AN INVESTIGATION OF WIKIPEDIA TRANSLATION AS AN ADDITIVE

PEDAGOGY FOR OSHIKWANYAMA FIRST

LANGUAGE LEARNING

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ABSTRACT

The integration of Information and Communication Technology in the indigenous language classroom lags behind compared to other subjects. In many ways, indigenous language teachers find it difficult and to some extent, impossible to integrate ICT into their classroom activities. The focus of this study is to explore the ways in which ICT could be used as a learning tool in an Oshikwanyama First Language classroom. I investigated the use of Wikipedia translation as an additional teaching and learning tool. I concentrated on the impact that ICT tools have on learning, and the motivation it has on learners to learn Oshikwanyama. This qualitative case study was conducted in an urban school in northern Namibia. The adoption of ICT at the school is good as there is a full-fledged computer lab with unlimited wireless internet access. This was a requirement for the project to enable the participants to work online. I purposefully chose higher-level learners (Secondary phase) for this study. I conducted a survey with them on their access to and use of ICT devices in their daily lives, and thereafter conducted a basic computer workshop and a Wikipedia translation project with them. My research findings show that although the use of ICT is part of the learners' lives, most of the communication through ICT devices is done in English not Oshikwanyama. Wikipedia translation offers a stimulating learning platform for learners to learn Oshikwanyama and English at the same time and this improved their performance in both languages. Furthermore, the Wikipedia translation, which was done collaboratively, gave learners the confidence to work with other learners to create knowledge. Lastly, Wikipedia translation motivates learners to learn Oshikwanyama and use it in their daily ICT interaction.

DECLARATION

I, **Aletta Mweneni Hautemo** certify that this thesis has not been previously submitted for a degree, nor has it been submitted as part of the requirements for a degree except fully acknowledged within the text.

I also certify that this thesis is my own work. I have acknowledged any assistance that I have received with the research and the preparation of the thesis. In addition, I certify that all sources of information have been fully acknowledged in accordance with Rhodes University Education Department reference guide.

12 December 2013

Signature of Candidate   Date

DEDICATION

I dedicate this thesis to my lovely mother *Rauna Ndateelela Ngesheya* for you have taught me the value of education, hard work and commitment from a very young age. You have shown me what love is through the endless love you gave us. I love you mom.

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LIST OF ACRONYMS

CPU	Central Processing Unit
DSTV	Digital Satellite Television
DVD	Digital Versatile Disc
ETSIP	Education Training Sector Improvement Programme
ICDL	International Computer Driving Learning
ICT	Information Communication Technologies
IP	Internet Protocol (address)
IMM	Integrated Multimedia
KWP	Keyboard and Word Processing
LOLT	Language of Learning and Teaching
MOE	Ministry of Education
NAMCOL	Namibia College of Open Learning
NETSS	National Education Technology Service
NGO	Non-governmental Organization
NOLNET	Namibia Open Learning Network
RAM	Random Access Memory
SL	Source Language
SMS	Short Messaging Service
ST	Source Text
TL	Target Language
TT	Target Text
TV	Television
UNESCO	United Nations Educational Scientific and Cultural Organization
VCR	Video Cassette Recorder
ZPD	Zone of Proximal Development

CHAPTER 1

INTRODUCTION TO THE RESEARCH

Knowledge is like light. Weightless and intangible, it can easily travel the world, enlightening the lives of people everywhere. Yet billions of people still live in the darkness of poverty. (World Bank Development Report, as cited in Lieberman, 2009).

1.1. INTRODUCTION

This chapter serves to introduce the research. I discuss the background of the study focussing on the context and the rationale behind using a Namibian indigenous language (Oshikwanyama) on an ICT platform. I introduce issues concerning the translation of the content from the internet, more specifically the Wikipedia content. I introduce my motivation for doing the research and my research goals and finally the theoretical framework that provides the ontological and epistemological lenses for the study and the research methodology.

1.2. BACKGROUND OF THE STUDY

Information and Communication Technologies (ICTs) are becoming an integral part of education systems all over the world. As a result of globalisation, ICT has a pervasive influence both on education delivery in many regions and on fields of study. Developing countries around the world and African countries in particular, are confronting new challenges because of the process of globalisation and the arrival of the information age to support development (Lieberman, 2009; Osborn, 2010). The Namibian government introduced an ICT Policy for Education in 1999 which was revised in 2005. This policy is designed to support Vision 2030, Namibia's framework to develop into a knowledge-based society, to build a society where knowledge is used for innovation and nation building. In his foreword to the ICT Policy for Education, the then Minister of Education asserted:

It is imperative that we expose our children, parents, and teachers to ICT to improve the quality of education and technical proficiency of our human resources, thus leading to increased productivity and accelerated development ... we must provide our children with a greater understanding of other peoples and cultures, thus defending our renewed legacy of peace and tolerance. (Namibia. Ministry of Education [MoE], 2005, p. 1).

The objectives of the Education Training Sector and Improvement Programme (ETSIP) are geared to help achieve the aims of the ICT Policy to produce literate citizens and broaden access to quality educational services for learners at all levels in the education system (Shafika, 2007). ETSIP was introduced in 2007 in order to reinforce improved access to ICTs, to enhance learning and administration, including affirming ICT as both a subject and a cross-curricular tool, and strengthening access to information, culture and lifelong learning (Namibia. MOE, 2007; Ngololo, 2010). Despite this strong commitment to ICT diffusion in the Namibian educational system, technological systems need to be better understood by researchers, teachers and learners as it is "an integral part of the social system and political, cultural and economic frameworks and they need to know what the limitations are" (Namibia. MOE, 2010, p. 11). The premise of my study is that ICT's integration in the Namibian indigenous language classroom would represent an interesting testing ground for ICT integration into the curriculum as a whole.

1.3. RATIONALE OF THE STUDY

ICTs have been introduced and disseminated primarily in European or Asian languages (Osborn, 2010). To many Africans, this is a reflection of both the dominance of the languages inherited from colonisation and their continuation into the information society (Lieberman, 2009). One constraint lies in the lack of access to ICT tools for a vast number of people in Africa, where individual ownership of computers and internet connection are still very limited. Community access centres are still the most common means of providing access via computers (Hakansson & Deer 2006; Lieberman, 2009). Similarly, in Namibia, few indigenous people are connected via computers but an increasing number are now becoming connected through mobile phones. The mobile phone will clearly become the communication tool of choice for the majority of people in Africa and is being promoted as a tool for educational access (Selanikio, 2008). Thus, an opportunity for indigenous language preservation and growth using these tools is being missed – a process that implies a subsequent loss of cultural diversity, productive capacities and

indigenous knowledge (Osborn, 2010). This may well speed up processes of homogenisation, cultural dependency and western-dominance in globalisation (Dalvit, 2009).

One possible approach to preserve African indigenous[1] languages is the localisation of ICT (Dalvit, 2009; Lieberman, 2009; Osborn, 2010). Osborn (2010) asserts that localisation of ICT includes "the translation and cultural adaptation of users' interfaces and software applications, as well as the creation of internet content in diverse languages and the translation of content from other languages" (p. 1). Similarly, Dalvit (2009) points out "the primary focus of localisation into indigenous languages can be considered in its contribution to terminology development, working collaboratively on-line, volunteer translators engage directly with the development and choice of new terms ... and its main contribution is to improve the status of African languages, rather than their instrumental value" (p. 54).

In an attempt to contribute to the preservation of African languages using ICT, I carried out a study that focussed on the localisation of internet content in African languages, in this case Oshikwanyama first language. The tool for this study is Wikipedia. Wikipedia is a huge online encyclopaedia, with "more than four million combined articles of any length in English and a combined total of more than 19 million articles in approximately 270 languages" (http://en.wikipedia.org/wiki/Wikipedia:Size_comparisons). There are almost "40 Wikipedia editions in African languages – with Arabic, Afrikaans, Swahili, and Yoruba best represented – but with very little content" (Osborn, 2010, p. 82). Wikipedia has some content available in some of the South African indigenous languages i.e. isiXhosa, isiZulu and Sesotho (Maseko et al. 2010). On Wikipedia the contents are created, verified and maintained collaboratively by the visitors to the site (Alier & Barcelo, 2009). As one of the tools for content localisation, Wikipedia contains a shared foundation of a knowledge base which is increasingly growing

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[1] The term indigenous has cultural traits of its original location i.e. Indigenous people in this study refers to African descendants who were born within and inhabited African countries, and have distinct characteristics (culture, language and beliefs) which are clearly difference from other segments of the non-dominant groups and new arrivals of different origins and cultures. Similarly, the term indigenous language in this study is generic to its indigenous culture and origin. For example English is the indigenous language for England, French for France etc. given the connotation of the word indigenous, I decided to use it when referring to various African original languages or/and sometimes mother tongue. The term mother tongue denotes not only the language one learns from one's mother, but also to the speaker's dominant and home language (or the language used at school as a first language).

(Godwin-Jones, 2003), and can be used as a cooperative collaborative paradigm in the classroom, to enhance peer interaction and group work and facilitate sharing and distributing knowledge and expertise among the learners and the school community.

Translation has been a very significant aspect in language learning over a long time and a key element of the earlier Grammar Translation Method (Duff, 1989; Kavaliauskiene, 2009) which emphasised the role of rote-learning and drill and practice. It was seen as a difficult skill which requires specialised knowledge (Posen, 2006). With the language teaching methods that developed later, such as the Direct Method and Audio-Lingual Method, translation was banned and no longer included as a part of the classroom activity (Posen, 2006). However, the growth of the Communicative Language Teaching approach (Duff, 1989; Posen, 2006) presents translation as a real life communicative activity, which learners practice daily in their social lives, and is linked to a communicative purpose.

According to my observations as a language teacher, it appears that the majority of Namibian learners mentally translate from their first language to the second language and vice versa in and outside the classroom. This makes translation a very natural process in language learning. Conversely, code switching between languages is also a natural development for many Namibian learners. Learners see it as a quick and easy way to present the meaning of words and contextualised items to draw attention to certain situations, mostly depending on certain context. The case for translation as a learning tool points to the need to explore ways for its appropriate application within the communicative paradigm in order to create challenging language activities that have cognitive depth. Thus, the potential of online translation is useful for language learning as it can offer authentic materials and its collaborative nature makes it an 'interactive and learner-centred activity that could promote learner autonomy' (Leonardi, 2010, p. 30).

1.4.   RESEARCH MOTIVATION

The recent introduction of ICT integration as a cross curricula tool poses challenges for teachers to find relevant ways to introduce ICT into the learning experiences across subjects. ICT has the potential to improve language teaching and the level of competence in African languages for many learners which is currently very poor. In addition, media sources including as the internet, point to the opportunity to explore new ways to motivate and teach home languages and at the

same time an opportunity to initiate small steps towards increasing the profile of these languages on the web and in ICT applications is enhanced.

Localisation of internet content into African languages is already a living and moving phenomenon in some African countries. In South Africa for instance the NGO Translate.org.za has been localising internet interfaces and applications into the South African indigenous and national languages since 2004 (mainly through an online translation management tool (Pootle, Po-Based, Translation and Localisation Engine) that uses Open Source software such as OpenOffice.org and Mozilla Firefox) (Wolff, 2011). In Namibia, online translation of internet interfaces was introduced in November 2011, through the partnership between Translate.org.za, Rhodes University and the Polytechnic of Namibia on a 2-day translation marathon of Wikipedia content into Oshiherero and Oshiwambo, a programme I was fortunate to attend. This translation of Wikipedia content was done with the purpose of terminology development and involvement of the actual users of the language. It is this participation that triggered the idea of taking the translation of Wikipedia pages into the Oshikwanyama classroom. I linked this idea to my earlier roles and experience as a language teacher of English and Oshikwanyama and my experience gained in the ICT teaching modules developed in my BEd Honours course to initiate this research project.

This study required a sample of Namibian high school learners to: learn Oshikwanyama first language through Wikipedia content translation, acquire language translation strategies and create an attitudinal shift in Oshikwanyama first language learning brought about by the Wikipedia translation process. The primary learning approach or pedagogy was to engage the participants in a series of translation tasks using interesting Wikipedia content and then returning the translations to the internet.

1.5.   RESEARCH HYPOTHESIS

This research proposes that Wikipedia translation activities should be integrated into an existing course, in this instance an Oshikwanyama language class. This requires a multi-skill integration, which includes preparatory activities or pre-translation activities that involve some background training on basic ICT skills and workshopping some basics of Wikipedia translation, such as editing and loading information on the web. I had three explicit hypotheses for this study:

- Firstly, engaging high school higher-level learners in translation might help them extend their knowledge of their mother tongue. Using content from the learners' own society and culture might facilitate and encourage their use of the language and their self-expression, thereby promoting language acquisition and advancing greater language proficiency.
- Secondly, translating Wikipedia content into Oshikwanyama might result in the development of language learning strategies that provide an opportunity to learners to learn both languages (Oshikwanyama and English) concurrently. This could give rise to an improvement in learners' language and translation competence and a potential change in attitude towards learning languages.
- Thirdly, the experience of contributing to generating web-based texts in Oshikwanyama might have an impact on the motivation of learners to learn their first language and generate a positive attitude towards it and its promotion, even if English continues to be valued as an important language for them.

1.6. RESEARCH GOALS

This research explores the translation of Wikipedia content as an additive pedagogy in the first language learning of Oshikwanyama. The aim of the study is to describe and analyse a grass-roots level approach to online content localisation and explore how high school learners engage in a cooperative learning community to work collaboratively on the translation of web-based content between English second language and Oshikwanyama first or home language.

To address the goal of the study, I devised the following research questions:
- What did learners learn from the translation of the Wikipedia content into Oshikwanyama?
- What strategies did learners use to translate Wikipedia content into Oshikwanyama?
- What role does Wikipedia translation play in providing a motivation towards Oshikwanyama first language learning?

1.7. THEORETICAL FRAMEWORK

This study seeks to reflect on a classroom web-related activity (translation of Wikipedia content) executed by Oshikwanyama learners using their linguistic and ICT skills collaboratively. This is a socially mediated process, whereby learners are immersed in an environment full of meaning

gained through different objects and tools, where they act and interact with other members of their community. Situated learning is used as the ontological orientation (Lave, 1988; Brown, Collins & Duguid, 1989). Situated learning is an empirical approach to learning, which emphasises the idea that much of what is learned is specific to the situation in which it is learned (Lave, 1988).

The model of cognitive apprenticeship provides steps for applying situated learning (Brown et al., 1989). Cognitive apprenticeship provides an authentic problem solving task that requires learners to transfer knowledge and learning at the same time as they apply it in meaningful ways. Moreover, cognitive apprenticeship is underpinned by the principles of learning through the Zone of Proximal Development (Vygotsky, 1978), whereby task accomplishment between a more knowledgeable person and less knowledgeable person is considered as a joint effort. Cognitive apprenticeship elements guide learners as they participate in the process of knowledge construction through apprenticeship, modelling, coaching, scaffolding, articulation, exploration of Wikipedia translation tasks and reflection on the translation experience.

1.8.   RESEARCH METHODOLOGY

In addressing the research questions the study adopts a qualitative empirical research paradigm. The qualitative paradigm provides the chance to conduct the research in an open-ended unconstructive way. It deals with different aspects of the social sciences with the intent to understand the world of human experience (Cohen, Manion & Morrison, 2007), where human beings can interpret the environment and their practices by bringing their own unique construction of the world or the research situation. The use of case study data collection methods that are part of the qualitative research paradigm looks in depth at the programs (Wikipedia translation), the class (Oshikwanyama group of learners), an event (learning Oshikwanyama in an ICT domain), within its authentic context.

The data was collected in a school situated in Oshana region, a formally marginalized northern region of Namibia. A purposeful sampling of 34 participants took place of which 32 were learners and 2 were Oshikwanyama and Oshindonga teachers respectively. The research was conducted after normal school hours in the computer laboratory. Participant observation, which was coupled with daily reflection questionnaires and follow-up focus group interviews, was

used. The findings were validated using methodological and co-observers triangulation. Ethical issues were considered by ensuring that the correct ethical guidelines were followed, such as seeking permission to conduct research in a public school. Informed consent and voluntary participation and the possibility of withdrawal from the research were explained to learners, teachers and parents beforehand.

1.9.   THESIS OUTLINE

The thesis consists of seven chapters including the first chapter which has introduced the research.

Chapter Two provides a review of literature surrounding the area of ICT and African indigenous languages in general. It also provides views on localisation of the internet content and the relevance of African language translation in the classroom.

Chapter Three undertakes a critical review of the social theories of learning with ICTs, which provides the conceptual lenses that gave rise to the foundation of this study. It highlights cognitive apprenticeship as a part of situated learning for enabling the use of ICT tools in the language classroom.

Chapter Four describes the research design and methodological orientation I employed. It describes qualitative research design and a case study approach, which draw on empirical evidence gathered in the study. All the procedures and strategies followed during the data collection, analysis and interpretation are discussed. It also discusses validity issues and ethical considerations.

Chapter Five presents the research findings and provides the analysis of the findings emerging from the interpretation of the research. The data is presented in two sections, the former deals with the research participants' level of understanding and availability of ICT tools and its use at home and at school. The latter presents the data created and collected during the Wikipedia translation exercise in relation to cognitive apprenticeship and the translation competence strategies used during the exercise.

Chapter Six provides a discussion of the findings in relation to the literature reviewed and the experience with ICT tools and the impact of Wikipedia translation on Oshikwanyama language learning and its role in motivating for language learning. In addition, pedagogical implications of the use of ICT online platforms are discussed.

Chapter Seven gives an overall summary of the study's key findings in which lessons learnt from the study, implications and limitations are discussed. Recommendations for future research in the areas of ICT and indigenous languages education are also made.

1.10. CONCLUSION

In this chapter, I discussed the background of the study, the research rationale, the goal and questions I want to address. I have also discussed the theoretical and methodological framework I employed. In the next chapter, I review the literature that provided insights into issues surrounding ICT in education, in indigenous language education and localisation of internet content into African languages.

CHAPTER 2

LITERATURE REVIEW

ICT should be capable of accommodating people in any language and serve as a tool for development in its fundamental and most comprehensive sense of revealing potentials (Osborn, 2010, p. xiii).

2.1.   INTRODUCTION

This chapter presents an overview of my research aim which was to investigate the translation of Wikipedia content as a pedagogical tool for Oshikwanyama language learning. I explore the literature surrounding the areas of ICT in Namibian education and ICT in African languages. I discuss the dominance of English and the importance of using African languages. In particular, I look at the localisation of internet content such as Wikipedia as a pedagogical tool for learning languages. I consider the development of language learning strategies, motivation and an attitudinal shift of learners as an important component of language learning through ICT.

2.2.   CONTEXTUAL BACKGROUND: ICT IN EDUCATION IN NAMIBIA

This section presents a review of the National ICT Policy for Education in Namibia. It stipulates the purpose, goals, and benefits of using ICT in the classroom and the ICT development levels.

2.2.1. ICT in Namibian education

Namibia has a well developed and reasonably competitive ICT infrastructure with seven registered internet service providers in the country. However, according to Shafika (2011) "the country's internet and broadband sector has been held back by high prices caused by the lack of a direct connection to submarine cables, which are connected through other neighbouring countries" (p. 288). This situation has resulted in poor use of internet services, as many citizens cannot afford the high costs of the internet due to poverty. Nevertheless, ICT diffusion in Namibia is moving at a steady pace to ensure community and educational access to ICTs.

The Namibian government introduced an ICT Policy for Education in 1999, which was revised in 2005. This policy was designed to support Vision 2030, Namibia's framework to develop into a knowledge-based society. One of the targets for the year 2030 in Namibia is that the ICT sector will be the most important economic sector in Namibia. The integration of ICTs throughout the education sector is considered of paramount importance (Namibia. MOE, 2006). Thus, to achieve this target, the Education Training Sector and Improvement Programme (ETSIP) was introduced in 2007. ETSIP aims to reinforce improved access to ICTs, to enhance learning and administration, including making ICT a subject and a cross-curricular tool, and strengthening access to information, culture and lifelong learning (Namibia. MOE, 2007; Ngololo, 2010). The "N$243.9 million allocated to ICT through ETSIP" (Namibia. MOE, 2007. p. 61) is an indication that the government recognises the importance of ICT as a tool in the development of the country.

This development includes the adaptation and creation of ICT pedagogical content into subjects such as history, social studies, geography, languages and literature (Shafika, 2011). Thus, the use of ICT in the Namibian education sector entails the ability to search for, prepare and present materials using a computer, communication via email and an understanding of management and administrative ICT systems. Two programs play a crucial role in spreading ICT training and tools to schools all over the country. These are, SchoolNet, mentioned earlier which aims to monitor and evaluate the impact of the use of ICT on education, and TECH/NA! which aims to strategize the training of the entire education workforce from Ministry to school level, with training of teachers focussing on pre-service and in-service training by teacher training colleges (Shafika, 2007).

A survey conducted by the Indian High Commission in Namibia on the ICT sector (2010) which includes a thorough investigation into programmes such as SchoolNet indicates that networked learning in Namibia is undergoing a rapid change. The survey found that "the SchooNet has rolled out computer labs in more than 200 high schools, collectively providing 2000 computers, 20 computers per school" (p. 17). Furthermore, educational institutes such as the Namibia Open Learning Network (NOLNET) and Namibia College of Open Learning (NAMCOL) are "spearheading opportunities for online learning and distance education at school level" (p. 19). These programmes and initiatives facilitate the increase of ICT awareness and the understanding of its potential in education. It fosters the sharing of information on best practices in school networking and in developing partnerships and relationships amongst the educational

stakeholders. Thus, with this joint effort from the government and non-governmental organisations, the realisation of Vision 2030 and the effective implementation of the ICT Policy for Education in Namibia will be realised.

It is my observation that internet cafes are also available in many towns and serve as areas where learners have access to internet research. Research indicates that mobile phones have started to claim their place in education in Africa where cell phone ownership and access among the youth is increasing compared to that of computers. Studies conducted by Hamwedi and Dalvit (2012) and Kreutzer (2009) have both found that compared to desktop and laptop computers, cell phones enjoy familiarity and popularity among African youth. The use of mobile phones as ICT devices is continuing to be pervasive as learners are becoming attached to the devices in their learning projects and researches. Cell phones serve as mini computers which can be used to carry out research, presentations and other relevant tasks that a computer can do.

2.2.2. The goals for Namibia's National ICT Policy for Education

The main purpose of the ICT Policy for Education in Namibia is "to prepare all Namibian education stakeholders to meet the challenges of the twenty-first century skills required by a knowledge-based economy" (Shafika, 2011, p. 68). This policy was introduced in order to stipulate ways in which ICT can be utilized to assist and facilitate learning and improve efficiency of educational administration and management in the schools. In addition, it guides the computer users of the specific ICT tools and their criteria to enhance their effective use and maintenance.

The goals of the ICT policy were devised to:

- Produce ICT literate citizens.
- Produce people capable of working and participating in the new economies and societies from ICT and related developments.
- Leverage ICT to assist and facilitate learning for the benefit of all learners and teachers across the curriculum.
- Improve the efficiency of educational administration and management at any level in the classroom, school library, through the school and to the sector as a whole.

- Broaden access to quality educational services for learners at all levels of the education system, and
- Set specific criteria and targets to help classify and categorize the different development levels of using ICT in education (Namibia. MOE, 2005, p. 4).

The policy values the proposition of investing in ICT integration in education, including the recognition that ICT has a role to play in education both "directly as a subject and indirectly as a management tool" (Shafika, 2011, p. 197). The goals emphasize the pedagogical use of ICT as an integrated tool in the teaching-learning processes at all levels in the educational system. It requires the curricula to indicate exactly what is expected of learners, learners and teachers and this includes cross-curricular opportunities (Namibia. MOE, 2005).

The ICT policy is clear about pedagogical and curriculum reform with reference to the promotion of skills of accessing, managing and processing information as well as the promotion of collaborative work skills. In particular, the policy identifies three aspects related to the role of ICT in the curriculum:

- Curriculum for ICT skills and knowledge which is referred to as ICT literacy skills;
- ICT as a school subject, which implies the study of computer studies and information technology geared towards advanced technical skill development; and
- Curriculum for the use of ICT within subjects, which is referred to as cross curricula ICT (Shafika, 2011, p. 198)

These aspects stress the integration of ICT into the curriculum and the formation of a new ICT curriculum. The pedagogical aspects of how ICT can be used as a cross curricula subject form the basis of this study which aims to integrate the use of Wikipedia translation into Oshikwanyama learning. This integration through the transition of readily available Wikipedia content is relevant for classroom use as the policy expresses openness to acquiring and using suitable content that is produced elsewhere for pedagogical purposes. Thus, the result of this study could be helpful in enhancing commitment from the government and curriculum developers to guide teachers on how to effect ICT integration and advise them on the best use of ICT in their specific subjects.

2.2.3. Benefits of ICT use in the classroom

The policy outlines some benefits accruing from ICT use in the classroom. It is hoped that through ICT, learners will be provided with additional resources to assist resource-based learning. ICT provides the opportunity for multiple technologies to be delivered by teachers that will allow 'teacher-to-teacher and student-to-student communication and collaboration' (Namibia. MOE, 2005, p. 2). This results in learner-centered teaching prospects, which provides greater exposure to skills which may be required to operate in the 21st century. Opportunities provided through studies such as this are open to mixed-interaction classrooms, whereby learners and the teacher learn in an apprenticeship-like situation which affords the chance to collaborate and work in teams to create and re-create knowledge.

These benefits indicate that ICTs are potentially powerful tools for extending educational opportunities and help prepare learners for the workplace. This preparation starts at school where ICT should be integrated across the curriculum, and be incorporated in the teaching of all subjects, including languages. This integration needs full commitment from the government and all the education stakeholders (Ngololo, 2010; Shafika, 2011). This includes the school principals and teachers who are the implementers of the policy and explorers of the opportunities offered through multiple technologies. It needs commitment from the parents, to understand what ICT entails and how it helps their children to learn. Moreover, learners have the responsibility to incorporate ICT in their own learning by participating in ICT learning opportunities, and by using ICT resource-based learning (Shafika, 2011).

As we have seen, the benefits mentioned above mean different things to different people, thus the implementation of the ICT Policy for Education in Namibia made provision for all educational stakeholders at different levels to understand its relevance. The ICT Implementation Plan was introduced in 2006. This is a comprehensive framework detailing all planned ICT interventions across the education sector. Among those interventions are the following ICT development levels.

2.2.4. ICT Development levels

The ICT Implementation Plan has set target measures for progress, which support the goals for ICT policy in helping teachers and learners integrate ICT across the curriculum. These targets

are linked to "employability and sector-wide impact on why ICT should be used at schools and institutions," (Namibia. MOE, 2006, p. 12). These levels are summarised below:

Table 1: ICT Development levels

	Level 1	Level 2	Level 3	Level 4	Level 5
Classroom facilities	1 room with ICT	At least 1 room with ICT	2 or more rooms with ICT	Many rooms with ICT	A significant number of rooms with ICT
Display facilities	Audiovisual and/or broadcast facilities	Projector and/or ability to display audiovisual materials	Projector and/or ability to display audiovisual materials	Projector and/or ability to display audiovisual materials	Projector and/or ability to display audiovisual materials
Internet access	Not necessarily	Yes	Yes	Yes	Yes
Teachers skills: all teachers	Foundation level ICT Literacy Certificate	Foundation level ICT Literacy Certificate	Intermediate level ICT Literacy Certificate	Intermediate level ICT Literacy Certificate	Advanced level ICT Literacy Certificate
Teacher Skills: Specialised staff	1-2 staff with intermediate level ICT Literacy Certificate	At least 2 staff with at least Intermediate level ICT certificate Literacy of Higher ICT qualification	At least 30% of staff with Advanced level ICT certificate Literacy of Higher ICT qualification	At least 50% staff with at least Advanced level ICT certificate Literacy of Higher ICT qualification	At least 50% of staff with ICT Diploma/Degree (or equivalent)
Learner or student skills	Introduction to ICTs	Foundation level ICT Literacy Certificate	Intermediate level ICT Literacy Certificate	Intermediate level ICT Literacy Certificate	Advanced level ICT Literacy Certificate
Learner or student access	1 class period per month	1 class period per week	At least 3 classed period per week	At least 1 class period per day	At least 4 class period per day
Timetabling of ICTS	No	Yes	Yes	Yes	Yes
Communication with parent Ministry via ICT	None	Over 20% done via email	Over 30% done via email	Over 50% done by email	Over 75% done through email and web

Source: ICT in Education implementation plan guide, (MOE, 2006, p. 13)

This research was carried out in a secondary school. As indicated in the table above, schools with secondary grades i.e. grades eight to twelve are among the priority sites (Level 2) to receive equipment and training. Level 2 of the ICT policy was explained as follows:

All teaching and administration staff should have reasonable access to a computer (at least one computer for every staff and 1 to 10 for learners/students[2]) and are able to use the internet and e-mail, as well as a word processor. The site is connected to the internet. Learning materials are downloaded and occasionally created by teaching staff. Significant communication and administration with the rest of the parents is done via e-mail and web-services. Students will spend about one hour every two weeks on the computer. At least two of the site staff will have an ICT qualification. The site will have a classroom equipped with a computer and projector system and/or the ability to display audio-visual materials to students. (Namibia: MOE, 2006, p. 7)

The school where this research was carried out is expected to develop, evaluate, maintain and use ICT in order to empower teachers and learners to have confidence in using ICT tools to support teaching without any kind of bias. Looking back at the development levels, the learners and teachers at high school level (grade 11 - 12) are expected to meet the standards proposed in Level 2. These standards are necessary for this intervention as it requires a computer laboratory with some workstations and internet access. This is necessary as the participants (teachers and learners) should be able to use the computer and have at least a foundation level of ICT to be able to search, edit and translate Wikipedia pages into Oshikwanyama.

2.2.5. Implications on achieving the developmental levels of ICT

Despite the government's call for ICT diffusion in the education sector, it is still facing some serious challenges. The ETSIP document (2007) outlined some of the challenges which hinder the implementation of ICT in school, and they are summarised in interrelated points below:

▪ *Subject curriculum lacks directions on the integration of ICT as a cross-curricula tool.*
Although the government proposed to introduce cross-curricular integration policies for specific subjects, none are available to date. Thus, a rigorous review of the curriculum to strengthen

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[2] The terms student and learner are used interchangeably in this research with emphasis put on learner. Students in this research refer to children who learn in school, in a formal environment who are compelled to learn and write exam or get grades, and in this way they are trained and taught certain discipline that enable them to learn. While learners are distinguished in such a way that they learn as collaborators, who are responsible for accomplishing intended goals rather than simply achieving learning. Learners are curious of new learning, goal oriented and willing to explore different learning tools, experiment with content and construct learners through peer assessment procedures. Therefore, the research participants could be refereed to both as students and learners, as they are trained first on the aspects and tools used in Wikipedia translation and then empowered to learn and become semi-autonomous in their own learning.

opportunities for the practical use of ICT across the curriculum is necessary (Shafika, 2011). There seem to be a failure to organise and conduct subject specific workshops that sensitise teachers to the use of ICT in their specific subjects. Opportunities for training teachers need to be extended to include the development of African languages in schools through ICTs. There are many benefits in the promotion of these languages. Cole (2005) pointed out that language diversity is seen as an opportunity to achieve full participation by people in society and in the economy. This ensures social, economic and educational empowerment for all African people of all ages (Lieberman, 2009). This empowerment needs to start at school where learners can be involved in indigenous languages developmental programs, in which they use different ICTs to learn the first language, which leads to motivating learners to use the indigenous languages.

- *Teachers need to be trained in using ICT because they are the key activators in the implementation process*

The government is challenged to ensure that compulsory training is offered to all teachers and educational organisations to provide basic to advanced computer literacy skills. The government of Namibian through the National Education Technology Service and Support (NETSS) centre has embarked on this exercise and to date many teachers have obtained their International Computer Driving Licence (ICDL) certificates. This training includes the indigenous language teachers so that they could incorporate it in the indigenous language teaching. (Rogoff, 1990) indicated that teachers at schools need to guide and engage learners in self-directed and group learning activities, thus they need to know and use technology for teaching. To integrate ICT in the classroom, teachers as curriculum implementers are expected to have a sound knowledge of ICT so that they can employ strategies and scaffolding tools that support the construction and understanding of knowledge. The government needs to take advantage of these new ICTs to make the process of coordination using new learning paradigms more efficient and to promote language learning both in school and in society.

- *The school management needs to be motivated on the use of ICTs*

The integration of ICT needs effective leadership from the school principal as the head of the school who can lead by example in facilitating access, communication between the government and schools, and also avail finances for ICT appliances at the school. Katulo (2010) asserts, "Careful management and control of ICT resources is one of the most important roles of the school principal" (p. 34). It is the role of the school principal and the management team to transform ICT activities within the school and enhance ICT use among teachers and learners. In

addition, they need to supervise and monitor ICT resources and the integration of ICTs as a cross curricula tool. The school principal needs to be the change leader in facilitating teachers' training, locating ICT experts, and in the maintenance of ICT equipment at the school.

- *Access to ICT technical support and infrastructure is needed in many schools countrywide*

The government has a crucial role to play in promoting both physical and infrastructural access to ICT in Namibia. Many schools in northern Namibia do not have telephone lines, and good network coverage, thus the responsibility rests on the government to ensure that the required infrastructure is in place before they deploy ICT tools (Shafika, 2011). The government needs to organise ICT awareness groups to the schools in the indigenous communities, to speak to the school management, teachers and learners about the importance of using ICT at school. Thereafter, ICT infrastructure and equipment should be sent to schools for effective use in the implementation of the curriculum.

2.3. LANGUAGES IN AFRICA: THE DOMINANCE OF ENGLISH AND IMPORTANCE OF USING AFRICAN LANGUAGES

This section provides a brief overview on language and technology as well as their relationship with socio-cultural and political factors that influence the adaptation of ICT and language choice in Africa. Particular focus is paid to Namibia. Other factors such as the economic and educational status of indigenous people have been taken into account.

2.3.1. The dominance of English over African Indigenous languages

a. **English as an official language**

Many African countries are multilingual societies. These societies have been colonies of several European countries and the use and non-use of African languages as a medium of instruction in schools depended largely on historical antecedents. According to Brock-Utne (2000) "the choice of a language of instruction in Africa is a political choice, a choice that may redistribute power in a global context as well as within an African country" (p. 154). However, apart from colonial reasons, Le Mottee (2008) points out that English was chosen in order "to steer the people away from lingua-tribal affiliations and differences and to create conditions conducive to national unity in the realm of language" (p. 34).

If we look at the Namibian situation, it is important to note that many Namibians believe that the previous government's apartheid policy contributed to the creation of an unequal language development process. Language groups, such as Afrikaans and English were given a head start while other Namibian indigenous languages languished neglected. (Swarts, 2000; Ohly, 2004). In compliance with the ruling party's language policy, English was established as the sole official language while Afrikaans was deprived of its former official position during colonial times and reduced to the status of a local language (Ohly, 2004). An example can be drawn from the Caprivi region, where English functions as the official language, Silozi functions as a semi-official language and the accepted lingua franca, while Sifwe and Cisubiya serve as local or national languages (Ohly, 2004). The same situation, applies to Owambo ethnic languages where out of eight dialects (Oshikwanyama, Oshindonga, Oshikwambi, Oshingandjera, Oshimbalanhu, Oshikolonghadi, Oshimbadja, Oshikwaludhi) only two are written, Oshikwanyama and Oshindonga.

b. English as a medium of instruction

English has been awarded the position of Language of Learning and Teaching (LOLT) in Namibia. The other 12 languages (Oshindonga, Oshikwanyama, Otjiherero, Damara/Nama, Khoekhoegowab, Rukwangali, Rumanyo, Setswana, Silozi, Thimbukushu, German, Ju|'hiansi) were awarded the position of medium of instruction in the lower primary phase, grade 1-3, with grade 4 being the transitional grade. African languages as such are taught up to secondary school level. It has been observed that using English as the medium of instruction leads to 'linguistic uniformity which may affect specific indigenous cultural heritages and values. This also means that, if English is the most important language of learning for children, then they become anglicised at the expense of their own cultural heritage (De Wet, 2002, p. 124).

There is little promotion of African languages since many people advocate the use of English because it is the Language of Learning and Teaching (LoLT) (Swarts, 2000). It has been observed that learners have lost interest in their own culture. (Swarts, 2000; Brock-Utne, 2000). In addition, many African parents prefer their children to be taught through the medium of English in order to gain a head start (Swarts, 2000; Dalvit, 2009). This is because in schools learners are encouraged from the beginning to use English, as it is believed that the language reflects a good image, and good study and job opportunities and a chance to interact with global

forces (Harlech-Jones, 2000). This situation is putting the future of African indigenous languages and cultures at risk (Lieberman, 2009). In return, this encourages cultural dependency (Dalvit, 2009), whereby the nation depends on the cultural beliefs of the western world and disregards their own.

c.   English as the language of technology

English has also dominated the new technologies. Online learning programs and resources are widely available in English. In addition, English will continue to be the main method of communication in everyday political, economic and educational life and thus has a huge base of information available on the internet. English has become the technology (ICT) language, despite the fact that it is still seen as a further act of colonialism to many African (Bernack, 2012). Bunyi (1999) observed that "whereas indigenous languages may divide people along ethnic lines, English divided them along class lines" (p. 348). There is little access to ICT resources for the indigenous communities in their own languages, reflecting their own cultures, or in the provision of ICT tools, resources and materials to the African indigenous communities and schools. This situation widens the gap between the advantaged and disadvantaged groups (Maseko et al., 2010) as a large portion of the population is unable to access technology and information in their language. It is important not to overlook the fact that although English has been imposed on many African inhabitants during colonialism, it is the dominant language through which African people can access ICT-based information which is an instrument of upward economic and social mobility and political participation.

The world is moving forward, and so is technology, which poses a challenge for African indigenous people to encourage indigenous language educators and policy-makers to take technological steps in empowering their own languages. Opportunities for emancipating African languages through ICT need to be created. This could start with the recognition of African languages through revitalisation programs such as the localisation of internet interfaces and content into African indigenous languages.

2.3.2.   The importance of using African languages in ICT domains

ICT use in African languages is seen to many as a two-edged sword (UNESCO, 2011). It is seen as having a destructive influence on African cultures allowing the erosion of indigenous

languages, values and norms. Indigenous people relate all new ICTs to the traditional ones, such as TV, radio etc. and this cause confusion in the African youth, who subsequently lost respect for their cultural identity. Consequently, many Africans are not committed to contribute and develop their own languages due to the reliance on foreign languages. On the other hand, ICT is seen as a mode of salvation for the African languages and cultures. ICT can be used to revive, support and create culturally responsive learning resources and environments for indigenous people and motivate them to contribute to and enhance the language standard (Shazia, 2000; Lieberman, 2009; Dalvit 2009).

There are language policies, which implement the use of English as the Language of Learning and Teaching (LOLT) in school, especially in the private sector. On the other hand there are policies which foster the teaching of mother tongue at all levels of education. These policies according to the UNESCO Policy on ICT and Indigenous People (2011) contribute to the "erosion of language and culture by their failure to reinforce the many aspects of indigenous culture such as language, food, oral histories, stories and traditional knowledge in the curriculum" (p. 2). With increasing development in most parts of Africa, indigenous communities are becoming powerful in empowering one another to improve teaching and learning. This empowerment incorporates the teaching of indigenous language practices using contemporary methods, which includes the integration of ICT in teaching and learning (Lieberman 2009; Osborn, 2010; UNESCO, 2011).

It is worth noting that African societies are multilingual where "individuals often learn several languages to varying degrees and use them in different contexts, or together in what linguists call code-switching" (Osborn, 2010, p. 34). This unity enables African indigenous people who have shared cultures and languages to contribute cooperatively to language growth and development. These opportunities for language growth and development can be achieved through the use of ICT, in educational settings like school, community practices and via national workshops. This may serve as a creation of career opportunities for people who want to be involved in projects, software localisation and development in African languages etc. (Osborn, 2010; UNESCO, 2011).

2.3.3. African languages revitalization through ICT use in education

a. The importance of African languages revitalisation through the use of ICT

Many parts of Africa today are still known as traditional societies which have stood the test of time, and which had been enriched by ancestral customs and unique myriad of languages, each of which contains specific ancient knowledge (Shafika & Hollow, 2012). Africa has so many assets and treasures, which need to be valued and protected. These include the languages and cultures of its indigenous people.

Coronel-Molina (2011) maintains that language revitalisation involves the restoration or strengthening of a particular language in areas where they prevailed before being displaced by another powerful and prestigious language. Furthermore, Lieberman (2009, p. 13) asserts, "Language revitalisation efforts must fight homogenisation at the political level, in education, and by producing resource materials." In this context, language revitalisation involves the strengthening of African languages such as Oshikwanyama, which are currently not well developed or cultivated on ICT educational platforms. Some of these languages have materials available in different publication like books, documentaries and literature, but very little is available on the internet. It is important to revitalise and document them through ICTs before they become extinct, so that the next generation can access them efficiently.

The concern about the reinforcement of indigenous culture and language through ICT was raised in the UNESCO policy for ICTs and indigenous people:

> Indigenous people have the right to practice and revitalise their own cultural traditions, customs and knowledge; incorporate and apply ICTs on their own terms, including the right to create and share cultural content in their own languages and to design initiatives and programmes related to the achievement of Millennium Development Goal 8. (UNESCO, 2011, p. 4)

Coronel-Molina (2011) emphasises that the lack of language transmission from generation to generation is a significantly contributing factor to their loss. This lack of transmission leads to fewer speakers of the language in each generation. ICT can be used where appropriate, under the support and control of the affected indigenous people, to provide the opportunity to standardise the languages, through the creation of online resources in indigenous languages.

b. Language revitalisation through localisation of ICT content

An example of language revitalisation is the online translation work done by the Translate.org of South Africa (Wolff, 2011), which is committed to translate internet interfaces into 11 official languages of South Africa. The NGO Translate.org.za has been localising internet interfaces and application into the South African 11 national languages since 2004 (mainly through an online management tool (Pootle, Po-Based, Translation and Engine) that uses Open Source software such as OpenOffice.org and Mozilla Firefox (Wolff, 2011) and divides work equally among the translators and gives ideas and suggestions for translation consistency. Translate.org.za has also established mailing lists for the translators to work collaboratively with one another and discuss difficult translation and terminology development (Maseko et al., 2010). According to Taragarira, (2009) Kiswahili has shown "its propensity to coin technical words or give existing common words technical orientations" (p. 25). The linguistic database 'Internet Living Swahili Dictionary,' provides instant translation of 56 000 words and discussion forums in Swahili (Lieberman, 2009, p. 13). Other African languages need to follow suit, and produce written media, which manifests interactions between technology and the practices of indigenous local people.

c. Language revitalisation in the classroom

It is important that the value of writing and translation of online content in the classroom is emphasized. For pedagogical reasons, the internet content translation opportunities need to be extended to the indigenous language classrooms. Learners can work collaboratively online and learn the language through online translation activities. This not only contributes to their language learning and growth but enhances their ICT knowledge and skills.

As computers and the internet become available and accessible in many indigenous communities, people become empowered to use them positively to effect change in their communities (Shazia, 2000). This may include indigenous language teachers and learners working collaboratively online creating their own instructional material. This provides an opportunity to deal with the friction that exists between indigenous languages and cultures and ICTs and to strengthen and add value to indigenous languages, especially in the classroom. ICT pedagogical approaches for indigenous language learners might motivate learners through its vivid representation of text, sound, and images to learn the language better. It may also help

facilitate the acquisition of basic skills through the development of ICT literacy and finally this would enhance improved access to knowledge and skills needed in the 21st century.

2.4. LOCALISATION AND TRANSLATION OF INTERNET CONTENT AS A DEVICE FOR LANGUAGE LEARNING

This section describes the concepts and processes of localisation of African content. It discusses the relevance of translation in the language classroom and the effects and implications of Wikipedia translation as an additive pedagogy in the first language classroom.

2.4.1. Conceptualization of Localisation of internet content into African Languages

Localisation of internet content has been seen as the main approach that can be used to preserve African languages (Lieberman, 2009; Dalvit, 2009; Osborn, 2010). The term localisation is defined by many academics as the cultural adaptation of the internet interfaces and digital information to the local mode of communication and cultural standards (Osborn 2010; Dalvit 2009). There are two processes of localisation. These are software localisation and content localisation.

Software localisation is described by Collins (2001) as the process by which computer applications are analysed and adapted to the requirements of different markets. This may include adaptation of graphics to the target markets, modification of the content layout to fit the text, conversion of local currencies, formatting of dates, addresses and numbers and many. According to Sandrini (2008) localisation is not just translation; it goes beyond that to the meaning behind the words that are used. "It requires adaptation of linguistic and cultural digital content and the provision of services and technologies for the management of multilingualism across the digital global information flow," (p. 167). Different cultures use different grammar and sentence structure, therefore straight word-to-word translations are never enough to convey understanding (Sandrini, 2005). The ultimate goal of localisation is to maximize quality (translations and user interfaces etc.) and quantity (number of locales etc.), while minimizing time and overall cost.

Content localisation involves the translation of internet content in order to benefit people of different native languages (Schäler, Wasala & O'Keeffe, 2011). It may require a cultural and linguistic adaptation of the internet content that includes the preservation of meaning or message

that may require the re-writing of a phrase. Keniston (1999) identifies two main components of content localisation, which are *translation* and *modification*. The former, involves the translation of the source text into the target language, back to back translation into the original language, comparison between the two versions, adjustment to the version in the target language and integration into the interface. The latter refers to structural changes, such as scrolling patterns, character set, and box sizes, cultural aspects such as colour and icons and linguistic aspects such as dictionary search patterns.

Content localisation in a multilingual web includes the development of terminology, which in many ways requires extensive translation knowledge and cultural appropriateness experience. Thus, in localising internet content collaborative effort is needed so that localisers can co-contribute to the terminology development and work together on different aspects of languages, like cultural contents and terminologies. According to Tarigarira (2009, p. 196) "this collaboration helps translators to complement each other's knowledge and skills, especially in basic technical skills required to operate a computer".

2.4.2. Dimensions of Localisation

Localisation of the internet content or user interfaces is a technical task that involves the translation of basic computer software such as the browser and word processor into different language (Osborn, 2010) and thus it requires a knowledgeable person to work on the computer system and the internet in order to function and in order to retrieve and exchange information on the World Wide Web. In localising the internet content, the knowledgeable person needs to know how to interact with the computer's operating systems and specific software which might be web related or available in hard copy. The following table illustrates the dimensions of localisation.

Table 2: Dimensions of Localisation

	Interface/access how we interact	Information storage, communication, retrieval (what we use the technology for)
Computer (individual piece of hardware)	1. Operating system, software for various purposes, keyboard , display	2. Documents and files of various sorts, created by user(s)
Network (connections among computers: the internet and intranets)	3. The above (under item 1) plus specialised software resident on servers such as search engines, databases	4. Web content, remote storage, ability to link individual computers in real time

Source: Osborn, 2010

Any African who is willing to contribute to the development of African indigenous languages on the internet, is motivated, and empowered enough to do so, can localise. However, this is easier said than done because localisation is a daunting task that requires multi-skills to execute effectively. Depending on the dimension (done to satisfy the market demand, or for academic purposes, fun and leisure) to develop correct terminology requires a good level of knowledge and skills and the use of standardised orthography, grammatical and lexical language structures in order to produce relevant and correct information.

2.4.3. Translation of internet content in Africa

Translation is a term widely discussed and defined by translation scholars' worldwide. Hatim and Munday (2004, p. 6) define it as:

a. The process of transferring a written text from the source language (SL) to the target language (TL), conducted by a translator, or translators, in a specific socio-cultural context.

b. The written product or target text (TT), which results from that process and which functions in the socio-cultural context of the TL.

c. The cognitive, linguistic, visual, cultural and ideological phenomena, which are an integral part of a and b.

Corresponding to the new challenges brought about by ICTs, translation is expanding at a good pace. The form of translation has shifted from paper to screen, through the use of computers and the internet. ICT is then used as a tool for the development of orthography in low languages and

thus provides people with the intellectual capabilities to create, localize and update their own language status, (Kelly, DePalma & Hedge, 2012).

The need for translation in Africa is strikingly obvious. Africa has a wealth of cultural knowledge and skills, which can be shared with the rest of the world in their own language (Maseko et al., 2010; Lieberman, 2009). Moreover, the continent has become a harbour for many foreign nationalities who are here for economic purposes (Kelly et al., 2012). Many people including foreigners living in or visiting African countries need to become literate in African indigenous languages in order for them to be able to have basic communication skills with the indigenous people in their communities.

Research indicates that localisation and translation of the internet content into African languages is already a living and moving phenomenon in some African countries (Lieberman, 2009; Dalvit, 2009; Maseko et al., 2010; Osborn, 2010). In recent years, many online organisations are on the web, working on online dictionaries and education resources in African languages. Considerable effort has been made by localising Windows in Kiswahili, Setswana and isiZulu and many other South African languages (Maseko et al., 2010).

One of the available translation resources is Wikipedia. Wikipedia contains a shared repository of a knowledge base that grows over time (Godwin-Jones, 2003). Translation of Wikipedia content involves the adaptation of language through borrowed or invented terms. This translation of Wikipedia content could happen with the facilitation and guidance of an experienced teacher in both languages using computers and learners to translate collaboratively. This would provide learners with an opportunity to mutually reflect on the translated content and perhaps change their attitude towards the target language.

Osborn (2006) asserts, "As long as a language is spoken and used in other spheres of activity; it is worth at least providing the opportunity to be used in various ways within new technologies" (p. 86). African languages have proven to be important vehicles for the expression and generation of knowledge and African indigenous people have a wealth of knowledge which needs to be shared internationally (Kelly et al., 2012). Interventions and programs intended to contribute to language growth and development, and especially regarding the areas of online localisation and translation are welcome as they are an important aspect of this development.

2.4.4. Translation pedagogy

Translation as a learning pedagogy has often been classified as a cognitive learning strategy, which is the phenomenon of transferring one language to another language. Ellis, (1992) notes that translation is a legitimate pedagogical tool which deserves to be rehabilitated. It is an area that connects theory and practice in order to improve reflective approaches and methods in the language classroom (Károly, 2011). Translation is a natural thing to do in language learning and "code switching between languages is regarded as a natural developmental" (Kavaliauskiene, 2009, p. 3). It is a real life communicative activity, which is used in classes, at home, and in the community in a multilingual society. In addition learners often use translation as a learning strategy to comprehend, remember and produce the first or second language (Duff, 1989).

The use of translation has been banned from the language classroom for many years. This is because "it had been used as a frequent object of ridicule by those eager to demonstrate their uncompromising allegiance to modern ways of teaching" (Kavaliauskiene, 2009, p. 2). Conversely, Ross (2000) maintained that translation could be employed to enhance the four language skills (i.e. listening, speaking, reading and writing) and develop accuracy, clarity and flexibility (Duff, 1989). In addition, the use of the mother tongue translation on an English language platform is found to be a relevant tool for improving language skills, and helps learners to activate language usage. Thus, it serves as a tool for improving both first and second language (Kavaliauskiene, 2009). (Ross, 2000) referred to translation as the "fifth language skill" which promotes "communication and understanding between strangers" (p. 63). Thus, translation serves as both a social and cognitive tool that involves learners in collaborative activities in which they use the language that relates to their individual identities and cultures.

In proposing the transformational view of language learning, Chomsky (1965) asserts that,

> A child uses language acquisition devices (LAD) to make sense of utterance heard around it, derived from his "primary linguistic data" hypotheses about the grammar of the language – what the sentences are, and how they are constructed. This knowledge is then used to produce sentences that, after a process of trial and error, correspond to those in adult speech; the child has learned a set of generalizations of rules, governing the way in which sentences are formed. (p. 9)

As a pedagogical tool, translation can be used in the class to compare grammar, vocabulary, word order and other lexical items between the source language and the target language. This may help to eliminate or reduce language interference between the mother tongue and the second language (Ross, 2000) and help to create linguistic awareness in learners (Duff, 1989).

Chomsky (1957) emphasizes linguistic creativity, which he describes as "the ability of human beings to produce and comprehend an infinite number of novel sentences" (p. 10). As a result, translation offers learners a chance to understand and transform the sentences from their original language to a language that reflects their culture and which can be understood in their community. In this way, the opportunity is presented to learn two languages reciprocally and this in turn develops their sub-linguistic competence (Ross, 2000). Moreover, learners have an opportunity to highlight the similarities and differences between the SL and TL and this helps them to become good speakers and writers of the language.

2.4.5. The relevance of translation in the First Language classroom

The pedagogical use of translation is widely discussed by translation scholars such as Baker (1999) and Newmark (1988, 2001). Translation is normally seen as "the expression in another language (target language) of what has been expressed in another (source language)" (Newmark, 2001, p. 56). In translating, translators try to preserve semantics (the study of the meaning of words) and stylistic equivalence (the similarities in language and text style and format). According to Newmark (1988) "translation has been instrumental in transmitting culture, sometimes under unequal conditions, responsible for distorted and biased translations, ever since countries and languages have been in contact with each other (p. 7).

Translation is one of the learning tools that highlight the need for exploring ways for its appropriate application within the communicative classroom and to create challenging language activities that have cognitive depth. Language translation is an activity, which involves transformation and creation of knowledge (Arrojo, 2003). Kelly et al. (2012) indicate that online translation in the classroom promotes language learning, raises awareness and develops learners' autonomy. Translation brings many benefits to learners in the language classroom. Some of these are:

a. Enhances communication skills

Translation provides learners with the practice and skills needed to communicate with a broad audience accurately, meaningfully and appropriately (Kelly et al., 2012). According to Duff, (1989) translation is an activity of that leads to discussions and reflections, and since there is not a single correct answer, the promotion of accuracy, clarity and flexibility. The use of translation helps learners learn vocabulary in context. It develops the ability in learners to decode and express meaning using the exact term or by paraphrasing. This enhances learners' communication confidence which enables them to communicate without fear and anxiety with any audience.

b. Raises language awareness and develops metalinguistic skills

Translation assists learners to reflect on language usage and the exchange of views on using and developing the language thus raises language awareness. Translation allows learners to provide definitions and diverse meaning to words, while at the same time increasing their vocabulary (Posen, 2006). In this way, the ability to choose the right words and working on language register is assured. Translation helps learners to understand the influence of one language (source language) on another (target language), and to eliminate habitual errors that creep in unnoticed such as the miscues of particulate words or structure (Duff, 1989). Through translation of culturally bound proverbs, learners can learn about the nuances of the target language, while comparing and contrasting language distinctions in both source and target language. Translation raises language awareness as learners realise that there are words in their mother tongue that can be adapted to the foreign language and vice versa. In translating, learners are encouraged to contribute to terminology development (Dalvit, 2009) by discovering new words in the target language and that contributes to language growth.

c. Develop language learning strategies

Wang (2008) notes that in translation phenomena, "the translation test carries either more or less information than the original text, and as a result, it has caused some problems for readers to reach the real meaning" (p. 129). Translation is essential for pedagogical purposes in order to train the learners in strategies that drive good translation, which promotes language learning. Translation requires learners to use different strategies to ensure the completion of a translation

activity. In translating, learners need to use memory strategies to help them make language associations and trace semantic maps, which are fundamental in any translation activity (Kavaliauskiene, 2009). As compensation and meta-cognitive strategies are developed, they offer an opportunity for code-switching and contrasting language patterns since there is no one-to-one relationship between words of any language system (Leonardi, 2010). This helps learners to compensate for a piece of language they do not know. Translation also facilitates the development and acquisition of communicative strategies (Duff, 1989), since speakers are often engaged in conversation sharing, negotiating and interpreting meaning.

d. Develop translation strategies

Krings (1986) defines translation strategy as "translator's potentially conscious plan for solving concrete translation problems in the framework of a concrete translation task" (p. 18). In addition, Venuti (1998) posits that translation strategies "involve the basic tasks of choosing the foreign text to be translated and developing a method to translate it" (p. 240). Scholars such as Newmark (1988) and Hatim and Munday (2004) have discussed translation strategies for use in the language classroom, these are:

i. Equivalence

Culler (1976) observes that one of the problems of translation is the disparity and differences among languages. This means that the bigger the gap between the SL and the TL, the more difficult the transfer of messages from the former to the latter will be. Thus, an ideal translation should be able to integrate both the linguistic meaning and the cultural meaning of the source language seamlessly into the target language, so that the readers of both languages can experience the same mind impact. This situation contributes to the notion of equivalence.

Functional equivalence happens when a translation contains the meaning that is similar, or as close as possible to that of the source text. Functional equivalence is closely related to cultural adjustments and modification of the source text (Wang, 2008). In functional equivalence, the translator tries to neutralize or generalize the source language word by either explaining or paraphrasing its meaning (Newmark, 1988). Since the translators cannot understand the source language text correctly without careful consideration of its cultural background, translation thus

becomes a cross-cultural activity between two languages, a source language culture and target language culture and these cultures constitute the context for communication and storytelling.

Formal equivalence (or linguistic equivalence) is the process of translating word-to-word (Newmark, 1998; Hatim & Munday, 2004). Formal equivalence is used when the translator singly translates the source language text into the target language. This is word-to-word translation which occurs both as a single procedure as well as in couplets or triplets (in little chunks of information). This strategy is preferred by the translators but is considered risky because meaningful elements of a word may actually lead to a loss of communicative effect. Formal equivalence also involves the use of literal translation (Newmark, 1988) in which the grammatical structures of the source language are converted or changed to their nearest translation equivalent, but the lexical form of the languages is translated singly.

ii. Adaptation

Adaptation involves the changing of cultural references when a situation in the source culture does not exist in the target culture. This means that the translator tries to adapt some word in the source language into the target language (Newmark 1988). Adaptation is a free form of translation, which was described by Newmark (2001) as "the equivalent of paraphrasing on the text level with the purpose to make the source language text easily comprehensible to the target group" (p. 62). This means that adaptation as a translation method is the equivalent of paraphrasing the text to make it easy to comprehend. In adaptation, the language is simplified for the reader, and sometimes transferred, especially in case of idioms and cultural terms.

Within the framework of this study and considering the purpose of the translation exercise for pedagogical reasons, adaptations of lexical and orthographical aspects of the language may be considered. This is because the use of culturally-specific words such as names and idioms in English might be a challenge to be carried over to Oshikwanyama. Suh (2005) observed that African cultural-specific elements do not really blend into the European language and end up still carrying a foreign aspect. This case is common in Namibia where many Oshiwambo words such as those of animals and place were adopted either from English or Afrikaans. In this way, transliteration, which is the conversion for phonic/graphic shapes of a source text to be in line with the patterns of pronunciation and spelling of the target text happens, an example of '*cup – ekopi'* or '*donkey – ondongi'* from English to Oshikwanyama.

iii. Borrowing

Borrowing refers to the kind of direct translation of source language to target language that happens when the translator tries to use the exact source language word in the translated text (Newmark, 1988; 2001). In his research, Suh (2005) used the term borrowing as "a cover-term for the various degree of preservation of culture-specific items that one may resort to in the process of transferring the contents of a source text into the context of a target culture" (p. 123). In this way, the translator takes the exact words in the source text without changing anything and moves it to the target text. This is described as lexical translation where "one language is passed into another and may over time become fully integrated into the host language" (Suh 2005, p. 123).

Newmark, (2001) pointed out that the easiest method of borrowing that involves transferring of a source text words or lexical units to the target language is transcription or transference. In using this method, one has to accompany it with a footnote explaining the transferred text or word. Transcription is seen to be appropriate with proper nouns, addresses, names of institutions, titles of books, films, papers etc.; in cases they are not transparent in the target language.

iv. Omission

Omission occurs when the source text segment cannot be traced in the target text, meaning that it had been omitted or deleted. According to Baker (1992) omission is allowed only in cases where there is no close equivalent in the target language and when it is difficult to translate. In this study, omission might be influenced by a number of factors. Lack of standardization in orthographies and pronunciation between the target language and the source language is one of them. I have personally observed that the content is usually omitted if the person fails to get the meaning or a standard translation in the target language, mostly in cases of idiom and cultural terms. To avoid problematic culture-specific words which could be considered irrelevant and might confuse the reader, the translator decides to delete the word. Another limiting factor observed in the standardization is the use of special characters, which in most cases requires specialized fonts. Here the translator omits those characters or fonts in order to avoid confusion in the target text. In other case, it is done to avoid repetition of ideas or texts due to the lack of equivalence or standardisation in between the languages.

2.4.6. The use of translation among higher school learners

Translation is an important tool that can be used to enhance learners' learning. Károly (2011) maintained that translation is an appropriate resource for advanced learners as "it serves as a problem-based resource as well as a cognitive exercise in the classroom" (p. 59). Bernardini (2004) observed that advanced learners in many cases want to know the underlying rules behind language formation. These learners ask questions on how certain expressions are translated and what rules are involved. Involving them in Wikipedia translation activities serves as a rewarding activity for the learners as they can challenge themselves linguistically and it offers them the opportunity to get the answers about language development that they have been looking for.

The use of English in the mother tongue classroom raises learners' consciousness of the non-parallel. Károly (2011) noted that "translation can be used in the classroom to develop the learners' translation and foreign language competence in the functional-communicative sense, meaning that learners translate real-life and authentic texts" (p. 59). In addition, translation in the language classroom can build learners' vocabulary and increase their background knowledge, which can prove very useful later on in their career (Kavaliauskiene, Mazeikene & Valunaite-Oleskevicine, 2010). Snell-Hornby (1985) maintained that "translation develops advanced learners linguistic accuracy and makes them makes them aware of the structural differences between language" (p. 21). This was further supported by Duff (1989) who argued that translation trains the learner "to search (flexibility) for the most appropriate words (accuracy) to convey what is meant (clarity) the combination of freedom, and constraints allows the learner to contribute their thoughts to a discussion, which has a clear focus: the text" (p. 62).

2.4.7. Language motivation through translation of online content

2.4.7.1. Motivation defined

Garrison (1997) defines language motivation as the "perceived value and anticipated success of learning goals at the time learning is initiated and mediated between contest (control) and cognition (responsibility) during the learning process" (p. 26). In language learning, motivation was defined by Gardner (1985) as referring to "the extent to which the individual works or strives to learn the language because of a desire to do so and the satisfaction experienced in this activity (p. 10). According to Lightbrown and Spada (2001) motivation in languages is "a

complex phenomenon which can be defined in terms of two factors: learners' communicative needs and their attitudes towards the second language community" (p. 33).

Motivation in the language classroom is characterised by four interrelated components indicated in the figure that follows:
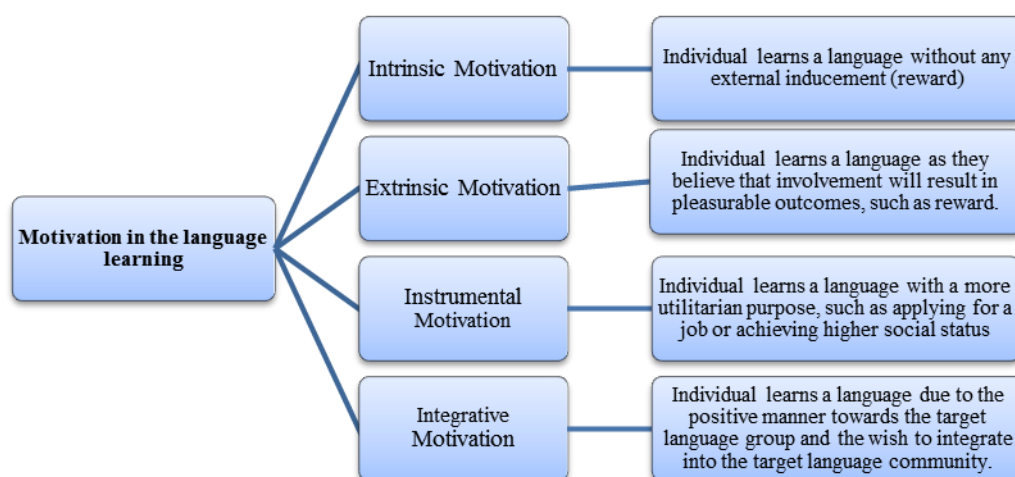
Figure 1: Components of motivation in language learning

a. Intrinsic motivation

According to Ryan and Deci (2000, pp. 55-56) intrinsic motivation refers to "doing an activity because doing so is enjoyable and satisfying and not primarily to achieve a reward". Schunk, (1990) pointed out that learners who are intrinsically motivated are inclined to take part in activities and complicated problems and gain knowledge from their slip ups and mistakes. Thus, they do it to satisfy their internal sense of self-worth (Isen & Reeve, 2005). The use of Wikipedia translation in the indigenous language classroom may motivate learners intrinsically due to some variables such as the mastery of translating skills, exploration of languages, the need to contribute to the language development and also the development of translation strategies.

Furthermore, Ellis (1997) notes that the creation of challenging tasks and activities motivates learners to learn a language. Thus Wikipedia presents a well-balanced ICT environment in

which learners are enabled to translate in collaborative groups, whereby each learner brings a wealth of knowledge and skills to the group that will enable them to use the relevant grammar and structure needed to effect the translation. In this way, learners are intrinsically motivated to work together in creating a piece of work that is relevant and which can be used in the classroom as referential material or a classroom resource (Godwin-Jones, 2003).

b. Extrinsic motivation

Ryan and Deci (2000, p. 59) explain extrinsic motivation as those "actions implemented to achieve pursuit of personal benefits (high scores) or social benefit (peer acceptance)". It is compliance for an individual to act in a certain manner based on the assurance of an incentive (Isen & Reeve 2005). Kohn (1994) noted that extrinsic motivating factors do not change a person's commitment to learning. Individuals comply with certain rules or activities because of the reward involved. ICT had shown potential in providing extrinsic motivation to learners. It exposes learners to an educational journey with positive factors (such as using grammar and new vocabulary, working in collaborative teams to get results) that contribute to their success rate in the exam and an improvement in performance.

c. Integrative motivation

Integrative motivation involves "the desire to learn a language in order to communicate with people from another culture that speak the language or to identify closely with the target language group" (Gardener & Lambert 1972, p. 37). This means that a positive attitude towards the language influences the desire to learn it and encourages the effort invested to persevere. Gardner (2006) notes that a motivation to learn a language is rooted in a desire to join its culture and have contact with its speakers. Many African learners want to learn English to be similar to English speakers, who are perceived as socially advanced. Such perception is reinforced by the fact that English speakers are ICT literate and that English is the dominant online language. Learning an Africa language through ICT contributes to closing this gap. In this way, they develop a positive attitude towards online or Wikipedia translation activities which fosters the desire to interact with ICTs in their own indigenous languages. Moreover, learners may be integratively motivated to contribute to online translations of Wikipedia pages because they feel sympathetic with their indigenous language and appreciate a chance to contribute to the language's development and growth.

d. Instrumental motivation

According to Gardener and Lambert (1972, p. 36), instrumental motivation involves "the desire to learn a language because it would fulfil certain utilitarian goals, such as getting a job, passing an examination etc." Instrumental motivation involves the perceived pragmatic benefits of language proficiency as stimuli for generating those utilitarian objectives (Gardner, 2006). Language learning, specifically through online activities, could motivate learners instrumentally when they find the activity rewarding for future employment prospects or further studies. In addition, the instrumental value of learning languages in ICT domains is related to linguist power and influence (Deci & Ryan, 1985). Learners may be inclined to use their indigenous languages in translating online content because it makes their languages powerful and competitive economically. In this way, opportunities are presented for learners as speakers of the language to produce resources (online) in their own language and in doing so strengthen these languages.

2.4.7.2. Motivation and group dynamics in the language classroom

Group dynamics refers to "the scientific study of groups, including the analysis of group structure, group norms, interaction patterns and group cohesion" (Matsubara, 2007, p. 210). In language learning it entails the relationships between individuals' human behaviour, linguistic background, personal characteristics influenced by different factors such as cultural norms, social identity, personal traits etc. Dörnyei (1994) points out that motivational components related to group dynamics found in education includes, goal-orientedness, norms and reward systems, group cohesion and classroom goal structure. These factors are important in the language classroom where interaction is facilitated by the use of ICT and in which learners collaborate to achieve the goals of the lesson. They facilitate and promote learner autonomy, stimulate intrinsic motivation, internalise extrinsic motivation and motivate authentic assessment and feedback in a collaborative language classroom.

Motivation is a salient component of language learning which aims at a cohesive learning group which is characterised by a climate of trust and support within the learning environment. Dörnyei (2001) characterises the inter-member relations that affect motivation into two dimensions: 'attraction' and 'acceptance'. Attraction involves "an initial instinctive appeal,

caused by factors such as physical attractiveness, perceived competence, similarities in attitudes, personality, hobbies and living condition etc." (p. 720). This usually refers to the initial bond between the group members, which is gradually replaced by a deeper and steadier interpersonal relationship which is acceptance. In learning languages using ICT tools, attraction deals with many aspects which involve the attractiveness to the physical space and authentic tools. Acceptance involves "a feeling toward another person which is non-evaluative in nature, but entails an unconditional positive regard toward the individual, acknowledging the person as a complex human being with many values and imperfections" (p. 720). Acceptance has nothing to do with likes and dislikes; it is appreciating a human being the way they are, thus allowing opportunity for development, enhancement of self-confidence and self-efficacy in learners.

Williams and Burden (1997) point out that "motivation may be constructed as a state of cognitive and emotional arousal, which leads to a conscious decision to act, and which gives rise to a period of sustained intellectual and/or physical effort in order to attain set goals" (p. 120). Language learners are motivated through different factors intrinsically or extrinsically and through this motivation they develop a sense of self-concept and mastery in learning and interacting with the learning tools. As learners develop new learning skills, their attitudes change as they become interested in what they do as they see its relevance, they understand the expectation and derive satisfaction when they achieve their goals. In this way, they develop 'positive interdependence' (Dörnyei, 1997, p. 484) in which they encourage and facilitate each other's efforts to achieve and complete tasks. When learners learn language through groups, they become oriented toward achieving their set goals, they find reward in what they do and this strengthens group cohesion and the overall learning outcome.

2.4.8. Challenges of online translation

Although there is a need to develop and create African languages online, there are technical hurdles, which are the result of the background of most Africa indigenous people. Some challenges have been observed in relation to the translation of Wikipedia content.

a. Lack of access to ICT facilities

Access to ICT facilities is one of the main challenges facing African countries, "with a ratio of one computer against 150 students as oppose to 1:15 students in the developed countries" (Kiptalam & Rodrigues, 2010, p. 50). In Namibia, the ICT Policy for Education recommended one computer per ten students for both primary and secondary education (Namibia. MOE, 2005). To date, this is dream is yet to be achieved. This is because computers are still very expensive despite the spirited efforts by the government and NGOs to donate computers to as many schools as possible. In many cases, schools are loaded with old and broken computers, and some with out-dated programs and no internet access. In some cases, many schools in Africa and Namibia specifically are not yet connected to electricity (Shafika, 2011).

Many African children come from disadvantaged backgrounds of which a vast number have not seen a computer at home, in the community and maybe a lucky few have encountered a computer at school. The lack of background exposure to ICTs was observed by Samaras (2005) who noted that it is not only lack of access to digital information where indigenous people are disadvantaged but also the lack of literacy and the skills-based capabilities required for effective utilisation of ICTs. Moreover, many African children know the computer as mere hardware; they are not familiar with the components and purposes of the computer and the internet. This contributes to the diversity of media and ICT experience in learners. As Majcenovič (2011) observed "translation required additional specific knowledge and experience in the field of translation with audio, visual and/or written channels" (p. 192). This means that the lack of learner's access to ICTs and the internet at home and at school and technical support on the use of ICT could hinder effective online translation.

b. Negative attitude toward the use of African languages in the ICT domain

Negative attitudes prevail among indigenous people towards the use of African indigenous languages at school and in society. There is still a lack of trust in indigenous communities and schools for ICTs such as television (UNESCO, 2011). Many African people believe that ICTs represent a threat to the vitality of their cultures and language (Borrero, 2013). In some cases, African governments have reservations about introducing ICT in indigenous languages. A

survey conducted by UNESCO (2011) reveals that indigenous communities are concerned that ICTs could alter verbal communication while failing to build the cognitive skill that people need to learn through songs and dances about their culture. They believe that ICT portrays negative images within the indigenous communities. Consequently, these opinions discourage governments to develop policies and programmes for ICT use in indigenous languages.

Some African countries do not consider their indigenous languages as important compared with the prevailing European language. For example many Namibian people see their mother tongue as a language that can only be used at home. They see it as a language without a future as it is not used in the world of work (Swarts, 2000) and mostly they have never seen it on the internet or Wikipedia with the minor exception of social networks such as Facebook. Majcenovič (2011) points out that teachers use approaches to language teaching that best suit their particular needs and knowledge, approaches which are dictated by what their working environment offers in terms of resources, technical progress etc. Sites like Wikipedia have never been considered as one of the cultural modes of communication in many African language classrooms as most of teachers rely on pen and paper, book and chalkboard in teaching.

c. **Lack of incorporation of indigenous languages in ICT policies**

Government and educational policies do not incorporate the use of ICT in indigenous language learning; even though they have proposed the use of ICT across the curriculum (UNESCO, 2011; Shafika, 2011). In some schools, computers are still not regarded as educational resources. A study conducted in Kenya reveals that in the majority of computer assisted lessons teachers tend to be passive, and some learners regard the use of computers as time for relaxation as opposed to serious learning (Kiptalam & Rodrigues, 2010, p. 50). The incorporation of indigenous languages in ICT policies is vital to online translation in the language classroom. Majcenovič (2011) points out learners need training in technological knowledge at the fastest possible rate without reducing the quality and quantity of effective use. There is a need to introduce learners to the translation toolkit such as Wikipedia. This has to start with the empowering of indigenous languages on a policy level, so that indigenous language teachers can devise different strategies for integrating the use of ICTs in their lessons.

d. Lack of standardization in African languages

Osborn (2006, p. 87) points out that "African languages are limited by the standardization of orthography, and individual experimentation with the language in some cases varies for the same language across the borders". This situation is problematic for the African language translators, as they experience a lack of standardization of languages. An example of this was experienced in the Sesotho language translation. Sesotho has regional dialects and differences in terminology between the South African Sesotho and the Lesotho Sesotho. Another example that might be affected by a lack of standardization is Setswana, which has speakers from Namibia, South Africa and Botswana, and the Ovakwanyama speakers in Namibia whose language originated from Angola. The lack of standardization between the languages causes clashes between translators and proof-readers as each clings to the local dialect. According to Kelly et al. (2012) this situation poses a challenge to the translators who will have to deal with conflicting issues caused by the differences and barriers in the orthography.

2.5. CONCLUSION

In summary, this chapter discussed the availability and influence of ICT tools in African society and the exposure of indigenous communities to the use of ICT in school. I discussed about the importance of African languages revitalisation through the localisation of ICT tools and the translation of internet content into African languages. Furthermore, I elaborated more on the relevance of translation in the first language classroom and the implication towards its effectiveness. The literature indicates that although there are challenges, ICT integration in education is one of the fast-growing movements of the 21st century. Platforms such as Wikipedia positioned themselves as one of the pedagogical tools which can be used to foster first language learning in the classroom. Motivation plays a major role in fostering language learning and development and thus it was explored in relation to group dynamics and collaborative learning.

In the next chapter, I discuss situated learning as a theoretical framework for using ICT in the language classroom.

CHAPTER 3

THEORETICAL FRAMEWORK

Learning is a social process that occurs through interpersonal interaction within a cooperative context. Individuals, work together, construct shared understanding and knowledge (Johnson, Johnson & Smith, 1991, p. 11).

3.1.   INTRODUCTION

In this investigation of the dynamics of ICT use in the language classroom, several pedagogical principles and theories are adopted and explained. This chapter focuses on the epistemological and ontological orientation of the research. I look at situated learning (Lave, 1988; Brown, Collins & Duguid, 1989; Collins, Brown & Newman, 1990; Lave & Wenger, 1991) which serves as the epistemological basis of this research and its conceptual model of cognitive apprenticeship and their influences on learning in an ICT domain.

3.2.   SITUATED LEARNING AS THE THEORETICAL FRAMEWORK

Learning environments are loaded with very powerful digital models and devices particularly the internet, which has revolutionized the way people interact, exchange messages, teach and learn. The web is increasingly equipped with "millions of web pages, site-archives, portals, databases and for ascertaining a kind of harvested-knowledge where learners can learn by themselves to construct knowledge" (Gray et al., 2003, cited in Kundi & Nawaz, 2010, p. 33). Consequently, e-learning requires new skills, competencies and attitudes amongst teachers who are the designers and developers of classroom materials.

This section looks at the pertinence of situated learning theory (Lave, 1988) and its model of cognitive apprenticeship (Brown, Collins and Duguid, 1989, Lave & Wenger, 1991) and its contribution to and implications for ICT use in the language classroom.

3.2.1. Ontological and epistemological underpinnings

Situated learning occurs when there is a 'break' in the flow of routine daily performance and the learner reflects on the current situation, resolves to address a problem, to share an idea, or to gain an understanding (Lave, 1988, p. 23). "Situation" encompasses aspects of the physical, social and cultural environment, including communication with peers during the learning process (Cobcroft, 2006). Lave and Wenger (1991) posit "in situated learning knowledge and skills are created in contexts that reflect how knowledge is obtained and applied in everyday situations" (p. 2). In this sense, the main aim for choosing this theoretical framework for my study is to try to situate ICT integration in an Oshikwanyama classroom. ICT integration across the curriculum was stipulated in the ICT policy for education, so as teachers, we must try and find contexts in which to integrate ICT and ensure that it makes sense to learners so that they appreciate a new mode of learning.

Situated learning stems from Vygotsky's social development theory (1962, 1978) in which learning (including language learning) is viewed as "the appropriation of socially-derived forms of knowledge; which are constructed through the exchange between persons and social and cultural circumstances" (Billet, 1996, p. 263). Therefore, in situated learning, learners' process new information in a way they can relate to, in their own contexts or environment.

Situated learning maintains that "knowledge is not a static symbolic representation, 'stored' in the brain of an individual, it is situated, being a product of the activity, context, and culture in which it is developed and used" (Tretiakov, Kinshuk & Tretiakov, 2003, p. 32). These views are necessary for a study which requires learning to occur via the exposure to and participation in an environment in which knowledge is practiced. Thus, individuals, culture and languages are considered as whole co-existing and joint members of the knowledge construction community. ICT integration requires knowledge to be constructed through the interactions of the learners with their corresponding socio-cultural environment rather than through the interactions with other people. According to Salomonidou (2009) ICT tools that include the use of computers have the potential to alter and replace traditional forms of teaching and learning and serve as a vehicle for situated learning. This learning needs to be situated in the learning environments, learners' prior learning experiences, their multiple realities and beliefs and the computer-based application which functions as cognitive tools.

Lave (1988) asserts that in situated learning, "knowledge is conceived as a set of tools stored in memory, carried around by individuals who take the tools and use them … after which they are stowed away again without change at any time during the process" (p. 24). This relates well with the use of ICT tools in the classroom. ICT may be used as an effective and attractive means of presentation, and importantly, as a way to facilitate peer interaction in and out of the classroom. From the situated learning perspective, "integration of technology into instruction does not just mean to teach students how to use a piece of technological equipment or to teach students by drill and testing" (Koc, 2005, p. 75). It is rather a plan to use technological resources to assist learners to construct meaningful knowledge by creating social, collaborative, inquiry-based activities and engaging learners in critical and higher order thinking.

The computer plays a mediating role, providing a medium for linguistic and notational expression, especially in the language classroom. McMahon (1997) maintains that ICT plays a significant role in enhancing social interactivity among learners and presenting information/ideas effectively for easy processing. This further means that ICT not only enables the transmission of the teacher's understanding to the learners, but it is a medium through which teachers and learners' understanding can be enhanced through social learning activities. Situated learning provides ways in which teachers can display knowledge to the learners in which everyone is fully involved in the knowledge acquisition process.

Brown, Collins and Duguid (1989) argued that meaningful learning will only take place if it is embedded in the social and physical context within which it will be used. The core idea in situated learning is that learning is inherently social in nature (Hansman, 2001). This means that in situated learning, learning is shaped by the nature of the interactions among learners, the tools they use within these interactions, the activity itself, and the social context in which the activity takes place. These core ideas of situated learning are relevant for ICT use in the language classroom. The use of ICT requires learners to enter the learning environment, bring with them prior knowledge and then engage in a web-based activity such as searching the internet, translating Wikipedia content and communicating with peers on suitable strategies or practices to use.

3.2.2. Cognitive apprenticeship as a model for situated learning

Cognitive apprenticeship (Lave, 1988, Brown et al. 1989, Lave & Wenger, 1991) is a model of learning based on the situated learning theory. This model is designed to 'acculturate students into authentic practices by practitioners in their everyday work' (Brown et al. 1989, p. 37). In cognitive apprenticeship, learners collaborate with one another and their teacher to reach shared understandings. According to Lave (1988) "Apprentices learn to think, argue, act and interact in increasingly knowledgeable ways with people who do something well, by doing it with them as legitimate, peripheral participants" (p. 25). For Lave, "Apprenticeship is not just a process of internalizing knowledge and skills, it is the process of becoming a member in a community of practice" (Hodson & Hodson, 1998a, p. 17). Thus, Lave and Wenger (1991) assert that in cognitive apprenticeship, (i) learning occurs naturally through activities, contexts and cultures, (ii) concepts taken from the natural contexts and applications are taught, and (iii) More "apprentice-like' examples are presented. This means that learning is seen as the notion of the apprentice observing the 'community of practice'. Community of practice helps learners to be able to participate in a legitimately peripheral way, which allows them to have a broad access to arenas of mature practice. As learning happens the involvement in the culture increase, the learners participate in what is called, a 'legitimate peripheral anticipation' (Lave, 1988, Lave & Wenger, 1991) which enables them to progressively gather the culture of the group and get the meaning of what it takes to be a member.

Lave and Wenger (1991) adopted Vygotsky's Zone of Proximal Development (ZPD) (1978) in developing this model. According to Vygotsky (1978) the ZPD refers to "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with capable peers" (p. 86). Cognitive apprenticeship requires that an experienced member of the community of practice is involved to plan and manage the learning situation (Hung, Looi & Koh, 2004). This is necessary in this study where knowledge is gained through the manipulation of tools in an ICT enhanced environment through the guidance of a teacher in addition to more knowledgeable peers. This provides an opportunity for guided activities, which are offered in collaborative learning environments.

Li and Ngan (2009, p. 51), claim that "teachers will never be competent in using ICT in teaching and learning if they are not given the opportunities to observe other experienced teachers using

ICT in teaching". The implication is that to use Wikipedia translation in the language classroom the teacher needs to be more knowledgeable in carrying out online lessons, time managements and especially if they want to complete the lesson objectives, and be aware of cultural artefacts such as the use of language and the Wikipedia translation toolkit. They need to be empowered with knowledge, skills and confidence and a better understanding of how to use ICT tools (either to teach or learn) in the first language classroom. Teachers need to be exposed to a more knowledgeable other, who are proficient in ICT.

3.2.3.1. Stages of cognitive apprenticeship

This study uses the three stages of cognitive apprenticeship proposed by Collins, Brown and Newman (1990, p. 454-455). These are (i) *Modelling* in which the researcher considers expert-like strategies involved in a task and provides a model for problem solution; (ii) *Scaffolding* in which the researcher designs scaffolds that offer hints that encourage learners to apply the strategies and (iii) *Fading* in which the researcher fades by gradually removing the scaffolding and allowing learners do the work by themselves.

Brandt, Falmer and Buckmaster (1993) as cited in (Hansman, 2001, p. 47) extended the application of cognitive apprenticeship further into five sequential phases, which are analysed in the figure that follows:
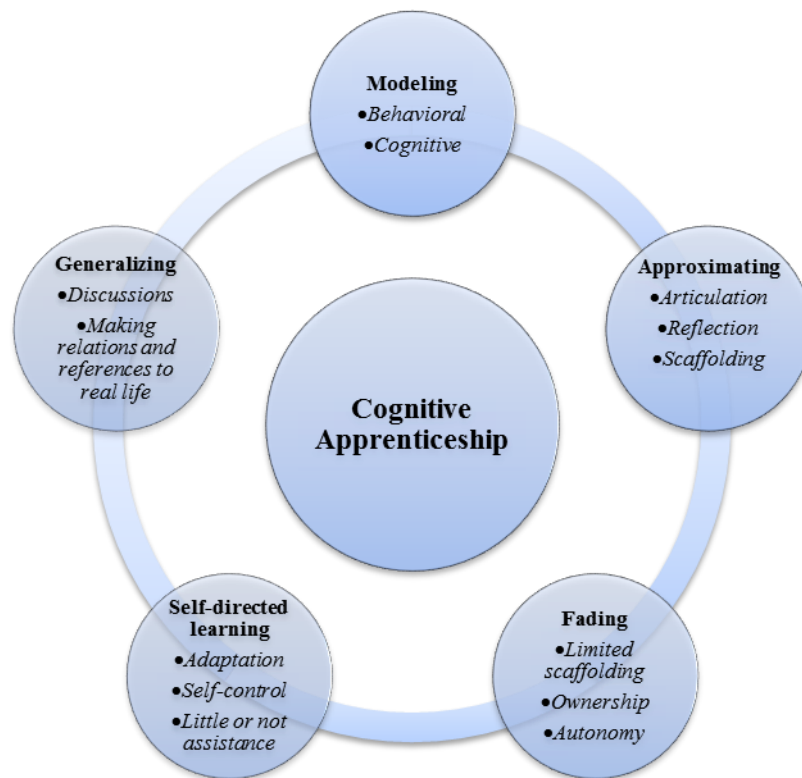
Figure 2: Cognitive Apprenticeship as a model for situated learning

Both (Allal, 2001; Collins et al., 1990) and (Lave, 1988), have pointed to modelling as one of the strong attributes of situated learning. Modelling assists learners in observing the activity performed by an experienced member of the community and cognitively to allow the experienced member to share knowledge with the inexperienced members (Hansman, 2001). Thus, in cognitive apprenticeship, a teacher models the expert strategies needed to execute the function effectively e.g. the teacher demonstrates how to use certain ICT tools such as the internet to translate Wikipedia content and how to use different translation strategies (reading and writing, typing) in translating from the source language to the target language and scaffolds learners throughout the activity. Scaffolding in cognitive apprenticeship, requires a modification of the learning context to suit the individual learner or situation. Scaffolding is collaborative in nature, the task should be within the learner's ZPD and gradual support of the learners' competence is essential (Yelland & Master, 2007). In this way, they get a chance to articulate learning and reflect on what they learn in order to improve practice. In addition, it helps learners to become self-directed in performing the activity and be able to make relations and references to what is actually happening in the real world

Bruner (1985) as cited in Li & Ngan (2009, p. 50) points out that "knowledge and understanding are constructed socially through talks and activity on shared problems and tasks". This means that in ICT integration, classroom learning can be a social mediation process in which meaning is constructed through cultural artefacts, widely available in sources such as books, Wikipedia articles, the internet and other resource materials. It can also be found in computers, PDAs, mobile phones and other ICT appliances. These artefacts implicitly embody shared cultural understandings that allow learners to acquire knowledge from a wide range of resources incorporating a particular culture or subject (Li & Ngan, 2009).

3.2.3.2.   Development of a classroom environment for situated learning

Situated learning emphasizes the idea that "much of what is learned is specific to the situation in which it is learned" (Lave & Wenger, 1991, p. 35). In cognitive apprenticeship, "learning occurs while learners are working on tasks that are slightly difficult than what they can manage independently, requiring the aid of their peers and instructors to succeed" (Collins et al., 1990, as cited in Tretiakov et al., 2003). Therefore, situated learning is experimental learning since learners learn by doing.

Lave (1988) assets that "computers give an enormous power to create a situated learning environment where students are learning about reading, writing, maths, science and social studies in ways that reflect the kinds of activities they will need these for" (p. 3). Integrating ICT in the first language classroom can be a daunting task for teachers. Teachers may struggle to decide on appropriate learning contexts, learning content and learning strategies to carry out online activities successfully. Situated learning may offer some of the most helpful strategies to deal with effective development of learning situations.

Anderson, Reder and Simon (1996) point out that in situation learning; the development of classroom activities is guided by learning which is grounded in everyday actions. Wikipedia translation is an activity grounded in everyday situations such as traditional translation with pen and paper in the language classroom, and the professional translation or localisation of the internet content by professional translators. Thus, it is learning that could be transferred to other situations such as the Oshikwanyama language classroom using the Wikipedia content instead of newspaper articles. In this way, knowledge is transferred to similar situations, learning is the result of a social process which is not separated from the world of action but exists in robust,
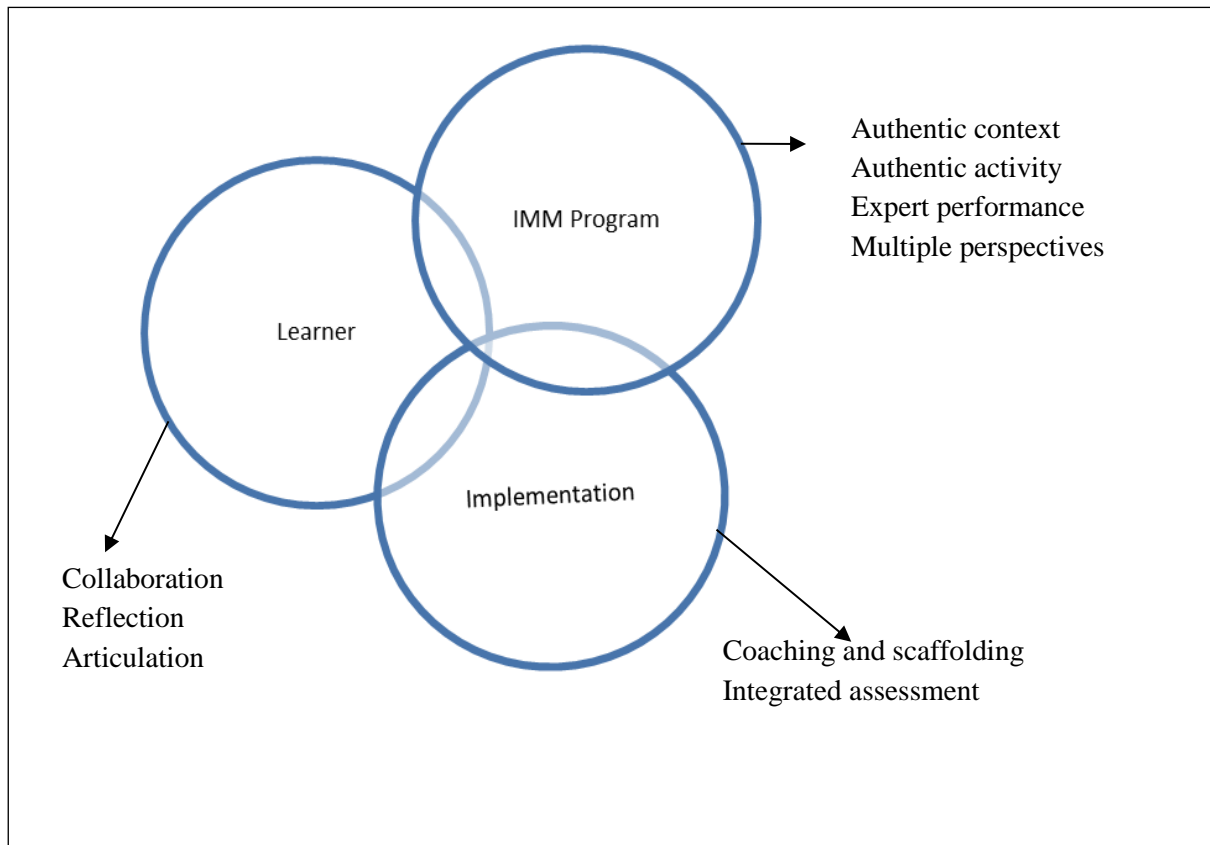
complex, social environments made up of actors, actions and situations. Therefore, learning is a continuous, life-long process resulting from acting in situations, in which tools are used and attitudes learned in order to prepare individuals for work in real life, and solve real life problems.

Lave and Wenger (1991) propose that situated learning happens in a community of practice. Thus, the situated cognitive use of technology could work best in complex situations that require transferring lower level skills to higher order thinking skills as there are many players (teachers and learners) that could contribute to the body of knowledge. Wikipedia translation can be used as a collaborative activity in a language classroom where learners as novice translators learn in apprentice-like situations. This activity could take place in a social context where learners work in collaborative knowledge and interact with ICT tools in order to translate texts into Oshikwanyama first language. This implies that the classroom activities should be designed in a way that each learner has a role to play in order to be able to contribute to the group effectively.

3.2.3.3. Designing learning using Wikipedia

To design learning using interactive multimedia (IMM) such as Wikipedia requires learning which results from the interaction on three areas of influence agent, activity and world (Lave & Wenger, 1991, p. 110-112). The agent refers to the person involved in the activity (Learner), which will be implemented according to a certain process (Translation) using an interactive multimedia (Wikipedia portal).

To construct meaningful knowledge, the characteristics or elements of situated learning environments were devised (Herrington & Oliver, 1995; 2000).

Authentic context
Authentic activity
Expert performance
Multiple perspectives

IMM Program

Learner

Implementation

Collaboration
Reflection
Articulation

Coaching and scaffolding
Integrated assessment

Source: Herrington & Oliver (1995, p. 256)

Figure 3: Constitutive elements of situated learning in interactive multimedia

a.   **Authentic contexts**

Situated learning attempts to promote learning within the nexus of activity, tools and culture through collaboration and social interaction (Brown et al., 1989, p.33). According to Koc (2005) the internet provides a rich source of outside information that allows students to address complex problems (p. 76). The internet connects the teacher and learners to people outside the school environment, providing access to expertise not available locally. It is the internet which provides the Wikipedia platform, which has a range of activities directly browsed from the Wikipedia website for learners to choose from and which could be edited at a time convenient to the learner outside the classroom. Ilomaki (2008, p. 20) assert that learning should be organized in authentic settings for learners to "abstract concepts and self-contained examples". The Wikipedia translation contexts need to enable teachers to act as practitioners, who operate on the ICT tools and set examples on how online translation could be done in an easily explainable way to learners.

b. Authentic activities

According to Brown et al. (1989) "cognitive apprenticeship methods try to acculturate students into authentic practices through activity and social interaction in a way similar to that evident – and evidently successful – in craft apprenticeship" (p. 39). This means that in innovative teaching such as web-based teaching, the focus is placed on problem-solving, deliberate attempts are made to generate meaning and show understanding of the nature of the activity. The activities should be coherent, meaningful, and purposeful (Anderson et al., 1996), and thus they are regarded as authentic because they are located within and reflect the culture of the practitioners. Wikipedia translation activities are ill-defined as they are available in a range of themes that promote exploration by learners. By exploring them, learners get an opportunity to detect relevant and irrelevant articles.

Collins et al. (1989) posits, "when classroom authentic activities are transferred to the classroom, their context is inevitably transmuted, they become classroom tasks and part of the school culture" (p. 34). Technology can be used to create authentic activities which are acculturated into the real world to make the learning meaningful and applicable in real world situations (Koc, 2005). The web is a learning platform that can be situated in a learning context as it provides access to rich sources of information which encourage meaningful interactions with content, and brings people together to challenge, support and/or respond to each other (Ng'ambi & Johnston, 2006).

c. Expert performance

Once the teacher as the facilitator of learning models new learning by presenting apprentice-like skills for executing the activities, he/she fades the scaffolding (Lave, 1988) and gives learners the chance for self-direction. Wikipedia translation being a new phenomenon in an African first language classroom needs to be guided through expert thinking and modelling in order to move learners from being less knowledgeable to more knowledgeable. Learners need to have access to the observations of real-life, real-time translation episodes being performed by the teacher or an experienced online translator. Since learners are assigned responsibilities, as soon as they pass through the Zone of Proximal Development referred to earlier; they can take ownership of the activities and begin working like experts.

Kageto and Sato (2010) point out that a technology based learning environment helps learners participate in their own learning, acknowledges the critical role of experience and technology in learning, and considers their beliefs and attitudes about the activity. This encourages learners to engage in dialogue with other learners and the teacher. It supports cooperative learning principles in which learning takes place and elaborates content with interactive tools. In this way, learners are provided with a chance to act like experts because they have acquired both the declarative and procedural knowledge to carry out the activity.

d. Multiple roles and perspectives

Situated learning provides the learners with a chance to generate their own solution paths in which they take on roles as creative members of the community, who discuss, reflect upon, evaluate and validate learning procedures through collaboration (Ilomäki, 2008). Thus, for learners to successfully complete the activity, they need to understand the multiple roles, responsibilities and perspectives required to interpret reality, construct knowledge and execute experience-based activities. Wikipedia translation provides access to a range of articles that give learners different viewpoints and perspective especially when working in collaborative groups. For ICT enhanced translations a broad access to ICT tools, dictionaries, encyclopaedias and other media sources is needed to facilitate learning in a community of practice.

e. Collaborative learning

Pinheiro (1998) as cited in Cobcroft, (2006) defines collaborative learning as "the process of students working in teams to pursue knowledge and learning" (p. 118). In collaborative learning, information, ideas, and problem solving are actively shared among the team members. In situated learning, learners participate and become intimately involved with a culture of learning, interacting with the community and learning to understand and participate in its history, assumptions, and cultural values and rules (Lave & Wenger, 1991) so learning is collaborative by nature.

Tretiakov et al. (2003, p. 32) assert that "all learning is similar to language learning, with knowledge being constantly constructed and re-negotiated by its practitioners (such as the language speakers)". They compared learning in a situated environment to a child learning languages in that "children are able to learn a language at an incredible speed when they are

actively participating in an environment where the language is spoken" (p. 32). Through collaboration, which takes place in an ICT simulated context, symbolic language features such as vocabulary and grammar rules can be used to provide a modest success rate, help learners to participate in an environment in which the knowledge being practiced is very important.

f.   Reflective learning

A situated learning environment would require learners to reflect upon a much broader base of knowledge to solve their problems, and this can be done when the learner is able to predict, hypothesize, and experiment to produce a solution (Hansman, 2001). In an ICT environment, this involves the ability to interact with ICT tools and platforms to convert knowledge into meaningful concepts. This is a trial and error process, which requires reflection from any previous learning. In a way learners learn to become self-directed and self-motivated in doing online activities (Garrison, 1997). Wikipedia translation activities require background reflection with regard to the use of ICT tools, content and linguistic expertise needed to translate. This allows association of new knowledge with the prior knowledge into the learner's conceptual framework. Reflection allows the teacher and learners to monitor and criticize the level of acquisition and the ability of application of knowledge and skill in a learning context and compare it to that of the more knowledgeable person.

g. Articulation of learning skills

Articulation is needed in situated learning in order to enable tacit knowledge to be made explicit (Collins et.al., 1989). This articulation is procedural in the ICT context where tools are used to produce knowledge, and where a learner as a novice becomes an apprentice to learning. Once learners are able to reflect on learning, either individually or in collaborative groups, then they can easily break down the problem according to the priority areas of importance and execute the activity effectively. The technological applications that support learning are used as cognitive tools that "enable learners to become critical thinkers and engage in knowledge construction rather than knowledge reproduction" (Jonassen, 2000) as cited in Koc (2005, p. 76). In the case of technology use, learners should be self-regulated in order to take responsibility for their own learning. In addition, articulation of correct grammar and vocabulary is needed to translate the text effectively. Learners also need to have good summarising skills and that necessitates the relevance of sentence construction.

h.   Coaching and scaffolding

Scaffolding learning advocates that people learn in a community of practice, where learning requires development through ZPD (Lave, 1988). This means that learners and novice members of the community need teachers to provide different forms of support for learning, through intrinsic scaffolding and coaching (Herrington & Oliver, 2000). ICT enhanced learning requires both teachers and peers to create opportunities for articulation through scaffolding assistance in the program or activities to be implemented (Collins et al., 1989). Consequently, Wikipedia translation needs support (both ICT and linguistic) offered by the teacher and /or more knowledgeable peers. Support could also be offered through the external use of material such as dictionaries, which guide learners on the choice of vocabulary needed for translation.

i.   Authentic assessment of learning within the task

Assessment involves the process in which learning outcomes are assessed and evaluated. In teaching through ICT integration, authentic assessment requires "student time and effort in collaboration with others and, as with authentic activities, requires complex, well-structured challenges that involve judgment and a full array of tasks within the assessment seamlessly integrated in the activity" (Herrington & Oliver, 2000, p. 182). In a Wikipedia translation exercise which is conducted through collaborative groups, assessment (peer-assessment) is needed to ensure that learners critically review their progress and take immediate action. If assessment is integrated in the activity, it requires learners to be effective performers who possess sufficient acquired knowledge to craft well-polished online products.

3.3.   CONCLUSION

In this chapter I discussed the theory of situated learning and cognitive apprenticeship as a model for using Wikipedia translation in the classroom and its implications for the language classroom. I found situation learning useful for my study in providing the theoretical and analytical lenses to view the learning environment, which uses authentic activities that reflect the way the knowledge will be used in real-life. It also seems to offer access to expert performances and the modelling of the processes. It is said to provide learners with multiple roles and perspectives that they can execute, support of collaborative construction of knowledge

through coaching and scaffolding by a knowledgeable other, the promotion of reflection and articulation of knowledge, and the provision for integrated assessment which is embedded within the task.

In the next chapter, I discuss the methodology I used in this study, including the theoretical and practical issues concerning data collection and analysis.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

We do not encounter the world as it exists in any neutral or objective sense outside of the realm of human experience… the world is pre-interpreted for us by previous generations and we draw on the experiences that others have had before us (Säljö, 1998, p. 51)

4.1.   INTRODUCTION

In this chapter I explain the research orientation that I employed including the epistemological (views about knowledge), ontological (views about reality) and methodological (views about knowing) paradigms of this research (Cohen, Manion & Morrison, 2007). I provide a description of the case study method and a justification for why it was chosen for this study. The chapter further provides an account of the sampling procedures and a description of data collection methods and the methods that I employed to enhance the validity and trustworthiness of this study. The chapter ends with a discussion about ethical considerations and an explicit explanation about my role as a researcher and the limitations of this study.

4.2.   THE RESEARCH PARADIGM: QUALITATIVE EMPIRICAL PARADIGM

A research paradigm refers to "a set of very general philosophical assumptions about the nature of the world (ontology) and how we can understand the world (epistemology)… paradigm also includes specific methodological strategies linked to the assumptions and methods identified" (Merriam, 2001, p. 6). Patton (2002) asserts, "a paradigm is a worldview, a general perspective that is embedded in the socialisation of adherents and practitioners" (p. 69). This study focuses on social practices of knowledge and skills construction where the participants make use of available ICT applications to translate readily available Wikipedia content in a social environment. Thus, the study adopts a qualitative empirical research paradigm (as described in Yin, 2003; Gay, Mills & Airasian, 2009).

Shank (2002) defines qualitative research as "a form of systematic empirical inquiry into meaning" (p. 5). By systematic he mean "planned, ordered and public", following the rules

agreed upon by the members of the qualitative research community. By empirical, he means that this type of inquiry is grounded in the world of experience. Inquiry into meaning implies that the researcher tries to understand how people make sense of the experience. According to Maxwell (2005) qualitative research helps the researcher to "understand the participants' ways of making meaning of their experiences and events as well as how they understand what influences their behaviours and understanding of the particular context within which the participants act, and the influence that this context has on their actions" (p. 17). Thus, it is a subjective process in which meaning is explored from the participants' point of view. In this research study, qualitative research concerns itself with the process, with what has transpired as much as with the product or outcome. This relates it to the phenomenon under study; the use of ICT in an Oshikwanyama classroom as well as the types of ICTs involved and their use for learning.

4.2.1. Benefits of using qualitative methodology in this study

The qualitative methodological approach provided the opportunity to design empirical procedures that enabled me to analyse learners' actions, views and attitudes about working on the internet and in particular about translating the Wikipedia content into Oshikwanyama. Qualitative research necessitates a prolonged and intense contact of two weeks with the learners in their own school context. This gave me an opportunity to talk to them about different ICTs, their use and the ICTs that were accessible to them. It also enabled me to get a holistic view of their perceptions and actions and attitudes towards translating Wikipedia content.

Qualitative research is an exploratory approach emphasizing words rather than quantification on gathering and analysing the data, (Gay et al., 2009). In this research, I conducted a pre-study survey, which supplied a large amount of statistical data. Using a qualitative research method helped facilitate the production descriptive statistics to interpret quantitative data collected through closed questionnaire. Using qualitative research methods allowed me to concentrate on a single setting, one school and observe the participants directly engaging with Wikipedia activities, and carry out face-to-face interview with them after the translation activities. This facilitated the understanding of my research subjects; their beliefs and attitudes towards the activities; and the use of ICT in an Oshikwanyama first language classroom.

Conducting qualitative research helped me to focus not only on individual responses, but on emerging patterns, referred to as recurrent themes or constituents (Gay et al., 2009), from a

group of research participants, e.g. quotations of participant's actual words, citing field notes and interview transcripts as sources. It helped me to use case study techniques such as focus group interviews and participant observation to collect in-depth data.

4.3   THE RESEARCH METHOD: CASE STUDY

This study can be described as an observational study using qualitative information, under an empiricist/subjective point of departure and it uses case study methodological orientation. Yin (1994) eloquently defines case study as an empirical inquiry that:

> Investigates a contemporary phenomenon within its real-life context between phenomenon and context which are not clearly evident; and in which multiple sources of evidence are used; it looks in depth, at a particular individual, program, a class, a phenomenon or an event, with the purpose to understand the dynamics within singular settings at a particular moment. (Yin, 1994, p. 89)

This case study focused on an issue, which is explored in the domain of a limited system by the means of the case of interest (Creswell, 2003). In other words, in this case study, translation of Wikipedia content into Oshikwanyama first language is deeply and thoroughly studied in a specified time-period of four consecutive days, in which the participants had an opportunity to explore the Wikipedia translation activities under focused observation. Thus, the case was bound by time and activity and I collected detailed information using a variety of data collection procedures over a sustained period of time. The case study method provided the best way to involve learners in online activities and for me to get to know and see their lived experiences within a situated learning perspective.

4.4.   THE RESEARCH SITE

This case study was conducted in a northern Namibian school located in the Oshana region. The site was chosen due to several features: the school is one of the best performing schools in Namibia, among the top 10 best performers in 2010 and 2012. The school offers the higher level to all learners of Oshikwanyama First Language, and since I wanted my research to focus on higher-level learners it was an appropriate research site. I selected higher school learners who were studying Oshikwanyama at a higher level because they had experienced more than five

years of learning Oshikwanyama as a first language. Moreover these learners excelled in the Oshikwanyama Junior Secondary Certificate (JSC), with A and B symbols, the fact that qualified them to do Oshikwanyama on a higher level. Although the school is in an urban area, the learners come from different educational backgrounds, some have been schooled in urban areas all their lives, having been exposed to ICT facilities from a young age, whereas some have been schooled in rural areas, at schools with no water and electricity. This was the dynamic in learners' identities and characteristics that I was looking for in this study. Furthermore, this school is rich in ICT facilities. These comprise a fully equipped computer laboratory with 30 workstations that have a wireless internet connection. In addition it has TVs with DSTV, video and DVD-players, a stable electricity supply and many ICT appliances.

Situated learning principles insist that knowledge must be presented in authentic settings and relevant situations must be properly understood. Social interactions and collaborations are essential components of situated learning (Lave & Wenger, 1991; Brown et al., 1989; Collins et al., 1989). This Wikipedia translation project was conducted in a large, well-ventilated computer laboratory, which consisted of 32 computers and a printer. All computers are connected to a wireless network. The Window XP Professional is the operating system and the web browsing tool is Internet Explorer 8. All computers are equipped with a Microsoft Office 2007 package and Encarta 9 software.

4.5.   THE RESEARCH SAMPLE

In translating Wikipedia content as an additive pedagogy for Oshikwanyama learning, I used purposive sampling in selecting the target population of the study. In purposive sampling, "the researcher specifies the characteristics of a population of interest and then tries to locate individuals who have those characteristics" (Johnson and Christensen (2004, p. 215).

The group that I involved in this research study comprised 32 learners (21 girls and 11 boys) who are, (1) Grade 12 Oshikwanyama First language learners, (2) doing both English Second Language and Oshikwanyama First Language on the Higher Level. I chose this group of learners because of their language proficiency, which was necessary to carry out the translation from English to Oshikwanyama. The research population comprised learners who although they

did not all speak Oshikwanyama mother tongue at home, were taught Oshikwanyama throughout their schooling (from grade 1 to grade 12).

Oshikwanyama first language was selected as the target language of translation since it is the first language of the target learners, and it is my area of teaching specialisation. Oshikwanyama is one of Namibia's two written indigenous African languages and the one with the least popularity on the internet (with Oshindonga appearing/having a space on Mozilla Firefox and Google translation toolkits). Since the study was collaborative, the participants were divided into heterogeneous groups of 4 to 6 learners, to collaborate and work together during the web-based activities.

In addition, two language teachers at the school participated as co-observers and reviewers of the translated Wikipedia texts/pages on different occasions. The language teachers, one for Oshikwanyama and the other for Oshindonga first language, were chosen as additional language experts. Their purpose in the study was to provide the research participants with linguistic-related assistance in order to define, explain, translate difficult terms, and clarify sentence formation and structure. These teachers have good academic qualifications, a B.Ed. degree and more than 3 years teaching experience in their respective languages.

4.6.   DATA GATHERING PROCEDURES

Johnson and Christensen (2004, p. 379) assert that "case study research methodologists tend to be pragmatic and advocate the use of multiple methods and multiple data sources". Using multiple data gathering procedures helps to monitor how the participants are moving through the activities and this provides a good basis for verification and justification. The term data collection is ambiguous to use at times. Tobi and Tippins (1993) as cited in Miranda (2004) say that it is often problematic because

> …it implies that data are out there to be gathered up. As is often the case, the use of the collection metaphor can constrain thinking about actions associated with the process of data collection. From a constructivist perspective, data are not collected, but they are constructed from experience using personal theoretical frameworks that have greatest salience to the goals of the individual conducting the research (p. 40).

This study involved firstly the exploration of the use of ICT and Wikipedia platforms among Oshikwanyama learners and secondly the intervention on the use of Wikipedia platform in Oshikwanyama. Thus, we did not only collect data, but we also created new data through the translation of Wikipedia pages from English to Oshikwanyama and uploading the translated pages onto the Wikipedia portal.

The data in this study was gathered in two phases. The first phase consisted of the *pre-study survey* that was conducted to determine the feasibility of the proposed research design, and to identify equipment (ICT tools) and data collection and creation methods. A questionnaire which consisted of both open and closed ended questions was administered to 32 learners (See Appendix D for the questionnaire). It was conducted to provide an overview of the participants' current understanding and experiences with ICT tools such as computers and mobile phones and ICT platforms such as the internet and websites.

In the second phase, the data was created through the translation of Wikipedia pages. In this phase, the respondents had an opportunity to translate Wikipedia content into Oshikwanyama First Language. This was also done in two stages. Firstly, I gave learners *a two-day basic computer literacy course.* Afterwards *the Wikipedia translations* were carried out on four consecutive days, in which I, as a participant observer facilitated the translation.

4.6.1. The Basic Computer Literacy workshop

The pre-study survey (findings presented in Chapter 5) indicates that learners had varying ICT skills. In addition, the data indicates a relatively high number (around 90%) of the participants did not have any idea of what Wikipedia was and had never searched or interacted with it on the internet. This prompted me to provide them with a two-day basic computer literacy workshop, which covered most of the items required to execute online translation activities. In this workshop, learners were introduced to (i) the internet (browsing, using Google to obtain information etc), (ii) Wikipedia which entailed an introduction to the website, introduction to the languages of Wikipedia, Wikipedia content and how it is created, edited and manipulated, (iii) introduction to basic keyboard usage. The basic computer literacy skills workshop was conducted two days before the data collection. The workshop took place in the school's computer laboratory, after school hours, from 14H00 – 17H00, and was attended by all 32 participants.

4.6.2. Wikipedia translation activities

After the initial basic computer skills training, four sessions (2-3 hours per session) were dedicated to the translation of Wikipedia pages into Oshikwanyama. Time was dedicated to the selection of suitable topics and existing English Wikipedia pages related to Namibia, or any social content which might interest the participants. The participants worked on the translation of web-content into Oshikwanyama in collaborative groups of 3 to 4 members. Through this, they translated the Wikipedia pages and then peer reviewed each other's work before the final review by the participating teachers. At the end of the lesson series, the participants gave a report on the translated texts.

Although there were sufficient computer stations in the computer laboratory for each participant, the computers were shared on a ratio of 1:4 during the Wikipedia translation activity. This was done in order to allow learners to work in an apprentice-line community of practice (Lave, 1988; Brown, et al., 1989), with the purpose of allowing them to co-contribute and translate and to accommodate all learners with varying ICT and linguistic abilities.

To be able to address the research questions, three primary data collection procedures were followed to generate data that also served as a basis for data triangulation. These were: participant observation, questionnaire and focus group interviews.

4.6.3. Participant Observation

Observation was one of my primary data collection instruments. It is defined by Johnson and Christensen (2004, p. 186) as "the watching of behaviour patterns of people in certain situations to obtain information about the phenomenon of interest". Observation is an important way of collecting information about people because people do not always do what they say they do (Creswell, 2003).

In this case study, I adopted the role of an active participant observer (Gay et al., 2009; Best & Kahn, 2006). I observed the participants as they translated the Wikipedia content and scaffolded them throughout the activities. A participant observer's role is described by Merriam (2001) as an "observer who sees first-hand information and uses his or her own knowledge and expertise

to interpret what is observed rather than relying upon once-removed accounts from interviews" (p. 96).

The intention of this observation was to see how learners translated the Wikipedia content into Oshikwanyama first language with a focus on participants' engagement in the activity, their reactions to issues that arose with online translations such as ICT skills, language translation strategies and motivation to learn languages. Observation also helped me to facilitate learning through scaffolding the online activity while observing learners working through cognitive apprenticeship. The data was recorded in the form of general field notes of events happening in the classroom that were recorded in a diary. These field notes served as a daily self-reflection tool of every observed session, which focused on the participants' engagement in the online task and their performance. The daily notes included direct quotations of conversations carried out in the classroom. In this observation, checks and controls were ensured through the involvement of two language teachers who served as co-observers throughout the data collection and whose daily notes were compared with my own notes. I also captured some print screens with the translated Wikipedia pages (Appendix J). This allowed for better analysis or triangulation of the findings especially concerning the translation strategies used and the contribution of the activity to language learning.

4.6.4. Questionnaires

The questionnaire was the second primary data collection that I used because it is a self-report data-collection instrument that each research participant fills out as part of a research study (Johnson & Christensen, 2004) and which provides rich descriptive information (Cohen et al., 2007). To provide a definite framework, a questionnaire was given to the participants at the end of each day, to assess the views on the daily translation exercise with regard to the strategies they used to effect the translation and also to collect views on how the learners determined their strength and weakness in the task.

This questionnaire was short and brief, with eight closed questions on the Likert scale and four open-ended questions (Appendix E). It was treated as a daily reflection tool used to ensure that each participant had thought about the learning experience. Furthermore, the participants' daily reflection served as a baseline for further questions in the focus group interviews. The answers and comments were typed out in order to guarantee anonymity.

4.6.5. Focus group interviews

Focus group interviews were the last primary data collection procedure that I used. According to De Vos et al., (2005) focus groups give "a means of better understanding how people feel or think about an issue, product or service" (p. 299). These focus groups helped me to get in-depth understanding of the participants' experiences based on their group outcomes. It also helped the participants to evaluate and reflect better on what has transpired during the translation activities without feeling intimidated by me. It helped learners to feel comfortable and at ease, as if they were in a classroom setting, feeling free to complement and add to others points.

The interview with open-ended questions was conducted with the respondents to give insights into interesting strategies for translation and on challenges encountered during the Wikipedia translation. Although the interview questions were open ended, probing played a big role in soliciting information and clarifying issues during the interview process (Cohen et al., 2007). For all the interview proceedings, a voice recorder was used to capture and record data based on the aforementioned variables, which gave me a true reflection of the Wikipedia translation process. The recorded discussions were then transcribed (Appendix F) after each interview session in order to ensure the availability of data for analysis and to allow me a chance to go back to the participants for follow-up questions and to rectify any mistakes. The transcripts were made available to the participants for confirmation and checking (Ary et al., 2006).

4.7. DATA ANALYSIS

Gay et al. (2009) points out that "data analysis in qualitative research involves summarising data in a dependable and accurate manner that leads to the presentation of study findings in a manner that has an air of indeniability" (p. 448).

In analysing the data collected, I used the "induction mode of inference" (Danermark et al., 2002) to discover patterns, themes, differences and similarities from the collected data (Gay et al., 2009, p. 449). The data was coded, which is "the process of segmenting and labelling text to form descriptions and broad themes in the data" (Creswell, 2002, p. 266). The ideas that emerged from Wikipedia activities was coded and looked at in terms of testing the hypothesis and answering the research questions, with themes and new concepts being developed from the

classroom activities and between participants in their collaborative groups during the online activities.

To do a reliable analysis and interpretation of the questionnaires and interview feedback, the data was compared to check commonalities and differences among the respondents. This included the data that emerged from the topical and analytical analysis, which came from unanticipated themes and characteristics of the participants observed during on-line activities. The field notes from each session were transformed into well-organised summaries that closely reflected what transpired from the online activities.

4.8.   RESEARCH VALIDITY

This research is embedded in the qualitative paradigm whereby multiple and diverse realities were captured using a variety of methods of searching and gathering data (Golafshani, 2003, p. 609). Thus, to ensure the credibility, transferability, dependability and conformability (Gay et al., 2009, p. 375) of the findings, I engaged participant feedback and member checking (Ary et al., 2006; Johnson & Christensen, 2004; Cohen et al., 2007). This is defined by Hinchey (2008, p. 97) as "the process of a researcher sharing preliminary data analysis and interpretation with the study participants to determine whether they agree or disagree with the researcher's analysis". The participants reviewed the raw data which was collected i.e. transcripts, to validate whether their viewpoints, thoughts, feelings, intentions, and experiences were understood accurately and to make corrections and additions.

During the observation, field notes and interview transcripts, I used what Stake (1995) terms 'verbatim' to quote the participants' exact words through direct quotations. Verbatim helps the reader to experience the participants' actual language, dialects and personal meanings throughout the research. In addition, to measure the quality of the research, especially during the online translation activity, the participants were required to check each other's work, thus ensuring 'peer-examinations' (Merriam, 2001 p. 204). This gave them a chance to comment on each other's work and measure the relevance and credibility of the translation.

I used triangulation, which according to Creswell (2003) and Gay et al. (2009) is the use of different data sources of information. Methodological triangulation that looks at multiple

methods, data collection strategies and sources were used, and I employed three primary data collection procedures which allowed me to take the data collected in each tool and compare it to arrive at informed results. In addition, the co-observers triangulation was used especially during the observations to record and describe the research participants' behaviour during web-based activities and to crosscheck observed feedback. This allowed corroboration of observations across multiple data sources and assisted in examining the evidence to build a coherent justification for themes and to avoid biased information.

Lastly, I took my own bias into account (since I have been teaching Oshikwanyama for five years, and the feelings and views that I hold about the research outcome), and the fact that this is a novel intervention, I tried not to claim that the findings apply to a continuous process. Thus, I chose to be a reflexive researcher, by which I was actively engaged in critical self-reflection about my potential biases and predispositions, (Johnson & Christensen, 2004). This helped me to become self-aware in monitoring classroom proceedings and the participants' progress.

4.9.   ETHICAL CONSIDERATIONS

Slavin (2007) asserts that observing ethics in research is necessary for the researcher to avoid public concern over real and potential abuses of participants and data by the researcher. Thus, to protect my image, and those of the research participants, and to ensure ethical consideration, I used the following checks.

Before embarking on the data collection, I gained permission to access the school. Thus, I wrote a letter to the Director of Research in the Ministry of Education to ask for permission to conduct research in a public school. Upon receiving approval, I wrote to the Oshana Education Regional Directorate (Appendix A) and the school principal respectively, to request permission to conduct my study at the school. The letter gave the details (aims and purposes) and the period of the study.

Once the permission had been granted, information letters explaining the aim and duration of the research and all the specifics and letters of consent were given to all the participants (Appendix B and C). In the letters, I assured the participants of their right to confidentiality and that anonymity would be highly respected (Best & Kahn, 2006; Ary et al., 2006). However,

anonymity which according to Johnson and Christensen (2004, p. 112) means, "the identity of the participants is not known to the researcher" was impossible to maintain since I knew the participants from a previous experience. Although I knew the names of the participants, confidentiality was maintained by using pseudonyms in relating to them or their remarks in the report.

4.10. THE ROLE OF THE RESEARCHER

I approached this research as a researcher, participant observer and facilitator of learning, who introduced the Wikipedia translation in an Oshikwanyama First Language classroom for the first time to the learners. Thus, before the study was initiated, I tried to find the connection between what learners already knew and their experience with ICT and the online localisation process in Oshikwanyama. This helped me as a facilitator of the learning process to establish a context that was meaningful and accommodating to all learners, regardless of their ICT background. I explained the learning situation and context to the learners. I orientated them to the tools used during the translations, both ICT tools and language tools and the procedures to be used. In this way, I tried to gain their interest and confidence in the activity.

As a facilitator who has an extensive language teacher background (Oshikwanyama and English) and with the help of the two observer teachers, I had the responsibility of highlighting the important features to be learned, emphasize the use of language, guide learners on the translation strategies to be used and help them in manipulating the ICT tools for translation. I took learners through the process, and systematically guided them through the use of the internet, searching of the relevant Wikipedia pages, opening a Wikipedia account and the editing tools of the Wikipedia content. The fact that I had experience with dealing with Wikipedia content and the fact that I am a language teacher myself, made it easier to assist learners to apply familiar knowledge, which in this case was translation into an unfamiliar context, which is Wikipedia.

4.11. LIMITATIONS AND CHALLENGES

Stake (1995) points out that, case studies provide a poor base for generalisation as specific cases cannot be transferred to similar cases in a different setting. This study was conducted in one

individual school in the Oshana region and with learners from the Owambo ethnic group (there are 13 ethnic groups in Namibia). Merriam (2001) asserts that the readers of case study research use the information to determine if the situation matches theirs especially if the researcher provides a rich thick description of the phenomenon (p. 211). Therefore, the findings cannot be used as representative of the entire region or country but the type of findings generated can be used to inform an understanding of different contexts with learners with similar characteristics to those of the participants in this research.

Apart from that, two major challenges were identified during the pre-study; the learners' unevenness in ICT skills and their differing language proficiency (Hamwedi & Dalvit, 2012). A workshop was conducted on ICT basic skills to ensure learners understood what was required of them. After the workshop was completed, I realised that learners still had unequal ICT and language proficiency due to their background experience with computers and the internet and their linguistic exposure during their early years. These differences between learners are inevitable and are part of the group dynamic. I organised the translation project in such a way that learners worked in heterogeneous groups of mixed abilities (ICT and language proficiency), in which they had to compensate for each other's shortcomings and collaborate in cognitive apprenticeships. In this way, even the weaker learners had a chance to be involved and profit from the activities.

4.12. CONCLUSION

In this chapter, I outlined the research design which is qualitative empirical paradigm. I also discussed the methodological orientation of the study, which is a case study, data collection methods that I employed in this intervention such as the pre-study survey which was kind of a pilot study to determine the current ICT use and accessibility rate of the participants. Data analysis strategies and issues concerning validity and ethical considerations were also discussed. The chapter ended with a brief discussion about my roles and positions as a researcher and the limitations of the study.

In the next chapter, I present the data collected.

CHAPTER 5

PRESENTATION OF THE RESEARCH FINDINGS

Curriculum defines what counts as valid knowledge, pedagogy defines what counts as valid transmission of knowledge and evaluation defines what counts as a valid realisation of this knowledge on the part of the taught. (Bernstein, 1971, p. 85)

5.1.   INTRODUCTION

In this chapter, I outline the findings that emerged from the research which investigated Wikipedia translation as an additive pedagogy for language learning. The findings are presented in two cycles.

The first cycle presents the findings from the pre-study survey. This includes the information pertaining to the research site, the research population and statistical analysis of the research population's current mobile phone and computer access and the perceived benefits and challenges of using and learning Oshikwanyama in an ICT domain. In essence, situated learning that provided the theoretical lens for this research requires authentic contexts and activities to be coupled with guidance based on expert modelling, situated mentoring and cognitive apprenticeships (as discussed in Chapter 3). The result of the pre-study survey were used to determine the participants' level of understanding and experience of ICT tools, the use of the internet, computer and Wikipedia platforms, which was necessary in determining the level of basic computer literacy required.

The second cycle presents the data generated from the Wikipedia translation online activities. These are presented in three main themes that try to answer the main research questions. The themes are also divided into sub-themes, which analyse the coded data into categories. Data is presented in two ways, using the participant's real words from their daily reflections and interviews (I used pseudonyms when referring to the participants, given at the end of the quote). Secondly, the data collected through my own observation was triangulated with the other' findings, such as the co-participants' notes and learners' daily reflections.

5.2. CONTEXTUAL FINDINGS

In this section, I give the contextual analysis of the research site focussing on the school's Language policy, ICT policy and the availability of ICT infrastructure that aids teaching, learning and administration at the school. I also present the data collected from the pre-study survey that I conducted with the research participants, which is divided into two parts. The first part gives a statistical analysis of the access to and usage rate of both computers and mobile (cell) phones by the participants. The second part presents findings collected on the participants' current usage, perceptions and feelings of using and learning Oshikwanyama on ICT platforms.

5.2.1. The Research Site

This research project was conducted in an urban Namibian school, situated in the northern part of the country. Although this is an urban school, it is located in one of the previously disadvantaged regions. This school houses 799 learners and 33 staff members (teachers).

The research site is a public school, which follows the general national curriculum used in all public schools in the country. It has classes ranging from grade 8 to 12. Grade 8 to 10 is the Junior Secondary phase and grade 11-12 is the Senior Secondary phase. The senior secondary phase comprises learners doing both Higher Level (which only includes learners who have attained exceptional academic achievements in their Junior Secondary phase JSC – grade 10) and Ordinary Level (which is the lower level with Extended and Core curricula) in all the various subjects across the curriculum.

This particular school follows the national policy for languages. English is taught as a second language for all learners and it is the LOLT and Oshikwanyama or Oshindonga is taught as the first language. All learners (including best or average performers) are encouraged to take Oshikwanyama/Oshindonga first languages on the higher level (thus, one will find all the learners at the school are doing Higher level in the First Language).

The school follows the National ICT Policy for Education in Namibia (2005). There is no internal ICT policy for the school in place and thus teachers integrate ICT across the curriculum in their individual capacity. Although the National Curriculum for Education (2010) did

introduce ICT Literacy as a non-promotional subject for grades 5 – 12, this subject had not been introduced at the school at the time of the research and it did not appear in the school time-table.

The school is well equipped with ICT infrastructure. There are 4 computers in the administration block (1 in the school principal's office, 2 in the secretary's office, 1 at the reception and 1 in the staff room). A computer in each departmental office (3 computers in total), 1 computer in the library, 1 computer in the Science Laboratory, a full- fledged computer laboratory with 30 work stations and 1 main host. In addition, there are two projectors and a printer in every room with a computer. The school is connected to a wireless network, which can work within a radius of 500 meters from the administration block. The computer lab has unlimited internet access. There are a total of 39 working computers at the school, all can access the internet. Over 50% of teachers have their own laptops. Through informal discussion, I learnt that some teachers have completed their ICDL training, which was done by the Ministry of Education in cooperation with NETSS (mentioned in Chapter 2). There are other ICT media available at school such as the overhead projector, radio and voice recorders. These are normally used in the language classroom. The VCR recorder and DSTV are connected in the school main hall.

5.2.2. The Research Sample

The respondents for this study had varying educational backgrounds. Some 53% of learners had attended primary school in urban areas and 47% attended primary school in rural areas. The respondents were some of the best performing learners at school with 91%, having obtained more than 38 out of 42 points, in the grade 10 national examination with an average of a B-Symbol in Oshikwanyama. Apart from language proficiency, this group had a good reputation with computers, 69% of the participants had access to computers at home and at school. In addition, some participants (43%) had attended a computer literacy course at primary school and some (50%) have done Keyboard and Word Processing (KWP) from Grade 8-10. The pre-study survey indicated that these learners were equipped with computing skills such as typing, and the use of office programs. The following table shows the classification of Oshikwanyama first language speakers among the research sample.

Table 3: Classification of Oshikwanyama speakers among the respondents

Age group	15 – 18	
Oshikwanyama mother-tongue	Boys	7
	Girls	19
Other Oshiwambo dialect mother-tongue i.e. Oshindonga, Oshikwambi	Boys	4
	Girls	2

Although I did not measure the level of spoken Oshikwanyama at home, the table indicates that over 80% of the research population speaks Oshikwanyama as a mother tongue at home, 25% of boys and 68% of girls respectively. This could be because the school is located in the Oukwanyama district, where many residents are from Ovakwanyama ethnic groups or that the respondents were specifically chosen from Oshikwanyama only classrooms, where most of the learners are Oshikwanyama mother tongue speakers or have been doing Oshikwanyama as a subject from grade 1-4.

5.3.   ICT ACCESS AND EXPERIENCES AMONG THE PARTICIPANTS

In this section, I present the current access rate of the participating learners to ICT tools such as computers and mobile phones. I analyse the learners' current experience with ICTs, either on their own or with assistance and their current uses of ICT in and out of school.

5.3.1.   Computer access and usage levels and experience

a.   Computer access

The findings indicated that only 31% of the respondents have access to a computer at home, the remaining 69% only use the computers at school. Over 70% of the respondents have less than 5 years' experience with computers leaving 24% with between 7-9 years' experience and only 2% with over 11 years computer experience. Furthermore, only 44% of the respondents have basic knowledge about computers, gained through the Keyboard and Word Processing subject at school (in Junior Secondary Phase) and a computer course at their primary schools. Of all the respondents, 66% indicated they had not attended any computer course.

b. Computer competence level

The participants were asked to rate their computer competence level, with regard to things they could do such as type documents, surf the internet, use social networks etc. The findings indicated that 60% of the respondents rated themselves as good and very good computer users. They were able to use the computer for multiple tasks such as for school related activities such as research, typing etc, and the same percentage used it for connecting to social networks like Facebook, Twitter, etc. About 31% of the respondents indicated they used the computer for playing games, downloading music and for journal keeping, alarms, and the calculator. The remaining 40% of the respondents' competence rated from poor to very poor. They indicated that they had little or no computer experience as they were not exposed to computers from their previous schools or at secondary school. The findings are presented in the chart below:
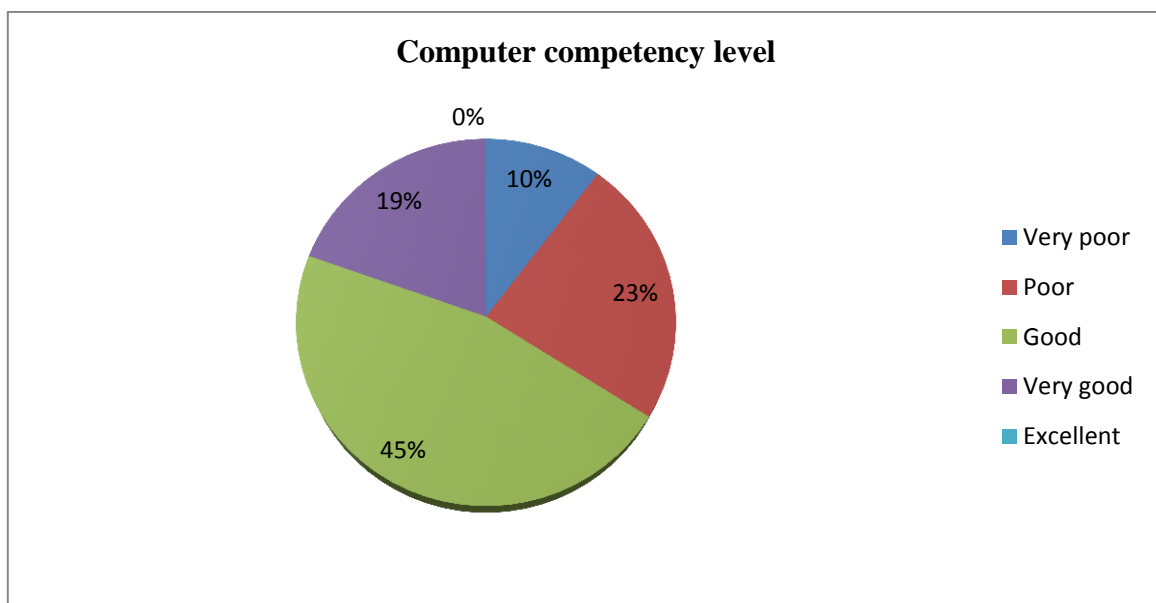
Figure 4: Respondents' computer competence level

The response to the question about the computer applications that the respondents could use indicated that social media such as Facebook was very popular and was the preferred computer or internet application which the participants' engaged with followed by Google and word processing applications. The findings are indicated in the graph below:
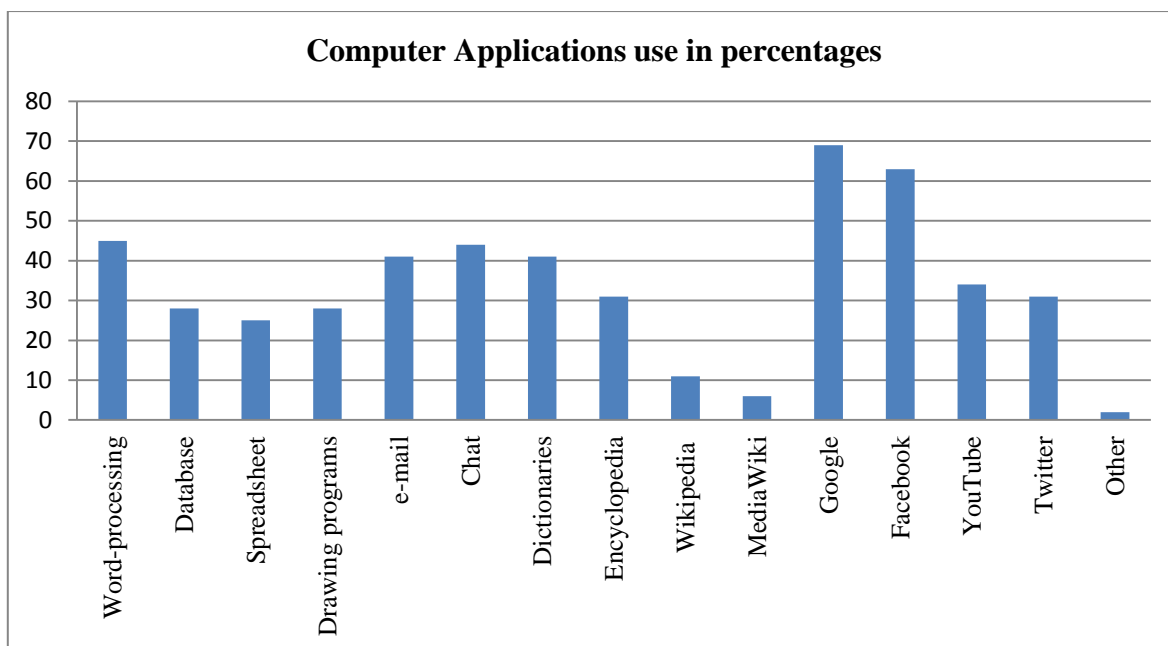
Figure 5: Respondents' computer application usage in percentages

c. Computer use at school

Using the Likert scale, the respondents were asked to rate their computer laboratory use at school. The findings indicate that most of the respondents (about 19.8 on average) had never used the fully equipped computer laboratory at school whereas those that had used it (12.2 on average) had only done so occasionally, especially on a monthly and weekly basis. From my informal discussions with the teachers at the school, I learned that the computer lab is used as the classroom for KWP lessons. Learners are not permitted to use the computers unless it is upon request from teachers, who supervise them. Since there is no computer technician at the school, the management fears that if the computers break, it would be difficult to get them fixed or to replace. Thus, 60% of the respondents indicated they used the computer lab for research and typing documents. The remaining percentage used it for playing computer games (10%), social media (16%) and the other (9%) for watching videos on YouTube. The findings are presented in the following figure:
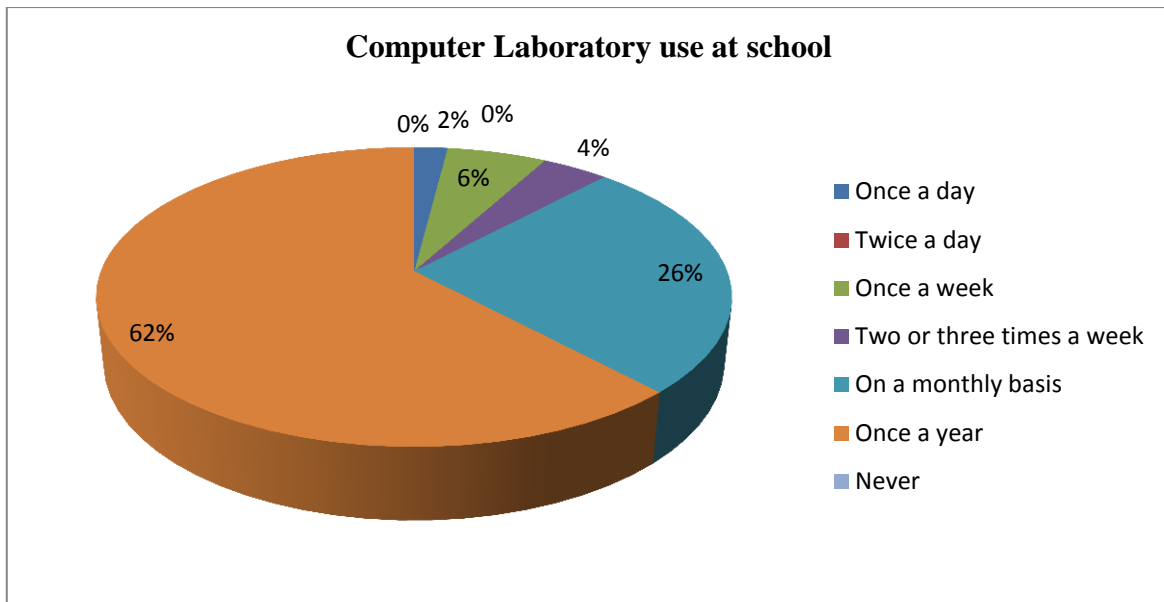
Figure 6: Respondents' rate of computer lab usage at school

5.3.2. Cell phone access and usage level and experience

The use of cell phones was familiar and popular among the respondents as 97% indicated they had access to a cell phone leaving only 3% without access. The respondents had access to advanced phones such as the smart HTC Hero and Samsung Corby TXT, Samsung Star etc. Since these phones have 3G, they can access many features such as the internet, social networks, instant messaging and many more. Some respondents had classic phones like the old Nokia 3310, and this indicated that they got them as hand-me downs from older siblings or relatives. The respondents were asked to state how long they had had access to the phones they currently used. 78% of the respondents indicated they had used the cell phone for less than two years, 19% for three to four years and only 3% for more than five years.

The findings indicate that although some of the phones have internet capabilities (can be connected to internet) only 69% of the learners can access them. The respondents also indicated they had access to downloadable features such as MXit, Opera Mini 6, Music Search1, and a Wap 2.0 browser on their cell phones. Some respondents, 13%, indicated they were not sure if they can use some applications since they were not connected to the internet. Internet connection on phones is not automatic (one has to go to the mobile communication centre to get connected) and internet charges are expensive on the phone. The fact that the respondents did not know all

the features on their phones due to a lack of internet connections had implications on the findings as some of the phones could have had more features than those listed.
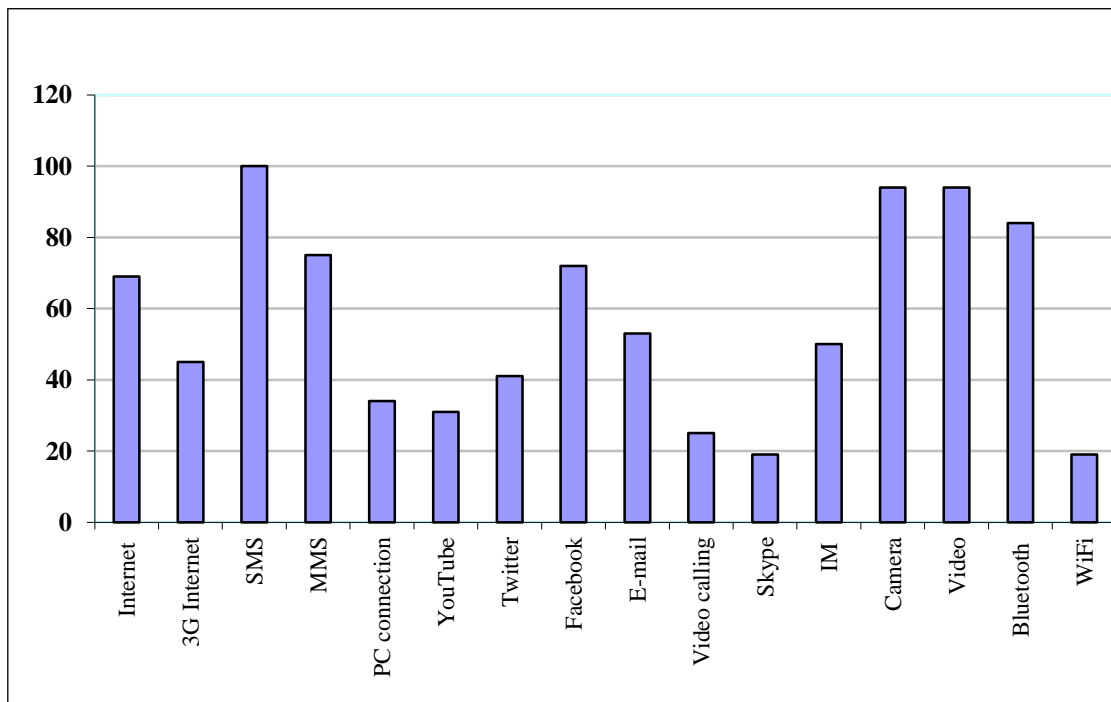
Figure 7: Features available on the respondents' cell phones in percentages

Although some of the cell phones have certain features, it does not mean that all learners are able to use them effectively if at all, thus the respondents were required to identify the features they could use on their cell phones. In comparison to the features available on the respondents' cell phones, the figure indicates that there was a decline in percentages of the available features and the respondents' capabilities. This means that, although learners had access to phones with similar features, it did not mean that they could operate them at the same pace with the same ability. Although 69% of the cell phones handsets have an internet connection, the findings indicated that the respondents connect to the internet occasionally with 25% connecting on a daily basis, 28% on weekly basis, and 22% on a monthly basis. In addition, 19% of the respondents had never connected to the internet using their cell phones. The respondents used the cell phone for similar or related and converging activities. The findings are presented in the figure below:
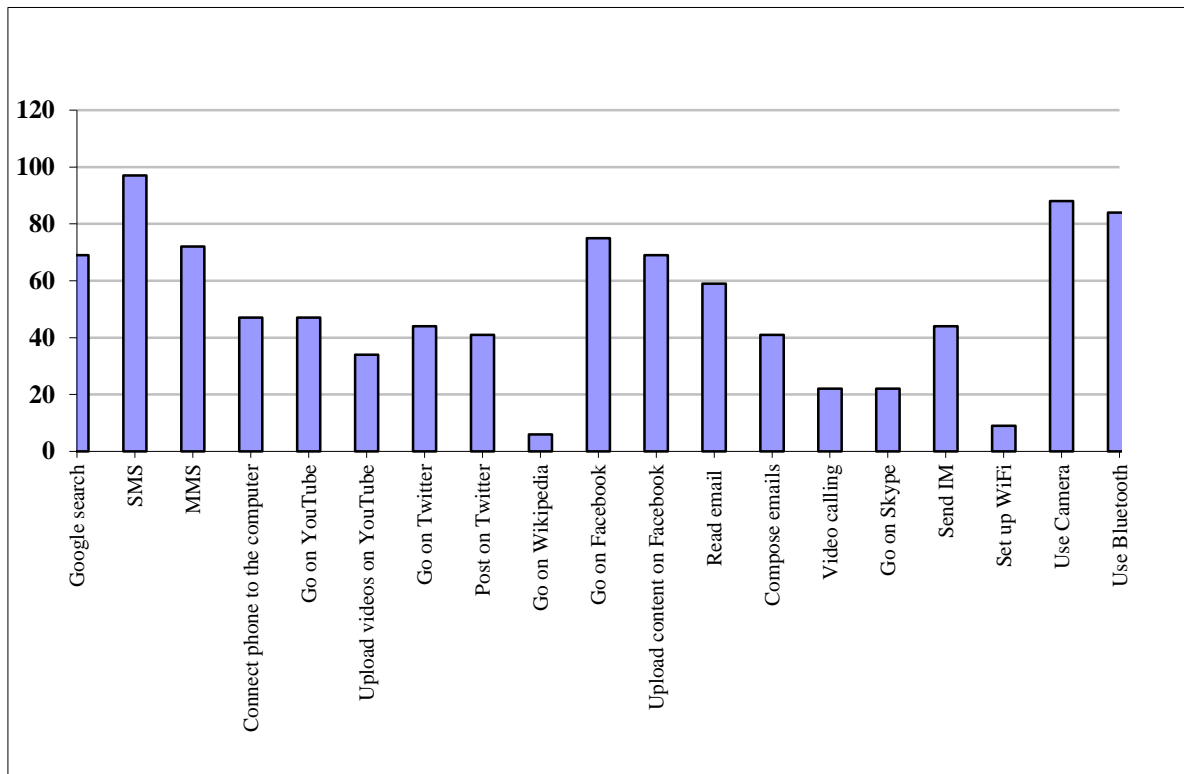
Figure 8: Cell phone features that respondents could use

The findings indicate that the Short Messaging Service (SMS) was the preferred application on a cell phone followed by the verbal communication of calling family members and acquaintances. The high percentages in the social network category Facebook (63%) indicated that respondents were hooked onto the internet for social communication purposes and since the respondents were school learners Google and mailing services had aroused their interest especially for research purposes. Of all the 32 respondents, 13% indicated they posted something on social networks on a daily basis, 56% occasionally, and 31% indicated they had never posted anything. Instant Messaging platforms such as MXit, Whatsapp and others were unfamiliar. Only 3% of the respondents had used Google talk, 9% Yahoo Messenger, 25% Google chat and 22% MXit.

5.3.3. Oshikwanyama usage level on Computer and Cell phone

In this section, I analyse the data collected on learners access to and experience of Oshikwanyama usage on ICT platforms (computer and cell phone), and their feelings towards using Oshikwanyama in the ICT domain.

5.3.4. The attitude and use of Oshikwanyama on a PC and the cell phone

The respondents were asked to give their views on the use of Oshikwanyama in the ICT domain i.e. computer and cell phones. The findings indicated that the cell phone enjoys popularity in the usage of Oshikwanyama than computers. About 63% of the respondents indicated that they normally communicate in Oshikwanyama on their cell phones when talking to their parents. Furthermore, 19% of the respondents indicated they use Oshikwanyama on their cell phones when chatting to their school friends/colleagues and parents and in cases where they happened to pick up the phone from an unregistered caller. The findings are presented in the pie charts below: This indicates that verbal communication between peers is usually done in the language they are most comfortable with, which in this case is English and then communication with parents is usually done in the mother tongue, the language that is often used at home.
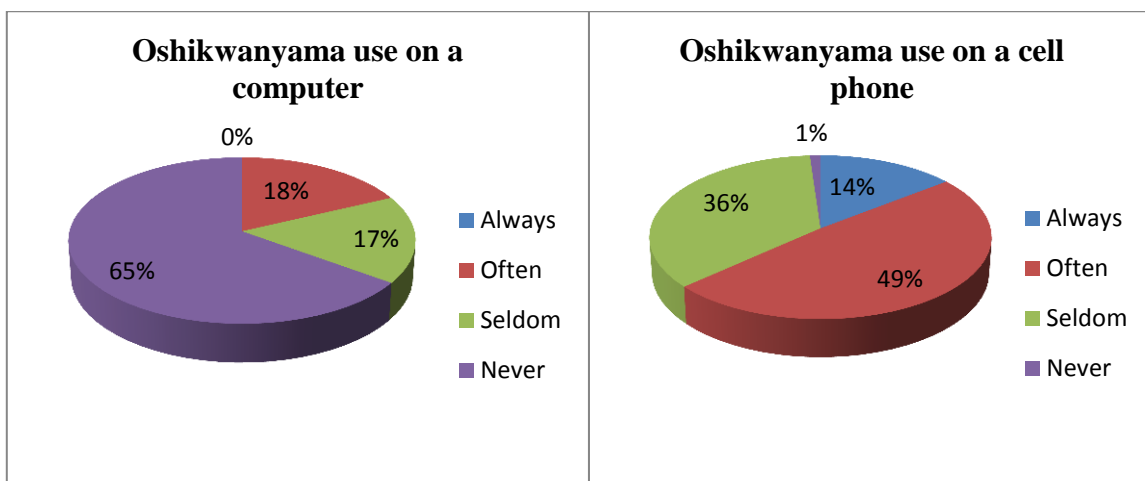
Figure 9: Comparison between Oshikwanyama use on Computer and Cell phone

Contrary to Oshikwanyama use, the respondents indicated that they used English because it is popular and it can easily be written (using shortcuts and abbreviations), thus it saves time and space. They indicated that most of their friends communicate in English as it is the official language and they constantly try to improve their proficiency in the language. Some respondents indicated that Oshikwanyama can only be understood by the people from the Owambo tribe thereby isolating their friends from other tribal and racial backgrounds. The respondents remarked that most of Oshikwanyama words are longer and they require a larger space, and are not easily abbreviated. One respondent remarked: *"English is easier to write in short, e.g. hw r*

u, if you perhaps shorten something in Oshikwanyama, one will not know how to translate it and know what you mean exactly".

5.3.4.1.   Posting information on the internet sites

When asked if they posted information in Oshikwanyama on an English website or web pages, 23% of the respondents indicated they had done it on rare occasions, but mostly on Facebook whereas 77% had never done it. More than 93% of the respondents indicated they had never searched for information in Oshikwanyama pointing out that they had never thought it was available on the internet. Respondents who did not have accounts on social networks had not posted anything in either Oshikwanyama or English.

When asked to mention the website that could be appropriate for Oshikwanyama use, Facebook and e-mail received preferences of 41% and 22% respectively, because it is where they normally communicate with their parents and friends from the same cultural background. Meanwhile, 22% of the respondents felt that any website could be an appropriate platform to use Oshikwanyama as long as it was specifically devoted to Oshikwanyama. Other social services such as Netlog and Twitter received a minimal number of votes since the respondents did not really use them and they felt that most of their users are interested in what was going on in the world of entertainment and news. The 39% agree rate on the use of Wikipedia indicates that many of the respondents who support the use of Oshikwanyama in the ICT domain felt that there was a need for Oshikwanyama to be accessible on the websites. While the lowest percentages of the preference Skype, indicates that some of the respondents do not normally use it and thus were not sure of how it works as a communication platform. The findings are presented in the following figure:
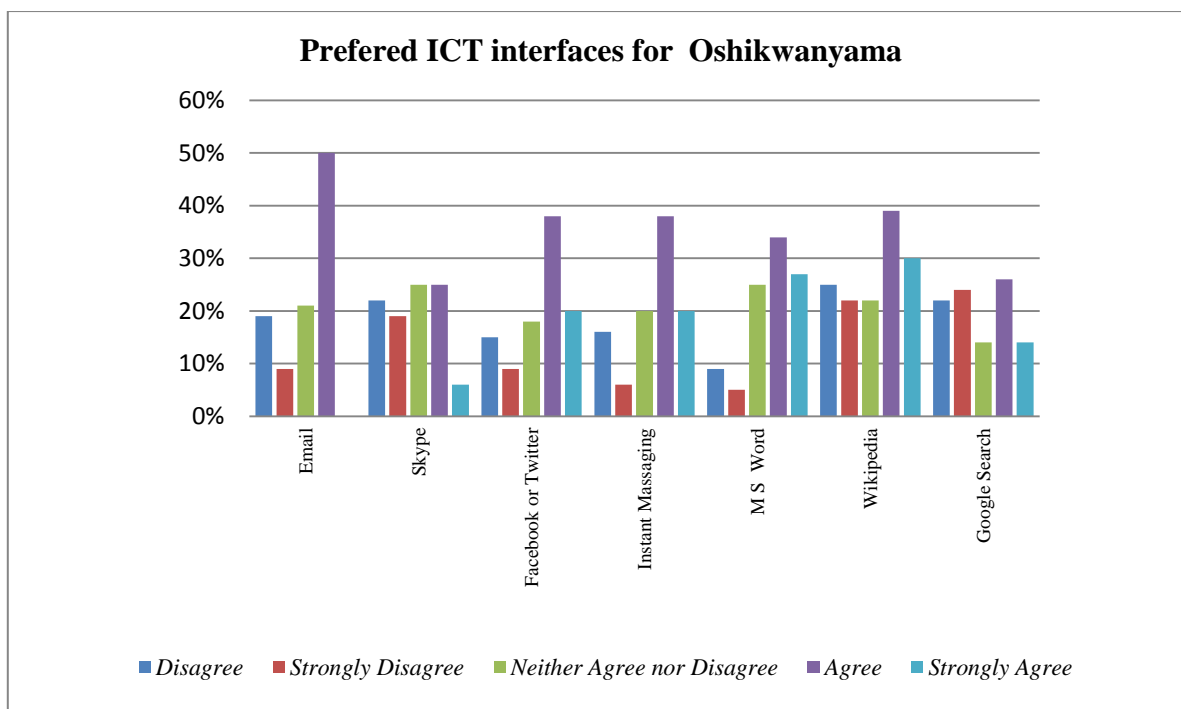
Figure 10: Respondents' preferred ICT interface for Oshikwanyama

5.3.4.2. The current attitudes regarding the use of Oshikwanyama in an ICT domain

The respondents were asked to describe the current use of Oshikwanyama in an ICT domain, and here only 6% indicated that it is often used in verbal conversations rather than written conversations. These respondents felt that there are Ovakwanyama people in Namibia who use ICT appliances such as cell phones, television, VCR/DVD and others, but cannot understand English and have to communicate in Oshikwanyama at all times.

Approximately 12% of the respondents felt that Oshikwanyama is not used on ICT platforms at all because not all people are knowledgeable in spoken or written Oshikwanyama. In addition the respondents felt that some people do not see its importance and value and actually end up not using it. One respondent remarked:

> *Oshikwanyama is not broad multinational or all-encompassing to be used in an ICT domain as it is only spoken and written in Namibia.*

Moreover, respondents felt that people actually tended to ignore African indigenous languages and considered using only foreign languages because they are national languages which are widely available and accessible around the world. Some felt that it was pointless to use

Oshikwanyama because people (especially those residing in the country) do not value it and it does not take them anywhere for example in terms of offering them opportunities for employment or further studies.

Where the above respondents expressed those feeling about the language use in the ICT domain, 72% felt that Oshikwanyama needed to be used a lot in the ICT domain. This is because "*we can have our own identity and not lose touch with our language and culture in today's world of technology*". The respondents also felt that it was necessary in order to accommodate the non-English speakers, increase an appreciation of vernacular languages rather than neglecting them, in other words, we first need to treasure what is ours. They also felt that people are currently losing their languages and they need to regain them and thus using Oshikwanyama on ICT platforms would "*promote African indigenous languages and raise these languages to greater heights and popular and raise interest in it."*

Respondents felt that there was "*a need for providing an alternative to English in Namibia"* and this would help improve school grades and understanding of the subjects. Overall many of the respondents felt that there was a need to prevent the language from being denatured and to remind people of their roots and cultural backgrounds.

5.3.4.3.   Views and feelings about learning Oshikwanyama in an ICT domain

It is apparent that the research participants' experienced mixed feelings concerning learning Oshikwanyama in an ICT domain. Numerous respondents were delighted because they thought it would make life easier to learn Oshikwanyama using ICT because it connects them to the world. It would also open up opportunities for the people who were not fluent in English to be involved in the ICT world, and learn both languages Oshikwanyama and English concurrently. Learning Oshikwanyama using ICT would assist to uplift indigenous languages as indigenous people would be able to access information faster and have a wider variety of information at their disposal.

The use of Oshikwanyama provoked positive feelings as the respondents felt it could act as a substitute language for English, which might make ICT fun and comfortable to use, as Oshikwanyama is regarded as an interesting and intriguing language to many. Respondents were also positive because using Oshikwanyama ICT tools would give the language the recognition

and respect it deserved and this would diversify the use of the language, allowing pupils to explore an advanced level of the language. For some, ICT offers an opportunity for interactive and simulated learning in which they are encouraged to pay attention in the class. Here are some of the respondents' remarks:

I will be proud of myself learning my mother tongue through technological things i.e. internet, it will make me to feel free, not like always being in fear of spelling words wrongly [sic].

I would feel very happy as this will help me to improve in Oshikwanyama and this will better my understanding and bring about excellent results in the examination.

It would be a good thing for everyone. Diversifying the use of languages in an ICT domain is allowing pupils to explore more advanced compositions of the language in various ways.

In contrast, the use of Oshikwanyama also evoked negative feelings among the respondents as they felt that it would be difficult to translate complex ICT terms from English to Oshikwanyama, since Oshikwanyama has many restrictions especially with regard to vocabulary. Some respondents remarked that:

Using Oshikwanyama will make life quite complicated in my opinion because terms such as RAM or CPU will have to be given names in Oshikwanyama; Oshikwanyama is not a suitable language for use in an ICT domain as it has many restrictions especially vocabulary but its use will be challenging in an interesting way.

It will be difficult as not all people have access to the technology being used.

In addition, the respondents also felt that Oshikwanyama would cause complications which could lead to confusion as ICT tools and manuals would be longer and be written partly in English after translation. Some respondents felt it would be useless to use Oshikwanyama because when one travels/studies abroad, the skills gained through its use would be of no use because Oshikwanyama in the ICT domain is not and never will be global.

5.4. WIKIPEDIA TRANSLATION: DATA ANALYSES AND INTERPRETATIONS

In this section, I present the data from the Wikipedia translation activities. The data covers what transpired from daily classroom observations from learners, the I and observing teachers. In analysing the data, I triangulated the data from multiple sources such as daily questionnaire, interview and observation and according to different themes that emerged in the process. The themes were arranged as follows: (a) learning about Oshikwanyama content through Wikipedia translation activities, (b) the translation process and strategies, (c) motivational attributes. To allow multiple interpretations of the data, I selected a few of the learners' actual classroom moments, in which their statements and actions are reflected. I use pseudonyms to ensure confidentiality and anonymity. The themes are interpreted in relation to the literature reviewed and the theoretical lenses of situated learning as a basis of knowledge acquisition and interpretation.

5.4.1. Learning about Oshikwanyama content through Wikipedia translation

In Chapter 3, I justified my reasons for using situated learning as the framework for my study. I also pointed out that I use situated learning both as the theoretical focus for using Wikipedia translations in an Oshikwanyama classroom and the analytical tool that frames the whole study and gives meaning to the characteristics of the learning situation my study provides. Following the situated learning principles that informed the design of this study, I ensured that the learning environment accommodated the situated learning characteristics. See Appendix H, for the table illustrated key characteristics of situated learning activities and their analytical features as pertaining to the Wikipedia translation activities.

5.4.1.1. Authentic context

A physical and conceptual structure of the classroom, which comprises different ICT media was needed to facilitate the translation activity and was presented for learners to explore. As described in the previous section of this chapter, the activity took place in the computer laboratory, where the basic computer literacy workshop took place. During the workshop, the participants worked individually in order to follow the tutorial and learn the content from their own perspective, and develop individual knowledge to be used later in groups. A Wikipedia account was opened for their group, and a Cambridge Dictionary was downloaded for easy

access (it was installed on the second day of the translation project, when I observed that many groups did not have dictionaries). Learners were provided with a questionnaire, which served as the tool for daily reflections.

The findings from the initial group discussion which was conducted before the translation activities indicated that learners had different perceptions about Wikipedia as a platform for learning Oshikwanyama. The participants were optimistic about translating Wikipedia content, thus concerns were raised about the area of the learning context versus the number of learners with computer knowledge or background. In the interview, Photo asserted that,

> *I think it is possible to learn with Wikipedia but it depends on the numbers of people with computer knowledge in the class. If the number is high then it is possible.* (Photo/L167)

Conversely, some respondents felt that learning on Wikipedia was interesting because they would gain knowledge about working with online activities and they believed this would improve their performance.

> *You see, a computer is much easier because you got a variety of articles, you can translate anything that you want not like newspaper or any source of information like magazine which only base on one article. So, with a computer you can search for anything and you can translate it.* (Mekondjo/L146)

Prior to the translation exercise, the participants also observed that although Wikipedia might be a good platform for learning languages and translation activities in the classroom there were risks attached. Some participants asserted that Wikipedia is a free encyclopaedia, and thus its content is not reliable because it might be full of inaccuracies. In the interview, Anna was worried or a bit sceptical about the whole translation process.

> *This thing of translating pages into Oshikwanyama as it was said that Wikipedia is a free encyclopaedia meaning that everybody has the right to translate anything. Is it not going to lead to the point where everyone will translate nonsense and lies which will cause confusion to people's understanding?* (Anna/L191)

It became evident that Anna's concern was a genuine one, because it has transpired that during the translation activity, some learners were not truthful with their translation. I also observed when I went through learners' translations that they omitted and deleted some information. To this, the participating teachers commented that this is risky in the classroom context, if the translation is to become a classroom activity, this would lead to learners failing. They pointed out that, when using activities like Wikipedia activities, learners must be given strict rules and a

thorough explanation on assessment procedures. The activities must be treated in the same manner as any other classroom activity.

Time management was one of the contextual key areas which the participants highlighted as a critical factor in learning with authentic content in an authentic context. The participants observed that doing a Wikipedia activity was time-consuming. In the interview, two learners had contrasting feelings about this. In the interview, Mavuku observed that Wikipedia translation could be time consuming in the class.

> *Well, sometimes during the class when we have to use many books, it can be time consuming, but in platforms like this, where you are just focused on translation then it was not*. (Mavuku/L3)

In contrast, Lindsay had a different perception. She compared the use of Wikipedia translation to their usual classroom translation and writing practices,

> *I do not think it was time consuming, because it is just like translating any other text, because you still have to read the whole paragraph and translate it to get the meaning, or if you want to go word by word it is fine. I think it was actually much easier because all the text that you want to translate is on the screen, you do not have to page back and forth, what is that… no second draft or what so every, for any mistake you just have to put a curser then and then edit and continue, so that was actually easier*. (Lindsay/L95)

The participating teachers felt that the online translation activities were not really a problem when it came to time. The ICT (computer and network) failures and overcrowding of the server might pose problems. This is because we observed the conflict with the IP address, which caused most of the translation not to be uploaded. A teacher commented that preparation of the laboratory before the activity and preparation of the web-based activities should be done in advance so that when the learners arrived in the lab, they could get on with their work.

5.4.1.2. Authentic activities

Authentic Wikipedia activities, which are readily available on the Wikipedia portal, were introduced to the learners. Learners opened a Wikipedia account in their groups, which enabled them to access a wide range of online articles in English that they could edit and translate into Oshikwanyama. Learners were given the autonomy to select the articles that they wanted to translate, although they were asked to look at articles within their own context (Namibia,

African people, countries or villages and articles within their social circles (the country's or continent's celebrities). The activity was open in order to provide learners with the opportunity to detect both relevant and irrelevant materials. Moreover, it required cooperative engagement in the task and sustained thinking over the process and strategies of translation, using ICT.

Although learners were given the freedom to choose any article they wanted to translate, some of them pronounced their dissatisfaction with authentic articles. Learners came across some of the articles that were social but not educational and unnecessarily long. Some of the articles chosen were written in advanced, complex languages, which many failed to translate adequately, and which led to the meaning being mistranslated and unreliable. In the interview, Tangeni declared:

> *The article we selected, we just selected it because it is about the most famous people that we know, that is why we searched for his article. It was interesting indeed but I think the entire article was not educational because it was just an autobiography of someone which was not encouraging people to follow the career that they really want.* (Tangeni/L124)

This indicated that learners were concerned about the value the article added to their education and knowledge. Articles that were not deemed educational were a demotivating factor, which they translated just for the sake of finishing the job but did not do quality work. Some learners mentioned their disapproval of the longer texts as they found that they led to a compromising of quality. Jay-Jay realized that articles should be short and brief:

> *I believe that articles that have to be translated must be shorter, so that the translator cannot get tired and so that he/she can become more interested and I believe that most of the articles that must be translated must be the articles that cannot confuse the nation, articles that can get value to the nation and not just any article.* (Jay Jay/L116)

However, there were some learners who felt that the activities were fine and had contributed a lot to the learning of Oshikwanyama first language. Some like Tuwilika commented on the way to approach the translation:

> *I think the translation itself was not aiming to change the words themselves, but the context of the sentence. Meaning if the sentence has to say something to do with the album at least you get a clue on what to say instead of saying album, you put it even if it is not in one word, even in two or three, as long as someone knows that you are talking about the album.* (Tuwilika/L134)

Despite scepticism about the value of the text, the language use in the article and the approach, learners indicated that the activity was worth doing. Learners had the opportunity to detect relevant and irrelevant texts and translations. All this contributed to their language growth. I also observed that the articles provided learners with the opportunity for exploration. This allowed active engagement in the knowledge building and skills upgrading exercise.

5.4.1.3. Expert performance

The Wikipedia translation project followed a spiral of activities designed to ensure that learners understood what was required of them. First, the two-day basic computer literacy training introduced learners to key areas of focus, with skills such as basic keyboard use, internet searching or browsing, and the Wikipedia portal itself. These activities gave learners the opportunity to view an expert performing and demonstrating those skills. The learner also had an opportunity to work on the project surrounded by experts in languages and in ICT, who guided and supported them and in some cases demonstrated learning and decontextualised instruction and strategies for them.

> *I think the training that we had made it easier for me to carry out this because I know what is expected of me to do. Some words were difficult to translate but as you know the teacher is there to help and for some we got helped by someone amongst the group. It was interesting that we had so different opinions some of them were like… just funny, like some people are experience … it was just fun.* (Namutenya/L62)

During the reflective interview, learners referred to the experience gained in the classroom and other subjects that helped them to carry out the translation efficiently. Thus, they did not only have expert performances from the teachers, but also from other learners (more experienced others). Some participants reflected that in the previous grade in the KWP classes, they used to translate and type out Oshindonga and Oshikwanyama words in spelling tests. They used that expert knowledge in the Wikipedia translation exercise which made it easier for them to work on the keyboard and type with ease. Moreover, some learners compared typing out translations using a computer to writing in cursive form. They noticed that it seemed as if the letters were further apart in Oshikwanyama then when typing in English and this led to spacing problems. Since they were used to cursive writing, it was difficult for them to search or ascertain common Oshikwanyama letters such as *s, h, g.* One learner remarked:

...when you are writing in cursive, you know when to separate but with computer it is all in one, and sometimes when you type like in English it underlines, you will know the right and wrong but in Oshikwanyama it does not underline. (Wendy/L89)

Expert performances gained from using different typing devices aided the Wikipedia translation. Learners also compared mobile devices such as cell phones which have QWERTY keyboards to typing with a computer keyboard. Lindsay experienced that typing was easier for her when she remarked:

It may be okay for me, because I own a phone with a QWERTY keyboard so, since I am used to and since I am fast in typing like texting people, it really made it easy for me. (Lindsay/L73)

5.4.1.4.   Multiple perspectives

In the dynamic of the two languages English (SL) and Oshikwanyama (TL), learners were able to decide on alternative ways in which to translate and use the language efficiently and correctly. In this project, multiple perspectives were provided in different ways. One way was that learners were assigned to work in collaborative groups in which each learner brought his/her perspective, experience and understanding of using ICT skills and language skills to the group. Another perspective concerned ICT skills versus the language skills and translation strategies among the participants and lastly, the participants' overall views on the Wikipedia translation process and the translation. (This point also features in other themes, such as scaffolding, reflection and authentic assessment).

Through observation, I noticed that learners were engaged in the activities. The whole design of the activity, the computers and Wikipedia itself brought in that natural curiosity of learners. Learners usually bypass Wikipedia as a source of information on the internet, or as an educational platform. This activity enabled them to search for and contribute to a wide range of knowledge collaboratively; in which the opportunity to share, debate, create or develop new knowledge was enhanced. Furthermore, learners got a chance to get different perspectives on ICT and languages from their peers. This enabled them to rely on the team's efforts because the successful completion of the task depended on group cooperation, time management and the translation strategies used. Learners enjoyed having other group members there so that they could get different ideas and different sentence structures, and to work hand in hand to complete

the task. They commented on the procedural assistance given by their team members. Emmy realized that it was better to work in groups than work alone:

> *It was helpful because like, as people say two heads are better than one, like there are some sentences that you do not know but others do, so I might not understand the word but my partner understands it, so it become easy.* (Emmy/L61)

5.4.1.5. Collaborative

In translating Wikipedia pages, learners worked in groups. The heterogeneous groups were organized with learners given the freedom to choose their partners, as long as they were mixed gender. Although almost all learners were good performers in both Oshikwanyama and English (these were higher level learners of which all their subjects were on higher level) we decided that there should be someone in each group with good typing skills.

During the observation, it was obvious that learners enjoyed working in groups as they shared knowledge in an amusing and friendly way, learning from others experiences and expertise. One of the learners who enjoyed working with her group members was Chabby:

> *I enjoyed my group, because there was this boy who was really good in Oshikwanyama. the problem came when we meet this English word that he did not know, so when you do not know the meaning of the word in English it get difficult for you to translate, so I tried to explain the English word and then the Oshikwanyama word and then we translate it, that was fun.* (Chabby/L84)

For others, group work was a serious arena for knowledge building and co-contribution to the translation activity. Tuamena wholeheartedly endorsed the fact that working in groups was beneficial to him and others. He commented on the benefits of joint problem solving that led to the completion of the task:

> *Since we were working in groups we actually worked together and then heard from each another point of views, let me say for instance this colleagues think this way and the other think another, we combine together and come up with a direct term of which we both agree on. Yeah, that was really the main important thing, working together. Just like they say, the good team beat with one heart, so that was basically it.* (Tuamena/L15)

This sentiment incorporated many of the benefits that come with collaborative groups. One recurring advantage was that the learners learnt by articulation and negotiation of meaning, they were able to let other group members feed them with the knowledge and then they combined

that knowledge to make decisions. Learners offered each other support and they scaffolded each other throughout the activity. Learners helped each other, especially in typing; you would observe two learners using the keyboard searching for words, it was real teamwork. The learners carried that spirit of team work throughout the project and that is why during the interview, they referred to each other as "we", meaning the group.

Although, most of the learners enjoyed working in groups, some were not satisfied with their group performance. Individual preferences in the group, time wasting were some of the disadvantages that the participants alluded to. One learner, Mavuku, who was the least positive about working in collaborative groups said:

> *…it was worse, there was not really teamwork because everyone wanted their ideas to be jotted down, there was no combined ideas and stuff, and so for me the whole thing was just not good.* (Mavuku/L83)

5.4.1.6. Reflection

This project is the first of its kind to be done at this school and with Oshikwanyama learners in Namibia. The way it was designed was based on authentic context and authentic activities that required learners to reflect on their experience and beyond. Thus, learners were given a daily reflection task to note their views, feelings, strengths and weaknesses. In addition, the interview conducted with them served as a reflective tool that enabled learners to look back at the activity they had just finished, and reflect upon learning languages, using ICT and the motivation from engaging in the Wikipedia translation exercise.

In their reflections, learners were able to return to the experience, relate it to their own classroom experience, and recollect the most salient things that they liked about translation. It is evident in the learners' reflections that although it was a learning activity, it was also an enjoyable activity. One participant had that exact feeling when she reflected on group work, in which each person contributed his or her experiences:

> *It is probably fun, you know when we're in groups, it's like we debate over a certain word like everyone with her own meaning, and so we end up laughing at each other. Sometimes you kinda say some crazy words tending to help one another and that if the fun part of it. You end up being wrong and everyone keeps going on about it.* (Daily reflection/Day1)

Some learners were excited about the whole experience and the outcome of the translation, and wished that their parents or grandparents could see and read their translation, because although it was not a perfect translation, they wrote it in a way that anyone could understand the meaning. This meant that even though this was intended to be a classroom activity, learners were optimistic about the diverse knowledge and understanding that it could carry out there for other people to get information in Oshikwanyama.

5.4.1.7. Articulation

In this translation activity, learners were not only given an opportunity to interact with computers, they were also given a chance to interact with each other, and interact with the Wikipedia content that they were translating. These learners had the opportunity to view the task from different aspects and use different strategies to translate the sentences. The activity was designed in such a way that allowed learners to learn in a social situation through group work, where they discussed the translation and strategies and tackled the whole process collaboratively.

Many learners were able to draw from their individual experience (tacit knowledge) and use it to provide effective strategies. They alluded to the way they tackled translations, mostly focusing on the area of failure experienced in the previous sessions. To many participants articulation of strategies of a learning opportunity:

> *I have learned to carefully examine the content, which I am dealing with and gain an understanding of it before translation commences. This skill acquiring process enables me to quickly and easily translate passages.* (Daily reflection/Day2)

Learners were supportive of one another in their groups, and how they valued the process of articulating understanding of grammar and vocabulary that led to an efficient translation process.

5.4.1.8. Coaching and scaffolding

Learners were allowed to work in collaborative groups where more experienced others could assist in the learning process. My presence as a facilitator, an experienced teacher of English and Oshikwanyama, and also my ICT skills helped learners to comfortably engage with the online

activity. I observed that learners were at ease when translating, even though it was their first experience. One learner, Namutenya commented on her experience:

> *For me it was the first time, logging into Wikipedia, the only thing I use Wikipedia for is when searching for information but I do not think of things like having an account, editing pages, print screen and all this other different things so it was a troublesome, and sometime the connection on the server was a bit down sided. Yah, the problems were there, but the facilitator was there, so they were sorted out.* (Namutenya/L71)

The presence of an additional teacher also contributed to the success of the translation. Learners were able to consult her and ask the meaning of the words that they totally failed to translate. In some cases, learners asked for clarity when it came to the spelling of words. In her reflection, Ms. Ndunge commented on the importance of scaffolding:

> *It was necessary to move around from groups to group, just to see what they are doing. Some learners are very serious, they ask questions, and they will even ask you to read their sentences to see if it is okay. Some are not too serious; they pretend to work but might be busy with something else when you are not looking. Thus, it is helpful to see if all learners are working at the same pace.* (Ms. Ndunge/Daily reflection)

5.4.1.9. Authentic assessment

During the translation, learners were involved in the process of error analysis in which they identifed different language errors. This helped learners to correct those errors immediately and choose the most suitable/closest terms. After they finished with the translation, they were involved in retrospective assessment in which they were asked to read the passage (several groups 3 out of 8 read aloud for the whole class) and then compared it with the source text. In this way the whole group was given the opportunity to judge their translation, check for accuracy and its effectiveness in case it was decided that the Wikipedia translation process become part of Oshikwanyama curriculum.

In general, learners found the activity to be educational and offered many learning opportunities for both English and Oshikwanyama. Nevertheless, some learners commented that it was a challenging activity to do:

> *To me it was a bit challenging because I had to come across some new terms both in English and in Oshikwanyama. So, a new term in English that means that it will be difficult for me to translate it into Oshikwanyama because it is very new, I have*

never heard it before. This is mostly on political terms because the page that we were translating was based on politics, so connecting myself to the world of politics was very challenging. (Ndanyanyukwa/L8)

The learners pointed out that finishing translating the whole passage did not mean that they did excellent work. Most of them experienced problems in translating English words, which they said were advanced and complex in Oshikwanyama, which they referred to as a difficult and complicated language.

> *I think our Oshikwanyama page was very shallow; it was not the same as English. It seems so primary school Oshikwanyama. It was not complex or interesting, because some of the words like 'critically acclaimed', 'exponential', you understand them in their original version, when you put them in Oshikwanyama, they say like "osha li shiwa neenghono" (it was very nice), and you see it is not really the same. But I think it does deserve to be there because the meaning is still there.* (Chabby/L81)

On assessing the significance of the Wikipedia translation for the Oshikwanyama language classroom some learners were a bit sceptical because of the standing of the Oshikwanyama language (which is currently only spoken in two African countries, Namibia and Angola) and comparing it to English which is spoken widely across the world. Although they thought it was a good thing to be introduced in the Oshikwanyama classroom:

> *I actually think that although this was successful, if you compare the two languages, English and Oshikwanyama, English it too vast, it has a wide vocabulary and it is really so, it is like an old language, so complex and Oshikwanyama… I do not really think Oshikwanyama can accommodate all the terms in English, actually, I don't really think it can. I do not think it should be because Oshikwanyama is only spoken in Namibia, it is not a global language, unless we consider Namibia alone, maybe using it only in Namibia and forget anywhere else.* (Ndapanda/L67)

Other learners were delighted to highlight the fact that if English speaking people could do it then so could they.

> *I think it is possible, today we are just busy with a small scale but then this is just one leak for bigger discoveries or so, I think if the English people did it, we can also do it if we really put our minds and we are determined that we want to translate like the South Africans are doing. It is only that we have people from different areas and this might take time to translate language from English into their local languages like we can also do it in Oshikwanyama.* (Miina/L66)

This Wikipedia exercise took significant learner time and effort to work in collaboration with others in order to succeed. Learners highlighted their areas of strength such as learning new words, developing new translation strategies, completing the translation activity successfully, using the keyboard effectively to type etc. They also indicated that they would need additional resources such as dictionaries to help them with difficult words. They also indicated some challenges of the activity, which included time management, difficulty in choosing the right words, difficulties of translating from English to Oshikwanyama and the availability of resources to aid translation.

5.4.2. The translation process and strategies

In this section, I analysed and briefly discussed the strategies used by the participants to complete the translation exercise. These strategies helped them to reach consensus on the correct or most appropriate words to use. The process of choosing the foreign text to be translated and the method of translating it were critical. In this translation activity, learners selected the Wikipedia articles in real time and real context in collaborative groups. It was a process which involved negotiation and articulation of articles in terms of their language, length, context and individual group member's interest.

The translation procedures used by the participants included the analysis of the source language Wikipedia text, by which learners were given time to browse through the Wikipedia website, and search for the most suitable article/text to translate. This analysis included a thorough study of several articles before attempting to translate them and paying consideration to both the source language and the target language the participants had to make judgments of both semantic and syntactic approximation. Through my observation, most of the groups, probably 5 out of 8, did not really consider the language (the syntactic side) at the time of selecting the article, but complained about it later during the translation.

The translation process included the organization of the text in terms of paragraphs and sentence building. I noticed that some groups opted for shorter articles with little content, while groups with learners who really wanted to challenge the language issue opted for longer texts. Although with Wikipedia text, the organization of texts/articles in terms of the sentences and paragraphs (including headings) is automatically similar to (or same as) the original text as seen in the previous section, I was pleased that a number of the participants were able to reflect on the

organization of their articles during their daily reflection to evaluate the language accuracy and effectiveness to their own context/culture.

Following are the most noticeable strategies used by learners during the translation:

5.4.2.1.   Formal (Linguistic) Equivalence

The preferred translation strategy for my research participants was formal equivalence. Formal equivalence as discussed in Chapter 2 involves the use of literal translation whereby the translator translates word to word. The participants noted that using formal equivalence had its strengths and weakness during their reflection process. Some translated directly because of the lack of Oshikwanyama vocabulary compared with English. Ndeshipanda had difficulties with translating some words:

> *There was a word neh, and it's like mouth piece like together mouthpiece, I just translated directly to Oshikwanyama like 'oshipambu shokanya,' just to get it translated. So, I let it be like that, because there is no other way, because it seems like a slang word.* (Ndeshipanda/L12)

Although word-to-word translation was done, especially on the first day according to my observation, learners soon discovered that it was a mistake. Learners indicated that translating word-by-word led to the loss of the original sense of the text. They felt that to translate effectively, one had to get the meaning of the whole text or sentence and try to rephrase it in the target language. One learner remarked in her daily reflection:

> *I saw that translating word by word is not always the right way to translate a document. At times, you will have to examine the content as a whole. Reading the entire text/paragraph and then translating the message as a whole helps.* (Daily reflection/Day1)

During the Wikipedia translation, direct translation was also done in one of the passages entitled "The Dogg" an article about one of Namibia's famous music artists. This name in Oshikwanyama is derived from the word for a 'dog', thus some learners literally translated it as *'Ombwa',* and they used the term in the article when referring to him. The same thing happened with *'German'* where they used the Oshiwambo name *'Ondowishi'.* I noticed that in most cases, learners transferred the names, used the same name in English to Oshikwanyama, just like in spoken language where they normally do not change the names, especially names like America.

Other examples are names like *'SWAPO Youth League'* which means *'Evava lovanyasha voSWAPO'*, or a newspaper names *'TODAY'* which means *'Nena'*. (See Appendix J (i).

The figure below shows a print screen of the Wikipedia page translated by the participants, in which I highlighted some of the direct translation used. See Appendix I (i), for the Source Text which is the English version. Page also available on, http://en.wikipedia.org/w/index.php?title=Kavango_Region&oldid=498675163
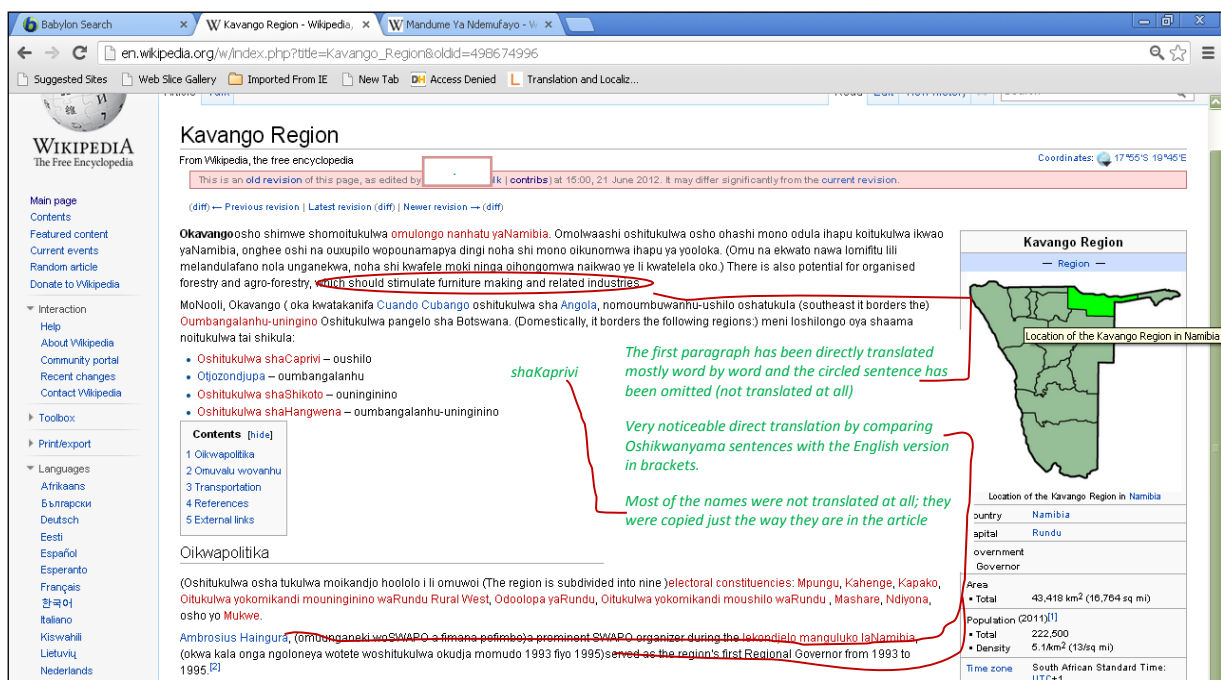

Figure 11: The use of formal equivalence during the Wikipedia translation

5.4.2.2. Adaptation

Adaptation which is a translation strategy in which translators try to simplify cultural words or phrases in the source language in order to get a suitable term in the target language (Chapter 2 Section, 2.4.5. d. i.) was also observed. In this translation, learners used different techniques of adapting the source language into the text language. Some learners tried to simplify the language into the nearest accurate Oshikwanyama terminology. Most of the learners pointed out that they tried their best to get each group member to contribute at least one word or to provide the meaning of an English word and then they put those words on a scale in order to choose the

word closest to the actual meaning. According to Lina group contribution made it easier to adapt a text in the source language in an attempt to translate it.

> *It made it much easier because everybody had to contribute according to his/her own point of view, according to his or her understanding and it is much better because you can select which words fit well with the article. It also contributes to others' knowledge like let me say the other person, for example the other one is giving the example of the word 'guide' , aah what was the words, aaah, the other on said "okuulika", then the other one "okuulikila" and also "okulondwela", now they were like three. Then we were like which one is better for the articles, because it is hard to know which one is the right meaning of the word because it is difficult, so you now have to select the appropriate one.* (Lina/G3/L119)

Some learners used adaptation in forms of paraphrasing the whole sentence. In doing this, they first read the whole sentence and tried to get its meaning and then rewrote it in their own words without changing the content. In some cases, they could add information, which did not really mean what was said but was close to the meaning (and sometimes they put a sentence in the brackets to extend its meaning, e.g. a description). For example, the title '*Jesus otati*' (learners' added information in brackets) '*Jesus is saying*' to clarify the word in English. This is similar to the phrase "mouth piece", mentioned in section 5.4.2.1, which learners translated as '*oshipambu shokanya*' in Oshikwanyama, which is so direct. See Appendix J (ii). This supplementary information was also noticed in one translation in which the translators used the combination for the preservation of the original term and addition of explanatory information in which its original meaning may have been omitted (See Figure 11 and 12).

The Wikipedia page below show how adaptation of the language was used and also some omissions of text (which will be discussed in the following section) are indicated. See Appendix I (i), for the Source Text which is the English version. Page also available at: http://en.wikipedia.org/w/index.php?title=Richard_Kamwi&oldid=499291785
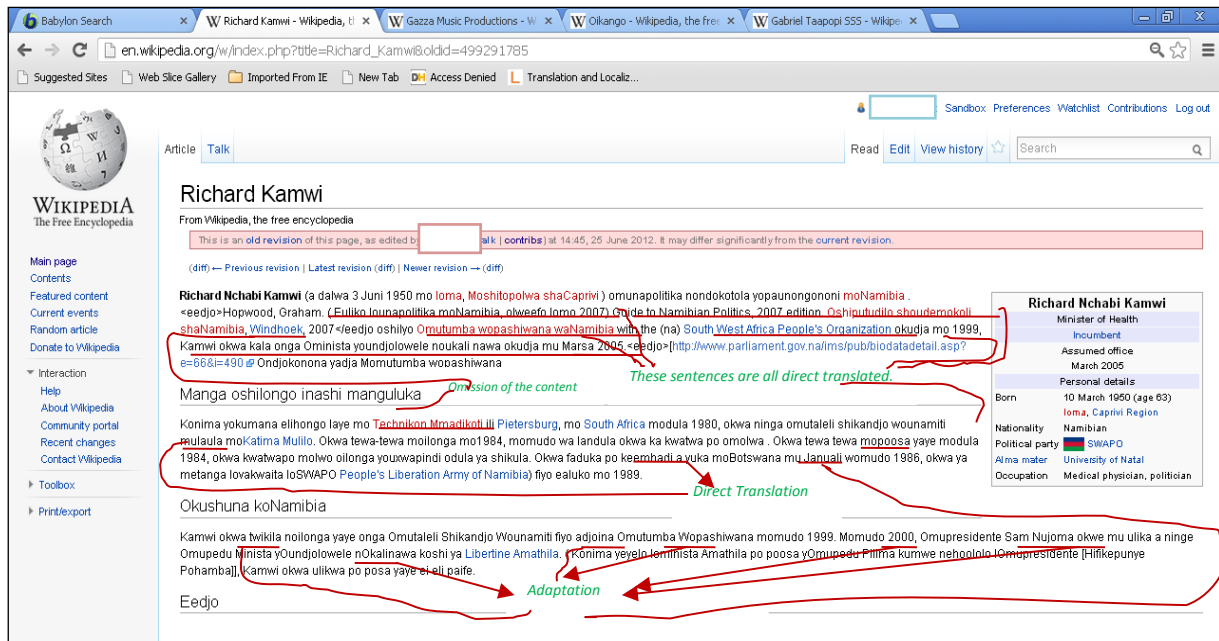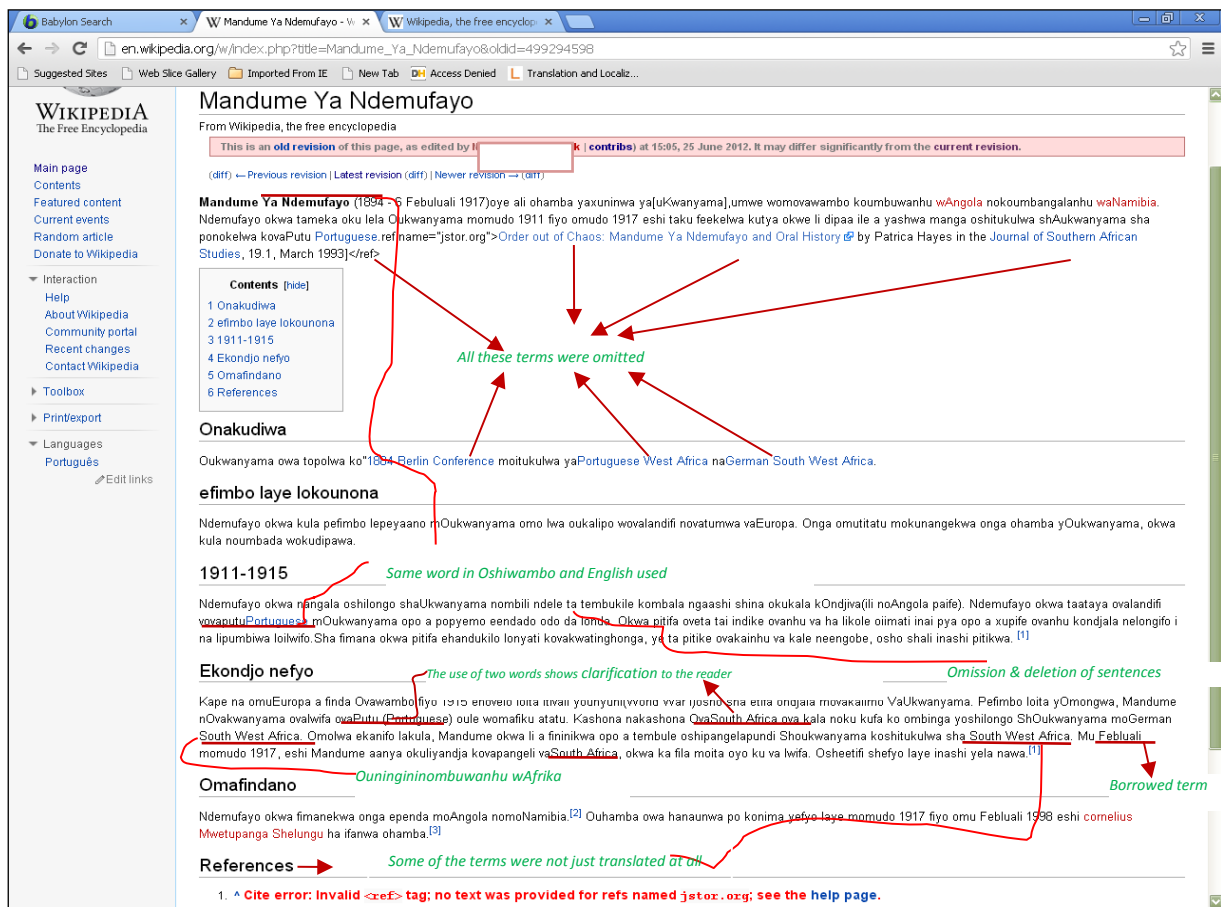
Figure 12: The use of Adaptation during the Wikipedia translation

5.4.2.3. Borrowing

Closely related to adaptation, borrowing was one of the strategies used during the translation whereby learners changed some English words into Oshikwanyama. In this translation, learners complained that English is a complex language with an extensive vocabulary, while Oshikwanyama has a limited vocabulary, with long sentences and few words of expression, thus is difficult to translate. Many learners resorted to borrowing in which they have used the English language for some Oshikwanyama expressions.

Although learners used many Wikipedia articles from Namibia, of which many consist of proper nouns (real given names), they did not really attempt to translate them. In most cases this transliteration which is the process of converting /altering the phonic/graphic shape of a source text name in order to be in line with the target language patterns of pronunciation and spelling (Newmark, 2001) in Oshikwanyama does not totally change the meaning (e.g. Africa become Afrika, just a change in one letters but pronunciation remains the same).

5.4.2.4. Omission

Omission and deletion of text was seen as common strategies used in the translation process (Baker, 1999, Newmark, 1998, Suh, 2005). In this strategy, the translator could opt to omit the

problematic culture-specific item altogether so that no trace of it was found in the translation (Suh, 2005). This strategy was used by the participants in cases where they could not find the suitable word to convey the meaning into Oshikwanyama; they could omit the whole sentence or just leave out that part of the sentence.

> *From the beginning, the activity was very interesting. The problem is that there were some words in English that we could not translate into Oshikwanyama, the words like 'album' and nominees'. I think most of the articles that we translated were too long and then it got boring and I was even tired, and thus, I did not even finished translating some of the article, or have deleted some of the information and left it the way I want. Because apparently Wikipedia is a free encyclopaedia that is why I did what I felt like doing.* (Tangeni/L114)

The figure below illustrates how learners used borrowing in their translation and includes some of the omissions and deletions of sentences used in the translation (these will be discussed in the following section). Also See Appendix, I (iii) for the Source Text which is the English version. Page also available at:

http://en.wikipedia.org/w/index.php?title=Mandume_Ya_Ndemufayo&oldid=499294598

Figure 13: The use of borrowing, omission and deletion during the Wikipedia translation

5.4.3. Motivational attributes

In this section, I analyse the motivational attributes that the Wikipedia translation had on learners. Motivation in this research is analysed in four variables, (a) Social and cultural environment, (b) A more knowledgeable other, (c) Anxiety and, (d) Attitudes.

5.4.3.1. Social or cultural environment

The social and cultural environment for this translation project offered the participants an open and dynamic atmosphere in which to work, to interact with different resources, ICT tools and with one another. Authentic context (section 5.4.1.a) which was offered as a social practice served as a motivation to learners as they provided an environment for language learning which was interesting and which had a tangible value. Learners were engaged in social collaboration, translating articles in their own platform/context which they used in real life. This motivated learners, because they wanted to show the world that their languages could also be available for everyone to read.

I noticed through my observations that just the idea of learning Oshikwanyama with the computer fascinated the learners. Learners were immediately occupied with the knowledge that, *'I am going to write Oshikwanyama on the internet',* even before they knew what Wikipedia was. When they opened their Wikipedia account, they were excited. In the daily reflection, one learner comments:

> *The activity provides an unfamiliar but conducive environment, which enables one to learn the language effectively. The most enjoyable part was being exposed to a wide variety of terms in English and having to translate them to Oshikwanyama.* (Daily reflection/Day3)

Learners were asked to choose cultural content (articles about Namibia, or African, people or countries or social life). These texts served two purposes. Firstly, they motivated learners to read with interest, because they wanted to know more about what was said about the place or the person. One group chose an article about the first King of Ovakwanyama, 'King Mandume Ndemufayo'. There was a picture of him on the page, and the whole story about his life. I noticed that these learners were interested in translating this story, although it had a lot of political terms which were challenging to them.

Authentic materials which were accessed by learners through Wikipedia created an opportunity for them to choose interesting information which is available in understandable English. In a way, this helped them to improve their reading and writing skills.

> *The whole process was good, but we need to create some pages into Oshikwanyama not only to edit but to create our own content. I developing reading and understanding skills, whereby I have to read the sentence very well and seriously, that helped me to understand everything that I read and translate it.* (Silas/L160)

The use of dictionaries in translation also motivated learners to translate better and not to give up on the process. It provided them with synonyms for the words, which made it easier for them to choose the most suitable word or term for translation. I observed a group that brought an Oshindonga-English dictionary into the class, which although is not as advanced as the English dictionary, was helpful in giving direct meanings of some words.

Apart from political words which were off-putting, I observed that with some groups when the text was too long, it discouraged learners from finishing the task perfectly. Some groups confirmed they cut the story short, omitting and deleting some of the difficult and long sentences (see Appendix I and J). In the interview, learners revealed that language, which was difficult and not direct, was problematic for them.

5.4.3.2. A More Knowledgeable Other (the teacher or a more experienced learner)

This variable takes us back to section 5.3.2.1, the discussion about scaffolding. In any learning environment, the teacher is the author and processor of learning. In this Wikipedia translation, the teacher was a facilitator, a mentor, a co-learner and an observer. This was the first Wikipedia translation exercise in which I (as the facilitator) was involved with learners. It was also the first experience for the co-observers who were the language teachers at the school. That is the reason why I tried to be positive in getting everyone involved in the project so that we could make a success of it. My presence as both a participant observer and a facilitator, motivated learners to make use of the Wikipedia program with confidence knowing that if anything went wrong or they could not make progress, I was available to help them.

The presence of language teachers on different occasions in the classroom served as a motivator because learners had an external source of knowledge who could communicate with them. That

is, they had someone to lean on, a person with a wide range of vocabulary which was accessible to learners. I observed how those teachers were involved with learners, ensuring they accommodated their questions and having chats talks with their learners to ensure that they used their own knowledge. The teachers' presence was beneficial in a sense that it served as an extrinsic motivation to learners to learn Oshikwanyama. Learners saw the teacher as an authority member, a person who could make them either pass or fail. In such a way, their presence motivated them to take the activities seriously, as if they were in the class. This encouraged them to do the translation well in order to impress their teachers even though there was no reward on offer.

Learners were oriented to the task during the two-day basic computer workshop. This workshop introduced them to the concept of a Wikipedia translation and the idea of working in collaborative groups. This inspired them to take the online translation seriously and lean on each other to work with computers and ICT appliances. In this way, they developed a positive attitude to each other and toward the activity. In this translation, I observed that learners not only depended on the teachers to learn. They depended on their teammates, each of whom came with his or her special quality. In my notes, I compared their teammates' presence to a person's 'spinal cord'. They scaffolded each other, either with language learning or ICT skills such as typing or using the internet. On working in groups, Silas remarks:

> *I think, working in groups was better, because you learn the skills of how to work with other people; how to trust other people knowing they have better computer literacy and knowing if you know the word they might have a better word that can fit the context, it is the suggestion from different people that made the text better.* (Ndahafa/L118)

This remark is an indication that collaborative groups serve as an intrinsic motivation, not only to those who were more knowledgeable but also to the less knowledgeable. The more knowledgeable were acting as tutors as well as learners. They had the autonomy and a sense of responsibility that contributed to the group's success. This empowerment motivated learners to develop linguistically and developed the ICT self-confidence and self-efficacy mentioned earlier in this section. Moreover, collaboration motivated learners to become linguistically competent. By this I mean that they were able to enhance their vocabulary and improve their written grammar. They became aware of how to deal with descriptive written text and to translate both direct and indirect speech from English to Oshikwanyama.

5.4.3.3. Anxiety

Many learners felt anxious about the translation activity because it as it was the first time they were involved in anything like it. They had optimistic ideas and expectations. I did notice that some learners used the word 'if', in our initial interview. This showed that their expectations were low, and that they believed that Oshikwanyama could not be used on the internet, but some were enthusiastic about putting Oshikwanyama on the internet for the first time. Some of the learners' remarks on the use of Oshikwanyama on the internet were:

> *I found it very interesting, translating words into Oshikwanyama I have never heard of a person introducing such a thing, (even me – in the background) something new and different, yet fun.* (Lindsay/L48)

I noted one learner who found it very difficult to choose group members because he was unsure of his own capabilities compared with other group members. I had to reassign one team, because all the learners in the group had been schooled in rural areas with no ICT background. Another concern I noted was to do with extroverted and introverted learners. The quieter learners who kept to themselves were the last ones to join the groups, and they were also reluctant to join in the debates about the words, and thus provided minimal input in the translation. Extroverts were the first one to pick their teammates, and they made sure that they selected the most proficient in ICT. I had to dismantle one group which consisted of learners all from the same primary school (private school) who had experienced a computer literacy course and were all talkative and outgoing and another group of learners who had all done Keyboard and Word processing at school. With mixed ability groups, I noticed that learners were motivated to work together, and complemented each other's weakness and strengths.

Working in collaborative groups made learners anxious in terms of their ICT proficiency. To both Hafeni and Mekondjo, it was a daunting task because of their low proficiency in computer expertise:

> *I think it was a challenge because some of us we were not taught about computer thus we were not really able to follow with what was happening at a time.* (Hafeni/L126)

> *Seriously, if you do not know how to operate a computer then it is going to be difficult for you. Because we have that question how will you be able to find what you are looking for and it is a challenge.* (Mekondjo/L128)

When they started typing, I saw that most of the boys wanted to type with the girls assisting here and there. Their lack of typing skills did cause problems:

Typing speed was too low/ slow because to some of us it was our first time, being across the computer, so it is like wow this is the computer, so it was so time consuming because finding each and every letter on the keyboard was just too much for me. (Photo/L28)

Although the teachers had a positive attitude to the task, they also felt that training was needed for everyone involved on how to use ICT. They commented that although some learners really wanted to type, they ended up leaving the task to those that could type faster to save time. From my own observation, anxiety was centred on the use of ICT tools, especially computers. Many learners who did not have any computer experience or low ICT proficiency were the most affected and at times demotivated. Concerning language, learners seemed to have linguistic control and they were able to lean on others to use language in translation effectively.

5.4.3.4. Attitudes

Attitudes to this translation project was presented in different ways through the demonstration of different feelings about the languages (source language and target language), ICT appliances, ICT skills, group organisations and influences etc. Although at some point the participants experienced some levels of anxiety as mentioned in the previous section, they also developed a positive attitude towards the language use, ICT and their peers. As is seen in section 5.3 the participants were optimistic about the whole online translation process which they referred to as unfamiliar and alien to their indigenous languages. In some cases during the daily reflection and the focus group interview learners pointed to the fact that they did not have skills such as typing using a QWERTY keyboard in Oshikwanyama, thus their typing speed was very low. Although most of the participants were highly motivated to translate in Oshikwanyama mostly for instrumental reasons such as having their language on the internet, they still had mixed feelings about using the computer and internet to translate and put the language on Wikipedia.

The development of a positive attitude meant that learners gave encouraging feedback and made positive remarks on the translation activity. In their interview, learners expressed their feelings about their social status now and that of Oshikwanyama. They pointed out that they were happy

that they were doing this online and that it was the first time they saw the value of learning Oshikwanyama. One happy learner remarked during her daily reflection:

> *I am really grateful you are giving us a chance to see how far we can go and what we are capable of. At first, I did not think we would succeed but now I'm full of hope. It is fun, I am proud that Kwanyamas' (or Namibians in particular) are getting out of the closet.* (Daily reflection/Day3)

It is evident that learners developed linguistic self-confidence (Dörnyei, 1975) during the Wikipedia translation. This means that learners expressed how much they improved in both languages, Oshikwanyama and English. Those who had worries about the activity became confident and anxiety free, and were motivated to learn the language and communicate freely with other group members. Some were encouraged to use the ICT tools at their disposal and built up confidence in typing the texts. This confidence encouraged them to focus on their ability to achieve their goal and to complete the task successfully. One participant reflected in the daily reflection about her experience:

> *I think I learnt something because I got to see that my Oshikwanyama level was too low, cos I have too many problems in translating, because I am too low in grammar and vocabulary is too low bringing it in English has motivated me to read Oshikwanyama just to learn it.* (Daily reflection/Day3)

Learners were requested to carry out a self-evaluation of the activities on a daily basis which helped them to develop linguistic self-efficacy (Dörnyei, 1975). This encouraged them to focus on the task and to evaluate their personal growth in the task. Those who did not take the activity seriously at the beginning began to see the value of the activity as the days went by. Those who were not confident to use the computer and to communicate in both English and Oshikwanyama were motivated as they continued with the activity. This changed the way they felt about their ability to complete the task. One participant experienced this when answering if she had developed new translation skills and strategies on the second day of the project:

> *…next time I will be serious because at first, I just took the translatio as a game. I also think that I need to speed up my thinking capacity, to be fast at typing and save time. Translating words in a way I understand the sentence will also do the trick instead of picking each word and put it in Oshikwanyama.* (Daily reflection/Day1)

5.5. CONCLUSION

In this chapter, I presented the findings of the Wikipedia translation as an additive pedagogy for Oshikwanyama language learning. I presented the data captured from the pre-study survey conducted with the participants to determine their ICT competencies and understanding. I analysed data created through the Wikipedia translation first against the elements of situated learning and then the emerging themes such the translation process and procedure and then the motivational attributes. The data was analysed with reference to the participants' actual utterances, using pseudonyms, and the observed field notes.

In the next chapter, I discuss the findings in relation to the literature and the theoretical framework of my study.

CHAPTER 6

DISCUSSION OF FINDINGS

Languages are differently equipped to express the same extralinguistic contents

Ivir (1987)

6.1. INTRODUCTION

In this chapter I discuss the analysed data. The discussion draws on insights from the participants' experiences with ICT, Wikipedia translation and learning Oshikwanyama in an ICT domain. In the first section of this chapter, I briefly discussed the findings from the pre-study survey in relation to the ICT policy for education in Namibia (Namibia. MOE, 2005), and the implications to Oshikwanyama first language learning. I emphasise the policy intention of promoting ICT as a cross-curricular subject and how it should be integrated in Namibian language teaching.

The second section pulls together a discussion on the findings from the Wikipedia translation activity. The impact of ICT on Oshikwanyama language learning through a Wikipedia translation is discussed under the following themes: (i) learning through Wikipedia content translation into Oshikwanyama (ii) development of translation strategies, and, (iii) Wikipedia translation as a tool to motivate learners to learn the language.

6.2. ICT AS A CROSS-CURRICULA SUBJECT FOR OSHIKWANYAMA FIRST LANGUAGE

Here I discuss the findings from the pre-study survey conducted with the research participants, which I presented in Chapter 5.

6.2.1. Computer and cell phone access and use among Oshikwanyama learners

The ICT Policy for Education in Namibia (Namibia: MOE, 2005) introduced in Chapter 2, proposed the use of ICT as a cross-curricula subject. For pedagogical reasons, it is expected that

all the language learners will interact with ICT tools in their daily classroom activities. The policy encourages teachers to engage learners in the use of ICT tools in the classroom.

It is evident from the results that the research site met many of the requirements set in the ICT implementation plan (Namibia: MOE, 2006) see Table 1. The school is one of the few in northern Namibia that has a fully-fledged operational computer laboratory which is connected to unlimited wireless internet access. In addition, there are projectors and other ICT tools available at the school.

The pre-study survey findings on the use of the computer laboratory by learners at the school indicated that the use of the computer lab was limited. The fact that the computer lab is used as the classroom for KWP is one of the factors preventing learners from having access to the lab for other activities. Learners indicated that they had used the computers only once a month some only once a year. This could have implications for learners, especially the grade 12 learners who were just months away from university, on their ability to develop technological skills. Apart from teaching Keyboard and Word Processing, the computer laboratory was not used for teaching and learning in other subjects like English, Geography and others.

The survey conducted with the Oshikwanyama learners indicated that the level of ICT access was low among the participants. This was shown by the fact that only 31% of the participants did have computer access at home and limited access at school. The participants who were computer literate gained the experience at primary school and through Keyboard and Word Processing, which is focused on teaching typing. Nevertheless, there were indications that Oshikwanyama learners used computers for social activities such as Facebook, Twitter, YouTube, downloading music etc.

The findings indicated that many respondents had some experience with ICT through the use of mobile phones. Studies conducted by Selanikio (2008) and Kreutzer (2009) indicate that cell phones are popular amongst African youth. This situation was confirmed by the 97% of the participants who indicated that they had access to a cell phone. Cell phones are an affordable ICT gadget. Goundar (2011) pointed out that cell phones are mobile than laptops, as learners can easily carry them around and they can also use them for mobile data collection or note taking.

Although cell phones are considered as educational tools (Ndafenongo 2012; Kreutzer, 2009), learners hardly use them for that purpose. A contributing factor is that mobile phones are banned in Namibian schools. Since learners are not using them for educational reasons at school, there is no motivation to use them for learning on their own.

When comparing the use of Oshikwanyama on a computer and the cell phone, the participants indicated they used the language on the cell phone in speaking to their families and acquaintances. Over 65% of the participants indicated that they had never used Oshikwanyama on a computer. Kormos and Csizer (2008) confirm that English has become a global language that many learners are motivated to use. They argue that in the 21st century "a high number of learners learn English as L2 in a foreign language setting with the purpose of being able to communicate with other non-native speakers in an international environment" (p. 330). This sentiment agrees with my earlier discussion in Chapter 2 about English being a global language and a tool for upward mobility (Brock-Utne, 2000). In addition, the participants' indicated that they preferred to use English because it is easier to write. They also pointed to the fact that most of their friends communicate in English, and they try to improve their proficiency for competitive reasons.

The scarcity of African languages on the internet has been identified in this research as one of the reasons why the participants do not use Oshikwanyama when online. Furthermore, they feel that there are many people out there (their friends and acquaintances) who do not communicate in Oshikwanyama at all.

6.2.2. Participants views about Oshikwanyama use in ICT domains

The participants expressed many perceived benefits that would come with Oshikwanyama use on ICT platforms. These were related to the improvement in language proficiency, improved access to ICT by African languages speakers and an improvement in ICT skills.

6.2.2.1. Improvement in language proficiency

The participants' expressed a need for an alternative to English that would help them improve their school grades and learn two languages (English and Oshikwanyama) reciprocally. This has integrative value for learners' achievement, which motivated them to use the exercise as a way

of improving their language standard in the areas of grammar acquisition in the TL and SL, vocabulary development and extensive writing and terminology development. When you look at the translated pages (Appendix I and J) and compare them with the source Wikipedia pages which are available online, it shows clearly that was a language learning and development exercise for all learners. Learners were able to change the text using proper grammar and vocabulary. For example the caption from Appendix (I, iii) in English

> *"Ndemufayo took the throne peacefully by Kwanyama standards and immediately moved the loyal residence to Ondjiva (now in Angola)"*

Translation in Oshikwanyama (see 5.4.2.3. Figure 13)

> *Mandume okwa nangala oshilongo shaUkwanyama nombili ndele ta tembukile kombala ngaashi shi na okukala, kOndjiva (ili MoAngola paife).*

This translation is an indication of good language use as the participants tried to find the linguistic equivalence of grammar and vocabulary (mentioned in Chapter 2) which they used effectively. In addition, they were able to use punctuations such as capital letters, brackets and the full stop correctly which is essential in language writing.

The translation of this Wikipedia content confirms the sentiment by Bamgbose (2011) who asserted that "there is no concept that cannot be expressed in any language provided the need to do so arise" (p. 3). Using different strategies in translating the text the participants were able to come up with different ideas in which they have used the target language to change the source language expression. In doing so, learners developed their language standard, and they also raised language awareness which helped develop extensive grammar and vocabulary.

6.2.2.2. Improved access to ICT by speakers of African languages

Osborn (2006) asserts that "the inability to access ICT-based information in one's own language curbs one's access to technology" (p. 87). There is an indication that learners wanted Oshikwanyama to be used in ICT domains because they did not want to lose their language and identity in today's world of technology. This sentiment resonates with the discussion about language revitalization mentioned in Chapter 2 in which the language is strengthened through the production of resource materials in indigenous languages (Coronel-Molina, 2011; Lieberman, 2009). Many learners felt the revitalization of African languages through the

translation of Wikipedia content into Oshikwanyama, needed to accommodate not only those fluent in English and other foreign languages but also those that understand Oshikwanyama thus giving its users an identity they could relate to.

The instrumental value of using Oshikwanyama on ICT platforms such as the internet means that even indigenous people would have access to ICT because the content is written in their own language they use in their everyday lives. To the participants, the use of Oshikwanyama on Wikipedia did not only improve the language status in the classroom but also promoted the value of the language economically and socially, with many spin-off benefits such as the recognition of African languages as having value.

According to Maseko et al. (2010, p. 315) "ICT is a powerful tool to support development in the modern Africa. Through access to ICT tools Africans knowledge, which is usually imparted in foreign languages is easily understood by the African people." The participants indicated in their interview that the Wikipedia translation exercise gave them the opportunity to contribute to that body of knowledge in their own language. This had instrumental value towards socio-economic development. The UNDP report on ICT in Africa, (2003, p. 2) indicates that "ICT offer enormous opportunities to narrow social and economic inequalities…by improving the communication and exchange of information, thereby facilitating the creation of a powerful social and economic network". Interventions such as this address the inability to use ICTs and "improve the status and visibility of African languages and their speakers in their own eyes and in the eyes of the international community." (Maseko et al., 2010, p. 316).

6.2.2.3. Improvement in ICT skills

The findings show that using Oshikwanyama in an ICT domain improved fluency and computer skills. Since the exercise included the training of basic computer skills in using the internet, searching the Wikipedia platform, editing and uploading information, this helped the participants to improve their ICT skills and learn new things in the process. Vosloo (2005, p. 26) states that "people more easily embrace ICTs when tutorials, training materials and software interfaces are presented in local languages". This fits with the learners' reflection that using the computer in their own language motivated them to learn the language and use the computer, in this way increasing their ICT proficiency. Using local languages on the internet then helps to

generate, disseminate and consume local content using high-speed communication channels such as the internet.

6.3. LEARNING THROUGH WIKIPEDIA CONTENT TRANSLATION

In this section, I discuss the pedagogical findings on the process of learning Oshikwanyama through Wikipedia translation. The findings about learning were analysed according to the characteristics of situated learning, which is the theoretical framework for this study. I incorporated these findings under the umbrella of three interrelated themes which deals with interactive learning, learning through apprenticeships and learning in the ZPD through scaffolding.

6.3.1. Interactive learning through the use of authentic materials in an authentic context

Knutson (2003, p. 56) posits "language learning is an activity which involves active participation through taking risks, testing hypotheses, making plans and decisions and making judgments about one's own progress". Language use and language learning are social activities which occur best in situations which encourage negotiation of meaning and learner collaboration with other learners. The findings of this research indicate a good reflection of collaboration and negotiation of meaning. Learners highlighted the strengths of working in groups such as sharing of ideas, combining language ideas and deciding on the most appropriate terms to use. Many also commented on the articulation of ideas through collaboration and its influence on group contributions especially in cases where learners had to supplement each other's knowledge and ICT skills (see 5.4.1. e and f).

In addition, Genc Ilter (2009) points out that web-learning offer well selected activities and interactive learning. This interactive learning takes place when learners are challenged with authentic texts which are presented in an authentic context. The findings indicate that Wikipedia translation is complex than replacing source language text with target language text, it includes "cultural and educational nuances that can shape the options as attitudes of the recipients" (Bernacka, 2012, p. 110). Moreover, Wikipedia presents an excellent authentic platform for learning language and involving learners in language learning debates. This translation exercise was like a puzzle solving exercise. Learners came to this exercise with both language tools (the

use of language in speaking, reading, listening and writing) and the ICT tools such as the internet.

The findings indicate that as an educational platform Wikipedia presents a wide range of current and up-to-date information or learning content from which learners can choose. Some of the content is offered as simulations, which learners are familiar with or information that they have wanted to read or stories of people in their country, e.g. King Mandume Ndemufayo, the first king of the Ovakwanyama tribe. Wikipedia, although an English dominated platform, also serves as an online book. This means that learners can access information about people and environments they know, and can easily relate to their own culture and language. The translated Wikipedia below presents a good example of the content from the learners' own cultural background. See the Source Text Appendix I, (iv). Page also available at http://en.wikipedia.org/w/index.php?title=Oikango&oldid=498670194
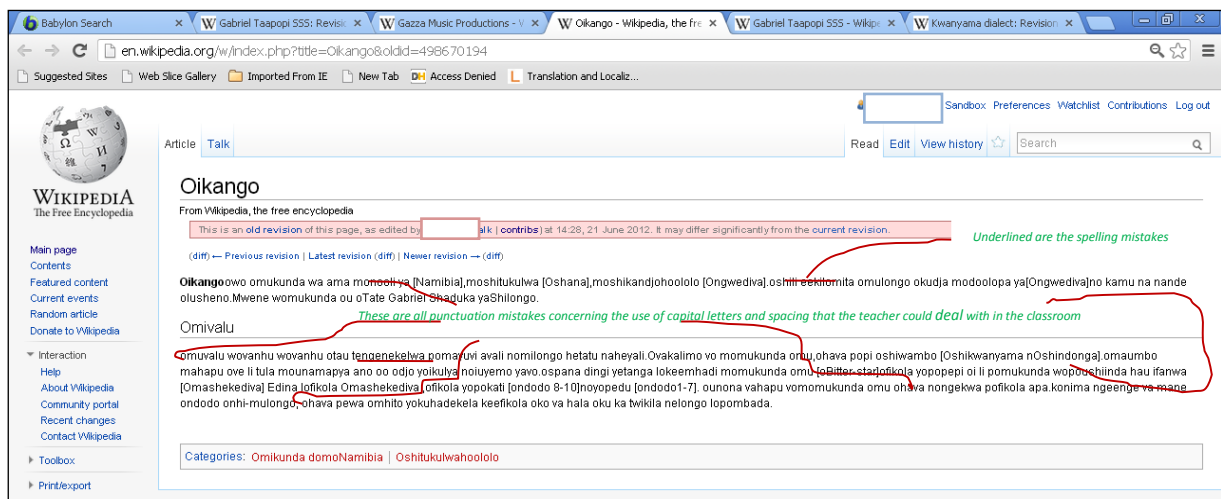
Figure 14: Wikipedia page reflecting content from the learners' background

A short Wikipedia page such as the one presented above, shows a wide range of learning activities to be used in an Oshikwanyama classroom. Since this page was selected by the learners, it provides knowledge about a familiar context, a village that learners can easily relate to. If used as a classroom translation activity, deals with punctuation, spelling, sentence building and vocabulary acquisition. When analysed as shown in the diagram, the language teacher could mark and provide effective feedback and comments that helped the learners to learn the language and become good writers. In addition this page is in line with national and regional

issues pertaining to those regions that are relevant for African content preservation through the localisation of online content mentioned in Chapter 2.

Genc Ilter (2009) points out that "as well as providing excellent authentic materials, technology offers language learners a chance to use daily conversations and rich vocabulary" (p. 138). Wikipedia translation helps the learner to become a mediating agent between monolingual communication participants in two different language communities (Katan, 2004). The authentic content translated in this project gave learners as translators a chance to become intercultural mediators of language. Learners who are both bilingual and bicultural were placed in a unique position to understand various language and cultural and national development issues through the translation of Wikipedia pages such as of King Mandume Ndemufayo, one of the most respected kings of Ovakwanyama tribe in Namibia, Richard Kamwis's paper, who is the current Minister of Health in Namibia, the musician The Dogg, and others (See appendix I and J). The use of Wikipedia translation articles, which reflect the learners' culture and background, should be incorporated into the broad curriculum as the learners indicated that they wanted the exercise to be extended to a larger context (Miina, in 5.4.1.i).

6.3.2. **Learning through apprenticeships**

Rogoff (1990), when she proposed her idea of instruction-oriented apprenticeship, pointed out that apprenticeship depends on communication and negotiations between the teacher and learners about what new knowledge or skill is needed and how it can be made compatible with existing understanding and capability. This notion talks to the role of the teacher in situated learning in helping a novice apprentice (learner) to understand new learning.

This Wikipedia translation was new to all the learners and teachers involved in the project. The training given to the learners was necessary so that learners got a chance to be guided and coached on their roles as language translators and Wikipedia translation implementers. This discussion should acknowledge the fact that translation is an old classroom practice in Oshikwanyama classrooms. Learners are involved in newspaper translation, text translation in their verbal communication or written activities in the language classroom on a daily basis. Thus, the connection needed to be made first as a modelling activity, since learners carried out the translation on a platform that had never been used in an Oshikwanyama classroom before. It

was important that learners were introduced to the tools to be used through the two day-training on online translation procedures, concentrating on the Wikipedia portal.

In this translation, learners as apprentices participated in the community of practice (Lave & Wenger, 1988). I noted that learners were very nervous when I introduced the concept of translation through Wikipedia to them. However, the more knowledgeable learners assisted in making the implicit explicit and the unknown known. This worked with ICT use like browsing the internet and typing and bridging the gap between the more experienced and the less experienced. Moreover, it helped learners to move efficiently through the Zone of Proximal Development (Vygotsky, 1978).

6.3.3. Learning in the Zone of Proximal Development through scaffolding

According to Hodson and Hodson (1998a) scaffolding involves "the teacher (or other expert adult or peer) controlling the learning task so the learner is able to solve a problem, perform a task, or achieve a goal that would be beyond their unassisted efforts" (p. 18). The findings show that in this research the nature of scaffolding depended on the nature of the task (Wikipedia translation), the learners (Oshikwanyama learners) and the situation (learning/pedagogical situation).

The second phase is the Zone of Proximal Development (Vygotsky, 1978). The pre-study survey findings confirmed that it was the first time that some of the participants had used a computer to type or enter information in Oshikwanyama. Many of them had no knowledge about Wikipedia (see Figure 5 and 8). Learners needed a relevant induction process to the exercise. The learners were in a 'Zone', which required appropriate cognitive demands, which would help them to carry out the translations effectively. In this zone, expert performance is modelled and learners are instructed and supported in their effort to replicate expert practice (Hodson & Hodson, 1998b).

Bruner (1971, p. 20) asserted "one of the most crucial ways in which a culture provides aid in intellectual growth that is through a dialogue between the more experienced and the less experienced". I noted that in this Wikipedia translation, higher level learners liked learning in challenging situations instead of merely accepting guidance they first negotiated the meaning of the words with the teacher or facilitator. Thus, the learning atmosphere during the translation

project was that of knowledge co-construction. This knowledge co-construction was necessary in an ICT context where learners need both aided and unaided assistance for them to develop the confidence to complete the task successfully on their own.

According to Hodson and Hodson (1998a), scaffolding includes "reducing linguistic complexity, eliminating sources of distractions, and reducing the level of 'noise' associated with hands on work" (p. 18). Through scaffolding, a sense of self-responsibility and responsibility towards the group achievement was developed in learners concerning ICT use in this Wikipedia translation project. Although some learners indicated that they did not have internet access at home or at school, I came to realize that many learners had advanced knowledge on how to browse the internet. For many, it was just a matter of getting the instruction. After the first exercise, those with advanced skills could model ICT procedures such as searching for STs or typing for the less knowledgeable ones. In this way responsibility towards learning was gradually transferred from the expert to the novice until such time that the learner was intellectually independent and no longer needed the teacher (Brown et al., 1989). The findings indicate that learners became very dependent on each other either with ICT skills or with language proficiency (see Chabby's comment, which shows a good example of scaffolding, 5.4.1.e).

(Hodson & Hodson, 1998a) maintain that learners need to carry out an activity and maintain effort and persistence in order to achieve. Learners had the responsibility of structuring Wikipedia translation activities and allocating duties among themselves in their groups. They could take turns in typing the content or each contributed a term in order to find the equivalence between SL and TL (See Lina's reflection at 5.4.2.2.). This enabled the facilitator to withdraw assistance and let learners work by themselves. This enculturation of self-sufficiency beliefs and improved self-esteem widens the zone of proximal development (ZPD).

6.4. DEVELOPMENT OF TRANSLATION STRATEGIES

In this section, I discuss the findings on the translation process and strategies used.

6.4.1. Translation process and procedures

As discussed in Chapter 2, translation requires the translator to develop a conscious plan that solves the concrete translation problem. This requires the translator to develop a method of translation. The research findings indicate that the process of choosing the foreign text to be translated and the method to translate it is very critical. This translation was a process which involved negotiation and articulation of articles in terms of their language use and development, length, context and individual group member's interest. For example, I noticed that deciding on which text to translate was difficult for the group members due to individual preferences with regard to the social and cultural milieu. Through learners' reflections presented in Chapter 5, we see how some of them translated the test directly while others preferred to read the whole sentence before translating it. Furthermore, learners' computer competence levels were different, especially in typing, which led some of them to prefer shorter texts and some to omit or delete the content.

The translation procedures used by the participants included the analysis of the source language Wikipedia text, where learners were given time to browse through the Wikipedia website, and search for the most suitable article/text to translate. This analysis included a thorough study of several articles before attempting to translate them. In addition, the participants had to make judgments of both semantic and syntactic approximation between SL and TL. Thus, the participants indicated that they had to contribute three or more words in Oshikwanyama to translate one English word. Most of the groups did not really consider the language (syntactic) at the time of selecting the article. This had some implications on the translation results as the use of grammar and selection of appropriate vocabulary especially if learners chose a passage with English jargon; the meaning might be diverted when translated to Oshikwanyama.

6.4.2. Formal equivalence

The first step in the process of translating a source language text is to find suitable equivalents in the target language. Sometimes, this could be difficult due to semantic and syntactic differences

between the two languages. According to Nida (1964), formal equivalence "focuses attention on the message itself, in both form and content. It requires that the message in the target language should match as closely as possible the different elements in the source language" (p. 159). In translating Wikipedia pages into Oshikwanyama, learners used literal translation.

Literal translation means word-to-word translation. It has been criticized as a translation method as it has rough grammatical edges (Lewis, 2002). The findings indicate that on the very first day of the project, learners who used word-to-word translation realized it was unsuitable at a later stage. Some learners pointed out that when they tried to translate directly from Oshikwanyama to English, the text lost its meaning. Although literal translation happens, the findings show that if learners are given a chance to translate in a group, they can counter-translate and become conscious of the similarities and differences between the source language and the target language. This type of translation happened when learners started to use the adaptation strategy.

6.4.3. Adaptation

Adaptation is seen as the freest form of translation in which the SL culture is converted to the TL culture and then the text is rewritten (Newmark, 1998). The findings indicate that adaptation was the preferred translation strategy. The learners worked on changing the content and the form of the ST to make it conform to the rules of the TL and culture, for example words like *'program' = 'eepologarama', or 'politics' = 'opolitika'* among others. Some learners adapted English terms by finding their synonyms and translated them into Oshikwanyama. Others decided on each group member thinking of his/her own individual meaning for the word and then selecting the most suitable meaning.

Lewis (2002) points out that adaptation in translation is valid within a lexical approach. It works with expression and not a single word, and this allows the learner better comprehension. Thus, adapting English vocabulary also contributed to terminology developments (Dalvit, 2009). The findings indicate that learners have used or created some new Oshikwanyama terms on top of the adapted ones, and this reflects a good sign of language growth and development.

6.4.4. Borrowing

Iver (1987) commented on the effectiveness of borrowing when he asserts that, "borrowing is neither better nor worse than the native-language expression and the result depends on the user's familiarity with the extralinguistic reality" (p. 38). In this translation, I noted that most groups used cultural borrowing, which according to Suh (2005) is "the process of taking over a source language expression verbatim from the source text into the target text" (p. 123). The findings reveals that learners borrowed English words, which they either wrote exactly as it is in English or tried to alter it a little in Oshikwanyama without changing its original form.

The findings indicate that borrowing is also caused by the range of English words comparing to that of the Oshikwanyama language. Himood (2009) explained that borrowing is easier from a language where a lot of borrowing has already been done than from one in which borrowing is rare. This is the case in English, whereby most of its lexicons are imported from other languages such as Greek, French etc. this makes English a diverse language with a wide vocabulary. Furthermore, the findings indicate that many Oshikwanyama words are borrowed from English, and learners are used to using those words in their verbal conversations. Thus, the use of borrowing (and adaptation) in this translation was a natural thing to do. In some cases, learners explained the term in the context, in other cases where no knowledge of the word is presumed by the reader, in-text transcription happens. As indicated by the participants, this is due to the fact that English is an advanced language with a diverse vocabulary, and thus Oshikwanyama cannot accommodate all English words.

6.4.5. Omission

The last translation strategy used was omission where by the participants replaced the SL with nothing and/or deleted words, sentences or paragraphs of the SL so that it did not appear in the TT. Baker (1999) refers to deletion as "omission of a lexical item due to grammatical or semantic patterns of the receptor language" (p. 40). Research shows that the omission strategy occurs more especially in the use of idioms. Baker (1999) asserts that, "as with single words, an idiom may sometimes be omitted altogether in the target text. This may be because it has no close match in target language, its meaning cannot be easily paraphrased, or for stylistic reasons" (p. 77).

Baker (1999) pointed out that "if the meaning conveyed by a particular item distracts the reader with lengthy explanations, translators can and often simply omit translating the word or expression in question" (p. 40). Omission sometimes is required to avoid "redundancy and awkwardness" (Nida, 1964, p. 228). In some cases learners may have deleted the information because it was repetitive in the TL and thus could not find a direct meaning of the word or even a paraphrase.

There were cases when learners omitted some of the words that were obvious and used in daily conversation in Oshikwanyama. Examples of words which were omitted could be found in Appendix J (ii), such as,

Onayena village = Omukunda waNayena
Mechanical Engineer = Omupangeli womashina
Science degree = Odjapo yondondo yopombada mounongononi
Windhoek City = Odoolopa yaVenduka

These phrases are available in Oshikwanyama orthography and learners use them on a daily basis in the language classroom. I noticed that on numerous occasions learners omitted some of the special words such as those in the 'links' sections, or in the 'reference' parts and the 'content' boxes due to a specialised skills or knowledge. Some characters such as ellipsis, apostrophe, colon and semi-colon were among those that were left out.

Although omission is accepted by some, it still remains debatable if it is an acceptable translation strategy for all. Himood (2009) pointed out that the notion of deleting text must not be used as an excuse to hide an ability to translate the text, it could lead to a distortion of the message and this could lead to discouraging the reader from reading the text. Omission and deletion could be a disadvantage to language learning if online translation is to be implemented as a classroom practice. For example some learners said that they deleted some information since Wikipedia is an open platform where anybody can edit. In addition, learners indicated that since some of their passages were long, they decided to cut some sentences so that they could finish the translation. This could result in failure because if these activities were marked it would mean learners would be judged as inept.

6.5. WIKIPEDIA TRANSLATION AS A MOTIVATION TOOL

In this section, I discuss the findings that deal with the role that Wikipedia translation has on motivating Oshikwanyama First Language learning. The motivational variables that rose out of the process of Wikipedia translations into Oshikwanyama such as social and cultural environment, collaborative learning and the teacher's role in Oshikwanyama language classroom are discussed. In addition, invariant motivational variables such as anxiety and attitudes are incorporated in the discussion as they serve as cross-motivational factors which were experienced within other variables.

Ideas drawn from different types of language motivation such as, integrative and instrumental motivation, (Gardner, 1985) and intrinsic and extrinsic motivation (Deci, 1975), will form part of discussion in this analysis.

6.5.1. Social and cultural environment as a motivator

The findings revealed a process of translating languages using authentic texts in an authentic context. This real life real time activity offered both instrumental and integrative value that led to both intrinsic and extrinsic motivation of learners to learn.

Learners reflected that they were excited to work with ICT tools, computers and Wikipedia for the first time in Oshikwanyama. Although some learners (two groups) indicated they deleted and omitted some content in the translation, the fact that learners were working on the internet in an Oshikwanyama classroom in itself served as a spur to learners to carry out relevant translations. Many remarked that the level of Oshikwanyama would be raised through the translation process and even if it could be done frequently in terms of language developments and in promoting the language standard in the world of technology.

As Deci (1975, p. 23) puts it "people engage in the activities for their own sake and not because they lead to an extrinsic reward". There is an indication that learners were inspired to do the activity because they felt challenged by it. In their daily reflection, learners stated their challenges such as translating difficult and political terms, experiences with word-to-word translation, etc. This made learners persistent and they participated seriously in the activity. Learners were given the autonomy to work hard, to help each other and translate in their own

ways. They were motivated to succeed and prove to themselves that they know languages well (both source and target language). Using the language (translating from English to Oshikwanyama) was a motivator. If the learner felt challenged by the word, then she/he developed new strategies to translate. They negotiated with other group members, consulted a dictionary, or considered word-to-word translation.

The findings indicated that learners were excited to use the language on the ICT platform, i.e. the internet. That served as the biggest motivator for them to join the project. Learners had the desire to use Oshikwanyama in tools that were not from their own culture. There is an indication that Wikipedia made Oshikwanyama language learning attractive to learners. The participants indicated that it provided a fast and reliable way to write the language, because as learners put it, you do not have to draft and redraft your work. All you need to do is move the cursor to the word that you want to change or delete and then you move on with your work. Although time was a constraint for some, translating using Wikipedia articles was time saving for many of the learners, especially those that were good at typing and/or browsing the internet.

Some challenges were observed. Anxiety, which stemmed from the fact that some of the participants did not know how to type or browse the internet and other factors such as the level of the activities were some of the psychological factors that hindered motivation. One solution to anxiety, fear of computers and other psychological factors that hinder motivation was the grouping of learners according to their level of proficiency in both ICT and languages. In addition, mixed grouping helped learners collaborate and work together as a team. In this way learners developed a positive attitude towards the use of ICTs and toward others in the group.

The findings indicate that to translate in the classroom, learners needed to be given enough time for preparation, doubling the time of a normal period would work. Learners also needed to be prepared for the task so that they knew what was expected of them. This would act as an intrinsic motivation for them to develop a sense of self-confidence in using ICT tools (Wikipedia) and linguistic confidence to use the language effectively in an unfamiliar environment. This positive attitude helped learners to succeed in the Wikipedia translation exercise and encouraged them to continue doing it in their leisure time. In this way, they continued to learn both languages English and Oshikwanyama and become proficient in using ICT and languages.

6.5.2. Learning through collaboration as a motivational factor

Group dynamics at work in this Wikipedia translation served as a motivational factor towards Oshikwanyama language learning. As discussed in Chapter 2, Dörnyei (2001, p. 720) identified the basic types of inter-member relations within a group. Those are 'attraction' and 'acceptance'. Attraction involves instinctive appeal that attracts members to join with one another. In this translation, learners had a chance to choose their own group members. This led to a situation where learners who grew up together, (geographical), previous schools or streets joined one another. Some learners looked at their ICT proficiency level, those who were good at ICT, for example those who attended KWP classes, were found in one group. To the learners it was a matter of perceived competence and similarities in attitudes that attracted them to the group. This also has some instrumental effect on learners, identifying themselves with their peers, or by the Wikipedia articles that they translated.

Acceptance, which focuses on interpersonal relationships, was also considered. When learners grouped themselves, I realised there was group discrimination. In an attempt to have mixed abilities groups, I decided to reassign them. This decision was a positive move because it gave learners an opportunity "to acknowledge the others as complex human beings with many values and imperfections" (Dörnyei, 2001, p. 721). In this way, learners scaffolded each other through the activities and complemented each other's knowledge. They developed positive interdependence attitudes that helped them to structure their roles within the group, and strive towards attaining the goal. This helped create a dynamic group of learners who were good in both ICT and languages. At the end of the day, this brought a change in learners' attitudes towards one another, and they valued all individual contributions. This is what led to one learner to reflect that he was happy to be working in groups because "one group beat with one heart" (Tuamena, daily reflection Chapter 5). This means that learners felt that closeness to one another, as they depended on others to complete their translation successfully. This group cohesiveness as Dörnyei (2001) puts it, contributes to individual member commitment to the task and to the success of the group as a whole.

6.5.3. Teacher as a motivator

According to situated learning principles (Lave, 1988; Brown et al., 1989; Lave & Wenger, 1988), the teacher is referred to as a facilitator of learning whose role is to introduce learning

which is tuned to the level of learners and also to carry the children through apprentice-like teaching. The findings in this research show the vital role that the teacher played in introducing the tasks to learners, and motivating them to work through the task with confidence.

The findings indicate that the Wikipedia translation which was at the learners' level enabled the learners to find fulfilment within the task. Thus, the teacher has to ensure that the new learning accommodated all learners. One constraint in this study is that it was impossible to train learners in typing because the goal of the activity was not determined by the typing proficiency or to assess typing. It was determined by the effect that Wikipedia translation had on Oshikwanyama language learning and motivation towards language learning. The findings indicate a lot of motivational variables that the teacher brought into learning such as collaborative learning, ICT tools, the basic literacy course that inducted learners to a new learning situation and the co-observers who assisted learners to translate the texts effectively.

The presence of language teachers on different occasions in the classroom served as a motivator in itself because learners had an external source of knowledge who could communicate with them. The teacher's presence was beneficial in a sense that it served as an extrinsic motivation to learners to learn Oshikwanyama. Learners saw the teacher as an authority member, a person who could make them either pass or fail. Their presence inspired them to take the activities seriously, as if they were in a lesson. This encouraged them to do the translation well in order to impress their teachers. The teacher's attitude towards translation using online text also mattered in this context. Moreover, the teachers involved had a positive attitude toward Oshikwanyama first language which encouraged learners to develop that kinship with the language so they welcomed opportunities for further language development.

6.6.   CONCLUSION

In this section, I discussed the findings of my study using supporting arguments from relevant literature. In the next chapter, I conclude my study by highlighting the main findings; some of the challenges faced in the use of Wikipedia translation as a pedagogical tool for teaching and learning Oshikwanyama.

CHAPTER 7

CONCLUSION AND RECOMMENDATIONS

I hear and I forget. I see and I remember. I do and I understand.
Confucius

7.1.   INTRODUCTION

In this chapter, I present a summary of the main findings of the investigation into the use of Wikipedia translations as an additive pedagogy for Oshikwanyama first language learning. I discuss some of the challenges which currently inhibit the integration of ICT use in an Oshikwanyama classroom and I make recommendations for classroom practice. Finally, I make suggestions for further research in the area of ICT in Language Education with a focus on African indigenous languages.

7.2.   SUMMARY OF THE RESEARCH DESIGN

This naturalistic inquiry has been underpinned by the belief that knowledge is acquired through a process of mediation, consultation and interaction among the participants that engages them by drawing on their lived experiences. The intention of this study has been to represent the complexity of Wikipedia translation in an Oshikwanyama first language classroom, by providing an in-depth representation of online translation as a real-time activity and engaging learners in interactive and collaborative learning mediated by ICT. To realise the objectives of this study, and test the hypothesis, exploratory research questions were designed, to be administered through a qualitative empirical approach. The data collection proceeded inductively: participant observation, daily reflection questionnaires and in-depth focus group interviews were conducted to ensure triangulation. This also helped to confirm the reliability and validity of findings from different perspectives. Although all the data collection methods used were effective, participant observation was the best method used in this study as it registered the nonverbal expression of feelings on the part of learners as they engaged in groups, and shared group tasks and responsibilities such as typing, searching for information, selecting

the article to translate, and many others. The data was colour-coded into emerging themes pertaining to individual research questions.

Some limitations concerning the research methodology were observed. First, due to the lack of computer access in most Namibian schools – let alone computer laboratories with full internet access and enough computers – it was difficult to locate the school and select the sample for this case study. This limited me to making use of participants from the same school and class (Oshikwanyama Higher Level class), which means that the findings of this study may not be representative of other learners in different situations (e.g. a school with no accessible computer laboratory, or Oshikwanyama Ordinary Level class). Secondly, the sample is skewed in gender, with female representation overpowering that of male (because there just happened to be fewer boys than girls in that particular classroom).

Qualitative analysis of the statistical data presented herein imposed limitations on my findings as it needed to be presented through descriptive statistics. Data from the pre-study survey and daily reflection questionnaire was not easy to handle and analyse, because, as in any qualitative study, the data is quite detailed and sometimes unstructured. Furthermore, the information from observation, whereby the co-observers were required to tick or give some ratings, was summarized in paragraphs according to allocated themes in order to get some qualitative data. The combination of description and action (translation of Wikipedia pages into Oshikwanyama) was effective in this study, providing useful empirical evidence. However, in the context of developing relationships between the teacher and learners in a classroom, this project might yield a yet rewarding experience when framed as action research. I think action research would be insightful in dealing with online activity, which could include a thorough reflection and detailed authentic assessment which is needed for teachers to integrate ICT into Oshikwanyama first language teaching.

Situated learning elements have provided both theoretical and analytical lenses for this research. The findings have clustered around two important themes concerning learning through social interaction using ICT. These themes enabled learners to make sense of the learning activity and relate to one another as they interpreted existing knowledge and co-built new knowledge. Cognitive apprenticeships served as the main facilitating agent of learning, enabling learners to learn in the Zone of Proximal Development (ZPD) through scaffolding. It enabled learners to approach Wikipedia translations as members of a learning community and use their multiple

perspective gained through previous learning and experiences to collaborate, reflect and assess learning in an authentic context using authentic content, which in this case was existing Wikipedia texts/articles readily available in English and accessible on the Wikipedia portal. One of the most powerful resources in situated learning is the process of scaffolding, which shaped the nature of participation from learner to learner, teacher to learner and learner to the interactive tools (computers, the internet and language). Thus, scaffolding contributes to the utility of ICT through the use of computers and online facilities as an empirical tool with the potential to improve the growth of African languages and shape human agency in terms of using ICT for learning in the first language classroom.

Cognitive apprenticeship principles provided participatory units of analysis which helped to explicate the socially mediated learning process, in which all the elements co-contribute to learning in a community of practice using interactive multimedia such as the internet. It supported researcher reflexivity by raising awareness of different factors that contribute to and affect the relationship among the participants, the selection of authentic contents, participants' related experiences in ICT and Oshikwanyama first language, and all the other factors that shape the research activity. Its biggest value as an analytical tool was that it enabled different research findings to be easily grouped into their direct elements of significance. The interweaving of different elements of cognitive apprenticeship was difficult to articulate due to similarities in the descriptions of different elements. In addition, the volume and complexity of data (too much data, which all seemed to be valuable) was overwhelming and complicating, and this called for additional effort and concentration in order to make sense of the learning experience.

7.3.   SUMMARY OF THE MAIN FINDINGS

The findings from the pre-study survey show that Oshikwanyama is not used much in writing on ICT platforms such as the internet and devices such as computers and cell phones. The findings also revealed that learners who know how to use ICT tools such as the social networks do not use Oshikwanyama in carrying out written communication. Most of the participants only use Oshikwanyama when using a cell phone (speaking particularly). On a theoretical level, learners know a lot about ICT tools, but many of them do not know how to use them. This was also confirmed by learners who had access to computers at home, about 69% of them. Of these, only 6% had an idea of what Wikipedia is, and none of them knew how to edit on the portal.

Although the use of English dominates on ICT devices such as computers and mobile phones, it did not hold the learners back from thinking they could also use their mother tongue. At the beginning of the project, some participants were sceptical about whether it could work, but their attitudes had changed by the end. Learners were very happy that they had an opportunity to put Oshikwanyama on the internet. Some wished that the exercise could continue in other schools so that many learners could be involved. They talked about how happy their parents would be if they got a chance to read Oshikwanyama (specifically their translations) on the computer. This is an indication that this translation of Wikipedia, and indeed translation into African languages in general, is necessary in bridging the information gap: local people in the communities would be able to get and read information in their own languages as long as they were connected to the internet.

Wikipedia translation put Oshikwanyama on the internet, which is accessible to other people anywhere in the world to read. This has value for the participants for having contributed and thus added to the body of knowledge, and for the community, as they could now access information in their own language. A limitation is the scarcity of internet connectivity: many African rural communities simply do not have access to the internet. This includes schools where there are vast numbers of African language teachers and learners who could translate Wikipedia articles into their own languages if given the opportunity. The study found that the use of Wikipedia translation in the classroom can be both complex and problematic. On one hand, it requires knowledge to use ICT tools such as the computer and the internet using one's own first language. Secondly, it needs internet connectivity to operate effectively.

Wikipedia translation involved problem-solving and analysis strategies. Learners saw the translation activities as an interesting challenge, which facilitated language learning, terminology development and engagement at a higher level of critical thinking. By engaging in Wikipedia translation learners improved their reading and writing comprehension. They deepened their understanding of grammar and enhanced their vocabulary in both Oshikwanyama and English. The exercise helped learners to develop cultural knowledge of the target language and at the same time learn both semantic and syntactic aspects of languages.

In translating the Wikipedia content, learners were given a chance to participate through collaboration with other learners in the classroom. In this way, the generation of multiple perspectives was enabled from both teachers and learners. Learners who were novice translators

were observed, especially during the computer literacy course, imitating the behaviour of the skilled ones (the teacher and more knowledgeable peers). They gradually picked up the concepts of using the Wikipedia translating toolkit. Scaffolding one another helped them move through the ZPD smoothly. Learners who were not confident with ICT became confident when experienced learners took them through the exercise. They developed positive attitudes about themselves through showing they had the *know-what* (declarative knowledge) of what translation is, the ICT tools involved and the Wikipedia platform. They also had the *know-how* (procedural knowledge), as they could use the computer to type documents, post information on the web and translate from English to Oshikwanyama using the Wikipedia content.

Through the Wikipedia activities, learners became critical reflectors on a learning situation. In this project, learners were asked to think critically about the learning process. Instead of just reflecting on what they did in the classroom, they went through an in-depth critical reflection and assessment of the authentic tools and the translation process. Their reflection went beyond the classroom level, to the importance of the activity in real-life situations and Oshikwanyama language development. This had a positive effect on how the learners regard Oshikwanyama. Various respondents were quick to highlight the fact that the introduction of Oshikwanyama into an ICT domain would enable them to easily and efficiently do their Oshikwanyama-related work. They indicated the diversification of languages in ICT domains would allow pupils to explore advanced compositions in their language, which would help them in terminology development; their writing and speaking skills would also improve.

From the beginning, the intrinsic value of the activity was evident in the learners who wanted to experience using Oshikwanyama online. They wanted to be among those who knew how to work with computers. Some did it because they wanted to improve their linguistic knowledge so that they could improve their performance in Oshikwanyama. Regardless of how and for what reason, all the participants indicated that the translation was an interesting and educational project.

Although using Wikipedia to translate content into Oshikwanyama was a fulfilling experience for the participants, implementing the activity proved to be difficult. The participants pointed out some areas of weakness, such as the need first to train learners and teachers on how to use ICT in the first language classroom, and the lack of ICT equipment in the school. The inexperience of some participants in using ICT tools such as the computer for browsing the

internet and inadequate knowledge and experience in ICT contributed to a lack of self-confidence. This negatively affected their ability to translate effectively.

Furthermore, the participants used different translation strategies, such as adaptation, direct formal equivalence and borrowing, which all contributed to language and vocabulary development. Nevertheless, omission and deletion of content was observed, which could result in the whole message being distorted. Learners indicated two main reasons for deleting and omitting text: that English is a vast language with a huge vocabulary compared to Oshikwanyama, and that Wikipedia is a free portal which anybody can edit an upload. These reasons may actually have led learners to omit some words or sentences in order to avoid incorrect information being posted online. In addition, it was observed that some learners omitted information because they were not serious about the translation. These negative observations serve as an alarm bell regarding the classroom practice of using Wikipedia content for translation, because precautions need to be taken in order to avoid such situations. To avoid generating unreliable information, thorough checks and assessments need to be made when involving learners in activities such as this.

7.4. RECOMMENDATIONS FOR PRACTICE BASED ON LESSONS LEARNED FROM THE STUDY

In this study, I investigated the use of Wikipedia translation as an additional pedagogy for Oshikwanyama language learning. After reflecting on my findings, I make the following recommendations pertaining to the use of online translation in the first language classroom.

Despite the fact that some participants had been taught basic ICT skills at primary schools, others through KWP classes and despite a short crash course on the ICT skills needed to do the Wikipedia translation, participants worked at a very slow pace. This might be because of having had very little interaction with ICTs, and the experience they had was with mobile phones rather than computers. Good computing skills such as using the keyboard and browsing the internet are needed to speed up the translation process in the classroom. Computer crash courses such as the one conducted at the beginning of this study are of some use, but they need to be conducted over a longer period of time. As previously noted, mobile phone literacy would also be valuable, as learners could transfer their mobile skills (such as typing on a QWERTY cell phone keyboard or browsing the internet) to the computer.

It is important to plan and structure any learning environment, especially one that involves the use of technology, in order to avoid (technological) mishaps. A Wikipedia translation lesson needs to be carefully planned and well structured, so as to limit possible constraints on learning (such as the gap between more knowledgeable and less knowledgeable learners). This preparation could include the involvement of learners in collaborative teams and computer laboratory preparation. As noted in the findings, learners complement each other's knowledge; it is important to have thorough knowledge of the learners involved in the translation, of their experiences and capabilities. This could help avoid issues such as anxiety (e.g. fear of handling the equipment for inexperienced users), which could easily discourage the learner from contributing and participating effectively.

In preparation for Wikipedia translation classroom activities, language teachers need to familiarise themselves with the ICT tools to be used and the internet pages to be selected/assigned to the learners. Both the teacher and learners need to take charge in choosing the articles to translate, as learners need to have the autonomy in a learner-centred classroom. This responsibility includes the fact that learners need to achieve specific/set lesson objectives. The teacher needs to set the parameters on how the activity is conducted to ensure the task is completed. This would assist learners in making good decisions about their choice of text and the translation strategies to use.

This study confirms that in any learning environment there should be a blend of more and less capable learners, and thus the communicative modes facilitated through social interaction and collaboration creates awareness of learning and helps to bridge the gap between all learners of different abilities. To help learners adapt to this new learning situation a more knowledgeable person such as the teacher or a translation expert is needed to double check the choices made by learners, such as the source texts, the choice of words, the style etc. This person should also be actively engaged in managing the interactions between different learners within groups.

The teacher's pedagogical decisions with regard to how Wikipedia translation should be done, where and when it should be conducted needs the support of all language teachers in the school and the backing of the school management. The school management could facilitate the provision of computer tools (since some computer labs are not used for teaching purposes) at the school. In addition, language teachers need the support of the computer experts at school such as

the ICT technicians in case the technology backfires or just to help with any technical glitches. Language teachers need to work together and collaborate on teaching strategies, which could integrate ICT use in first language learning in the classroom. The teachers need practice and guidance on how to use computers, prepare computer aided lesson and handle basic troubleshooting that may arise in the midst of the lesson.

Lastly, although this translation had its own challenges, I recommend this practice to the consideration of policy makers. To incorporate online translation into the curriculum, conditions need to be met such as the allocation and distribution of computers to different schools; induction of African language teachers on delivering online translation lessons etc. This study recommends other pilot studies which involve a sample of schools to test the level of African language teachers' computer competencies, and streamlining the induction process.

7.5. SUGGESTIONS FOR FUTURE RESEARCH

The findings showed that the use of mobile phones dominates over computer use among Oshikwanyama language learners. I would recommend research to be conducted on ways to engage the use of mobile phones (m-learning) in the first language classroom in Namibia. The research could focus on an interpretative route of looking into the perceptions of teachers and learners on the use of m-learning in Oshikwanyama classrooms. This is because many mobile applications are being developed, that deal with voice translation and phonetic formations that could help learners and first language speakers extend their language proficiency and create a resource-base on the internet.

Many of the challenges experienced by learners in the present study were specifically related to text translation. Another suggestion is an intervention using videos in the African language classroom. Learners who are studying literature in an African language could use mobile phones and video editing software to dramatize and do role-plays to enact the narrations. This could address some of the challenges involved in the production of written material in African languages (e.g. relatively low written proficiency among native speakers, lack of terminology and perceived inappropriateness of code-switching in writing, lack of typing skills etc). One could further look into the attitudes and motivation of learners and teachers when using oral as opposed to written modes of producing content in African languages.

My study was limited to the use of Wikipedia. Another area of useful research would be comparing translating internet content using either Mozilla Firefox toolkit or Google Translation tool kit or any other toolkit available. Such a study could investigate the affordances of different translation toolkits and their suitability to the African language classroom. Bearing in mind the fast changing pace of technology in this field, this type of overview is necessary for policy makers and teacher trainers to make practical recommendations as to which tools to use.

7.6. POTENTIAL VALUE OF THE STUDY

This thesis is the first study to investigate the use of Wikipedia translation as a pedagogical tool for Oshikwanyama first language learning in Namibia. It showed that this study contributes to language growth and development. This study advocates the revival of translation in the language classroom and promotes the use of ICT in indigenous language development and teaching. The study proposes a model which teachers could use to involve learners in a learning environment that comes with the use of ICT in the first language classroom. This in return will make learners respect and appreciate their mother tongue.

Most of the studies conducted on translation (none in Namibia) advocate the use of professional and volunteer translators for localisation programs. This is one of few studies dealing with translation of ICT content as a pedagogical tool in the African indigenous language classroom. I believe this study sheds light on the role of learners as translators in the classroom to contribute to language learning and development. A good example of how collaborative learning can be done in the first language classroom and how it motivates learners to learn as a team was shown. This study provided learners with a real-life experience which they could potentially use at their own convenient time to discover new content and contribute to an existing body of knowledge.

Finally, as noted previously, the study has the potential to inform policies (ICT policies and language policy) on learning languages by using ICT in the classroom. This could encourage policy makers to consider integrating ICT in the school (especially at high school level). This is easier said than done, as it comes with many challenges such as schools readiness with regards to the computers and internet availability, learners' readiness i.e. computer literacy and skills, and teachers' readiness and preparedness i.e. delivery of online lessons, computer skills and troubleshooting during lessons, and lesson preparedness were identified among many. This

could also be extended to the support system which includes teacher's trainers in online translation lesson delivery or pedagogical aspects, learners' preparation for translation.

7.7. CONCLUDING REMARKS

This study enabled me to investigate the use of Wikipedia translation as an additive pedagogy in the Oshikwanyama classroom. The use of situated learning theory allowed me to see explicitly how learning revolves around different elements of the community of practice and how each element is needed to make a contribution towards learning Oshikwanyama first language. I fully support my hypothesis that the use of Wikipedia content translation helps learners to learn Oshikwanyama first language. Following the situated learning principles, learners were able to work in an apprentice-ship like situation and collaborate with one another to develop good translations. It encourages learners to develop a positive attitude towards learning the Oshikwanyama language.

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APPENDICES

APPENDIX A: LETTER OF PERMISSION

REPUBLIC OF NAMIBIA

MINISTRY OF EDUCATION

Tel: 264 61 2933200 /	Private Bag 13186
Fax: 264 61 2933922	Windhoek
E-mail: mshimho@mec.gov.na	NAMIBIA
Enquiries: MN Shimhopileni	31 May 2012

File: 11/1/1

Ms Aletta Mweneni Hamwedi
P. O. Box 70372
KHOMASDAL

Dear Ms A. M. Hamwedi

RE: REQUEST FOR PERMISSION TO CONDUCT A RESEARCH STUDY AT SECONDARY SCHOOLS

Your correspondence dated 24 May 2012, seeking permission to conduct a research study at the school mentioned above, has reference.

Kindly be informed that the Ministry does not have any objection to your request to conduct a research study at the schools concerned.

You are, however, kindly advised to contact the Regional Council Office, Directorate of Education, for authorization to go into the school.

Also take note that the research activities do not interfere with normal school programmes. Participation should be on a voluntary basis.

By copy of this letter the Regional Director is made aware of your request.

Yours sincerely

A. Ilukena
PERMANENT SECRETARY
cc: Director: Oshana Education Directorate

MINISTRY OF EDUCATION
Head Office
Dept.: Formal Education
31 JUN 2012
Private Bag 13186

APPENDIX B: PARENT INFORMATION LETTER AND CONSENT FORM
PARENT INFORMATION LETTER

Dear Parent

My name is Aletta Mweneni Hamwedi, a student at Rhodes University. I am doing this Masters in Education research project in order to find out what strategies are the learners using in the online translation and how does the translation motivate them to change their attitudes towards learning Oshikwanyama. By doing this online project, I hope to understand how ICT can be incorporated in Oshikwanyama language learning and how translation as a language learning pedagogy can be revived back into the language classroom through online projects.

The main goal of the project is to describe and analyse a grass-root level approach to the localisation of online content and explore how high school learners engage in a cooperative learning community to work collaboratively on the translation of web-based content between English second language and Oshikwanyama first or home language.

As part of the project, I would like to involve your child in the seven day online based activities by which the first two days will involve him/her in a basic computer workshop, that deals with basic keyboarding skills, MS word skills, Wikipedia or online editing, downloading and uploading information on internet and basic email skills. The last five days he/she will be involved in a series of online Wikipedia translation activities on whereby you will be divided into four groups by which you are going to translate several Wikipedia pages of their choice from English 2nd language to Oshikwanyama 1st language. I together with two language teachers will be observing and scaffolding throughout the Wikipedia translation and record what has transpired during the activities. After every Wikipedia activity, the child will be required to complete a daily questionnaire where they reflect on the activity. The project will conclude (Day 5) with a group discussion or interview on the whole Wikipedia experience and the way forward. This project will be conducted after school hours, from 14H00 -16H00, in the school's computer laboratory.

After the collection of information, I will code all the information so that none of the child identity or any other personal information is revealed anywhere in the research report to anyone who may use the research findings. This project is conducted for research purposes and thus you child's contribution will not in any way affect to his/her current academic performance. The research is conducted on voluntary basis and the child has the right to withdraw anytime from the study and information related to him/her will be destroyed.

If you would allow your child to participate in the study, please complete the consent form, sign it and give it to the child to return it to me by the 19 June 2012. If you have any question please feel free to contact me, at 0812338389.

PARENT CONSENT FORM

Title of the research: Wikipedia Translation as an additive pedagogy for Oshikwanyama First Language learning.

Researcher: Aletta Mweneni Hamwedi, ICT in Education, Rhodes University

I have been given and have understood an explanation of the research project. I understand that if I have any question, I am free to contact the researcher.
 I understand that:

- My child's participation in this project is entirely voluntary.
- My child is free to withdraw him/herself and any information traceable to me will be excluded from the research report.
- Any information my child may supply to this project will be stored secured and only be accessed by the research.
- Confidentiality and anonymity will be ensured by using false names when referring to the child and the information will be coded.

I permit my child _____ (name of the child) to take part in the project under the conditions set in the information sheet.

Signature of the parent: _____   Date: _____

Print name: _____

Researcher: _____   Date: _____

APPENDIX C: RESEARCH PARTICIPANT CONSENT FORM

RESEARCH PARTICIPANT CONSENT FORM

Title of the research: Wikipedia Translation as an additive pedagogy for Oshikwanyama First Language Learning.

Researcher: Aletta Mweneni Hamwedi, ICT Education, Rhodes University

Research Description: I am doing this Masters in Education research project in order to find out what strategies are the learners using in the online translation and how does the translation motivate them to change their attitudes towards learning Oshikwanyama. By doing this online project, I hope to understand how ICT can be incorporated in Oshikwanyama language learning and how translation as a language learning pedagogy can be revived back into the language classroom through online projects.

The main goal of the project is to describe and analyse a grass-root level approach to the localisation of online content and explore how high school learners engage in a cooperative learning community to work collaboratively on the translation of web-based content between English second language and Oshikwanyama first or home language.

Participant consent: I have been given and have understood an explanation of the research project. I have had an opportunity to ask questions and have them answered.

I understand that:

- My participation in this project is entirely voluntary.
- I am free to withdraw myself and any information traceable to me will be excluded form the research report.
- Any information I supply to this project will be stored secured and only be accessed by the research.
- Confidentiality and anonymity will be ensured by using false names when referring to me and coded information.

I agree to take part in the project under the conditions set in the information sheet.

Signature of the participant _____   Date: _____

Print name: _____

Researcher: _____   Date: _____

APPENDIX D: PRE-STUDY QUESTIONNAIRE FOR OSHIKWANYAMA LEARNERS

This questionnaire is part of a Master in Education study project, which aims to investigate Wikipedia Translation as an additive pedagogy for Oshikwanyama First Language Learning. The questionnaire is designed and will be administered only for research and graduation purposes. As Oshikwanyama learners, you are selected to give your views, knowledge, and experiences with computer, mobile phone and the internet.

The information to be collected will create awareness in the integration of ICT in African language by bringing forward the potentials and barriers towards the use of ICT in Oshikwanyama language classroom.

The information you provide here will be treated with outmost confidentiality and that is the reason you are not required to provide personal details. The school and you as participants will be informed of the outcome of the research and be given a detailed feedback.

This questionnaire aims to collect personal information about your knowledge and experiences with ICTs (information Communication and Technologies).

Guidelines for answering the questionnaire:

a. Please complete **all** the questions.
b. Most of the questions are asking you to tick (√) the box that is most appropriate to you, other wise to specify or give details when required. Please ensure that you do as required.
c. Additional information is written in *italics.*
d. Use a blue or black ballpoint pen only.

When you have completed the questionnaires, please return to Ms. Hamwedi (the researcher).
For any questions or doubts, please contact me (Ms. Hamwedi) on 0812338389.

Your cooperation is very much appreciated!

SECTION 1: BACKGROUND INFORMATION

A. Biographical information

1. Age: ☐

2. Gender: | M | F |

3. Home language: ....

4. Do you think your home language is important? <u>Yes</u>   <u>No</u>

    4.1. Please explain Why.

    _____

    _____

    _____

5. Which language do you usually speak with family and friends?

	English	Oshikwanyama
Family		
Friends		

6. Do you think English is more important than Oshikwanyama? <u>Yes</u>   <u>No</u>

    6.1. Please explain Why.

    _____

    _____

    _____

B. Experience with ICT

7. Do you have a computer at home?

Yes	No

8. Maybe "how often do you use computers?

Everyday	
Once a week	
Once every two weeks	
Once a month	
Once every three months etc	

9. Have you ever attended any computer related course?

Yes	No

If Yes specify

_____

_____

10. How do you rate your competence in computer?

Basic academic uses of computers	Very good	Good	Better	Poor	Very Poor
a. Use word processor MS. Word					
b. Use spread sheet, i.e. MS Excel					
c. Use PowerPoint for presentations					
d. Send/receive email documents					
e. Browse the internet					
f. Research on Google/Wikipedia					
g. Edit Wikipedia pages					
h. Create Wikipedia page					
i. Created wiki sites					
j. Upload information on wiki sites					
k. Social networking					

11. Do you have a mobile phone:

Yes	No

   11.1.   Phone type: ....

12. For each of the following application, indicate the one that you can use on the computer or Mobile phone?

	Mobile phone	Computer
Word-processing		
Database		
Sms		
Download music		
Instant messaging		
Whatsapp		
Power point/presentations		
Spreadsheet		
Drawing and painting		
e-mail		
Chat		
Surf the internet		
Use educational software like Encarta etc		
Wikipedia		
MediaWiki		
Google		
Facebook		
YouTube		
Tweeter		
Playing games		
Other (Specify)		

13. How often do you visit the computer laboratory at the school?

a. Once a day	
b. Twice a day	
c. Once a week	
d. Two – three times a week	
e. Once a month	
f. Once a year	
g. Never	

14. When last did you use internet?

Today	
Yesterday	
Last month	
Last year	
Never	

15. When do you usually use Oshikwanyama on a mobile phone why?

When talking to my parents	
a. When talking to my friends	
b. When chatting to my colleagues at school	
c. When I pick up the phone and do not know the caller	
Other (Specify)	

16. On which ICT do you use Oshikwanyama mostly?

Personal Computer (PC)	
Mobile phone	

17. How often do you post information on Facebook, Twitter, Netlog, Badoo, Google Plus etc.

Once a day I think	
Twice a day	
Once a week	
Two – three times a week	
Never	

18. Which language do you use most in the SMS or Facebook posts and why?

English	
Oshikwanyama	
Other (Specify)	

_____

_____

_____

19. How often do you use Oshikwanyama on the personal computer?

Once a day	
Once a week	
Once a month	
Never	

20. When was the last time you searched information in Oshikwanyama on internet?

Yesterday	
Last week	
Last month	
Never	

21. Rate the ICT interface and social media and messaging that you think is more/least appropriate to Oshikwanyama.

	Least appropriate	Appropriate	Undecided	Least appropriate	Not appropriate
a. Email (i.e. gmail, yahoo etc).					
b. Skype					
c. Facebook or Tweeter					
d. Instant Messaging (gtalk, Mxit etc.					
e. MS Office i.e. MS Word, Ms Excel etc.)					
f. Wikipedia pages					
g. Google Search					

22. How would you feel about learning Oshikwanyama in an ICT domain?

_____
_____
_____

24. What do you think are the benefits of using Oshikwanyama in an ICT domain?

_____
_____
_____

 25. What do you think are the challenges (short-comings) of using Oshikwanyama in an ICT domain?

_____
_____
_____
_____

Introduction

This questionnaire is part of the Masters of Education in Information Communication and Technology, which aim to investigate Wikipedia translation as an additive pedagogy for Oshikwanyama First Language learning. The questionnaire is designed as a daily reflecting tool, which will enable you to reflect on the experience with online translation, the strategies used in translation and about attitudinal shift and motivation on Oshikwanyama language learning.

Why is it necessary to complete this daily questionnaire?

This questionnaire will give insight into the use of Oshikwanyama in an ICT domain and allow you as learners, to give your voice about your experience about Wikipedia translation highlight the areas of strength and constrains regarding the translation and using ICTs.

Confidentiality and Anonymity

The information in this questionnaire is treated with utmost confidential. At no time, the name of the school and your name will be revealed in the study. You are not required to enter your personal details in this questionnaire and thus anonymity will be maintained.

Information about this questionnaire

This daily questionnaire requires you to give a reflection on what has transpired throughout the Wikipedia translation activity.

The words online activity and Wikipedia activity are used interchangeably in this questionnaire but they are all related to one thing, which is the translation of the Wikipedia content into Oshikwanyama.

Please note that some question are closed and they require you to give a rate of how you feel about the scenario, whereas others are open and ask you to elaborate more on the question. The question guidelines are typed in *italics* and their categories in **bold**.

Please note that some questions refer to you as an individual and others as a member of the group.

This questionnaire can be completed by tying out the answers where possible, or by using an ink pen.

For further information, do not hesitate to   contact me on 0812338389.

Thank you very much for your cooperation!

DAILY QUESTIONNAIRE ON THE TRANSLATION ACTIVITY

Please indicate, by using the levels set in the scale, how you would classify the following statements.

(1 – Strongly disagree, 2 – agree, 3 – Undecided, 4 – Disagree, 5- Strongly agree)

	1	2	3	4	5
1. I enjoyed today's activity					
2. I found the activity useful for learning Oshikwanyama					
3. The was difficult to do					
4. The task was time consuming					
5. The task was challenging					
6. I could translate all the English words into Oshikwanyama					
7. It was difficult to translate some of the words into Oshikwanyama					
8. I have met new words that I have to search for the meaning					
9. I saw some new English words that I did not know what they meant					
10. I have borrowed some English words and made it new Oshikwanyama terms					
11. I think Oshikwanyama is easier to understand than English					
12. I am satisfied with the outcome of today's translation					

13. What did you like/enjoy most about the translation activity?

14. What did you dislike/enjoy least about the translation activity?

15. Did you develop any skill in terms of tackling the translation that you think you are going to use in the next session? Please elaborate.

16. Any comment on today's session

This is the end of the questionnaire. Thank you very much for your cooperation. Please make sure that you submit this questionnaire before the beginning of the next session.

APPENDIX F: FOCUS GROUP INTERVIEW TRANSCRIPT WITH LEARNERS

INTERVIEW TRANSCRIPT: GROUP 1

LINE	CONVERSANT AND CONVERSATION
1.	**Interviewer**: Good afternoon, guys?
2.	**All**:　　　　Good afternoon Ms.
3.	**Interviewer**: Group one. Okay. This interview will ask you to reflect on your Wikipedia translation activity, the one you have been with the past few days. The focus of this interview is to be able to see how you guys have been able to use Oshikwanyama in the English platform and the use of English in another mode, which is not the way you are used to in the classroom during a normal day. Okay you were supposed to translate Wikipedia pages from English to Oshikwanyama with a purpose of localisation of the Wikipedia content into one of the African language and also with the purpose of using it or making it local in order to be able to use it in the classroom. In this interview I am going to ask you questions, of which some questions will require you to reflect on how the activity went, if it was fine, any difficulties that you have encountered during the activity. You are free to answer any question, add, comment, or just contribute. Okay now the first question is:
4.	**Interviewer**: How was the translation? How was it to you?
5.	**Anna:**　　The translation was very nice, but the problem was within us because like me, I was too much in the direct translation, I translated directly from English to Oshikwanyama, some of the sentences ended up make no sense.
6.	**Interviewer**:　How was it to you?
7.	**Tuamena:**　To me it was quite okay, but it was also time consuming because we have to share ideas now and then with my colleagues, for instance some of the words that I did not know, we have to ask around and around, agghh… taking my time up.

8.	**Ndanyanyukwa:**	To me it was a bit challenging because I had to come across some new terms both in English and in Oshikwanyama. So, a new term in English that means that it will be difficult for me to translate it into Oshikwanyama because it is very new, I have never heard it before. This is mostly on political terms because the page that we were translating was based on politics, so connecting myself to the world of politics was very challenging.
9.	**Interviewer**:	Just a follow up question. Do you maybe remember one or two words that you were not able to translate at all, or getting its meaning?
10.	**Ndanyanyukwa:**	It was, aaahh... 'Controversial' I just did not get its meaning in both English and Oshikwanyama
11.	**Interviewer**:	Is there some other words that you could not translate or words that you have invented in Oshikwanyama? Any of you?
12.	**Ndeshipanda:**	There was a word neh, and it's like 'mouthpiece' like together mouthpiece, I just translated directly to Oshikwanyama like "oshipambu shokanya" (*a piece of the mouth*). (all laughing) just to get it translated. So I let it be like that, because there is no other way, because it seems like a slang word.
13.	**Amen:**	It was actually challenging because we did not have dictionaries in our groups, to look for words in English maybe we can get the meaning and translate it to Oshikwanyama. It was also time consuming.
14.	**Interviewer**:	Now tell me, how did you arrive to the translation, to get to a decision that this is the right words. Does it come naturally or how did you decide on that?
15.	**Tuamena:**	Ohhh, since we were working in groups we actually worked together and then heard from each other point of views, let me say for instance this colleagues think this way and the other think another, we combine together and come up with a direct term of which we both agree on. Yaa. That was really the main important thing, working together. Just like they say, the good team beat with one heart, so that was basically it.

16.	**Interviewer**: Mhh. How did it go for you? (*Asking Thandiswa*)
17.	**Thandiswa:** For us when we met challenging words, we usual have to read the whole sentence and get the meaning, so when you are translating the text that means you can translate it in a different way as long as the meaning of the sentence is there.
18.	**Interviewer**: Okay, are you saying that it was nice working in groups.
19.	**All:** Yeah. Very much.
20.	**Interviewer**: Tell me, the experience itself, working with or writing Oshikwanyama on a computer, on internet, on Wikipedia, how was it?
21.	**Simpiwe:** Actually it was amazing, that way we are bringing our language to be shown all over the world. It was a great experience.
22.	**Interviewer**: Do you think ICT can be incorporated or mixed in the classroom. Do you think ICT can really be used in Oshikwanyama classroom? Do you think it is necessary?
23.	**Naame:** It makes things understandable especially if you are poor in English you can get them meaning, so it improve your language.
24.	**Senzo:** To add on what she said, it enables us to understand the content both in Oshikwanyama and English, for instance if you understand something very well in English and both in Oshikwanyama it will upgrade your knowledge.
25.	**Ndanyanyukwa:** And just to get the other people, the English speakers, to also try learning our languages as we have learnt theirs, so if we bring it up in the ICT system at least they will be encouraged to learn it. Why won't they want to learn our languages if we have also learnt their own indigenous languages. So, it will also encourage them to learn Oshikwanyama, a white person learning Oshikwanyama, it will be 50/50.
26.	**Karabo:** On the other hand, it will be time consuming because not all of us are good at ICT, and this means that we will need a lot of training in order to work it out, so it will be time consuming.

27.	**Interviewer**:	What were your weak areas in this activity? The challenges that you have met here.
28.	**Photo:**	Typing speed was too low/ slow because to some of us it was our first time, being across the computer, so it is like wow this is the computer, so it way so time consuming because finding each and every letter on the keyboard was just too much for me.
29.	**Tuwilika:**	On the other hand, the Oshikwanyama words were just too long and complicated, using them on the keyboard; we are not used to use those words on the keyboard (to search for the letters on the keyboard
30.	**Shetu:**	The other think was just that we have that mentality that Oshikwanyama cannot be used on the computer, so seeing yourself just doing that was just a weird experience, something else, it was …
31.	**Interviewer**:	In the initial interview, before we started the translation, some of you said, 'No, I do not think this will work'. Do you still think that Oshikwanyama and ICT will not work?
32.	**Ndeshipanda:**	It will work but on a long run, because you still have to train people, because people who are not computer literate are the ones participating in this project. To make it work you effectively still have to start over, and train this people so that they can get it going, and that will be, it will only be a success in a long run when everything else is done. But it will be possible, but it will take time.
33.	**Shetu:**	Another problem is that we have also experience problems because you seem to understand the word in English, but the just to translate it into Oshikwanyama mother language is so difficult, you know the word, but just to translate it into your home language seem to be so difficult, just because maybe we are used to English …yaah, you get the picture, but just to put it English is difficult.
34.	**Interviewer**:	What do you think, as learners now, are the activities that can enhance translation in into the classroom? Do you think we can use it in writing, may be, how/ or may be in speaking, or reading in the classroom/ Do you think it can work?

35.	Ndapewa:	I think it can work if we have the resources available, because in translating, you will need a dictionary plus a computer not all learners are accessible to a computer, but once we all have resources it can work for us.
36.	Interviewer:	Do you have any final comment, may be your own personal feelings about the work we just completed here that you would want to share with us?
37.	Paul:	Actually, this translation will give a chance to the school dropout because some of them do not know how to read or write so Oshikwanyama can make them use computer.
38.	Tuamena:	I also think it is a great idea, but I do not want it to end here. It will be a good idea if all schools access to the Wikipedia pages, this will help all the learners access to the pages and help translate them, so majority of learners will be involved.
39.	Photo:	Most people pass all the subjects well but English, so using Oshikwanyama will help them improve vice versa.
40.	Naame:	It will also help us to be proud of own languages because familiarizing ourselves with Oshikwanyama at least can keep use to be focus on it because it is can be used on internet and that is motivating.
41.	Interviewer:	Thank you guys, for your time, you concentration and comments it was good and I really appreciate your time.
42.	All:	Thank you too maam.

Interview ends

FOCUS GROUP INTERVIEW TRANSCRIPT – GROUP 2

43.	**Interviewer**: Good afternoon guys
44.	**All:** Good afternoon Ms.
45.	**Interviewer**: Tell me, how was the translation? How did it go? You can speak in both Oshiwambo and English, it is fine to mix. Any language that you are comfortable with.
46.	**Emmy:** Okay, it was fine. It was okay. I was expecting it to be hard, I was kind of overwhelmed by the whole thing but ya, it was fine.
47.	**Chabby:** For me it was extreme difficult (in the background – you are exaggerating!), No I am not exaggerating because some of those words like, controversial or critically acclaimed, we do not really use those words normally, even though now you are expected to use them in the classroom, it was really difficult, I found it very difficult.
48.	**Lindsay:** I found it very interesting, translating words into Oshikwanyama, I have never heard of a person introducing such a thing, (even me – in the background) something new and different, yet fun.
49.	**Mavuku:** It was somehow, not so difficult not that easy but it was fine. At least we got to learn something from it.
50.	**Miina:** Ahhh! For me it was fine, even though we approached some difficult words, it was okay. I very learnt at least.
51.	**Interviewer**: So, do you think it was a learning experience, although some of have experienced some difficulties, was it a learning experience? What did you really learnt from it?
52.	**Emmy:** I think the other thing is you do not just translate direct words into Oshikwanyama, you understand at least what the sentence mean and then you can translate it. You have to translate the content not word by word.
53.	**Interviewer**: Do you remember any words, a new word that you think have formed

		yourself? Or maybe a word that you were not able to translate at all?
54.	**Chabby:**	Yeah. Convers… conversiii... Controversy!
55.	**Interviewer**:	Mhh! So, it was like so, totally new and not possible to translate at all?
56.	**Chabby:**	We got help though. It was hard but we got help later.
57.	**Interviewer:**	How did you reach to a consensus, or to an agreement that this is the right word?
58.	**Mavuku:**	Some of the people have consulted the teacher,
59.	**Lindsay:**	We discussed amongst ourselves the group members and come to an agreement that this is the right word.
60.	**Interviewer**:	Mhh, so was working in groups helpful for you and how?
61.	**Emmy:**	It was helpful because like, as people say two heads are better then some, like some people , like there are some sentences that you do not know but others do, so I might not understand the word but my partner understands it so it become easy.
62.	**Namutenya:**	I think the training that we had made it easier for me to carry out this because I know what is expected of me to do. Some words were difficult to translate but as you know the teacher is there to help and for some we got helped by someone amongst the group. Moreover, it was interesting that we had so different opinions some of them were like just funny, like some people are experience and … it was just fun.
63.	**Interviewer**:	Now, do you think that ICT, having been working on the computer, internet and the Wikipedia itself? Do you think it is worth trying in the Oshikwanyama classroom?
64.	*Pause*	
65.	**Interviewer**:	I can see some are nodding, some are like... impossible... tell me? (Laughing) Let's look at the positive first before we go to the negative.
66.	**Miina:**	I think it is possible, today we are just busy with a small scale but then this is just one leak for bigger discoveries or so. I think oohh, if the English people did it, we can also do it we really put our minds and we

		are determined that we want to translate like the South Africans are doing. It is only kutya (*that*) we have people from different areas and this might take time to translate language from English into their local languages like we can also do it in Oshikwanyama.
67.	**Ndapanda:**	I actually think that although this was successful, if you compare the two languages, English and Oshikwanyama, English it too vast. It has a wide vocabulary and it is really so, it is like an old language, so complex and Oshikwanyama, I do not really think Oshikwanyama can accommodate all the terms in English, actually I don't really think it can, I don't think it should be because Oshikwanyama is only spoken in Namibia, it is not a global language, unless we consider Namibia alone, maybe using it only in Namibia and forget anywhere else.
68.	**Interviewer:**	So, you do not think it can work?
69.	**Chabby:**	I do not think Oshikwanyama can accommodate English.
70.	**Interviewer:**	Now. Tell me, apart from the translation itself, did you face challenges with ICT itself? What are those challenges and how? Using computers, internet, typing, Wikipedia?
71.	**Namutenya:**	Example, for me it was the first time, logging into Wikipedia, the only thing I use Wikipedia for is when searching for information but I do not think of things like having an account, editing pages, print screen and all this other different things so it was a troublesome, and sometime the connection on the server was a bit down sided. Yah, the problems were there, but the facilitator was there, so they were sorted out.
72.	**Interviewer:**	What are other problems, you guys are good at typing skills and keyboard… (no… we are not), ok, what made it so challenging?
73.	**Lindsay:**	It may be okay for me, because I own a phone with a QWERTY keyboard so, since I am used to and since I am fast in typing like texting people, it really made it easy for me.
74.	**Miina:**	It was okay, because we had computer lessons at primary schools and when I came here we had Keyboard and Word processing, Grade 8-10 so it was fine.

75.	**Chabby:**	It was bad for us, the four of us, because we had no QWERTY phones, so when I am helping my dad with something, he has got a C3 (Nokia), so that when I get use of a QWERTY and everything. My phone is just normal phone with 123, abc in one block, yah, it is just the standard one.
76.	**Interviewer:**	Now, going back to the translation and having highlighted all that, do you think you have produced a good quality work? Was your article worth being on Wikipedia, in your local language and why?
77.	**Miina:**	(jokingly) oh, how I wish my grandmother was able and she could read information on Wikipedia, she will be able to read and get the meaning; we did for anyone to get the meaning, not only for English speakers but for Oshikwanyama as well.
78.	**Interviewer:**	Can she agree to the language that you have used?
79.	**Miina:**	My grandmother? I would say no, because she understand the language in depth like she has advance vocabulary, like I have repeated most of the words, but I do not think some of them were directly translated.
80.	**Interviewer:**	Mhh Chabby, how was your translation since you had experienced many difficulties than others?
81.	**Chabby:**	I think our Oshikwanyama page was very shallow; it was not the same as English. It seems so primary school Oshikwanyama. It was not complex or interesting, because some of the words like 'critically acclaimed', 'exponential', you understand them in their original version, when you put them in Oshikwanyama, they say like *"osha li shiwa neenghono" (it was very nice)*, and you see it is not really the same. But I think it does deserve to be there because the meaning is still there. Like we translated about "The Dogg" (*one of Namibia's top performing artist*) life, we still know where he is from, where he went to school but it is not the same quality as in English.
82.	**Interviewer:**	How was working in teams? Did you enjoy it?
83.	**Mavuku:**	No, it was worse, there was not really team work because everyone wanted their ideas to be jotted down, there was no combined ideas and

		stuff, so for me the whole thing was just not good.
84.	**Chabby:**	I enjoyed my group, because there was this boy who was really good in Oshikwanyama, *(all laughing – I think they know the boy)*. The problem came when we meet this English word that he did not know, so when you do not know the meaning of the word in English it get so difficult for you to translate. So I tried to explain the English word and then the Oshikwanyama word and then we translate it, which was fun. Then, I learnt a lot, and when he type, ohh that was fun *(all laughing)*.
85.	**Interviewer**:	Did you have any problem with maybe the spelling of words? Do you think you were really writing the way you would write in the examination?
86.	**Emmy:**	It was good, because, even though we were typing, for some of have been using the keyboard for so many years so even whether it is in Oshikwanyama or English well still got it right. For example in grade 9, we use to translate; we use to type Oshikwanyama or Oshindonga letters (formal letters) in order to see the difficulties of spelling of words on the computer. So, we used to typing words in Oshikwanyama or Oshindonga. So, it was not really difficult. It was more of this regular thing of separating words when you are writing but still.
87.	**Interviewer**:	So, what about you guys, who did not have any computer literacy or basic training, was it difficult for you typing Oshikwanyama words, was it the same as writing them down?
88.	**Amenenge:**	Well, typing itself is only that the letters are far apart, 'a' is somewhere here and 'b' is down but the spacing was also a problem like the control was not really there. We are used to cursive writing and here we are searching for 's', 'g'… *(laughing)*
89.	**Wendy:**	The other thing was that when you are writing in cursive, you know when to separate but with computer it is all in one, and sometime when you type like in English it underlines, you will know the right and wrongs but in Oshikwanyama, it does not underline.
90.	**Interviewer**:	Now, tell me, do you think there were some main challenges, the main

		one that we can deal with in case we want to introduce translation in the classroom to the learners?
91.	**Miina:**	Computer literacy, translation of words because of the meaning they will not perfect it, facilities. If we try to introduce this as an Oshikwanyama classroom activity it will be difficult as people are already trying to provide facilities such as chairs and tables but if they start trying to provide facilities such as computers to every school, setting up translating activities will be very difficult. It will require a lot of money and time.
92.	**Interviewer:**	So do you think it was time consuming?
93.	**Mavuku:**	Well, sometimes during the class when we have to use many books, it can be time consuming, but in platforms like this, where you are just focused on translation then it was not.
94.	**Lindsay:**	I do not think it was time consuming, because it is just like translating any other text, because you still have to read the whole paragraph and translate it to get the meaning, or if you wanna go word by word it is fine. I think it was actually much easier because all the text that .you want to translate is on the screen, you do not have to page back and forth, what is that…(*pause*) no second draft or what so every, for any mistake you just have to put a curser then and then edit and continue, ,so that was actually easier.
95.	**Interviewer**:	Any last comment.
96.	**Miina:**	Get more schools involved, learners, we are just about thirty something and we have learnt a lot, just think about doing to 3 schools in Oshana, or the whole Oshana region, think about how many pages will be translated.
97.	**Lindsay:**	If you think of such a program like this, then I think it should be hand in hand with an ICT program that teachers learner's bout the computer and internet usage, then I think this will succeed.
98.	**Emmy:**	I think it will only succeed if we start using young children about computers, so when they grow up like go to high school or so, then they

		already know how to use a computer. Then when you are going to introduce the program then it will be easier to them.
99.	**Interviewer**:	Okay, thank you guys for your answers, your comments it was really worth it. And thank you for being here with me.
100.	**All:**	Yeah, it was nice to see you too Ms. and we got the chance to at least use the school's computers and the internet, it was worth it.

Interview ends

FOCUS GROUP INTERVIEW TRANSCRIPT – GROUP 3

101.	**Interviewer**:	Good Afternoon guys?
102.	**All:**	Good afternoon Miss.
103.	**Interviewer**:	How the translation activity? How did it go?
104.	**Foto:**	I was kind of cool but a little bit tough because there are bombastic words in English that we were not able to translate in English, but overall it was cool.
105.	**Interviewer**:	Mhh. How was it for you?
106.	**Jossy:**	The translation was fine; it was interesting to translate some of the sentences from English to Oshikwanyama.
107.	**Interviewer**:	Was it your first time?
108.	**Jossy:**	Yes, it was my first time and it was very interesting.
109.	**Interviewer**:	Mmh… how was it for you, Ndahafa?
110.	**Ndahafa:**	Actually, it is a nice experience, I have enjoyed it even though there were some challenges, I have learnt a lot from this. It was a good experience
111.	**Jay Jay:**	It was so good that we can translate pages into our own language; the ability to get the meaning of some words was good.
112.	**Interviewer**:	Do you think you have formed new words or new Oshikwanyama words with this translation, or is there any English term that you were not able to translate at all?
113.	**Hafeni:**	Yeah. There was some words in English that I was not able to translate into Oshikwanyama, the likes of words like 'curious'
114.	**Tangeni:**	From the beginning the activity was very interesting. The problem is that there were some words in English that we could not translate into Oshikwanyama, the words like 'album' and nominees'. I think most of the articles that we translated were too long and then it got boring and I

		was even tired. Thus, I did not even finish translating some of the article, or have deleted some of the information and left it the way I want. Because apparently Wikipedia is a free encyclopaedia that is why I did what I felt like doing.
115.	**Interviewer**:	Do you think you that we should opt for shorter articles, what is your take in this?
116.	**Jay Jay:**	To my point of view, I that articles that have to be translated must be shorter, so that the translator cannot get tired and so that he/she can become interested. I believe that most of the articles that must be translated must be the articles that cannot confuse the nation, articles that can get value to the nation and not just any article.
117.	**Interviewer**:	Okay, you have been working on this for some days and you have worked in groups with some other people… How was working in the team?
118.	**Ndahafa:**	I think, working in groups was better, because you learn the skills of how to work with other people, how to trust other people knowing they have better computer literacy and knowing if you know the word they might have a better words that can fit the context, it is the suggestion from different people that made the text better.
119.	**Lina:**	It made it much easier because everybody had to contribute according to his own point of view, according to his or her understanding and it is much better because you can select which words fit well with the article and also it contribute to others' knowledge like let me say the other person, the other person, for example the other one is giving the example of the word 'guide' , aah what was the words, aaah, the other on said "okuulika", then the other one "okuulikila" and also "okulondwela", now they were like three mos, and then we were like which one is better for the articles, because it is hard to know which one is the right meaning of the word because it is difficult, so you n have to select the appropriate one.
120.	**Interviewer**:	Did you translate word by word? How did you translate?

121.	Foto:	For us we read like each paragraph, we have to understand it and then translate not like word by word, it was not easy to translate, so you have to understand the whole content first.
122.	Tangeni:	Just to add, we had to translate the whole sentence, meaning reading the entire sentence so you can get meaning and then translate it because it is difficult to translate each English word into Oshikwanyama. The other point I want to make about working in groups is that it was not really a good idea. it was time consuming because if you are working with your partner, sometimes you argue about some words and it is time consuming, so it was not really a good idea.
123.	Interviewer:	Tell me, did you select the topic that you really wanted yourselves, how was the topic contributing to your translation, since you have highlighted the values of the text?
124.	Tangeni:	The article we selected, we just selected it because it is about the most famous people that we know, that is way we searched the article for his (what it interesting) it was interesting indeed but I think the entire article was not education because it was not educational, because it was just an autobiography of someone which was not encouraging people to follow the career that they really want.
125.	Interviewer:	Now, most of you have, I mean all of you have ICT skill but at different level, ICT skills like computer literacy, do you think that the use of computer on translation was a barrier or was also a challenge?
126.	Hafeni:	To me I think it was a challenge because some of us we were not taught about computer thus we were not really able to follow with what was happening at a time.
127.	Jay Jay:	I think it was a problem with some people with typing, after they have interpreted the sentence then they had to type it, so they could not finish their text because some of them did not have that speed of typing.
128.	Mekondjo:	I think so, cos seriously if you do not know how to operate a computer then it is gonna be difficult for you. Because we have that question how you will be able to find what you are looking for and yeah, it is a

		challenge.
129.	**Interviewer**:	Were you motivated to learn Oshikwanyama through this exercise?
130.	**Lina:**	It was encouraging that you have to look for many Oshikwanyama words so whenever you are going to translate you have got the skills.
131.	**Foto:**	Yeah. Now I know some of the English words and also Oshikwanyama words through the translation we just did
132.	**Inga:**	I think I learnt something because I got to see that my Oshikwanyama level was too low, cos I have too many problems in translating, because I am too low in grammar and vocabulary is too low bringing it in English has motivated me to read Oshikwanyama and read Oshikwanyama books just to learn it.
133.	**Tangeni:**	I am agreeing with Inga's point, but to my side I have realized that there are just some of the English words that you can't translate into Oshikwanyama. Like the word computer, I think computers were invented min England where English people developed the word. That is why the word is just in English, doesn't matter if you say it in Oshikwanyama, it still sound like in English, the meaning still remain the same it does not change, it still remain the original that name. You will never translate that word and give it Oshikwanyama name. You will never do that.
134.	**Tuwilika:**	I think for the translation itself was not aiming to change the words themselves, but the context of the sentence. meaning if the sentence has to say something to do with the album at least you get a clue on what to say instead of saying album, you put it even if it is not in one word, even in two or three, as long as someone knows that you are talking about the album.
135.	**Silas:**	Mmhh (Okangalo) instead of just saying there is no word for that. Add two to three words in Oshikwanyama and they make up for one English word.
136.	**Interviewer**:	Do you think your translation was of a good quality?

137.	Jay Jay:	For me no, because it was my first time to do it, so it was hard for me translating from English to Oshikwanyama, so it was not that of a good quality.
138.	Foto:	For me, it wasn't good because I do not how to divide Oshikwanyama words; I think I made some serious spelling mistake
139.	Tangeni:	To me I believe it was moderate because I know most of Oshikwanyama words, so thus I was able and capable of translating most of the words from English to Oshikwanyama although I might have made some mistake
140.	Tuwilika:	For me I think it was not good and not bad, because at some point we have to we have to come up with meaning of the sentence and because we were not capable of doing so, as it says we felt we will just change it because we knew the person, so we ended up making some changes to the context. That was not that good.
141.	Interviewer:	So, what do you think are the risk of translating the Wikipedia pages?
142.	Tangeni:	From my point of view, I think it is very risky because I can provide wrong information so that people can read it and believe it. Fore stance like, I might have a conflict with someone, and so I might just go on Wikipedia page and say bad things about that person because I do not like him or her.
143.	Inga:	I think it is very risky, because a person that do not understand that language, you block that person from searching for information on Wikipedia, they might check with something else and end up not getting the information they really needed.
144.	Interviewer:	But, do you think it is worth doing it as an Oshikwanyama classroom practice, instead of translating newspaper articles, we go online and translate those?
145.	Tuwilika:	Online translation offer diffident context and different pages on either entertainment, history or anything. With newspaper, it is mostly about news but with online you have a broad or a whole range of articles and

		vocabulary to view on.
146.	**Mekondjo:**	Yaah. It is worth it as Tuwilika said. You see a computer is much easier because you got a variety of article, you can translate anything that you want not like newspaper or any source of information like magazine which only base on one article. So, with a computer you can search for anything and you can translate it.
147.	**Tangeni:**	I believe that it is a good idea, like what she said, there are various articles that you can translate but like using a newspaper, you only focus on what other people have contributed but with Wikipedia you got a freedom to search for whatever you what to translate., so I think it is a good idea.
148.	**Interviewer**:	Now, what do you think it will be a challenge for a school to use it for teaching, like from grade 8-12? Do you think it is possible? Do you think it is challenging?
149.	**Hafeni:**	I think it is challenging because putting up a timetable for all the classes to come to the lab… because I think not all teachers are literate with computers. So it will be very challenging for the teachers and especially for the teacher who is always busy with the lab, so it will be difficult to accommodate all the classes and all the lesson.
150.	**Interviewer**:	What do you think we need to do, in order to involve ourselves Oshikwanyama learners with ICT? What can we do?
151.	**Foto:**	Maybe we selected the days we can use ICT because as she said, the time-table will not accommodate it, maybe skipping up some days will do.
152.	**Jay Jay:**	I believe weekly basis is also a good idea because the school does not have enough computers to accommodate all learners, I also think some of the periods like Life Skills can be used to do computer programs.
153.	**Tuwilika:**	I also suggest, teachers to get computer literacy so they can pass it to the learners.
154.	**Interviewer:**	Any other comment, the last comment. What is the way forward?

155.	Mike:	I think it is a very good think to be introduced to other schools and learners, so that they know how to use Wikipedia pages, and get the chance to learn how Wikipedia pages are formed and also how to use ICT.
156.	Inga:	To, the transfer of English, we were not supposed to change the text but just to add another paragraph in Oshikwanyama and not delete an English paragraph.
157.	Tuwilika:	For me, it was really a good idea, and we tend to improve our vocabulary, and we got to know that Oshikwanyama is just a better language like English; you can also use Oshikwanyama when it comes to computers, not just to concentrate on English but also on our first language.
158.	Hafeni:	According to my understanding, I think it is a good idea to translate from English to Oshikwanyama because one can be a translator, those people who can translate like (professional translators) and then from this training one can learn. Or if someone what to do so, he/she can get knowledge to do the thing, since the person had already went through the same challenge so if you happen to be in some of the meeting and there is one person who cannot understand English, you can step in and translate to them, you have already got the challenge, and you have learnt form you mistake and therefore from there you can start improving as you can
159.	Tangeni:	As I initially said that the activity was interesting, from my side, I would like to encourage all teachers to train their learners on computer literacy. I also believe that translating from English to Oshikwanyama it will assist the majority of the Kwanyamas to read all those articles because they will have a better understand of what the articles are saying. Like for instance some of the elders are illiterate, but ooh… what can I say? Illiterate but they can read. They are computer illiterate, but they can read the computer content but if some articles can be translated into Oshikwanyama then they will have a better understanding and catch up with what was said in the article. Because some articles are educational,

		they can get education from there so that they can guide their children to do what is right and know what is in correct.
160.	**Silas:**	The whole process was good, but we need to create some pages into Oshikwanyama not only to edit but to create our own content. I developing reading and understanding skills, whereby I have to read the sentence very well and seriously, that helped me to understand everything that I read and translate it
161.	**Lina:**	I believe using ICT in Oshikwanyama is a nice thing, it is fun and interesting thing, and it helps some people because their vocabulary is too low, using translation will help them.
162.	**Interviewer**:	Thank you guys for your time, and that you have spent some time doing this project with me, I wish you all the best.
163.	**All:**	Okay Ms. Thank you too.

Interview ends

APPENDIX G: INTEVIEW WITH LEARNERS BEFORE THE WIKIPEDIA TRANSLATION EXERCISE

163.	Interviewer	Omwa uhala po nawa? *(Good afternoon?)*
164.	All	Eehe. Ove wa uhala po nawa meme. *(Good Afternoon Ms.)*
165.	Interviewer	Elalakano letu eta apa olo okutranslate Wikipedia pages of your choice into Oshikwanyama language. Wikipedia is a free encyclopaedia which you can translate into any language of your choice, any language you can make a computer language, including Oshikwanyama. Ohatu ka translateni nee hatu kufa from English into Oshikwanyama. Now, I am going to interview you as a class in which you are going to give your views. Omadiladilo oye opetameko fimbo ino tameka kutya ou udite naanaa ngahelipi about Wikipedia translation into Oshikwanyama. Do you think it is necessary or not? Do you think it can be a classroom activity or not? Okay. Now. It will be a short interview, which will consist of maybe five questions and if you have any question before we start the activity you are free to ask. I may give you a chance or you can answer willingly if you want to give your views then you must be free to answer any question or to comment. *(Our main aim of coming here is to translate Wikipedia pages/content into Oshikwanyama language. Wikipedia is a free encyclopaedia which you can translate into any language of your choice, any language you can make a computer language, including Oshikwanyama. Now, I am going to ask you some few questions before we start about your views regarding this exercise).*
166.	Interviewer	Elongifo locomputer moclass yOshikwanyama eshi wa tala oshinima tashi dulu okuningwa ile itashi dulu, omolwashike to tile ngaho? *(What are your views about the use of computers in Oshikwanyama classroom/ Do you think it is possible to use computers in Oshikwanyama classroom?)*

167.	Photo	Eshi nda tala otashi dulu okuningwa she likolelela kutya omwalu wovanhu vangapi moclass omo ve na owino yokompiuta. Shalala kutya ngeenge omwaalu ouhapu nawa otashi dulika. *(I think it is possible but it depends to the number of people with computer knowledge and experience, if they are many in the class then it is possible)*
168.	Interviewer	Opena umwe vali a hala okupopya sha vali. Ngeenge wa tale elaka lokompiuta Oshiingilisha nosho tuu otashi shiiva tuu okulongifwa mOshikwanyama? *(Is there anyone who wants to add something? If you compare the language of the computer which is English, is it possible to use it in Oshikwanyama classroom?)*
169.	Naame	Itashi shiiva shaashi okompiuta oi na oitya ihapu, hano elaka loshidjaidjai, but then oEnglish oili direct maar Oshiwambo kashili direct, otashi dulika noxo oitya imwe yOshiwambo ihemo mOshiingilisha sho osho itatu dulu okulongimfa okompiuta meelesson dOshikwanyama. *(I do not think it is possible because the foreign language used in a computer, which in this case is English is direct which is not the case with Oshikwanyama, and there are many words in English which you cannot get in Oshikwanyama orthography).*
170.	Ndeshipanda	Ame eshi nda tala otashi dulika, shama ashike twe shi longo mo otashi dulika shaashi ngee opena ava vehe shi okulongifa eekompiuta ohatu dulu ashike okuva longa, (ava ve shishi otava dulu okulonga ava vehe shishi. *(I think it is possible because if there are those who do not know how to use computers those who knows can help or teach them).*
	Interviewer	Wikipedia translation, ocontent ei tai tolokwa oili mOshiingilisha, eshi mwa tala oshiima shipu ile oshinima ile oshiidjuu, oshinima to dulu okushi ninga. *(The Wikipedia content to be translated is in English, do you think you can translate a Wikipedia page into Oshikwanyama from English?)*
171.	Paul	Eshi nda tala itashi kala shipu okutranslate shaashi oitya imwe mOshiingilisha itashi kala shipu oku i translate mOshikwanyama. *(I do

		not think it is an easy thing to do because some English words are difficult and you cannot translate them into Oshikwanyama).
172.	**Silas**	Ondi wete kutya oshiima otashi dulika ashike otashi kala shidjuu, nande opaife ngaha ohatu kala hatu popi oitya imwe mOshiingilisha hatu popi Oshiwambo shaashi otwa nyengwa kutya oshitya osho mOshiwambo otashi kala shike, so ngeenge tashi ya nee kokutranslate epandja lilipo nale la nyolwa meeterminology, neebombastic words, oitya oyo ngaho otai ka kala idjuu okui tula Melaka lOshikwanyama shaashi tatu shi okui longifa shaashi kushi kutya otai ti ngahelipi shaashi nafye vene elaka lOshikwanyama katu shi apa ladja (the whole class laughing). *(I think it is possible but it won't be easy because even now as we are talking, we are speaking in both English and Oshikwanyama. So, when it comes to translation, we are going to translate a page which is written in difficult terminologies and bombastic words which are difficult to translate. We do not know how to use a lot of Oshikwanyama words, because we do not even know there the language has originated from).*
173.	**Lindsay**	Otashi kala shidjuu ndee ngeenge oto tale keembinga adishe, fye Ovakwanyama oshoyo ovalongi vOshikwanyama otava ka mona mo ngaho owino wokushiiva okulonga neelaptop, osho yo eeprojectors ngaashi ngo ovalongi vomwaalu have shi ningi moclass. Shoovene oshidjuu ngaho, ashike ngeenge osha ningwa nOshikwanyama otashi kala ngaho shi shivike, nokulonga otaku kala ngaho kupu kovalongi vOshikwanyama *(It will be difficult but if you look on both sides, the Ovakwanyama people and Oshikwanyama teachers will benefit as they will know how to use laptops in their teaching and projectors just like mathematics teachers do. It is difficult to do, but once it will be beneficial to many teachers).*
174.	**Tangeni**	Oudjuu woovene opo ngaho tau ka kala, ashike hawo naanaa tau imbi oilonga i longwa shaashi omolwashike omunhu ho dulu okutranslate to kufa mOshikwanyama to tula mOshiingilisha, oudjuu oudjuu otau ka

		kala u li peni opo. (The whole group whimpering). *(It will be difficult but will not prevent us to translate because we usually translate words from Oshikwanyama to English in our conversations on daily basis).*
175.	**Interviewer**	Mhhh, tashi ti nggenge oho dulu okukufa mOshikwanyama wa youka mOshiingilisha natango otashi dulika ngaho ku kufa mOshiingilisha wa yukifa mOshikwanyama, Tangeni osho tati. Eshi wa tala opena ouwa washa tau ku dilile mo Wikipedia translation*? (Mh, so you are saying you are saying it is possible, so, what do you think are the advantages of Wikipedia translation?)*
176.	**Tuamena**	Ouwa ouli apa kutya, ndishi ope na vakwetu vamwe ihava udu nawa elaka lOshiingilisha, ngeenge okwa lesha elaka lOshikwanyama ota dulu okuudako etumwalaka nawa. *(It's a good mode of carrying the massage to those who do not know English very well).*
177.	**Emmy**	Otashi ka kala yoo tashi dulu okutu vatela moilonga yofikola imwe i lili shaashi ngeenge nandokuli mobusiness opena ochapter ku yuuditeko mOshiingilisha oto dulu okuyuudako nawa melaka loye mwene, ove to ningi nee shinya hatu ningi hatu fatulula mOshiingilisha, ngaashi ngee ku udite kutya oMarket oshike, ngee wa tula mOshiwambo to shiiva ngoo kutya omatala okulandifila. *(It will help with school work for example if there is a chapter in Business Studies that I do not understand well I can easily translate it into Oshikwanyama, for example words like market, you will get a whole picture of what it means if you translate it into Oshiwambo).*
178.	**Amenenge**	Ondi wete kutya otashi tu vatele shaashi otashi improva oitya yetu yomOshiingilisha shaashi ngeenge oshitya kushi eshi tashi ti oto shi shiiva naashi ota shi improve ovocabulary yoye kutya nee omOshiingilisha ile mOshikwanyama. *(I think it will help us to improve our vocabulary in both language English and Oshikwanyama).*
179.	**Shetu**	Ondi wete otashi tu omukumo ovanhu novo wehe shi elaka

		lOshikwanyama navo ve lihonge mo yo nova shiive kutya ovakwanyama navo otava dulusha ngoo ngaashi yoo ovadjailongo (ovaIngilisha) navo hava etapo oinima yavo (all laughing). *(I think it will encourage people to learn Oshikwanyama language to learn and for them to know that even the Ovakwanyama people can also put up something in their own language for the whole world like the English did).*
180.	**Chabby**	Otashi tu kwafele yoo opoo tu udeko ngeenge hatu lesha nande oishangomwa yoshiimngilisha, oitya imwe ohai kala i djuu shili ashike ngeenge owe shi leshulula mOshikwanyama tashi kala u shi uditeko leala. *(It helps one to understand English much better in case there is an article that you do not understand well, it will be much understandable if you read it in Oshikwanyama)*
181.	**Interviewer**	Eshi mwa tala ekwafo lilipi tali mu dile mokutranslate moungudu, tamu longo no Wikipedia nokompiuta, ino li pewelwa okompiuta yoye mwene to longo kwoove mwene? *(What do you think are the advantages of working in groups, translating Wikipedia content with one computer in a group?)*
182.	**Ndeshipanda**	Efimbo limwe ngaashi fye vamwe inatu longwa nale oinima ina sha nokompiuta ngaashi oubar woku searching, ashike paife eshi hatu longo moungudu opena umwe eshiisha eshi u heshishi, yee mukweni teku kwafele nee apa uheshi ye mukweni teku kwafele nee yoo oinima to i shiiva nee aishe. *(There are some of us who were never taught with/ about computers, it will be easier for us to work with those that know and they can help us).*
183.	**Miina**	Ngee omuli moungudu oshafa shili nawa shaashi omitwe mbali odidule umwe, oshiima eshi u heshii kushi kufa mOshiingilisha to shi tula mOshikwanyama oto dulu okushi lombwelwa kumukweni nyee tamu li kwafele ngaho. *(It is good to work in groups because two heads are better than one, if there is something that you do not know, others can help).*

	Tangeni	Ngaashi omukwanyama hati pena va vali ihapa liwa dimbwa noludidi, osha hala kutya oilonga ngeenge otai longwa moungudu otai kala i pu nonande omunhu kakwa li eheshi poitya imwe yOshiingilisha ota mono ngaho kutya mOshikwanyama otei fatulula naanaa ngahelipi shashi ope na ngoo ou ta dulu okumu vatela ndee oilonga tai kala ipu. *(Groupwork help people to share ideas as it is a well-respected norm of Ovakwanyama to share work and get prefect result. Working in groups makes work easier; even if there are English words that you do not understand other can help you translate them in Oshikwanyama).*
184.	Interviewer	Mhh. Vahapu omwe shi talela unene kepukululo nokukala uheshi shimwe shina sha nokulongifa okompiuta ile ointernet ndee to shi shiiva. Omu na omawede po kombinga yekwafelo eli tali di mo Wikipedia activities la yuka ko vanafikola. *(Mhh, most of you think working in groups helps you to share ideas, and assist each other with the computer and the internet usage.*
185.	Ndapewa	Onda hala kuweda po kutya, ngeenge owikipedia ei ngaashi monena ngaha ohatu i ningi ashike mongudu ei yetu nena ngaha, shi ha xulile ashi apa, shi ende hano tashi kulu sha yuka komesho fiyo ofikola aishe, ile oshilonga ashishe, shi shiive kutya ohashi dulu okuningwa. *(I want to add that, this Wikipedia translation exercise must not end in this class, I want it to continue to the whole school and the whole country at large so that all learners could learn how to do it well).*
186.	Interviewer	Mh. Eshi wa tala, omikalo dilipi to dulu okulongi fa opo u translate nawa okwatendo ile oshinyolwa eshi to pewa opo shi kale naanaa Melaka lOshikwanyama lela. Oto shi ende ngahelipi? *(How are you going to carry out this translation? Any strategies of tackling it?)*
187.	Anna	I think ouna okukala u na eudeko lokaparagraph kutya otake ku lombwele shike opo u ka tule moitya yoye ove mwene. *(I think we have to understand the paragraph very well before translating it in your own words).*

188.	**Ndanyanyukwa**	Osha fimana opo u leshe etumbulo alishe ndele to li uduko, ino kala ashike to translate kookamwe nookamwe otashi dulika elityo letumbulo olo u likanife. Oshafa ashike ngee to translate to kufa mOshiwambo wayukifa mOshiingilisha, ouna oku udako elityo letumbulo alishe opo u li translate nawa. *(It is important to read the whole sentence before you translate it, because if you translate word by word you might divert the meaning of the sentence).*
189.	**Mavuku**	Ohatu kundafana opo tu shiive kutya oitya otai ti ngahelipi, shaashi omukulu wonale okwa ti kutya omitwe mbali odidule umwe, hano otuna okutula omadiladilo kumwe. *(Communication is important for us as it brings ideas together).*
190.	**Namutenya**	Oshiwa ngaho nande oto lesha oka paragraph nee to kufa nande oka dictionary u tale kutya oshitya otashi ti ngahelipi? *(It is good to read the whole paragraph, and to take the dictionary and search for the meaning of the words).*
191.	**Anna**	Ame ondina epulo. Oshiima nee eshi sho kutranslate to tula mOshikwanyama, shaashi nee kwa ti wa Wikipedia is a free encyclopdia meaning kutya keshe umwe ota kala oufemba woku translate oshinima osho ngaho (kehe). Itashi keya nande po point opo keshe umwe ta ka translate ashike oipupulu yoovene vene shootashi ka nyona nee eudeko lovanhu filululu. *(I have a question, This thing of translating pages into Oshikwanyama as it was said that Wikipedia is a free encyclopaedia meaning that everybody has the right to translate anything. Is it not going to lead to the point where everyone will translate nonsense and lies which will cause confusion to people's understanding?)*
192.	**Interviewer**	Ehee, oyo orisk imwe yo Wikipedia oyo, online encyclopaedia ilifree ku editingwa by everyone. Umwe ote ya mo ta shange oipupulu umwe oteya mo ta shange oshili. Ashike ngee ohatu tale kmo translation ei yetu, opo tu kale twa lambalala Oshikwanyama shetu tu shi koleke,

| | | otuna ku translate lela oshili yoovene, hano, omatumbulo tuna okua shanga lela mOshikwanyama mwoovene opo tu koleke elaka letu, nande omunhu wokondje teke a lesha oteli longo Oshikwanyama shoovene. Ashike oyo orisk imwe yo open source software. Ashike ngeno okwa li hatu create opage oito dulu oku create opage itai dulu oku editingwa. Ashike shaashi paife ohatu longifa nala omapandja e lli po ota ku dulu okudja omunhu umwe teya a pukife ocontent, shoo osho ngo taku dulu okudja omunhu umwe teya ei pukulu, omunhu umwe eli honest mtasulu kutya eshi hasho shina okukala ngaho, e.g ohamba Mandume hayo Kavala ndee oyo Kayala. Iyaa, opena ngoo oodisadvantage no advantage ili po mmokutranslate. *(Yes, you are right, that is one risk of Wikipedia portal, and it is a free online encyclopaedia which can be edited by everyone. Some people could edit correctly other wrongly, but is we look at this translation that we are busy with today, we are focusing on learning and putting Oshikwanyama online, so that we can strengthen and develop the language so that it could be used even by foreigners who visit our country. There those who have good intention when it comes to translating open source software, for example if we today refer Ohamba Mandume as Kavala on Wikipedia someone might come and edit that it is not Kavala but Kayala. So, there are both advantages and disadvantages of translating open source software.* |
| **193.** | **Interviewer** | Kape na vali epulo. Opena epulo? (Pause for 1 sec) natu tamekeni nee nokutranslate. Tangi unene komhito ei kwali mwa pange opo ndi mu intervi. Patululekni nee eecomputer deni tu tamekeni. *(Is there any more questions? Ok, We can start without translation activities. Thank you all for a great interview. You can now switch on your computers).* |

APPENDIX H: ELEMENTS OF SITUATED LEARNING IN SUPPORT OF WIKIPEDIA TRANSLATION ACTIVITY

Learning Elements	Features
Authentic contexts	▪ Wikipedia texts directly browsed from Wikipedia website. ▪ Translation carried out online in a real time. This allows the natural complexity of the real world. ▪ Activities set up in an e-learning classroom atmosphere, which contain a large number of resources to provide rich situational affordances (Brown et al. 1989).
Authentic activities	• Activities are ill-defined - Real text presented to the learners (they were given a range of Wikipedia activities themes to choose from and solve or translate) thus promote exploration. • Provide opportunity to detect relevant and irrelevant articles. • Non-structured activities, which can be integrated in Oshikwanyama classroom. • Activities allow enculturation into the real world (have real world relevance and utility).
Expert performances	• Pre-study basic computer training given 2 days prior to the translation activity to prepare learners and bring them at the same pace. • Access to learners various level of expertise in both ICT and languages. • Access to Wikipedia articles before the translation process started and provides access to expert thinking and modelling before and during the Wikipedia translation activity. • Access to the observation of real-life, real-time episodes as they occur (Brown, et al. 1989; Lave & Wenger, 1991).
Multiple perspectives	• Access to a range of Wikipedia texts that give learners different perspectives on topics. • Access to computers, dictionaries, encyclopaedia and other media sources. • Group work for different perspectives and experiences.
Collaboration	• Group-based translation activities offer the opportunity to express different point of view through collaboration. • Group-based problem solving requires group effort.
Reflection	• Wikipedia translation activities require background knowledge and reflections. This allows association of new knowledge to the prior knowledge, integration of new knowledge into the learner's conceptual framework. • Daily reflection requires thinking back on the translated

	Wikipedia activity/text and group effort.
	• Open-ended interview questions requires overall critical reflection of salient features of the translation activity.
Articulation	• Group-based activities require articulation of translation strategies.
	• Articulation of correct grammar and vocabulary to be used.
	• Summarized solution (sentences) necessitated the relevance of sentence building.
Coaching and scaffolding	• Support offered by the facilitator and the observing teacher (ICT skills and linguistic support).
	• Support offered by other group members (more knowledgeable other (Vygotsky, 1978).
	• Support offered through the external use of materials such as dictionaries.
Authentic assessment	• Peer-assessment ensures learners to review critically on their progress and take immediate actions.
	• Attend to learners' translations and how they have justified them, assessment to be seemingly integrated within the activity
	• Required learners to be effective performers with acquired knowledge to write correct articles.
	• Group reports to give an overall assessment that the impact of Wikipedia translation activity has on Oshikwanyama first language learning.

APPENDIX I: THE SOURCE TEXTS - ENGLISH WIKIPEDIA PAGES

I. KAVANGO REGION

II. RICHARD KAMWI

III.MANDUME YA NDEMUFAYO

IV.OIKANGO

APPENDIX J: WIKIPEDIA TRANSLATED PAGES OSHIKWANYAMA

I. KAZENAMBO KAZENAMBO

http://en.wikipedia.org/w/index.php?title=Kazenambo_Kazenambo&oldid=499300023

II. THE DOG

III.OSHIKUKU

http://en.wikipedia.org/w/index.php?title=Oshikuku&oldid=498671568