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**INNOVATIVE USE OF EDUCATIONAL TECHNOLOGY IN THE  
SECOND LANGUAGE CLASSROOM: DESIGN PRINCIPLES FOR  
TEACHING AND LEARNING**

by

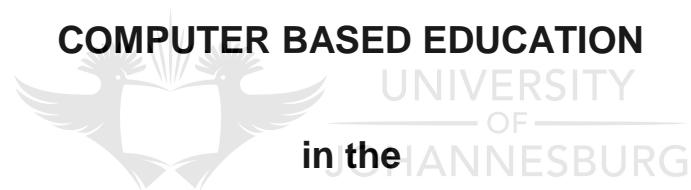
**PERCY PETER HUMAN**

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**Submitted in partial fulfilment of the requirements for the degree**

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at the

**UNIVERSITY OF JOHANNESBURG**

**Supervisor: Prof G. Lautenbach**

**Co-Supervisor: Dr. J Batchelor**

**April 2014**

## DECLARATION

I confirm that this is the final corrected version of my minor dissertation. I declare that no unethical research practices were used or material gained through dishonesty. I herewith declare that my academic work is in line with the Plagiarism Policy of the University of Johannesburg with which I am familiar with.

Percy Peter Human

08 April 2014



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*“Without people, we would be nothing in this world... nothing to compare ourselves with, nothing to compete for, and no one to be with... seems very lonely to me. I'm grateful I am surrounded then, even if it's not perfect, something is always better than nothing” ~ Christina Dessert.*

## ABSTRACT

The use of information and communications technologies (ICT's) is essential to build capacity in education. This is regarded as one of the strategic thrusts for the national development plan focusing on the development of 21st century skills in the information age. ICT's offer many new learning opportunities when integrated into languages and in particular, when addressing the preparation and presentation of speeches in the second language classroom. Prepared speeches are not only difficult, but tend to become boring due to the fact that learners battle with pronunciation, grammar and language structure. By using primary school learners, in groups of not more than 8, learners were expected to work in collaboration to prepare a viral video production, that would replace the traditional speech. Participants had to rely on drama and computer skills to create a 90 second viral video that would promote healthy eating habits. By using Google Translate, Windows Moviemaker and digital cameras, learners had to translate from English to Afrikaans, write storyboards and finally create a video production. The data collection in this research is of a quantitative nature. The research involves a deeper look at the theory underpinning teaching and learning with technologies, as well as the notion of transformative action which is based in Cultural Historical and Activity Theory (CHAT). Draft design principles were distilled from informal interviews, reflective diaries and a set of questions to clarify experiences of all learners.

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## CHAPTER 1. Introduction

The driving force behind this research is to develop an understanding of how primary school learners experience the innovative use of technology in the second language classroom. Most classes at this one specific primary school are well equipped with interactive whiteboards and the research site has two well-equipped computer rooms. This study is based on the presumption that important data based in the second language classroom can be gathered by studying a school that has been doing well with the integration of technology over a 5 year period to ensure that all learners at the school have access to ICT. The school was rated highly in a recent e-maturity survey (Amory, 2010; Lautenbach, 2011). This study presents the reader with detail of an investigation of innovative technology integration in a Johannesburg South Primary School where a mixture of technology and language was used in order to promote learner enjoyment of a language that is not regarded as their home language. This study was created to show the difference between the traditional individual oral speech and a collaborative effort whereby learners in a Grade 7 second language classroom work creatively together in achieving the same expected outcomes as a group and not as individuals. A theoretical framework was created that will help classify, illustrate and evaluate the factors that influenced the successful integration of educational technology into the second language classroom.

Although the focus of this study is on the innovative use of technology in the second language classroom and how this integration can enhance participant enjoyment and promote an interest in language learning, I will also be touching on the development of language during the early life stages. This research is necessary because the use of technology in the Language classroom can no longer be considered as an add-on or a “special effects” display, but as a “must have” to enhance learning in all classrooms. Vosoiadou (2003) argued that: “Our emerging role as teachers and technologists in the 21st century is to prepare ourselves, our colleagues, our schools and our classrooms for the linguistic and cultural realities of the teaching in a world where everyone and everything is connected, or “intertwined” (Vosoiadou, 2003). By creating a viral video in the second language classroom we were hoping to prepare the participants and teachers at the research site to understand the valuable connection between technology and second language teaching and learning and how the use of computer technology can change both teacher and learner attitudes.

One can only learn by experimenting, as there are significant benefits to be gained from the use of technology in language teaching and learning which should form an integral part of each lesson. By becoming proactive and creative in the use of computer technology, video and application software in the second language classroom one can promote enjoyment, appreciation, communication, collaboration and efficiency (Mitchell & Savill-Smith, 2004). In order to be able to promote enjoyment, collaboration and efficiency one has to explore the work of other researchers and also record and make one's own research findings available to others.

This research is relevant because it follows up on previous video centred research done by McNulty and Lazarevic (2012) to promote second language acquisition (McNulty & Lazarevic, 2012) and Brown (1977); whereby students created scientific documentaries using Web 2.0 platforms (Brown, 1977). The reason for me using examples from both researchers is because McNulty and Lazarevic as well as Brown helped me not only to understand the importance of video technology in classroom activities, but also to not re-invent the wheel when comes to the execution of my study. McNulty and Lazarevic (2012) argued that video technology supported learning efforts by improving confidence, proficiency and comprehension skills (McNulty & Lazarevic, 2012). Brown (1977) argued that by using a constructivist approach in the video making process, students were held responsible for their own learning experience which motivated them by working independently and in co-operation with others as a socially responsible person (Ibid). Although I regard the research of McNulty and Lazarevic (2012) as a very important guide for language acquisition through student centred video productions (Ibid). I prefer using the research of Hafner and Miller (2011) as basis for my research as they have used the constructivist approach in student centred video productions (Hafner & Miller, 2011). The research done by the aforementioned researchers is unique because it not only adds to the constructivist approach of language learning but also brings about a whole new perspective in video making in the second language classroom by drawing on the learners' ability to develop aptitude as well as enthusiasm to act and work independently. When reading the rest of this chapter the reader will be introduced to the research study, an investigation into the innovative use of technology in the Second Language classroom followed by the research problem and methodology as well as a summary of the research goals. This chapter then closes with an outline of the thesis.

## 1.1 Research problem

The use of information and communications technologies (ICT's) is essential to build capacity in education. This is also one of the strategic thrusts for the national development plan focusing on the development of 21st century skills in the information age. ICT's offer many new learning opportunities. A selection of Web 2.0 technologies are freely available to users including social software and applications which allow users to share, interact and collaborate with one another. However, not all schools in South Africa are able to offer ICT enriched teaching and learning opportunities. Primary schools in general are battling with ways in which to introduce innovations that excite learners. Barriers to entry include age appropriateness, budget constraints, a shortage or lack of trained staff and technical support, and the lack of ability and creativity on the side of the educator. These are some of the factors exposed in the 2010 e-maturity survey conducted in Gauteng schools (Amory, 2010; Lautenbach, 2011). Although the research school ranked highly in the e-maturity survey and was identified as one of the most e-mature schools, educators and learners still do not fully exploit the potential of available technologies. In response to this problem, this research is conceived in an attempt to challenge both educators and learners to engage with technologies and to transform their teaching and learning strategies. Through the production of multimedia videos by learners in a second language classroom, learners are challenged to actively participate in the transformation of their own learning. The research question can be stated as follows: **How do primary school participants/learners experience the innovative use of technology in the Second Language classroom?**

Language learning, and in particular the presentation of oral speeches in the second language classroom at the research site can be very boring. Based on discussions with my colleagues in the Johannesburg South region, similar problems on how to motivate our learners and create an interest in learning a second language. We are faced with a dilemma and that is: how do we find alternatives to boredom in a language classroom? (Padhy, 2012). Teachers are constantly looking to find new ways, methods or innovations such as computer technology, video, sound and music to excite learners in the second language classroom (Ibid). Computers and video cameras have been around for a number of years, but not used to full potential due to a number of factors. Whilst most schools are well equipped with computer laboratories and most learners in schools have digital cameras and cellular phones with cameras, Collier (1987) argued that these technologies are not always used effectively in the

classroom (Collier, 1987). I do not entirely agree with his argument as I am of the opinion that these technologies can work well in an adequately resourced school where teachers are creative or ready to explore and also where learners have grown up with these new technologies or innovations. Teachers at the research site are restricted by cell phone policy, as well as learner ability and maturity. I would like to argue that Primary school learners firstly have to be taught the proper use of new technologies and application and secondly be allowed to experiment more often with devices and software.

The fact that digital cameras and cellular phones with built-in cameras are becoming more affordable for middle income families, mean that teachers can grab the opportunity to experiment with these new technologies in their classrooms. Although “detailed and reliable information regarding cell phone usage in South African schools remains absent” (Aker & Mbiti, 2010), I was hoping to gain an understanding of how well equipped learners at the research site are when it comes to the access to ICT equipment, cell phones and cameras. In this research project I make the claim that teachers in this well-resourced school can make a difference in the second language classroom by allowing participants to use ICT technologies available at school to produce their own viral videos. Not only will the making of viral videos excite the learners, but it will change the passive learning environment into a collaborative environment or a hub of activity. Society has become more interested in the use of social media tools such as Facebook, Twitter and YouTube I was eager to get the same reaction from the learners with the production of viral videos. Hopefully learners will be motivated to become positive and work collaboratively by supporting one-another in the learning process. By integrating tools such as computers, video cameras and software applications such as Windows Moviemaker to aid the learners in language learning can be regarded as beneficial to both teacher and learner. By making a viral video learners can not only see and hear themselves, but teachers also have the opportunity to rewind a video and fix oral mistakes where necessary. By creating their own storyboards and viral videos in a controlled classroom setting both teachers and learners are able to explore and utilize audio-visual media in the collaborative classroom. The individual learner is supported by the group and is also assisted to in correcting language structure and oral mistakes in a fun and effective way. The main aim of this research is to focus on learner enjoyment through the production of viral videos that will enhance teaching and learning in the second language classroom. Learners must feel comfortable with the use of language when they are preparing for their oral assessments.

## 1.2 Research paradigm

Coe (2002) argued that subjectivity in research is considered to be a very important aspect when dealing with people and information and must be addressed in such a way as to ensure that research is conducted meticulously and with fairness. This can only be accomplished by placing a research methodology within an appropriate paradigm (Coe, 2002). The research paradigm acts as a “set of lenses” allowing the researcher to view fieldwork within a particular set of reputable expectations by joining the abstract usefulness of the paradigm with the practical application of meticulous research (Ibid). According to him information science is not attached to one specific paradigm, as it is considered to be a very young discipline and is still searching to find its roots (Forza, 2002). The fact that information science is still regarded as a very young discipline, made it extremely difficult for me to declare my position in terms of scientific truth.

Although I consider myself to be a positivist, Nunan (1988) argued that researchers that engage in mixed method research are not “purists” because mixed method research has not established itself in positivism nor constructivism, but in pragmatism (Nunan, 1988). Based on this argument on the nature of scientific truth, I have to consider myself to be a pragmatist (Nunan, 1988). She argues that qualitative researchers do not often cross the border to the quantitative field and vice versa, because the epistemology and axiology components are very different and that researchers using of mixed methods cannot be considered “purists” (Ibid). “Pragmatism”; according to Creswell (2009) is not devoted to a single system of philosophy or reality. Pragmatist researchers concentrate on the “how” and “what” of the research problem, a direction which is both diverse and useful (Creswell, 2009). Velez (2008) is of the opinion that mixed methods researchers do not pledge to any one philosophy only and therefore they apply assumptions from both quantitative and qualitative paradigms as the methodological point of departure (Nunan, 1988).

In terms of my position in society I have to admit that I found it extremely difficult to position myself with the argument of Forza (2002) that “Information Science does not offer an easily accepted paradigm” (Forza, 2002). According to him, in the Information Systems field the two most significant conflicting research paradigms are those of positivists; more specifically the functionalist approach and the Interpretive approach (Ibid). Based on the research of Weiss (2007), I am of the opinion that the interpretive approach would be the most acceptable paradigm for me as it deals with people and culture, and I would like to

reject the functionalist-, radical structuralist- and radical humanist approaches (Weiss, 2007). The reason for this decision is that the Interpretive approach allows for discussion and questioning of assumptions, the sharing of the group's perspectives and because it is regarded as the most appropriate means of undertaking research based on people and information needs (Ibid). According to Weiss (2007); "This is the most natural behaviour of those seeking information and thus helps researchers to make key decisions about information needs, information satisfaction and information fulfilment" (Ibid). I regard the interpretive approach as vital in my research.

### **1.3 Aim of the research**

The aim of this research is to describe how primary school learners experience the innovative use of technology in the second language classroom. In order to achieve this aim a number of objectives are formulated as follows:

- To undertake an extensive literature review on the innovative use of technology within classrooms to inform the design of learning events
- To establish the impact of the integration of technology in the second language classroom based on learner experiences
- To engage primary school learners in the distillation of draft design principles for the innovative use of technology in developing multimedia videos and to map these principles to the notion of transformative practice.

### **1.4 Research question**

The purpose of this research is to investigate how learners in a Grade 7 Afrikaans second language classroom experience the use of technology in a constructive, but fun way by making a viral video about healthy eating habits. The study attempts to investigate the innovation and attitudes towards it and find answers to the following question:

- **How do primary school learners experience the innovative use of technology in the Second Language classroom?**

## 1.5 Objectives

The main objective of this research is to investigate how primary school learners experience the innovative use of technology in the second language classroom. By posing this question, I was hoping to find clarity on how learners get pleasure from the innovative use of computers, cameras and software applications and how the introduction of these new technologies will benefit learners in second language speech/oral work preparation.

## 1.6 Rationale

I argue that teaching Afrikaans second language with the use of ICT in the 21<sup>st</sup> century classroom has become a challenge in the sense that teachers have become textbook and content dependent and that learning materials, teaching programmes and tools are not adapted to suit the needs, interest, skills and abilities of learners. A “one size fits all” approach is followed in the language classroom in that teachers still believe that comprehensions, reading lessons and oral presentations or speeches should be done in the traditional way. Teachers are fearful when it comes to changing the way some of these important skills are presented to learners (Hennessy, Ruthven, & Brindley, 2005). Learners, on the other hand are not interested in the learning due to a lack of motivation (Crookes & Schmidt, 1991).

It happens at the research site that teachers rely on ready-made professional video productions to enhance second language acquisition. They use these productions to expose learners to the correct use of the language. Because these video productions are made by native language speakers, the learners are also exposed to the cultural backgrounds of the actors in the videos. Very little research is done at the research site whereby teachers have allowed students to come up with their own video projects to promote second language learning and teaching. By using professional video productions second language learning is limited in the sense that these professional productions might address a few important language skills, but may lack motivational and collaborative teaching skills (Ibid).

Although professional video productions are readily available for classroom use, there is a need for a new approach to ensure that learners are actively involved by speaking the language. By making own video recordings in class this not only assists learners in developing their social skill, but also allows for collaborative projects. Learners are indirectly



exposed to intensive research, translation and the oral component of the language. Although professional video productions assist the teacher and learner in providing a cultural understanding of the language, the production of own videos in classroom not only provide more excitement and amusement in class, but also stimulate learners to get actively involved in the speaking of the language.

This study is concentrating on learner enjoyment through the innovative use of ICT in the Second Language classroom and I believe that once teachers have become comfortable in the use of computers, cameras and software applications this will have a huge impact on general classroom practices. Empowering teachers to teach with the use of ICT in the 21<sup>st</sup> Century classroom will not only benefit the teacher, but it will also enhance the teaching and learning processes, which will then motivate learners to actively take part in class. No empirical study known to the researcher was found on the production of viral videos in the primary school, as most researchers investigated the effects of Instructional video or student-centred video productions that did not include production of viral videos.

## **1.7 Previous research**

McNulty and Lazarevic (2012) highlight the importance of video-based second language instruction to improve pronunciation and presentation skills with rich visual support which according to them supersedes printed instructional material. They argue that facial expressions and communicator's gestures are important elements which will help learners to understand the spoken language between communicators (McNulty & Lazarevic, 2012). Multimedia technology such as video and podcasts have transformed teaching and learning in such a way that learners can "take control of what they learn" (Creswell, 1994) . McNulty and Lazarevic (2012) argued that video has gone far beyond simple viewing and listening and that video sharing provide endless possibilities in the language classroom (Ibid). The main aim of collaborative production of viral videos required of group members, through the division of labour that they jointly come up with a production where all members can take responsibility for the project. Abdous, Camarena & Facer (2009) furthermore argued that prior studies in multimedia concentrated on evidence that video and podcasting promote second language learning, but very few of these studies examined the effectiveness of technology integration (Abdous, Camarena, & Facer, 2009).

Although I agree with Abdous et al., (2009) my research was based on learner experience and not on how effective the group work activities would be. My research concentrated on the use of learner-produced videos to establish confidence, creativity and enjoyment instead of professionally made instructional video.

Past research mostly concentrated on the use of ready-made instructional video for use in the Second Language classroom instead of own productions that could empower learners. By producing own videos learners not only see, hear and understand the second language but can learn from own mistakes made. These mistakes can then be rectified during the video production process. Digital video is easily editable and can possibly be used for more language learning activities. Shrosbee (2008) reported that in most second language classes, instructional type videos and sound files are mainly used for the purposes of listening-, viewing- and comprehension activities, because videos allow learners to see visual images of the speaker's body language as well as other visual aids that would assist with the teaching and learning process. According to him digital video technology replaced the compact disk and traditional cassette tape that was mostly used for comprehension purposes (Shrosbree, 2008). Video in particular became an eye-catching medium in language classrooms with the recording of oral activities such role play, documentaries and television type recordings (ibid).

## **1.8 Research methodology**

### **1.8.1 Research design**

Although it was initially planned that data collection during this study would be of a qualitative nature, a quantitative approach was ultimately followed as the results, when in numerical format, according to me, would be easier to analyse. Numbers sometimes give a better picture of learner experiences than words. I believe that by using numbers one can get a more reliable explanation of what learners had in mind.

A set of 69 (including 6 demographic) questions based on Likert format items (Scruggs, Mastropieri, & Casto, 1987) were constructed with responses ranging from 1 to 4. Learners will indicate whether they “Strongly agree” (4); “Agree” (3); “Disagree” (2) or “Strongly disagree” (1) with statements made by the researcher on the experiences of second language learners as they engage with technology in collaborative activities to develop multimedia videos. The questions posed to learners during the research process will be divided up into

the following 6 constructs to understand how learners experienced the innovative use of technology in the second language classroom:

- Construct 1: Means / Tools
- Construct 2: Subject
- Construct 3: Object
- Construct 4: Rules
- Construct 5: Community
- Construct 6: Division of labour.

By using the above-mentioned constructs, one can get a better picture on how language learning could impact on the subject, object and community. In the first phase, the practical problem of using technology applications in the teaching and learning of a second language will be explored. This phase will include the extensive review of the literature, informal consultations with both learners and teachers, and iterative cycles of interventions using best practice examples. The second phase involves a deeper look at the theory underpinning teaching and learning with technologies as well as the notion of transformative action which is based in Cultural Historical and Activity Theory (CHAT). Draft design principles will be distilled from informal interviews, reflective diaries and a set of questions to clarify experiences of all learners. These principles will then be mapped to the heuristic of Stetsenko's (2008) notion of transformative learning in order to determine the learners' level of acquisition, participation, collaboration and transformation regarding their learning.

The intervention that is planned will task learners to work collaboratively to design and develop viral videos in Afrikaans. This is offered as a second language at the research site. Viral videos (Wallsten, 2010) can be described as videos whose specific qualities that can make audiences laugh or cry and by doing so, draw the attention of Internet users to them. The more users that watch a viral video, the better the chances of a video to go viral. By going viral, it contributes to a specific video's success. Viral videos contain unique elements that may result in numerous views and "likes" also referred to as "hits". By liking the viral video, audiences of social media such as YouTube will be drawn to YouTube to watch the video. By watching the video a "hit" is automatically recorded, which will make this video a likeable video that would soon be going viral. By using tools of mediation such as software applications, cameras and computers to assist learners at the research site to create their own viral videos, learners will actively engage in learning. Viral videos will be stored on the

school's intranet for viewing and once learners voted for the top three videos, these videos will be shared via a social media application such as YouTube to a wider audience.

The research site is a primary school in the south of Johannesburg, Gauteng Province. In order to ensure effective sampling in this study, the whole Grade 7 group will be selected from 5 classes consisting of 161 learners. These participants will all form part of the project and the results and contributions to the project will be generalised back to the entire population. Informal individual interviews will be held with key informants identified from the entire group who may provide further clarity on issues and themes. The 3 teachers involved will be asked to keep a reflective diary to document their own experiences during the project.

Data will be transcribed and analysed using the heuristic of the CHAT framework but will go beyond this basic interpretation and will focus on the notion of transformative practice (Stetsenko, 2008).

The trustworthiness of the data will be verified through the design principles manifesting in the multimedia artefacts produced teacher accounts of the learning process, member checks with participating learners to verify their experiences, and a comprehensive data trail and methodological soundness.

### **1.8.2 Research intervention**

It is common practice in the research school's second language classes to allow learners to prepare oral work at home. Parents assist learners with their projects and it happens that learners recite speeches in classes written by parents, sometimes not even having a clue of what they are talking about.

The focus of this project is to change the way in which primary school learners experience oral presentations at school. A second language oral project in the form of a viral video (Wallsten, 2010) was given to learners. The project will be integrated into two learning areas; life orientation and second language. Learners will keep a food diary and research healthy eating habits for Life Orientation. They then will have to work collaboratively with their friends in a group of their choice. The main goal was to produce a 90 second video in the second language, to promote healthy eating habits. Learners will use Dictionaries and Google Translate to ensure that the vocabulary and sentences structures used by them are correct.

Once the story board for the 90 second video was completed learners then had to rehearse by using cameras to record their efforts. They will be given the opportunity to change vocabulary, sentence structures and storyboards to ensure that the final product is of a high quality.

After the final recordings were completed, learners used Moviemaker to edit their videos by adding sound and graphics to it. A rubric for the project was drawn up and learners were scored as a group.

### **1.8.3 Research instruments**

The fact that the research was integrated into two learning areas a number of research instruments had to be employed to ensure that all aspects of the research is captured.

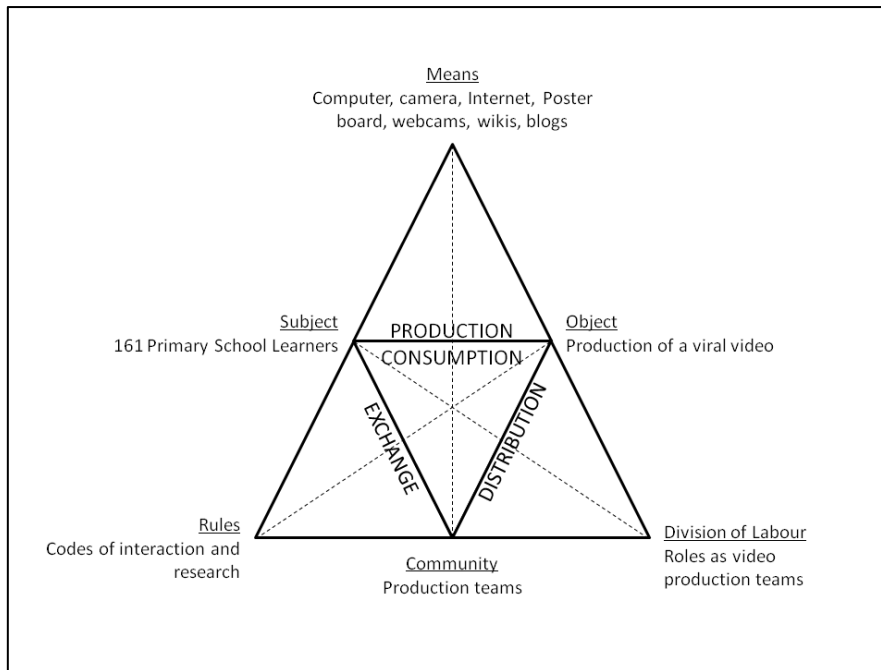
- **Observations and Informal interviews:** Teachers in the learning areas Life Orientation and the second language had to record all observations in a diary. Observations and, where possible, informal interviews in the second language classroom, were aimed at understanding learners change in attitude and behaviour when executing the project. Reflective diaries will be used to understand how learners experience the production of viral videos instead of the traditional speech. A form with Likert type questions will be designed and learners will be expected to submit their responses in digital format. Reactions of the learners will be monitored in order to understand whether learners enjoyed the prescribed activity. I will monitor their participation as a group and as individual's in a collaborative learning environment.
- **Reflective diaries:** will be kept by the teachers responsible for the following Learning Areas; Life Orientation, Afrikaans second language and Computer Technology. Teachers will be requested to record their own observations and feelings of learners as well as what they see, hear and observe during the lessons. In order to protect the identity of learners, teachers will be requested not to mention any names of learners.
- **Questionnaires:** A set of 69 Likert-scale questions are drawn up by using Google Forms. Learners will use the computer to answer these questions, and the data will be analysed by a special function available in Google tools.

#### **1.8.4 Research process**

The researcher has mainly concentrated on the quantitative research method. The research site is a primary school situated in the Gauteng province, south of Johannesburg. In order to ensure effective sampling in this study, the whole Grade 7 group will be selected from 5 classes comprising of 179 learners. Although all 179 learners were to be exposed to the class activities and the making of the Viral videos, only 161 learners, comprising 73 males and 88 female learners, received permission from their parents to take part in interviews and the research questionnaires. The 161 participants will all form part of the project and the results of and contributions to, the project will be generalised back to the entire population. Informal individual interviews will be held with key informants identified from the entire group who may provide further clarity on issues and themes.

The learner experiences will be assessed by compiling a set of Likert-scale type questions to get information on group demographics as well as the learner's understanding, emotions and feelings displayed when participating in the viral video project. Although different learning theories are investigated in the Literature review, all research will be based on Vygotsky's Activity Triangle, adapted by Engeström as a unit of analysis (Roth & Lee, 2007). The research questions will be divided up into 6 constructs that have to inform the research. The aim of this notion was to ensure that research done at the research site had to inform the principal "nodes" as set out on the Activity Triangle as defined by Engeström, as cited in Holt and Morris (1993), whereby each node would be addressed separately.

In order for the researcher to get a better understanding of the project, I have constructed an own example taken from the second generation Cultural-Historical Activity Theory as adapted by Engeström (1999). This triangle is exemplified using a process of viral video production.



**Figure 1-1 My representation and adaptation of Engeström's expanded Activity Theory Triangle**

In my representation and adaptation of Engeström's expanded Activity Theory Triangle as set out in Figure 1-1 My representation and adaptation of Engeström's expanded Activity Theory Triangle above, the individual constructs are listed as; Means/Tools, Subject, Object, Rules, Community and Division of labour and how I think it would be applied in my research.

### 1.8.5 Analysis and interpretation of data

Data will be collected by using the following instruments

- **Observations:** Teachers participating in this research project will be asked to keep a reflective diary to determine learner's experience and attitude towards the use of ICT in the second language classroom.
- **Informal Interviews:** The reason for doing these interviews during the research with the learners was to get a clearer understanding on how they experience the project and how it affects their emotional state.
- **Questionnaires:** A set of Likert-type questions will be compiled to determine the levels at which learners will take part in the project as well as the use of ICT in the language classroom. The questionnaire will be presented in an online format to the learners using Google forms, which will aid in the electronic recording of responses. By using Google tools and graphs statistical data will be provided on each response.

Data analysis processes such as data reduction, data display, conclusion drawing and verification will be employed to analyse data. Data will be displayed in graph format. Graphs, patterns and explanations will be analysed and verified and conclusions will be drawn.

## 1.9 Outline of the thesis

This dissertation has the following structure:

- **Chapter 1: Introduction:** This chapter explains the Choice of the topic, the Research problem, Research paradigm, the Research questions, Aim, Purpose and Objectives, Rationale Research methodology, as well as the Outline of the Thesis.
- **Chapter 2: Literature review:** This chapter covers a wide range of literature related to Second Language learning and teaching as well as the use of tools of mediation to enhance the production of the viral videos.
- **Chapter 3: Research design:** This chapter explains the epistemological assumptions that underpin the research approach, the quantitative method, design and methodology.
- **Chapter 4: Findings and analysis:** This chapter explains the research and results procedure, presents an analysis of the qualitative as well as quantitative research.
- **Chapter 5: Conclusion:** The conclusion will include a summary of findings, contributions and recommendations for further research is suggested.

## 1.10 Summary

An explanation of the aim, objectives, value and limitations of the research problem were presented in this chapter. The methodology of research was explained and relevant concepts were elucidated. In conclusion the further course of the study was provided.



## CHAPTER 2. Literature review

### 2.1 INTRODUCTION

With the first South African democratic elections in 1994, 11 official languages were recognised as languages of teaching and learning in South African schools. Teachers all over the country had to learn to cope with the demands of a multi-linguist society. South African teachers not only had to learn to teach in more than one language, but Institutions had to change to 21<sup>st</sup> century classrooms whereby the educator is no longer seen as a lecturer but much rather as an innovative facilitator of learning that enhances the language learning process with tools of mediation such as interactive whiteboards, computers and cameras (Higgins, Beauchamp, & Miller, 2007). Unfortunately, not all schools and teachers are in a position to use ICT, because it requires an organisational change which involves the input of school management to bring about a step in the right direction (Somyürek, Atasoy, & Özdemir, 2009). The school management together with the School Governing Body is required to bring about technological change in a school to enhance the teaching of lessons in all learning areas.

To bring about change one has to take the implementation of ICT to the next level. ICT implementation and technological change at a school is not an easy task and requires dedication and perseverance. It is almost a full-time job on its own. It requires creativity, long hours of work and involvement from all role players to ensure the effective use of ICT. It all starts off with a dream or vision that with effective involvement turn into a mission or action plan. Once the mission or action plan is in place, schools plan successful implementation of ICT.

The research school planned the implementation of ICT over a five year period and was ranked highly in the e-maturity survey. Amory (2010) argued that the site was identified as one of the most e-mature schools in the Gauteng province, but, both educators and learners still do not fully exploit the potential of available technologies. In response to this problem, this research is conceived in an attempt to challenge both educators and learners to engage with technologies and to change their teaching and learning strategies. Through the production of multimedia videos in a second language classroom, learners are challenged to actively participate in the process of transforming their own learning. This study will be

concentrating on how primary school learners experience the innovative use of technology and whether learners prefer collaborative speech/oral speech preparation and assessment to individual preparation and assessment in the second language classroom?

This chapter will help the reader to understand the position of the study and to provide the reader with background information on second language teaching, learning theories and the use of ICT to enhance the teaching and learning.

## **2.2 What is learning, and in particular second language learning?**

Teaching and learning in the 21<sup>st</sup> century second language classroom has its own challenges. Not only are language teachers faced with a teaching and learning process whereby a combination of culture, audio, visuals and body language play an important role in language acquisition, but also as to what style would seem to be most appropriate for the learners. It is vital that all learners be exposed to an array of learning styles as information enters the brain in three ways; hearing, seeing and touching (Padhy, 2012). Although learning can be described as a process guided by values that transfer information clearly and in detail without any confusion, I believe that a teacher should make provision to fit in with the learning style of the learners. If learners experience learning by hearing, seeing and touching then the classroom should change from the traditional classroom to the 21<sup>st</sup> Century classroom as only technology can assist us to cater for the needs of all those learners. Padhy (2012) argued that humans, animals and some machines have the ability to learn over a period of time by following certain learning curves (Ibid), but, learning is not compulsory and if it does not happen all at once, it will build up eventually and will be shaped into a process rather than a collection of factual and procedural knowledge. Collier (1987) argued that the acquisition of a second language is never easy and is a process that occurs over a long period of time (ibid). She also argued that although first language acquisition begins at birth, second language acquisition at school level, which includes reading, writing, speaking and language structures, is acquired depending on the environment in which the learner find himself (Collier, 1987). I believe that in any second language classroom you will have the teacher standing in front of the class wanting the learners to pay attention, observe, memorise, to understand the work and to take responsibility for their own learning, but this is unfortunately not possible without active involvement and engagement of the learner.

The role of the teacher cannot be ruled out when it comes to helping the learners to become lively members of the learning process and assume accountability for their own learning in order to achieve certain goals (Vosoiadou, 2003). An aspect that cannot be ruled out is the fact that a respondent has to understand something before he/she can master it. In order to master the second language, meaningful interaction and natural communication with understanding in the target language is required. Brown (1977) argued that: “Error correction and explicit teaching of rules are not relevant to language acquisition, but caretakers and native speakers can modify their utterances addressed to acquirers to help them understand, and these modifications are thought to help the acquisition process (Brown, 1977).

In order to understand how a learner acquires a language I would like to take the reader back to the early stages of language acquisition.

### **2.3 Language acquisition**

Toddlers at a very early age learn to speak by using one-word utterances. They are not able to complete a full sentence such as “Mommy entered the room, it is my mommy!” They just use one little remark such as “mommy” that does not demand much attention (Bowerman & Choi, 2001). “The idea children learn how to structure meanings through exposure to language is usually associated with Whorf” (Bowerman & Choi, 2001). “Whorf stressed that languages differ in the way they partition the world, and he proposed that in learning the semantic categories of their language, children also acquire a world view, a way of interpreting their experiences” (Ibid, p. 479). From an early age children have linked certain spatial actions to certain words such as: “mine”, “up”, “down” and “open”. Children learn to create spatial semantic value on the basis that they hear the word and the input connected to it (ibid) Through language acquisition and the spatial action connected to the word children can learn to choose between the similarities and the differences of the newly acquired word. The same situation is evident in the second language classroom, with the difference that learners do not only learn by attaching spatial concepts to certain words, but learn to understand in what context or situation the word needs to be used to create meaning.

Creating meaning and attaching spatial concepts to certain words starts at a very early age in South African schools. Second language learning and teaching takes place at Grade 1 level. Learners are exposed to a second language in order to prepare them for the challenges society may bring about.

The society we live in changes on a daily basis. A recent study has shown the importance of the acquisition of a second language in that learners gained greater divergent thinking, creativity and cognitive development (Adesope, Lavin, Thompson, & Ungerleider, 2010). By learning a second language learners can perform better in their future workplace by understanding the needs and wants of fellow workers. They become part of a community that understand one another and show more respect and apathy towards each other.

Second language learning in general enhances higher order and abstract thinking, enriches cognitive development and benefits academic progress in other school learning areas (Cummins, 2000). Bilingualism fosters the development of verbal and spatial abilities and benefits skills development (Diaz & Klingler, 1991). According to Garfinkel & Tabor there is a correlation between second language studies and improved reading scores for children of average and below average intelligence (Garfinkel & Tabor, 1991). Learners who are skilled in more than one language romped ahead of monolinguals on tests of verbal and non-verbal intelligences (Lasagabaster, 2000).

By learning a second language, learners have a better insight in listening and sharper memories than their monolingual peers (Littlewood, 1984). Second language learners will also be able to interact with peers from other language groups and become more tolerant of the cultural differences experienced towards one another (Byram, Gribkova, & Starkey, 2002). Language and communication has become an integral part of the daily routine. Language is not limited to the language classroom, but is needed to ensure the learner is becoming an active participant in all learning situations.

The learner has to understand the basic concepts and terminology of each learning component in order to progress in school and at university. Lifelong learning relies on communication as well as language ability to ensure the development of a well-rounded citizen (Candy & Crebert, 1991). In creating lifelong citizens, learners are involved in a collaborative learning process whereby educators merely act as coaches to scaffold the learning process. The role of the teacher has changed in the 21<sup>st</sup> century. The traditional way of teaching and learning has challenged the teacher to become more creative and to allow the technologically equipped learner to become part of a more creative learning situation. Learners are exposed at a very young age to technologies that never existed in the childhood days of the teacher (Garrison, 2011). The teacher is now confronted with new technologies of which learners might have more knowledge on.

With access to the Internet and world class technologies, textbooks are no longer the primary source of information. Learners are now using multiple sources, including technology, to find the information they need. Not only has the focus shifted from memorising and recalling to projects, presentations and performance based assessments, but the learners are now working together with the teacher to take charge of the learning process in preparing themselves to become responsible citizens (Garrison, 2011). It is my humble opinion that the learners at the research site grew up with the technology and are not afraid to use it to their advantage. I do not think that older people or learners at other sites, who did not have the same exposure as the learners at the research site, to the use of these new technologies, will experience the same emotions and abilities.

In the traditional second language classroom oral work solely relies on the performance of the individual learner. In a situation where learners are expected to prepare an oral piece of work in the form of a speech and present it at school to the rest of the class, the learner is mostly left to his/her own devices. In most cases learners go home and, together with their parents, come up with a piece of oral work that cannot be considered to be the learner's own work.

Based on the requirements of the 21<sup>st</sup> century classroom, the situation changed in the sense that learners were expected to collaboratively to come up with oral work that could be accessible to all learners via social media. What made the process easier was that learners are currently equipped with ICT devices that can be used in classrooms to benefit them in a number of ways (Lonsdale & Vavoula, 2004). In this research learners were explicitly instructed not to produce a traditional speech, but to use tools of mediation such as the computer and video camera to produce a collaborative production in the form of a viral video. They had to research healthy eating habits and produce an oral presentation in the form of a video. Once the video was completed and approved by the teacher for publication on social media sites, learners had to upload the final product on a social media site such as YouTube. The reason for this step was to see if the videos would reach "viral video": status. This status could only be achieved by the amount of hits or visits from the Internet user.

In order for a video to become a viral video, innovative ways for the planning and delivery of the oral work were investigated and integrated across three learning areas. The integration involved the expertise of the Life Orientation and Computer Technology teacher. Using the theme "Healthy Eating Habits", together with the use of tools of mediation, such as the computer and video camera, learners were becoming part of an active community or

classroom that worked collaboratively in achieving their goal (Mercer, 1996). They had to prepare a presentation in the form of a viral video that had to replace the traditional oral assignment, an assignment that they were not faced with under normal circumstances. They were challenged as a group that had to perform collaboratively (Mercer, 1996). They had to distribute responsibilities amongst one another and had to learn in a very short period of time to achieve some level of mutual understanding (Baker, Hansen, Joiner, & Traum, 1999). Learners had to take responsibility by collaboratively preparing an oral presentation in the second language with the use of video technology and video editing software.

The use of language, whether it was done in the home language, the Language of Learning and Teaching, or the second language, played a very important role in this assignment. The learners had to master the art of working together by co-ordinating content and process. Communication had to be clear in order to be able to work together harmoniously in achieving their goal (Nainby, Warren, & Bollinger, 2003). Language and communication became vital. Learners were exposed to something substantial, such as healthy eating habits, that they had to research and translate into Afrikaans second language. The most appropriate term that comes to mind is “grounding” (Clark & Brennan, 1991). Grounding could be described as a process whereby learners had to understand what is said. They had to find a common understanding of the purpose and medium of communication (Ibid). A common ground of mutual understanding had to be established before fine-tuning, synchronisation and co-ordination could take place (Baker et al., 1999). Learners were not only confronted with new information on healthy eating habits translated into Afrikaans second language, but they were also exposed to a camera, computer and video software editing tools.

What made this project special was that learners were exposed to new horizons, and they had to deliver an oral presentation in the form of a viral video opposed to the traditional oral classroom speech. Language, collaborative participation and grounding played a very important role in producing the end result (Baker et al., 1999; Nainby et al., 2003). The teacher placed emphasis on understanding and finding new ways and means to keep learners interested and learners were trying their best to communicate, translate, produce and edit videos collaboratively.

## 2.4 Multimedia in the second language classroom

The 21<sup>st</sup> Century brought about changes and developments which could assist language teachers in a number of ways. Should this be introduced in a correct manner, both teacher and learner could benefit from it. With the introduction of multimedia in the Second Language classroom a number of challenges should still be overcome (Miles & Huberman, 1994). Miles and Huberman (1994) argued that difficulties were acquired from previous established philosophies, curriculum orientation and instructional design in traditional Chinese classrooms (Ibid). Unfortunately, complying with curriculum requirements and trying to promote multimedia enhanced learning is not easily achievable. Every teacher in their own right believes that they are doing their best to promote teaching and learning. In my humble opinion, not enough is done in the language classrooms to make lessons interactive and more interesting.

Promoting good practices of teaching and learning in the 21<sup>st</sup> century classrooms requires a positive approach to the use of multimedia (Garrison, 2011). Multimedia, as a medium, has changed drastically over the last 10 to 20 years (Kern, Ware, & Warschauer, 2008). The tape recorder, CD-player and Overhead Projector had to make space for the data projector and the personal computer with sound and video capabilities. Although multimedia is readily available, teachers are faced with the problem of how to use it effectively and efficiently to the advantage of the learners.

Language syllabi include basic skills such as reading, writing, listening and speaking (Hadley & Reiken, 1993). By using the personal computer, speakers and a data projector in the language classroom, learners could be exposed to an interactive environment whereby they not only see and hear, but experience a new dimension of learning and teaching (Ibid).

Shrosbee (2008) reported that in most second language classes, instructional type videos and sound files are mainly used for the purposes of listening-, viewing- and comprehension activities, because video allows learners to see visual images of the speaker's body language as well as other visual aids that would assist with the teaching and learning process. According to him digital video technology replaced the compact disc and traditional cassette tape that was mostly used for comprehension purposes (Shrosbree, 2008). Video in particular became a very attractive medium in language classrooms with the recording of oral activities

such as role play, documentaries and television type recordings (Ibid). Digital video is easily editable and could possibly be used for more language learning activities.

With relatively cheap video camera equipment or cell phones with video capturing ability, teachers can use this technology to their advantage in allowing learners to create and edit their own video material for assessment purposes. This study, the production of viral videos in the second language classroom, was an integrated activity that involved two learning areas; life orientation and second language oral work. Learners were expected to investigate healthy eating habits in the Life orientation classroom, translate the information and prepare a 90 second production in Afrikaans second language, manipulate and edit the video using Window Moviemaker to add slogans and jingles. Instead of just watching videos as instructional guides, learners were required to make their own videos.

## **2.5 Visual literacy**

Visual literacy according to Felten (2008) is a “process that involves the ability to understand, produce and use culturally significant images, objects and visible actions” (Felten, 2008). Although human beings have created and used images as medium to convey meaning, the idea of educating people using visual literacy only developed over the last decade (Felten, 2008).

The camera was seen as a specialised piece of equipment and mostly used by professional photographers. This perception changed drastically in the last decade. Visual literacy became more common and involved more people. People were visually literate and were able to appreciate and create their own images (Ibid).

The cultural theorist W.J.T. Mitchell pointed out that; “The problem of the twenty first century is the problem of the image” (Ibid). He states that the supremacy of texts and expression by specifically the Western culture has ended. According to him, with the dawning of the age of the “new pictorial turn”, images are seen as a significant part of communication and meaning in the sense in that their key function is no longer to demonstrate and amuse (Ibid). The world faced a “visual bang” with the birth of Flickr in 2004 and YouTube in 2005.

High quality videos, with the focus on user-generated content, were uploaded onto the World Wide Web by the man on the street. ARTstor Digital Library and NASA’s Visible Earth



collection is available to teachers, learners and researchers. Felten (2008) argued that with access to new technology, “digital natives” or visual learners that are more visually literate than previous generations, were produced (Ibid). He pointed out that learners are far more capable at producing and analysing images. Digital cameras became cheaper and are owned by most households. Members of households are now able to record own images and change them into video.

## **2.6 Vibrant video technology brings teaching back to life**

Film and video technology changed drastically over the last few years. Film as hardware was replaced by video cassettes. Video cassettes were replaced by DVD and DVD was superseded by Blu-ray. This technology has become more affordable and is also readily available (King, 2002). In order to prevent any confusion with regard to the different formats video could be obtained from, the term video will be used for purposes of research.

Because Video is being regarded as more vibrant and better than inactive text, the use thereof in the Second Language classroom has been a practical source of teaching and learning because it exposes the learners to an image of an actor that is alive, that can talk and can move. It presents a living illustration that the learner can associate with, and understand. (Herron, Dubreil, Cole, & Corrie, 2000). Visual images, sound and voice are inter-dependant and can assist with the teaching of learners in the second language classroom.

Learning through the use of video, not only brings the language to life, but it develops the learners’ vocabulary and balances the shortcomings in the second language classroom. Video can be seen as a “story that can assist with contextualised linguistic and authentic cross-cultural information, because they are such valuable resources for teaching. By using video, learners are exposed to real life contexts rather than artificial situations (King, 2002).

Learners at the research site are exposed to a soap opera called “Sewende Laan”. This soap opera features between 18:30 to 19:00 from Monday to Friday on national television. All learners have access to this soap opera about the daily life of a diverse community staying in the suburb of Hillside (Orgeret, 2010). This community represents the diverse population of South Africa. The language used in this soap opera is mainly Afrikaans, but Zulu and English are also included. The sub-titles are displayed in English which is a common language that all South Africans understand. Afrikaans is the second language used at the research site.

Learners at the research site can easily identify with the characters and their daily lives, as they prefer watching recently released videos with good actors.

The length of time used for screening video in the classroom is based on the learners' language ability. The more capable learners are in the second language, the longer the display time of the video. When dealing with the inability of learners that do not understand the basics of the language, the display time of video will be much shorter (Ibid).

The advantages of using video such as the soap opera "Sewende Laan" in the classroom can be summarised as follows:

- As a tool of motivation to inspire learners to learn a new language.
- It is about the daily lives of a diverse South African society.
- Learners can identify with the actors in the soap opera.
- By using video in class, gaps between reading and listening can be reduced.
- Learners can see the actions associated with words.
- By seeing and hearing, learners will be able to create sentences and pronounce words.

New technology emerges daily and a growing trend is experienced amongst learners to demonstrate their increased passion for and reliance on technologies for entertainment and communication (Spires, Morris, & Zhang, 2012). Based on this argument teachers are left with no other choice than to integrate technology, including video, into the second language classroom (Berson et al., 2000). The appearance of video as a medium for teaching and learning has illustrated a demand for change. It has prompted the need to learn new forms of knowledge representation (Spires et al., 2012). The use of video does not only include pre-manufactured productions, but can also include videos shared from online services such as YouTube. The production of video is made easy with the availability of digital cameras, cell phones and video editing tools such as Windows Movie Maker. Although the overall quality of videos on YouTube may not be as good as expected, the communication impact is often considered to be very high (Ibid). Because present day learners are spending far more time using digital media with video ability such as computers and cell phones, teachers are required to implement and develop this ability.

## 2.7 Viral video: a new innovation that excites

Many years ago, before the birth of social media applications such as Flickr and YouTube, the film industry was dominated by big companies that placed themselves in the position to decide whether a film or video was good enough for consumption by the general public (Broxton, Interian, Vaver, & Wattenhofer, 2010). If these companies and some of the bigger public broadcast corporations were not happy with the standard of a film or video, the general public would have never been exposed to that specific video. The market was dominated by film and video that were pre-approved for public consumption. The situation changed drastically towards later part of 2004 when video sharing and social media sites were in a position to host several short videos on the World Wide Web that did not have the worth or format to make them suitable for broadcast (Broxton et al., 2010). These videos were placed on the World Wide Web by people that had access to a digital camera. Users were not only placed in a position to make their own decision on what they would like to watch, but they were given access to a video sharing application that they could use to broadcast their video across the world (Ibid). Social media networks have assisted video sharing sites, companies and the general public by bringing the world of video into the homes of Internet users.

Due to the increase in the number of videos available on video sharing sites, users found it difficult to make decisions on what to watch. Users are relying on social media sites in aiding them with their video viewing choices (Ibid). These choices are determined by people that have watched the video before and are now recommending it to friends and family via short text messages, e-mail, blogs and social media sites. The fact that a video was watched by a number of users assisted that specific video to grow in terms of popularity on the video application sites. Users helped the video to grow in status and therefore they became viral (Ibid). Burges (2008) refers to a term “viral marketing” whereby marketers make the most of “word-of-mouth” and Internet communiqué “in order to induce a massive number of users to pass on marketing messages and brand information” on a voluntary basis (Burgess, 2008 ).

Because videos achieve viral status on video production sites, video production companies are looking around on these sites to find new talent. Howe (2006) describes the efforts of production companies as “crowd sourcing” in that companies could contact these producers of viral videos to use their talents to market products on the World Wide Web or television (Howe, 2006). Video production companies approach amateurs because the production costs

of these videos in comparison with professional productions tend to be slightly cheaper and also for the reason that some of these videos already have a captive audience (Ibid).

For a video to be regarded as a viral video, it has to comply with four basic requirements; (1) that it has “hooks”, (2) that it has “hits”, (3) that it is short and (4) that it carries a message that either makes you laugh or cry (Kinsey & Henneman, 2011). “Hooks” can be explained as something that could make this video colourful and likeable to catch and keep the attention of the user without any distractions. Videos should have an interesting title, be between 2 to 5 minutes long to keep the attention of the prospective user (Ibid). The user will then be in a position to recommend the video to friends and family. More and more users will get hooked to the message contained in the viral video.

“Hits” has to do with the number of times users watched the video. Video sharing site such as YouTube keep track of the number of users that watched the specific video. The more “hits” a video gets, the better the chance to become viral (Ibid).

Although the research school ranked very high in an e-maturity study (Amory, 2010), exposure to the use of YouTube, video production and video sharing applications were regarded as new innovations. These new innovations were needed in order to promote second language usage with the use of tools of mediation such as the computer, video camera and YouTube. The learners had to be exposed to these applications to ensure collaborations in the classroom that would be enjoyable and promote learning on an on-going basis.

## **2.8 Learning theories in the second language classroom**

Vygotsky’s Cultural Historical and Activity Theory is alive and still valid in the digital age (Roth & Lee, 2007). There is no need to look any further to find learning theories that are geared towards 21<sup>st</sup> century learning. Although Vygotsky’s theory was designed years before the birth of the computer and other advanced technologies, it withstood the test of time (Ibid).

The development of learning theories can date back as far as the early 1920’s, computers, electronic whiteboards, cell phones, iPods, and iPads are new tools that developed intensively over the last decade to enhance learning. Although the use of these mentioned tools are paramount to education and training in classrooms all over the world, tools of mediation “in itself will never change the educational system or even implicitly encourage a new

pedagogy” (Amiel & Reeves, 2008). These tools have to be used innovatively to promote learning and teaching.

My research is based on the benefits that I experienced by using the CHAT theory together with tools of mediation in the classroom. I critically analysed Vygotsky’s CHAT theory (Ibid) as well as Siemens’ Connectivism theory (Siemens, 2005), as an alternative to “present day” or “new learning theory in the digital age”. I will be discussing changes in my own teaching and learning styles and conclude the research with recommendations that could possibly enhance teaching excellence in the “present day classroom”.

## **2.9 My view of learning and cognition in the “present day”**

Professor Seymour Papert, a Pretoria born mathematician and scientist at the Massachusetts Institute of Technology, once said: “One of the things that is wrong with school, I said, was that what you learn there, you can't really use. Another thing that's wrong with school is that there's one way to do it. That doesn't happen in the real world. In the real world, there are many ways to do things, and this is how creativity develops” Seymour Papert was the developer of a learning theory called Constructionism (Ibid), which was “built upon the work of Jean Piaget in Constructivism learning theories” (Ibid). Papert and Piaget worked together at the University of Geneva from 1958 to 1963, and Piaget commented that: "no one understands my ideas as well as Papert!" (Ibid). I wish I could have shared the same sentiments with Vygotsky as Piaget and Papert had shared. I have 28 years teaching experience in a primary school, and have to admit that Vygotsky’s CHAT theory (Roth & Lee, 2007) brought about a totally new perspective in my life.

I have changed my teaching style and attitude to learners. My lessons become more a partnership between me and my learners and we all contribute to productive activity (Roth & Lee, 2007). I am very fortunate to be able to experiment with a new way of learning and teaching. Collaborative learning was a new concept to me and I am very honoured to have been able to try it out. Learners experienced collaborative learning and were working together collectively to reach the zone of proximal development (Ibid).

As mentioned in the introduction to this research, I believe that Vygotsky’s social learning theory (Roth & Lee, 2007) is alive and well enough to withstand the test of time. Very little evidence to support a new learning theory such as “Connectivism” (Ibid) was found in my

research. It was more about a collaborative teaching and learning based on the use of tools of mediation instead of a connection that was made between man and technology.

Learning theories are defined as an effort to describe how people learn, in order to assist us in understanding the process of learning. Learning theories such as Vygotsky's social learning theory provide us with vocabulary and a description for understanding the examples of learning that we see (Roth & Lee, 2007). During my studies at the University I was exposed to Behaviourism, Cognitivism and Constructivism, and from my understanding, Behaviourism only concentrates on the independently observable aspects of learning (Bandura & McClelland, 1977). The same source states that cognitive theories look beyond behaviour to describe brain-based learning, and Constructivism sees learning as a course of action in which the learner actively creates or puts together new ideas or concepts (Bandura & McClelland, 1977). I will be concentrating on Vygotsky's social learning theory, later known as CHAT because a lot of evidence was found to certify CHAT fit enough to be recognized as a "new or digital learning" theory. By making such a bold statement, I am not excluding Constructionism and Connectivism as "new or digital learning theories" (Ibid) in the "present day" classroom, but would like to only concentrate on the changes brought about in my personal life, my learners' approach and attitude to teaching and learning, as well as the impact these changes had on the teaching and learning environment.

## **2.10 Connectivism as a learning theory**

In December 2004, George Siemens, who had a keen interest in the area of e-learning, proposed Connectivism as a new learning theory (Siemens, 2005). He argued that existing learning theories did not provide for the changing nature of learning due to the influence of technological advances. Although Siemens' Connectivism is not a universally accepted theory of learning by academics, he argued that if properly applied, it has the potential to significantly improve education through the revision of educational perspectives and generate a greater shift towards learner-centred education (Ibid). In this chapter I will be focussing on what Connectivism is, and how Connectivism is used in education as a new learning theory. I will also discuss arguments as to why some academics accepted Connectivism as a learning theory and why other academics were against Connectivism as a universal learning theory.

Connectivism was introduced as a learning theory that had its foundations set on the fact that "knowledge" is present in the world rather than in the head of an individual (Ibid).

Connectivism suggests a frame of reference similar to Vygotsky's Activity theory in the sense that it describes knowledge to be present within systems which are accessed through people participating in activities (Siemens, 2005). It also "touches" on Bandura's concept of Social Learning in that it suggests that people learn through contact, by giving attention to how people live, communicate and learn (Bandura & McClelland, 1977).

In Connectivism, learning takes place through the process of a learner connecting to and by feeding information into a learning community. Siemens argues that: "a community is the clustering of similar areas of interest that allows for interaction, sharing, dialoguing, and thinking together (Siemens, 2005).

According to Siemens the starting point of Connectivism is the individual. He argued that personal knowledge comprises of a network, which feeds into an organisations and institutions, all part of a learning community. The learning community then forms part of a larger network and is described as a node in the Connectives' model (Siemens, 2005). The nodes are established from the connection points that are found on a network. In this particular case, a network comprises more than one node linked in order to distribute resources. These nodes may have different sizes and strengths. It all depends on the focus of information and the number of persons who are "navigating" through a particular node (Ibid).

In Connectivism, knowledge, according to Siemens, can be stored in a number of different digital formats and is distributed across an information network. Siemens argued that learning and knowledge are said to "rest in diversity of opinions" (Ibid). Learning transpires through the use of both the cognitive and the affective domains; cognition and the emotions both contribute to the learning process in important ways.

With the changes in the development of technology, information also changes constantly. It can happen that technology's validity and accuracy may change over time, depending on the finding of new contributions pertaining to a subject (Ibid). Connectivism stresses two important skills that contribute to learning which include: the ability to seek out current information and the ability to filter less important and not pertinent information. Siemens further stated that: "The capacity to know is more critical than what is actually known" (Ibid) the ability to make decisions on the basis of acquired information is measured as an integral part of the learning process.

According to Siemens, Connectivism differs from other theories in the sense that “it denies that knowledge is declarative descriptive versus procedural knowledge” (Siemens, 2005) and that other theories are labelled as 'cognitivist theories because they depict knowledge and learning as being grounded in language and logic (Bandura & McClelland, 1977). Knowledge is described as a set of connections formed by actions and experience that may consist in part of linguistic structures. A phrase like 'constructing meaning' in Connectivism make no sense. “Connections form naturally, through a process of association, and are not 'constructed' through some sort of intentional action”(Downes, 2008). Downes argued that there is no real concept of transferring knowledge, making knowledge, or building knowledge in Connectivism. He stated that the activities we undertake when we conduct practices in order to learn are more like growing “or developing ourselves and our society in connected ways” (Ibid).

Kop and Hill argued that the key strength of Connectivism is in the use of web-based activity as an example of learning. Siemens and Downes acknowledged that the World Wide Web and its online environment was central to the development of Connectivism. They stressed that it is inclusive to other learning environments, but they did not provide any concrete examples of how it may be applied (Kop & Hill, 2008). Kop and Hill pointed out that learning is based on and part of networks, Siemens' Connectives' approach is essentially about cognitive development, and does not attempt to explain the Vygotskian processes “inherent” in the networked world”(Ibid). Principles of Connectivism were already present in established learning theories, and that Connectivism as a viable model will supply backup to pedagogy and curriculum rather than affirm a learning theory (Ibid).

Out of principle I would like to agree with the fact that “whether Connectivism is a theory or not detracts from what, for me, are the more important questions raised by Downes and Siemens and these are:

- How is technology changing the way we think and learn?
- How is technology changing the way we teach?
- Do we need to challenge traditional ways of working in education?(Ibid).

Although technology is changing the way we think and learn, I do not support the Connectivism learning theory as proposed by Siemens. I much rather support the use of Vygotsky's social learning theory, because it fosters understanding by meaning, in



comparison to Connectivism, whereby learners need to recognise patterns and create understanding (Siemens, 2005).

Research has shown that in order to promote Connectivism the use of an online environment is vital. Although we live in a society where social networking is the order of the day, learners in schools all over the world do not currently have the language and technical ability to support social collaboration and learning by connecting to an online environment using a tool such as a computer to feed information into a learning community, that allows for interaction, sharing, the use of dialogue, and thinking together (Ibid).

## **2.11 Cultural historical activity theory (CHAT)**

According to Roth and Lee, CHAT was falsely disguised under the banner of Marxism, Socialism and Communism (Roth & Lee, 2007), and the fact that it penetrated the Anglo Saxon Academia late, I think, is why we, in South Africa, were never exposed to CHAT in our training as teachers in the early 80's.

CHAT is mostly associated with Lev Vygotsky and the cultural-historical school of Russian psychologists. According to research done by Roth and Lee, Leontev, a student of Vygotsky, developed the conceptual framework which became known as Activity Theory (Ibid).

The basic characteristic of an activity is described through the use of a triangle model, which is based on Vygotsky's model. This triangle replaced the stimulus-response process with a complex, mediated one and has become central to most Activity Theory analysis frameworks (Ibid). Activity is made up of a subject, an object, the purpose of the activity and tools. The object is manipulated within the limitations set by the tools and the subject is motivated by the need to transform the object into an outcome which is based on an idea problem or solution to a problem (Ibid). An Outcome reached can either be positive or negative. Although the process is mediated by one or more tools, there is rarely a direct relationship between the subject and object. All human activities are mediated by tools such as computers, procedures instruments or processes (Ibid). Tools can also be psychological tools, or 'tools for thinking' or material tools such as a computer. Tools are shaped and changed as an end result of developments and changes in human activity (Ibid). Engeström was involved in the development of the second generation activity theory based on Vygotsky's idea of mediation in which the stimulus and response is transcended by a complex mediated act and formalised

in the triangular model, whilst Leontev focused on the relationship of mediation with the other components of an activity system (Roth & Lee, 2007).

Third generation activity theorists understand dialogues, multiple perspectives and networks of interacting activity systems, adopting joint activity or practice as the unit of analysis. Kuutti argued that the Activity Theory provides an academic basis “for studying different forms of human activities where both individual and social levels are interlinked at the same time” (Kuutti, 1996) Uden, Valderas and Pastor in their research argued that the Activity has become cross-disciplinary and includes a range of disciplines including the social sciences education, and Human Computer Interaction (Uden, Valderas Aranda, & Pastor, 2008). I have to agree with the statement made by the mentioned researchers in that human activity cannot take place without any form of social interaction. I will then boldly state that CHAT is a more organised learning theory than Connectivism. Although Connectivism was established in learning theories as a viable model that will supply backup to pedagogy and curriculum, I would much rather support Vygotsky’s social learning theory, as it helped me in my teaching career, by understanding collaborative work and the importance of scaffolding. In the next chapter I will be discussing my own research based on the principles of the CHAT theory.

## **2.12 Theories that informed my research**

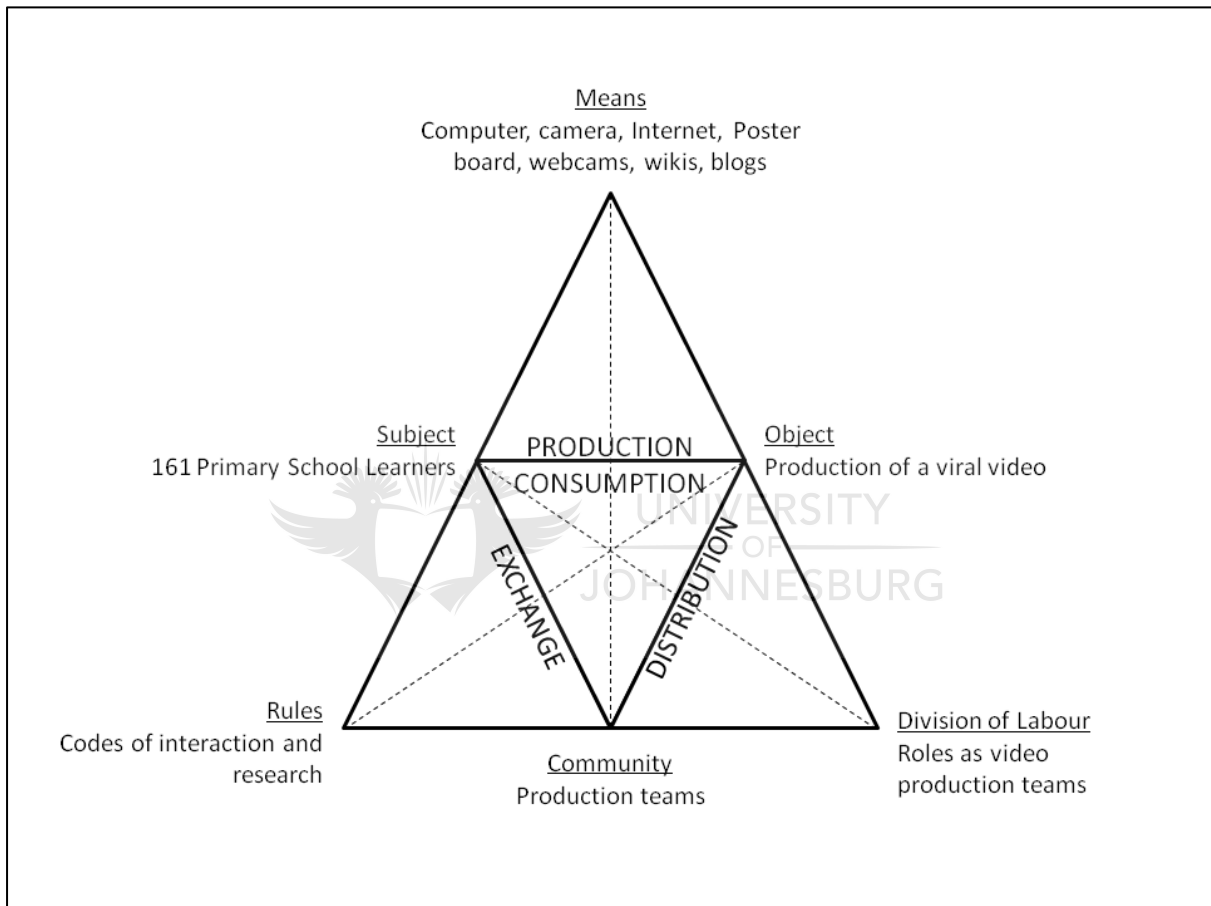
### **2.12.1 CHAT theory**

Although a number of learning assumptions such as; the “Connectivism theory” and “constructionist theory” exist as digital age learning theories, I concentrated mainly on the CHAT theory (Bandura & McClelland, 1977). Rules and discipline have to form part of the program. Although learners will be motivated to do what they enjoy “clear limits and boundaries” have to be established. This was, unfortunately, not evident in the Connectivism theory, and that is why I did not consider the use of Connectivism (Roth & Lee, 2007).

In this viral video project, learners had the opportunity to make new friends by working together in a group. These groups were aided by the process of scaffolding. They could rely on the assistance of a friend to help with difficult words or structures that they did not understand. Learners were able to explore in groups and worked collectively in reaching the zone of proximal development (ZPD) (Ibid). In order to close the gap between the learner’s ability to solve a problem on his/her own and solving a problem with the help from a peer or a teacher, helped the learners to achieve cognitive development in the ZPD. This was done

through the process of scaffolding, leading to a more understandable solution (Roth & Lee, 2007).

In order to get a better understanding of CHAT, I have designed my own triangle to get an idea on the viral video project as to what was expected by staff and learners in achieving social collaboration.



**Figure 2-1 Activity Theory Triangle: Viral Video (adapted from Engeström, 1999)**

By looking at the Figure 2-1 above, it is clear that the object was to engage with technology in second language learning. The outcome is the production of user-generated content in the form of viral video to encourage the use of Afrikaans as a second language. The activity theory helps us to shape our thinking “across three interrelated topics in learning research: motive or motivation, emotion and identity (Ibid, p. 213). It also outlines the basic relationships in the Activity theory between subject (focus of study) and the object, (the production of their viral videos). With the help of tools that will mediate during interaction between the subject and context within this activity, definite rules have to be established to

ensure respect and acknowledgement for the opinions of others in the group (Roth & Lee, 2007). These rules are vital for social interaction and should be respected by all. Groups have to form little communities and each little group has to ensure that the labour (Ibid) is divided between them. Although each member has to complete a certain aspect on their own, they will still be held accountable by the group for specific responsibilities and tasks negotiated to achieve a specific goal.

For a learner to reach his goals in a specific area could be considered as cognitive growth (Limón, 2001). This is unfortunately a lifelong attempt and by using powerful forces such as play and experimentation, learning can take place and the individual mind can develop (Ibid). The desktop computer, the camera, the viral video project and application software, as mediation tools, were purposefully introduced as a teaching aid between the learners and a social interactive environment.

By researching the CHAT theory and Connectivism it is clear that their focus on Constructivism and socio-cultural processes offers a valuable addition to learning in the digital age. The social learning theory of Vygotsky (Roth & Lee, 2007) is alive and valid in the digital age!"

It will not be easy for learners in this age group to work with the newly acquired software for the production of videos, the digital video camera and a computer. One has to understand that working collaboratively is a totally new concept to them. Learners will be exposed to new applications and technologies such as cell phones with built in camera and video ability. They do not understand the basics involved in the recording of a simple video production. They could learn by experimenting, but by looking at technicalities such as the use of light, background, good acting and recording practices, they could only gain this type of knowledge through the process of scaffolding or by relying on the knowledge and help of a peer or a teacher (Ibid).

Working together as a community of learners, parents and teachers within the group (Roth & Lee, 2007) the technicalities involved using video technology will be overcome easily as they will learn very quickly from one another on how to put technology to good use with the recording of their viral videos. By forming an "informal" community learners will be assisted by their peers through the process of scaffolding (Ibid) to overcome the challenge of using the correct vocabulary and language structures during the viral video production.

Learners, as individuals, can execute their viral video projects on their own by using basic knowledge of Afrikaans as a second language, basic video skills and basic acting skills, but what is required in this specific case was that they should move away from the individualist notion of human development to a more collective or collaborative project that only a “community” or interrelated level of activity could give them (Stetsenko & Arieivitch, 2004). By building on the information or assistance received from the collaboration or collective efforts of every person in the group (Ibid) learners will appear to be more competent and academically empowered than individuals that would have acted on their own. The production of the viral videos would not be successful without the ability of the individuals to act in a group by exchanging information. Stetsenko, (2004) argued that “exchanges among people require equally complex mechanisms that allow for self-regulation by every individual involved in these exchanges (Ibid). According to her, the role of the individual should be regarded as crucial for these exchanges to take place. High “demands” placed on the individual learner that is subjected to the group to take part in these collective processes could not be ignored as the individual is considered as an important part of the group or society in meeting such “demands” (Ibid)

### **2.12.2 Transformative stance perspective**

Using the computer technology and other tools of mediation to make a viral video in the Afrikaans second language classroom through acquisition, participation and contribution helped with the transformation of normal language lessons (Ibid). The use of these technologies can be seen as catalyst for change. The main purpose of the viral video program was not only to assist learners that are struggling with oral work by enabling them to learn from both peers and teachers in the classroom, but to bring about change in the way future oral lessons should be conducted. Learning technologies as tools aided in the design, development and deliverance of learning interventions.

### **2.13 Chapter summary**

This chapter reviewed the literature that encouraged the writing of this dissertation. The way that learning takes place in the second language classroom was discussed, based on previous literature. The next chapter explains the research design, research setting, procedure, sample and research instrument.

## **CHAPTER 3. Research design**

### **3.1 Introduction**

In previous chapters the theoretical issues describing the use of Afrikaans as second language and the production of viral videos were examined. It is my aim to establish further, in quantifiable terms, what the perceptions of learners are when getting actively involved in the production of viral videos.

In this chapter the methodology used to perform the research for this study will be described. I initially set out to do qualitative research but because numbers were considered to be more reliable and accurate, I then decided to use both informal qualitative and quantitative information, which did not either work. My whole approach changed to a pure quantitative research method. The approach to this study will be highlighted and brought into context by displaying innovative use of technology in the second language classroom. The research methods and approach will be discussed to direct to methods of data collection. A discussion on the methods for data collection will then follow within the context of this study and the soundness and reliability of the research will be considered.

### **3.2 PREPARING FOR THE RESEARCH PROCESS**

#### **3.2.1 Permission**

After selecting the research site, a primary school in the south of Johannesburg permission was requested from the relevant authorities, such as the Gauteng Department of Education as well as the school principal and the parents of the Grade 7 learners that were taking part in the research. Permission to complete the research in a public school was approved by the Gauteng Department of Education. Out of 179 were approached, consent was granted by the parents of 161 learners. A blank copy of the application forms as well as the permission letter is attached hereto (Annexure 4: Informed Consent).

### 3.2.2 Selection of the learners

The empirical investigation was conducted in the Johannesburg South District. For the purposes of this study, all Grade 7 learners in the research school were selected as a research group. The target population was defined by the following considerations:

- Type of school: Primary school
- Geographical area: Johannesburg South District
- Population: All Grade 7 learners at the school
- Age: 12-14 years
- Gender: Male and Female
- Sample size: The whole population

The population comprising of 161 learners selected from a Grade 7 group at the research site that will be used in the sampling process which may be considered adequate for a reliable data analysis. Denscombe (2010) states that a successful research study is dependent on the skills demonstrated in choosing groups that are homogenous in respect to certain important variables (Denscombe, 2010).



### 3.2.3 Sampling

Forza (2002:02) defines a sample as an element of the population, or a subset of members selected from the population for inclusion in a study (Forza, 2002). In most research cases a sample is defined as a small portion of the learners that formed part of the population and took part in the research.

The reason for sampling as an element of research is done to ensure feasibility (Ibid) and to ensure that accurate information was obtained from learners that represent the population. In this case, the entire population was used for purposes of sampling, because the margin of error when doing sampling in such a big group is less probable than in a smaller group (Coe, 2002).

## 3.3 Research paradigm

The term paradigm is used to refer to group of universally-held viewpoints or standards within the research community about an area of study. These viewpoints are crucial in determining what researchers should focus on, the type of methods that should be used, the

way in which the research should be done, and lastly how the results should be understood and interpreted (Spratt, Walker, & Robinson, 2004). Patton (1990) defines a paradigm as “a world view, a general perspective, or way of breaking down complexity of the real world. As such, paradigms are deeply embedded in the socialization of adherents and practitioners; paradigms tell them what is important, legitimate, and reasonable. Paradigms are also normative, telling the practitioner what to do without the necessity of long existential or epistemological consideration” (Patton, 1990).

The aim of the research design is to give a general perspective by planning and structuring this research project in such a way as to maximise the eventual validity of the research finding. This section is devoted to a discussion of the structure of the present research project. I begin by identifying the research paradigm for the study, after which I explain the research method and data collection techniques in detail. The section concludes with an exposition of the data analysis procedure used for this study.

### **3.4 Research design**

With this research, I wanted to grasp an understanding of the human behaviour and experience of learners when producing their own viral videos in the Second Language classroom (Morse, 2003). In order to comprehend, illustrate and clarify the research, I decided to use quantitative data to obtained from the entire population to get a complete picture of learner performance and understanding when exposed to the production of viral videos (Ibid). A quantitative method (Creswell, 2009) will be followed, whereby the all data will be used to compile graphs and other statistics.

### **3.5 Choosing a research design**

When a choice had to be made with regard to a research descriptive data method, I experienced a few drawbacks as it was not entirely clear as to which method would be the most suitable for this research paper. The method employed by me depended on the type of data that I had to analyse. In the case of numerical data, the researcher selects a quantitative method of research, in the case of textual data the researcher relies on the qualitative method (Creswell, 2009). The mixed method is employed by those researchers that work with both numerical and manuscript data.



In my research, I conducted informal interviews with learners, but had to rely on mainly on numerical data. I have therefore decided that the quantitative research method was the most appropriate as I had the opportunity to work with valuable numerical data. My confusion with regard to which research method to be used is not unique: it happens in the “world of research” (Reeves & Hedberg, 2003). The issue on whether it would be a qualitative method or quantitative method has been debated by a number of researchers in the past and was cited as a contributing cause leading to the poor quality of educational ICT research (Ibid, p. 267). I was planning to involve learners in a questionnaire based on the Likert scale by means of which I could determine their levels of enjoyment when taking part in the viral video project.

### **3.6 Quantitative research**

Hopkins (2008) argued that Quantitative research is all about quantifying relationships between variables (Hopkins, 2008). According to him, variables can be best described as things such as “weight, performance, time, and treatment” (Ibid), and is measured on a sample of learners. Once the process of measurement is completed, the relationship between variables is expressed in statistics which include “correlations, frequencies and differences between means” (Ibid).

#### **3.6.1 The effect of validity and reliability**

When doing research, the impact of the results is dependent on two concepts; validity and reliability. I would like to use the word “accuracy” as this plays a vital role on the sample size. According to Hopkins (2008), meticulousness or precision is expressed as validity and reliability (Hopkins, 2008). Validity is very important in the sense that it demonstrates the how well a variable measures what it is supposed to measure. The topic of “reliability” informs one as to whether repeated assessments provided a consistent result and also how reliable the assessment is (Ibid). Validity is made up of two parts: internal- and external validity. Internal validity tests whether the result of the research study is justifiable. The selection of groups, data recorded or the analysis performed would have an impact on the internal validity.

External validity, mostly referred to as “generalizability”, involves whether the results obtained in a study could be transferred to other groups of interest (Onwuegbuzie & Johnson, 2006). In the case of this study, that was exclusively performed at this research site on

specific gender race or geographical sub-groups, it is likely that it might not be applicable to a Primary School in the Western Cape.

When designing a research study, one has to have a strict set of rules in place to ensure that high levels of validity, which include internal- and external validity, could be achieved. When it comes to discussing validity in the research study, one must not lose sight of the fact that internal- and external validity complimented each other and that without the presence of internal validity, external validity is of no use. According to Onwuegbuzie and Johnson (2006); “Results of a poorly designed or executed study are not applicable to any population, in that particular study sample or otherwise” (Onwuegbuzie & Johnson, 2006). According to them a common threat against internal validity is lack of reliability (Ibid). A good explanation for this would be that when an assessment is done, it must provide the researcher with the same result every time the assessment is done, in order to be considered as reliable. Reliability can be placed at risk. This happens in the case where assessments are conducted by different people over a different period of time.

When doing a research study a researcher must be able to handle potential problems, as threats to a study’s validity can crop up at any given during the research process. When doing research it is very difficult to visualise what potential problems might crop up during the research and therefore it is vital to sort issues of validity and reliability out during the development of the study design (Ibid), by creating strict rules that can address the threats to validity and reliability.

### **3.7 Research setting**

The environment in which the research was carried out is a Primary School situated in the Southern part of Johannesburg. All Grade 7 learners were exposed to the creation of viral videos, but the statistical data used for purposes of this research was only obtained from 161 learners who were permitted to take part in the research. The main aim of this research project was to understand how primary school learners experience the innovative use of technology in the second language when replacing the traditional speech with a collaborative video making process that would motivate them to speak Afrikaans as a second language.

Learners were kept in their traditional register classes. They were not allowed to cross-integrate into other register classes. They had to create groups from their existing register

classes. All research was done during the normal teaching day in the subjects Life Orientation, Afrikaans second language and Technology.

## **3.8 Procedure**

### **3.8.1 Background**

The research site is a Primary School located in Johannesburg South. The school offers three languages. English is offered as a home language, Afrikaans is offered as a second language and Zulu is offered as a third language. Almost (25%) of contact time, which amounts to 7 hours per week is allocated to the teaching of Languages (Nunan, 1988). The home language is allocated three and a half hours; the second and third Language shared the remaining three hours per week. This amounts to one and a half hours per week allocated to Afrikaans second language. Assessments were done on a continuous basis by placing emphasis on speaking, reading and writing. Learners were expected to prepare oral speeches for assessment in class. These oral speeches were normally prepared at home with the assistance of parents. Learners arrived at school and recited an oral presentation in class written by a parent. They were not familiar with the vocabulary used, or even understand the sentences they presented for marks.

The Learning Area Head for Afrikaans at the school then decided to change the way in which oral speeches will be presented in class. The format for the preparation and delivery of oral speeches was changed into a collaborative project whereby teachers from three learning areas were working together in assisting their learners, not only in the preparation and delivery of oral work, but also ensuring that learners understood the content involved, as presented by other learning areas.

A video-making activity was recommended for purposes of the second term oral assessment during the 2012 academic year in the second language and Life Orientation. This activity was done on a voluntary basis, meaning that the students were free to choose peers that would be working together in groups. Classes had  $\pm 35$  learners and maximum of 4 to 5 groups were formed per class. The biggest group made up amongst learners in all classes were not bigger than 7 members per group. Teachers involved in the project comprised the Learning Area Head and three Post Level 1 teachers. Both teachers and learners were expected to keep journals of their experiences and progress made during the production of the videos.

The learners worked on the project for 10 to 12 weeks. They had to research healthy eating habits, translate it into Afrikaans, prepare story boards and record their final product. Teachers were expected to assist learners with the correct information, pronunciation and sentence structures. Learners were introduced to Google tools such as Google translator and Google Afrikaans (Garcia, 2009) that they could use as basis for research and translations.

Work from two learning areas was integrated into this project. A preparation and planning meeting was held with teachers from the different learning areas. One period per week per learning area, was obtained from the second language and Life orientation, without any disruption in the teaching and learning process. The project enhanced learning integration in all the mentioned learning areas. Learners attended classes as normal but concentrated on the planning and execution of their viral video project.

The learning area Life Orientation focused on healthy eating habits. The project was done during the winter months. Learners were not doing any physical activities during the Physical Education period, but were expected to keep a food diary of what food types they consumed over two weeks. They had to document their findings and discuss it with the rest of the class. Once their research was completed, they were given free range in choosing peers that had a certain abilities to assist them with the production of viral videos.

The groups of learners had to get together and plan a story board on promoting healthy eating habits. They had to use their findings from their research in order to decide on what was to be considered as healthy. They had to create the storyboard in Afrikaans second language.

In the second language, the teacher assisted learners with the correct use of language structures as well as correct translation of vocabulary (Nunan, 1988). Once that was in place, they had to put a storyboard together. They had to practice their storyboards in groups.

Learners were exposed to two sample viral videos hosted on YouTube as examples for their viral video productions. These viral videos were made by companies as advertising campaigns to promote specific products. Learners were expected to create something similar with “hooks” to gather audiences to watch their videos. These videos had to make audiences laugh or cry. Messages had to be clear and supported by good quality sound and visual effects.

The basics of viral videos, the importance of jingles and good advertising slogans together with effective sound effects were discussed with learners. The slogans had to contain speech,

music or noise as they are considered in the advertising industry as vital signifiers for the production of any advertising campaign (Pinquier & André-Obrecht, 2004; Yalch, 1991). Learners had to use self-made slogans, songs, images and sound to promote the message of the viral video. It was pointed out that no sound file or image is to be used from the World Wide Web without obtaining the necessary copyright permission from the owner. Music and images had to be of good quality and not offend the audience in any way. It was recommended that all images, slogans, songs and sound effects had to be self-made. Learners were supplied with poster boards and white board markers to make their own images or slogans. Sound effects could be offered in any format ranging from rapping, music, slogans or recitals, as long as they did not offend the audience in any way.

### **3.8.2 The video making process**

Learners used small digital cameras with video facility to record their projects. Once a recording was completed they were coached in the computer laboratory on how to use Microsoft Moviemaker to cut and edit their video clips. Video clips could not exceed 90 seconds in total. The video clips could be shorter than 90 seconds on condition that they had “textual hooks” or key signifiers (Burgess, 2008). The key signifiers or textual hooks had to act as a “form of bait” or propaganda item that will ensure that peers, families and other Internet users would promote such a video on e-mail, MySpace or Twitter, as these social media applications are considered to be of utmost importance for the promotion and survival of a viral video on YouTube (Ibid). The key signifiers or hooks in viral video had to offer the audience something to laugh or cry about.

At the end of the project, learners were requested to comment on their overall impression of the project compared to normal teaching and learning.

### **3.8.3 Approaching the Topic**

An instruction sheet, (attached hereto as:

Annexure 1: Assignment handed to learners on the making of the viral video), defining the basics of a viral video together with suggested topics on healthy eating habits was made available to all learners. They were given free range on the format of the video, as this could be presented as a dialogue, a play or improvisation. Due to the fact that the linguistic aspect was regarded as a vital for the production of the video every group member had to be part of the conversations or role plays. Learners were expected to speak clearly and fluently using the correct pronunciation.

### **3.8.4 The Audience**

The audience is mostly made up of peers or learners at the school. Learners from the research school had to vote on the best video as hosted on the school's internal servers. It was agreed that the best video would then be placed on YouTube for public consumption. Although videos were very creative, funny and experienced as most enjoyable by all learners, the general feel existed that these videos did not warrant exposure on a video sharing site such as YouTube.

### **3.8.5 Informal Interviews and reflective diaries to assess video projects**

In order to understand the project in totality, a guideline for the execution of the viral video project was made available to all learners before the project. The most important consideration that had to be taken into account when assessing these videos was the use of language as reflected in the correct use of language structures, terminology and dialogues. Other aspects that were assessed included video content, teamwork and creativity. The setting of parameters in the form of a guideline assisted learners in understanding as to what was expected from them.

Although the project was completed as a quantitative research, allowance was made for the use of informal interviews and the keeping of reflective diaries attached hereto as **Annexure 3: Reflective diaries**. Teachers had to monitor the video-making process by recording learner experiences, attitudes and emotions in a reflective diary. Questions posed to learners included the following:

- What was the most difficult aspect of the viral video project?
- What was the most enjoyable aspect of this project?

- Did you benefit from this project?
- Would you like to be involved in a similar project?

Although answers received from learners were regarded as being positive, learners had to deal with challenges such as technical- and linguistic aspects. Windows Moviemaker was introduced as a new concept. Learners had to learn record their own video, using a digital camera supplied by the school. The reason for not allowing learners not to use their own cameras or mobile phones with video ability was the vast difference in video formats. Mobile phones with video camera ability used AVI, MPEG, MOV, RMVB, FLV, WMV, MKV and VCD formats. These formats then had to be converted to MOV format. A basic 14 megapixel digital camera with video capturing ability in MOV format was used by all learners to produce their videos.

### **3.9 Research instruments**

Observation will take place in the second language classroom. Learners' behaviour will be monitored during the project. All data collected will be based on the statistical information collected from learner responses. Likert-type questionnaires were designed in line with the nodes on the CHAT theory triangle in order to understand how learners experience the production of viral videos instead of the traditional speech. Learners had to submit their responses online using a form designed in Google Docs (Weiss, 2007). Reactions of the learners were monitored in order to understand whether they enjoyed the prescribed activity. I have concentrated on their participation as an individual in a collaborative learning environment.

Electronic submissions by learners will be scrutinised to determine whether they enjoyed the activity or not and also to what extent they would like to be involved in future.

### **3.10 Administration of the questionnaire**

The questionnaire was compiled by using Google Docs and, if properly administered, will be the best available instrument for data collection using such a large population. The researcher personally attended each one of the 5 data collection sessions in the computer centre situated at the research site.

### **3.11 Data processing**

By using Google docs, Likert-type questions were captured and data made available immediately in a spread sheet and also in graphical format. There was no need to capture data as learners had to complete the questionnaire online as per Annexure 2: Questions posed to learners together with responses.

### **3.12 Data analysis**

The questionnaire was designed in such a way as to determine the learners' feelings and perceptions about the use of technology in the Second Language classroom. For the purposes of this study the questionnaire was divided into 7 sections.

- Section 1 covered the biographical data including information on age, race and gender.
- Section 2 to 6 covered the information regarding the learners' perceptions or feelings from 6 different constructs obtained from my own representation of a second generation Cultural-Historical Activity Theory triangle. Research ethics

As researcher I had placed a very high premium on ethical measures when establishing the qualitative research. I have an obligation to respect the rights need, values and desires of the participants in the research (Creswell, 2009). Resnik (2007), argued "that the most common way of defining "ethics"; is to look at norms for conduct that distinguish between acceptable and unacceptable behaviour (Resnik, 2007). Ethics can be learnt from church, home, school or society that has rules that manage behaviour and as pointed out by Resnik (2007) that ethical norms tend to be broader and more informal than laws" (Ibid).

As suggested in Creswell (Creswell, 1994, pp. 165-166), I have put the following measures into place to ensure the protection of participants rights and identities:

- The aims and objectives of the research were communicated in writing to parents and participants.
- The participants as well as teachers that took part in this research will remain anonymous.
- Permission was requested from the Gauteng Department of Education and all participants were informed of the data collection activities.
- The wishes, rights and interests of the participants were considered at all times when reporting on the data.



Privacy, confidentiality and anonymity were respected and no participants were forced to give input and their rights were respected. To ensure complete anonymity, neither the identity nor confidential information gathered during this research will be made known to a third party without the consent of the learner (Miles & Huberman, 1994).

### **3.13SUMMARY**

In this chapter, the researcher provides an overview of correct ethical conduct, the research design, explains the research methodology used for this study and gives a brief description of the research method and construction of Likert-type questions. The preparation, research instrument and Likert type question administration are presented. Chapter 4 focuses on the presentation and analysis of the research data collected from the questionnaire.



## **CHAPTER 4. Findings and analysis**

### **4.1.1 Introduction**

Previous chapters in this study concentrated on learning theories research objectives and the innovative use of technology in the second language classroom. This chapter deals with the research, described as a process of analysing and interpreting data to understand the observable fact (Creswell, 2009). The empirical data obtained from the research will be used to obtain further scientific support to the findings made in the literature study. My main aim was to get the learners' point of view and also understand how they experienced the viral video project. In order to create an organised set of research, the data obtained from this research was analysed using online features of Google Docs. The encoded data was collected in a spread sheet and converted into a display containing a set of pie graphs.

### **4.1.2 Google Docs, a free application with unlimited possibilities**

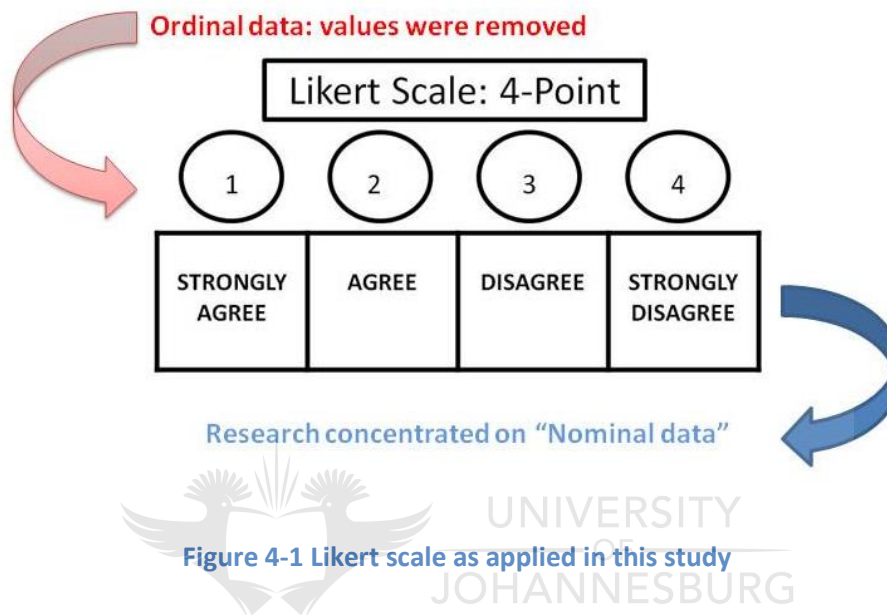
Google Docs is a web-based application that can assist users with data collaboration, documents, spread sheets and presentations. The questionnaire for the purposes of data collection in this research was developed electronically by using Google Documents (Darbyshire & Darbyshire, 2010). A form was created and linked to the research school's website as a web link. Learners had to click on a hyperlink to open the survey. Data collection took place and in real time.

Once data was collected it was made available in the form of a spread sheet with a "Timestamp" that recorded the date and time of the survey. A summary of the completed survey could be viewed online, or be exported in Excel. Google Docs online application software made life easier by providing summaries of data in the form, graphs with percentages (Ibid).

### **4.1.3 Using the Likert scale as basis for data collection**

Due to the fact that I had to measure attitudes of the learners, I was looking for a method that could produce measures that would be easily interpreted on a metric scale. I have chosen to use the Likert scale. The Likert scale was developed and named after Dr. Rensis Likert, a

sociologist at the University of Michigan. This technique, used world-wide, is defined as a non-comparative scaling technique that measures a single trait. According to Bertram (2007) “Each specific question (or “item”) can have its response analysed separately, or have it summed with other related items to create a score for a group of statements” and this is also why Likert scales are sometimes called summative scales” (Bertram, 2007).



## 4.2 Results

### 4.2.1 Introduction

The main aim was to review the sample in a table giving the overall sample size, demographics or features such as the average age, the percentage of learners of each sex, and the ratio of learners with related interests (Healey, 2011). Using statistics helped me transform a set of explanations that illustrate the data used in this research as 5 main constructs. Biographical data was excluded as a construct. The areas that I concentrated on involved learner attitude and language ability, Division of labour, Tools, and Objects.

### 4.2.2 Biographical data

The items on biographical information as used in the questionnaire included the number of learners, gender, age and race.

#### 4.2.2.1 Gender

Table 4-1 Biographical data: Gender

GENDER	NUMBER	PERCENTAGE %
Male	73	45%
Female	88	55%
TOTAL	161	100

Although 179 learners were taking part in the viral video project, only 161(89%) were given permission by their parents to be involved in the questionnaire. I did not try to obtain an equal amount of males and females, because the number of learners that took part in the survey was not an abnormal representation of gender distribution at the research site. The 161 learners used in the study included 73 males (45%) and 88 females (55%) versus the actual enrolment of 85 males (47%) and 95 females (53%) at the research site. There was a (2%) deviation per gender group of learners versus actual enrolments that took part in the study, but in relation to actual enrolments at the research site, this was a normal.

#### 4.2.2.2 Race

Table 4-2 Biographical data: Race

RACE	NUMBER	PERCENTAGE %
Black	53	33%
Coloured	15	9%
Indian	27	17%
White	66	41%
TOTAL	161	100

The numbers as represented in the above table is a true reflection of actual enrolments at the research site. What makes the study interesting is that the study did not concentrate on one race group only, but that it covered a multiracial community. If people of colour had to be combined as a group they will jointly make up (59%) of the participants in comparison to the (41%) white participants.

#### 4.2.2.3 Age

Table 4-3 Biographical data: Age

AGE GROUP	NUMBER	PERCENTAGE %
11 years	0	0%

12 years	33	21%
13 years	115	71%
14 years	13	8%
TOTAL	161	100%

The age of learners at the research site played a vital role in the use of social networking applications as well as obtaining information for the project from different Social Internet sites. In terms of the Children’s Online Privacy Protection Act of 1998 learners under the age of 13 were restricted in the use of most of the Web 2.0 tools as well as access to certain internet sites such as YouTube (Wallsten, 2010). Special precautions had to be taken as (21%) of the participants at the research site were under the age of 13 years.

### 4.3 Six constructs that informed the study

I have decided to divide the questions posed to learners into 6 constructs that are in line with the CHAT theory in order to ensure clarity and validity. The constructs will be presented and discussed in turn in the rest of this chapter. The discussions will consist of the questions being presented as well as the results collated from the surveys.

#### 4.3.1 Construct 1: Means / Tools

Learners in the 21st century classroom have access to mobile devices and computer technology at school and at home and are far more exposed to a wealthy source of information than learners without access to these technologies (Yamagata-Lynch, 2007).

Vygotsky proposed that whilst learners are interacting with means, tools or artefacts the process also involves thinking and speech and that the mediated action should be viewed as a means of interpersonal communication through interactions between the means/tools, the subject and the object (Roth & Lee, 2007). Language is therefore included in the following discussion as a tool.

The following questions were posed to learners on the availability of tools of mediation.

**Table 4-4 Tools of mediation**

QUESTION	YES	%	NO	%
Do you have access to a computer at home?	144	89%	17	11%
Do you have access to a digital camera?	132	82%	30	19%
Do you have a cell phone with a built-in digital camera?	145	90%	16	10%
<b>TOTAL</b>	<b>421</b>	<b>87%</b>	<b>63</b>	<b>13%</b>

All learners at the research site had access to tools of mediation. In order to understand how many have access from home, it was found that an average of (87%) of the learners had access to a computer and a digital camera, whilst (13%) did not have access to a computer or a digital camera. Although not all had access to tools of mediation, the learners were very proud of their achievement and (82%) were keen to show their video productions to friends and (70%) of the learners were happy to show the world their effort.

#### **4.3.1.1 Language as a tool of mediation**

**Table: 4-5 Language as a tool of mediation**

QUESTION	ENGLISH	AFRIKAANS	ZULU	OTHER
What language do you use to speak to your friends?	153 (96%)	0 (0%)	4 (2%)	4 (2%)
What language do you speak at home?	123 (77%)	2 (1%)	13 (8%)	23 (14%)
In what language are the television programmes you normally watch?	157 (98%)	1 (1%)	0 (0%)	3 (2%)
In what language are the radio programmes you listen to?	152 (94%)	2 (1%)	2 (1%)	5 (3%)
<b>Average</b>	<b>91%</b>	<b>1%</b>	<b>3%</b>	<b>5%</b>

Eleven official languages are spoken in South Africa by the rainbow nation. It is not any different at the research site. Although the learners represented different cultures and race groups, not all of them were raised in their vernacular or mother tongue. It was found that (77%) of all learners spoke English as a Home Language, (1%) Afrikaans, (8%) Zulu and

other languages represented (4%). Table 4-2 Biographical data: Race” reflected that (34%) of the learners were Black, (9%) Coloured, (17%) Indian and (40%) were White.

By comparing the language survey to the race survey, one would notice a discrepancy. Black learners represented (34%) of the population at the research site and one would normally assume that they speak a vernacular other than English, but only (13%) of the population at the research site spoke languages other than English. A deviation of (21%) was noticed, meaning that not all learners were raised in their mother tongue.

During an informal interview with black learners, urbanization was pointed out as a reason for changing their mother tongue to English as a language to ensure performance at an acceptable level in former model C schools. Some learners reported that they could not speak vernaculars, which made communication with their families and grandparents in the townships or rural areas very difficult. According to the learners, this decision was made by parents to ensure that the learners could cope with schooling and further education in the suburb schools. Families were placing a very high premium on education and that is the reason why the learners were raised with English as a Home Language. No formal interviews were conducted with parents to confirm the statements made by the learners and the information received from the learners could not be verified. Based on the results from the survey, one would notice that between (94-96%) of learners were comfortable with watching television and listening to the radio in English and (96%) of the learners were happy to speak English to their friends.

#### **4.3.2 Construct 2: Subject**

The subjects (learners) can be described as 161 individuals who were involved with the production of viral videos. Subjects had, as individuals, to keep a food diary and also research on healthy eating habits. Once individual subjects completed their research, they had to report back on their assignments and then choose to work in a specific group of between 5 to 7 members. Each individual group member had to be chosen on the basis that they would make a special contribution or contribute a specific skill. Groups were not to be formed on friendships, but on the basis of specific abilities or skills.

Subjects formed groups with the help and guidance of the 3 teachers. Individual subjects knew that they were responsible as a group for specific tasks that would contribute to the successful execution of the viral video production. As a member from a diverse background

each subject had to bring a specific ability to the group in order to achieve the final product (object). Although it was found that groups were not constructed on the basis of ability or skill, but rather on friendships, the learners during the questionnaire indicated that (86%) of learners “agreed” that their strengths or abilities were taken into consideration when working together as a group. Figure 4-2 Strengths taken into account when tasks were assigned” is an indication of the responses received from the subjects on their strengths or abilities.

**Figure 4-2 Strengths taken into account when tasks were assigned**



**Table 4-6 Distribution of work**

QUESTION	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
I am happy with the distribution of work amongst all members of the group	57 (35%)	89 (55%)	12 (7%)	3 (2%)
Every person in the group had a specific task to complete	48 (30%)	102 (63%)	8 (5%)	3 (2%)
The group worked well together in achieving the goal	77 (48%)	71 (44%)	11 (7%)	2 (1%)

During the questionnaire as per Table 4-6 Distribution of work”, learners indicated that (9%) were unhappy with the distribution of work amongst group members. Although (8%) do not agree with the fact that groups worked well together, only (5%) of subjects reported that not all group members had a specific task to complete.

#### **4.3.2.1 Feelings, attitude and motivational aspects experienced by the subjects,**

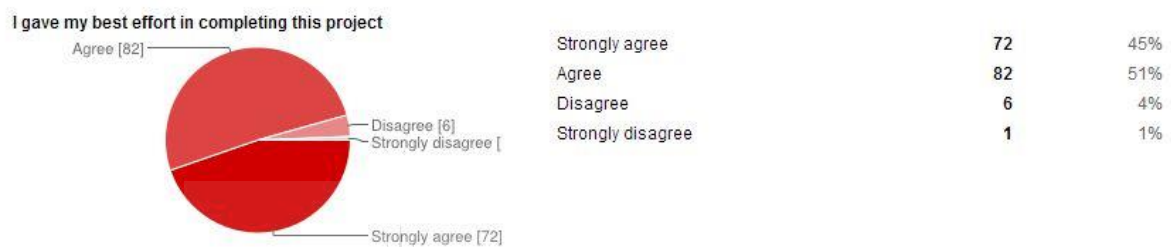
As part of the second construct seven questions were asked about the “subjects” to get an understanding of the feelings of the individual or the groups of individuals involved in the video-making process. The areas covered were attitude, motivation and anxiety as experienced by learners. The responses were summarized as follows:



#### 4.3.2.1.1 Attitude

Gardner, Day and MacIntyre (1992) researched the effects of attitude, motivation and anxiety on learners in a Second Language environment (Gardner, Day, & MacIntyre, 1992). Attitude in general can be explained as a positive or negative assessment of a situation by a person that involves an activity, idea or object in a specific environment. When a person makes an assessment of a situation, his or her attitude can vary from extremely negative to extremely positive, but it can also happen that people might express positive and negative attitudes towards a specific activity (Gardner et al., 1992).

During the viral video production process it was found that learners were very positive and had given their best:



In order to understand both positive and negative attitudes and in-between feelings, the following questions were posed to the learners as per Table 4-7 below.

**Table 4-7 Feelings experienced by subjects**

QUESTION	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
I think making my own viral video is cool	90 (56%)	62 (39%)	5 (3%)	4 (2%)
I enjoyed the viral video production sessions	79 (49%)	72 (45%)	9 (6%)	1 (1%)
I feel there should be more activities at school that include the use of computers	118 (73%)	38 (24%)	5 (3%)	0 (0%)

From the statistics gathered (95%) of the learners taking part in the research agreed that making an own viral video is “cool”, whilst (5%) disagreed with the statement. I think that the reason for this response is that it is the first time learners at the research site were exposed to this type of activity that involved a range of ICT-related equipment. The learners were in charge of their own learning and the majority enjoyed the technology they were exposed to.

The fact that (5%) did not think it is “cool”, could be the result of a number of aspects. They could have been influenced by the fact that that the activity was related to the learning area Afrikaans and that they could possibly struggle with the language, or the production of videos did not actually interest them.

The majority of learners (93%) enjoyed the activity whilst a small number (7%) did not enjoy the activity. It could have been that the activity did not interest them at all, or the fact that they do not enjoy activities where technology is involved.

The majority of learners (97%) feel that the school should introduce more activities that include the use of technology. Although (5%) were of the opinion that this kind of activity could not be regarded as “cool”, only (3%) were of the opinion that they did not support the introduction of computer technology in the language classroom.

#### 4.3.2.1.2 Motivation

Every person has the ability to influence his or her own levels of motivation. Motivation can be explained as a desire to do things. This depends on the attitude that a person might be experiencing towards a specific task and how well he/she is motivated into completing it. It is unfortunate that the attitudes of the learners in the Second Language learning process can have an impact on motivation (Ibid). The desire to learn a Second Language depends on the attitude of the learner and how he or she is motivated into doing so. The following questions as per Table 4-8, were posed to learners to understand their desires that will motivate them to be part of the viral video production process.

**Table 4-8 Motivational aspects**

QUESTION	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
Since I am curious about the viral video project, I would like to be part of a similar activity	62 (39%)	84 (52%)	13 (8%)	2 (1%)
I focused well on the activities	53 (33%)	99 (61%)	8 (5%)	1 (1%)
I feel using a combination of language and computer technology is fun	75 (47%)	78 (48%)	7 (4%)	1 (1%)
I gave my best effort in completing this project	72 (45%)	82 (51%)	6 (4%)	1 (1%)
Average	65.5 (41%)	40 (53%)	8.5 (5.25%)	1.25 (1%)

From Table 4-8 it is clear that the majority of the learners (91%) that took part in this research were motivated by this project and would enjoy being part of a similar activity in

future, whilst (9%) were of the opinion that they would not like to be part of a similar activity.

Based on the responses as per Table 4-8, (5%) of the learners reacted negatively to the question; “I think making my own viral video is cool”, but when the researcher compared that to the averages obtained from Table 4-7, a calculated average of (6.25%) of the learners were of the opinion that they did not think it was fun, did not want to be part of a future activity, and because they did not respond well to the project, they did not give their best efforts. What is important to the researcher is that, on average, (41%) of the learners “strongly agreed” and (53%) of learners “agreed”, which makes up a total of (94%) positive response. These learners enjoyed the project, focused well and gave their best effort in completing the project.

#### 4.3.2.1.3 Anxiety

Anxiety relates to an unpleasant state related to feelings of fear, worry and uneasiness that a person might experience when learning a Second Language. In cases where learners experienced positive attitudes and motivation, very little anxiety was experienced by them (Gardner et al., 1992), but in cases where learners had a negative attitude towards learning, learning tended to be of a slower nature and of higher anxiety levels. Gardner, Day and MacIntyre (1992), argued that less anxious learners show higher levels of vocabulary and language acquisition (Ibid). As per Table 4-9, the following questions were posed to learners to understand their levels of anxiety.

**Table 4-9 Anxiety experienced in a group situation**

QUESTION	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
When working in a group on oral work, I am not worried about my Afrikaans ability	36 (22%)	69 (43%)	50 (31%)	6 (4%)
When working in a group, I am not worried about my computer abilities	48 (30%)	74 (46%)	26 (16%)	13 (8%)
When working in a group, I am not worried about my camera abilities	47 (29%)	71 (44%)	29 (18%)	14 (9%)

In order to determine the anxiety levels of learners using computer technology, together with Afrikaans Second Language, all questions posed started off with the statement; “When

working in a group...” The aim of this set of questions was to understand whether learners are more comfortable in a group than on their own.

Although (76%) of the learners that took part in the research spoke English at home whilst (1%) spoke Afrikaans, (8%) Zulu and (14%) other languages, (65%) of learners were more confident in using the second language when working together as a group.

With regard to questions as to whether learners were worried about their computer abilities, (76%) responded that they are not worried about their computer skills when working in a group. Only (24%) of learners that took part in the research did not agree with the statement. One should not lose sight of the fact that (89%) of learners that took part in the survey had access to computers. I think learners were more comfortable with the use of computers.

Concerning the question whether learners were worried about their camera abilities, (73%) were not worried about their abilities. The reason for this was that (82%) of learners had access to a digital camera and (90%) had access to a cell phone with a built-in camera.



### 4.3.3 Construct 3: Object

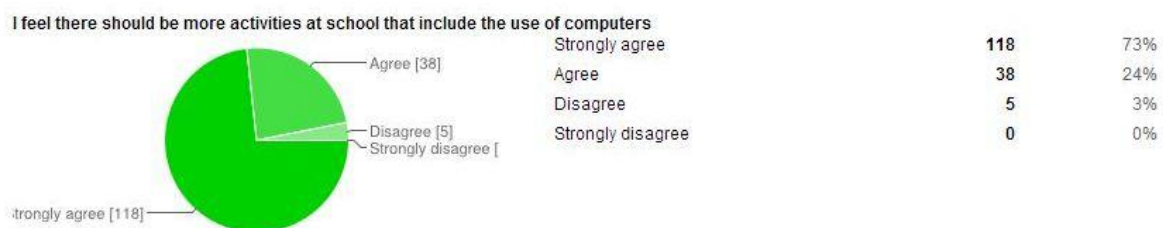
Table 4-10 Exposure to the world

QUESTION	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
I am happy to show our video to other learners at school	58 (36%)	74 (46%)	24 (15%)	5 (3%)
I am happy to let the world see our video on YouTube	59 (37%)	53 (33%)	34 (21%)	15 (9%)
Average	(36.5%)	(39.5%)	(18%)	(6%)

The term “object” as described in the CHAT theory should be seen as the anticipated outcome that the community wanted to achieve. The object in this particular case involves shared goals that had to be achieved by the community, as well as the production of a viral video. Although learners enjoyed the viral video project, an average of (24% - 18% that disagreed and 6% that strongly disagreed) as per Table 4-10 Exposure to the world”, were not happy to show the world their achievement, but in Figure 4-3 Include the use of technology in all lessons” (97%) were of the opinion that there should be more activities that include the use of computers.

I interviewed the learners and asked them why they felt this way. The response I got from the group was that once something was placed on YouTube the world would be able to see their efforts and that could have an effect on their confidence in later life. Learners were of the opinion that once a video was placed on YouTube, it could also not be removed. Learners were very happy with the fact that fellow students had access to the video footage and that it was restricted to the members of the school community only. The mere fact that the video existed in the school was not a problem to the learners, because they were going to leave school at the end of the academic year.

Figure 4-3 Include the use of technology in all lessons



#### 4.3.4 Construct 4: Rules

Rules are very important guidelines that had to be determined before the learners could take part in the research. When completing a project of this nature, where internet research is involved with learners in a primary school, the researcher had to provide a clear set of rules and norms because (20%) of the learners were under the age of 13 years as per (Figure 4-4).

Figure 4-4 Age of learners



Rules and regulations for the production of the viral videos had to be determined in order to provide a clear understanding of what was expected from learners. Learners had to understand the following rules and regulations and had to strictly comply with the following:

- Viral videos should not be longer than 90 seconds
- No person or product or race group should be discriminated against
- Learners should not be humiliated at any time
- No jingle, music, figure or object should be copied from any website without written permission from the owner
- No swearing or inappropriate language usage will be permitted
- This is a collaborative research project which involves all group members and not individual attempts

Learners adhered to the rules and regulations and none of the learners were guilty of breaking the rules as set out by the researcher.

#### 4.3.5 Construct 5: Community

In most second language classrooms at the research site, very little or no emphasis is placed on the production of videos. Professional or ready-made video productions are used in assisting the teacher with the learning process. In this research project the learners had to

produce their own videos by researching healthy eating habits, translate from their First Language into Afrikaans second language and learn how to use new software applications.

ICT and language skills were combined to create an interesting learning environment that would motivate learners to use and enjoy Afrikaans as a second language. The purpose of this construct was to see how learners experienced the tools of mediation and whether they have learnt from their experience.

#### ***4.3.5.1 The issue of trust and ability in forming groups***

Learners were requested to form their own groups based on ability and not friendship. Learners were given the opportunity to choose peers that they think they thought they would have the ability to make a successful viral video. The learners chose their friends and did not concentrate on ability but possibly on trust and friendship. Only (2%) of the learners were of the opinion that they could not be trusted as group members. Although choices of working partners were made based on friendship factors, (27%) of learners reported that they did not get along with certain group members. This could have possibly been caused by bringing friends into the group that did very well as a friend on social level, but did not have the basic skills to make the video production a success.

I am of the opinion that when groups were formed learners based their choices on friendships and not abilities. Approximately 85% learners were happy to report that their skills were taken into consideration during the project, but looking at the statistical data it is hard to believe that the same (85%) of learners had to acquire knowledge from outside the group. The intended purpose of group work activity was to allow learners to form their own collaborations based on ability and work together by forming new partnerships. By forming new partnerships, learners jointly learnt the required tools of the trade. A learner group of (94%) reported that they had learnt how to use new technology, whilst 6% were of the opinion that they did not learn a new skill.

Although (85%) of all learners were of the opinion that their strengths were taken into consideration whilst making the video, (52%) were eager to share knowledge and assist other groups during the production process. Inter-personal relationships and leadership dynamics also played a role in that (37%) preferred to be group leaders, whilst (27%) of the learners could not get along with peers in the groups.

**Table 4-11 Feelings of learners about communal participation**

QUESTION	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
I would have preferred to be the group leader	21 (13%)	39 (24%)	92 (57%)	9 (6%)
I was happy with the tasks assigned to the group	48 (30%)	102 (63%)	8 (5%)	3 (2%)
Every person in the group worked equally hard at completing the task	57 (35%)	71 (44%)	24 (15%)	9 (6%)
I preferred to be working in another group	6 (4%)	12 (7%)	83 (52%)	60 (37%)
I was trusted as a group member	81 (50%)	77 (48%)	3 (2%)	0 (0%)
The group could depend on me to complete assigned tasks	63 (39%)	85 (53%)	10 (6%)	3 (2%)
I could not get along with certain group members	13 (8%)	30 (19%)	59 (37%)	59 (37%)
I have learnt new technology skills in this project	71 (44%)	80 (50%)	9 (6%)	1 (1%)
I have learnt from other groups	35 (22%)	102 (63%)	21 (13%)	3 (2%)
I have used new ideas from other groups in my video	6 (4%)	24 (15%)	78 (48%)	53 (33%)
I was eager to help other groups	12 (7%)	72 (45%)	59 (37%)	18 (11%)
My group members all did their own work	17 (11%)	57 (35%)	64 (40%)	23 (14%)
I made use of people outside the group to help me by using technology	7 (4%)	41 (25%)	79 (49%)	34 (21%)

#### **4.3.5.2 Teacher and peer dependency and how they influence the community**

Although (86%) of learners managed to edit the video without the teacher’s help, (14%) had to rely on the expertise of the teacher. I think that this was only done because they felt more secure with the information obtained from the educator. The teacher managed to help (81%) of the learners whilst (19%) were not attended to. Almost (29.8%) of learners were using people from outside the group to assist with the use of technology, whilst (70.2%) were relying on their own group for assistance. According to figures obtained from the above table, (81%) of all learners were teacher dependant whilst (19%) could manage without the teacher’s help, whilst (64%) of learners prefer to ask their friends for help and (26 %) did not want to ask their friends or peers for assistance.

Trust was regarded as a very important aspect in the sense that (98%) of learners felt that they were trusted by their friends as a group member whilst (2%) reported that they were not trusted.

**Table 4-12 Teacher and peer dependency**



QUESTION	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
We manage to edit our video without the teacher's help	54 (34%)	84 (52%)	21 (13%)	2 (1%)
My teacher was able to help me	40 (25%)	90 (56%)	25 (16%)	6 (3%)
I made use of people outside the group to help me with the use of technology	7 (4.3%)	41 (25.5%)	79 (49.1%)	34 (21.1%)
I prefer to ask my teacher for help	29 (18%)	101 (63%)	28 (17%)	3 (2%)
I prefer to ask my friends for help	23 (14%)	80 (50%)	55 (34%)	3 (2%)
I was trusted as a group member	81 (50%)	77 (48%)	3 (2%)	0 (0%)

#### 4.3.6 Construct 6: Division of labour

Before the viral video project started, learners and teachers involved in the project were briefed on what was expected of them. Learners were requested to form their own groups in which they would be working. One of the most important aspects mentioned to learners is to ensure that they find people with specific strengths or abilities to assist the group in the viral video production process. Learners were happy with the compilation of groups, but it was found that learners based their choices on friendships and popularity.

The main aim of this construct was to see how learners experienced the involvement of themselves in the research, how they felt about the tasks assigned to them and how they and their peers functioned as individuals or as a group in completing the viral video. The information is summarized as follows:

QUESTION	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
I prefer to think seriously about the way I learn	75 (46%)	83 (52%)	2 (1%)	1 (1%)
I prefer that others ask me to explain ideas to them	47 (29%)	91 (57%)	23 (14%)	0 (0%)
I prefer to ask my friends for help	23 (14%)	80 (50%)	55 (34%)	3 (2%)
I prefer to ask my teacher for help	29 (18%)	101 (63%)	28 (17%)	3 (2%)
I prefer working in a group	84 (52%)	64 (40%)	8 (5%)	5 (3%)
I am happy with the distribution of work amongst all members of the group	57 (35%)	89 (55%)	12 (7%)	3 (2%)
Every person in the group had a specific task to complete	48 (30%)	102 (63%)	8 (5%)	3 (2%)
The group worked well together in achieving the goal	77 (48%)	71 (44%)	11 (7%)	2 (1%)

From the above table, it is clear that, although (71%) of the learners that took part in the research were of an average age of 13 years, they still experienced a sense of responsibility in that they thought very seriously about learning. Only (2%) of the learners were not serious about the way they learn. This could be because they were messing around during the project, or it could have been their honest opinion.

Although (86%) of the learners regarded themselves as very knowledgeable and were prepared to explain ideas to their peers, (64%) preferred to ask their peers for help, whilst (81%) preferred to ask the teacher for help if needed. Learners in general preferred that their peers consult them and therefore (92%) of learners regarded group work as very important.

One should not lose sight of the fact that learners had to choose their own group and that the group was responsible for the division of labour within the group. Every group member had a specific task to complete but they jointly worked together in achieving a common goal. Team work was of the utmost importance and (92%) of the learners reported that they were happy with the functionality of the group or team.

#### 4.3.7 Collaborative work



Figure: 4-5 Preference to group work

Preparing for an oral speech in a second language is not a very easy task. Learners found it very hard and had to rely on their parents to assist them with the preparation. Teachers at the research site had to listen to a brilliant oral speech written by a parent. Once learners were requested to present their speeches in class, they battled with the pronunciation of words as some of these concepts were very new to them. It also happened that some learners used direct translations from Google Translate, which made no sense.

What is most encouraging is that learners at the research site were very keen to work in groups, (92%) agreed that they prefer working in groups whilst (8%) disagreed with the statement.

**Figure: 4-6 Concerned about language abilities**



When looking at caption Figure: 4-6 Concerned about language abilities” it was found that although (92%) of learners agreed that they prefer working in a group, (35%) of the learners at the research site still worry about their Afrikaans second language ability. Although group work is preferred, ability is of utmost importance to most of the learners.

#### 4.4 Informal discussions

All the groups from different Grade 7 classes had a positive attitude towards the production of the viral video project. Learners reported that they have enjoyed the project and that they are better motivated and would love to do a similar project. They requested that all future oral speeches be done in the same way because they could rely on technology and the support of the group to produce a viral video project. They felt more motivated and self-determined to do second language oral work. Their positive attitude also influenced their behaviour in the sense that they experienced a harmonic connection with the production of viral videos and were able to take part without the fear of not being able to succeed.

Learners found the correct use of Afrikaans as a language very challenging in the sense that they found vocabulary, sentence structures and memorising the language difficult. Although they enjoyed the group work and collaborations, they were of the opinion that not enough time was given for the project.

When answering the question on the benefits of the viral video project, students confirmed that they had benefitted largely and that they gained knowledge and understanding from being involved in this project. They were of the opinion that they had had the opportunity to

improve their language skills with the support of the group. Learners appeared to be more confident to act and speak during using second language lessons.

With regard to technical aspects, learners were of the opinion that their computer skills and knowledge of video-making programs such as Windows Moviemaker were enhanced. They felt empowered in the use of editing software and very confident about editing their own videos. Some learners felt that working together in a group helped them by gaining knowledge of the language as well as technical confidence. I think that the social skills and the ability to work together as a group was one of the greatest benefits to them. Some answers included the following: “I got to understand how the minds of others work”, “I learnt a lot from....”, “and I did not know that I could trust....”, “I learnt about team work”, “I did not think that we would cope with.... As he/she tends to misbehave”, “I have made new friends”, “Working in a group where nobody could speak Afrikaans helped me a lot, because I thought I was the only person in my class that did not understand the language”.

Learners were generally happy with the project and, based on their experiences, I asked the learners whether they think I should do a similar project with next year’s Grade 7 group in 2013. I was overwhelmed by their positive response. Answers such as: “Yes, we enjoyed it, we are sure they will enjoy it”, “and we wish more teachers would include the use of computers and cameras in the classroom”. One of the learners even responded by saying: “I want to become a filmmaker”. Although they were not finding oral work in the second language easy, they were happy about the project.

#### **4.5 Negative responses**

One of the 5 classes used in this study, in particular, stood out. This specific class had two learners that criticised the project severely in its beginning stages. Their main argument for behaving in this manner was due to the fact that they did not like Afrikaans as a Second Language. Both these learners were known as being negative in all aspects of teaching and learning, as they tend to become disruptive during lessons. Neither responds easily to teacher’s requests in general. Although they did take part in the production of a viral video, they reported that they enjoyed the “collaboration” because it was done in a group. They were of the opinion that they have learnt from the group and that they would not have been able to cope without the support of the group.

## **4.6 Conclusion**

Although the level of difficulty in this project was extremely challenging, learners did very well in bringing it all together in the end. They initially struggled with the acquisition of new vocabulary as well as sentence construction. They have acquired new language- and technological skills. By using dictionaries to expand their vocabulary and drawing on their peers' technological abilities helped with the completion of the project. Technological skills included the use of the camera, the computer and Microsoft Moviemaker software. Students appeared to be more interested, more motivated and prepared to take part in all viral video lesson activities.

The aim of this quantitative study was to evaluate the learners' interest, enjoyment and motivation towards the production of viral videos. They were prompted with a questionnaire to give feedback on their feelings and attitudes towards the use of technology and collaborative oral activities as opposed to the preparation of traditional oral speeches.

## **4.7 Findings**

The information as per Annexure 2; "Summary of responses", summarised the learner's comments. All learners were exposed to the same teachers, the same learning materials and same activities. All learners, with the exception of those that were absent or sick, attended classes. It is important to note that none of learners could have made more than one remark or comment per question, as these were carefully controlled by the Google form application. The Google form was set up in such a way that only one response per learner could be entered.

## **4.8 Remarks / comments as per summary**

A detailed set of questions and results is attached hereto as Annexure 2: Questions posed to learners together with responses". These questions and responses were summarised across the research.

## **4.9 Discussion**

The integration of computer and video technology in the second language classroom assisted with the development of the learners' "knowledge building capabilities" and the promotion of

a collaborative environment whereby all learners were working together in achieving a common goal (Roth & Lee, 2007). This common goal was achieved by means of the use of language. Language is seen as a vital substance that is used to communicate and work together in achieving the common goal. Learners were active participants that were not only talking to one-another but by using language as a tool for communication as they became part of a learner-centred way of learning (Roth & Lee, 2007). Although they found it difficult to communicate in Afrikaans, they could still rely on their ability to speak the Home Language. Through the use of language, relationships were built and learners jointly worked together in the making of the viral videos.

By taking part in the viral video project, learners became “actors” who were able to combine drama, language and technology in creating an own production that increased their vocabulary and enhanced their language skills. Many learners mentioned that by working together as a group, they were feeling comfortable and could rely on the support of their friends if they did not understand any language aspect.

This study concentrated on learner enjoyment and motivation to take part in Afrikaans second language with tools of mediation such as the digital camera, computer and video editing software such as Windows Moviemaker. Learners prefer using these tools to their advantage in the second language classroom as opposed to traditional oral work in the “traditional” second language classroom.

Learners enjoyed themselves more in the second language classroom with the production of viral video activities and intrinsic motivational factors came more into play. They were hoping that future speeches be done in the same way, because by relying on technology and the support of the group helped them to become confident in speech preparation. They were more motivated prepare second language oral work. Their positive attitude also influenced their behaviour in the sense that they experienced a harmonic connection with the production of viral videos and were able to take part without the fear of not being able to succeed.

Not only did learners get pleasure from the viral video project, but they learned from the experience. They gained feelings of competence, which on its own cannot enhance intrinsic motivation. In cases where feelings of competence are accompanied by self-determination and harmonic connections, as experienced in this research, it will give true meaning to the concept “intrinsic motivation” (Ryan & Deci, 2000). Learners managed to excel above fear

and learnt to re-direct their thoughts to optimal experience and emotional well-being. They were enjoying the Afrikaans second language project.

Although this was run as a pilot project and learners experienced joy in the execution of the project, a number of technical problems were also experienced on the side of the video making process. Learners complained that their biggest challenge was to edit the videos. Although some learners did extremely well with the implementation of “voice over” inserts others did very well with the addition of “credits”.

Because this was done as a pilot project, a number of modifications and improvements to a future project have to be implemented. It is recommended that learners should be exposed to Microsoft Moviemaker in their Grade 6 year, and that the project only be executed in their Grade 7 year.



## **CHAPTER 5. Summary, Findings and recommendations for further study**

### **5.1 INTRODUCTION**

The aim of this study was to investigate how primary school learners experience the innovative use of technology in the second language classroom. In this chapter a summary and findings of the previous chapters, recommendations for further research, limitations of the study, and a final remark emerging from the study will be provided.

### **5.2 SUMMARY**

#### **5.2.1 Revisiting the problem**

This study investigated how primary school learners experience the innovative use of technology in the second language classroom, as well as learner's own experiences and pleasures derived from working with computers, digital cameras and software. It was common practice, in the past, at the research site, that learners were expected to prepare speeches at home. This preparation involved the help of mom or dad and learners arrived the next day at the site with a brilliant speech that was either too difficult to recite or was filled with words they could hardly pronounce.

Allowing learners to do preparation at home, created a situation whereby most of the work was done by parents and therefore learners received marks for parental efforts. In cases where learners presented oral work prepared at home, it was found that some learners presented speeches of high quality without understanding what they were talking about. This research focused on changing the way in which these oral preparations were done. The ultimate goal was to ensure learner enjoyment and creative use of language together with the innovative use of technology in preparation of an oral speech.

In order to prevent learners from taking oral work home for preparation, learners had to make up groups and do research on healthy eating habits, then use Google Translate to translate the



words from English to Afrikaans and write a short play. After they had completed the script, they then had to create a storyboard that had to be used to prepare a 90 second viral video on healthy eating habits. It was expected of learners to act out and video record their story. The video had to be edited by using Windows Movie Maker.

From this study it is evident that learners preferred working in groups as it was much easier to complete the oral work. Collaborative work and in particular the learners' preference of working in groups was discussed in paragraph 4.3.7. In the past, by presenting oral work on their own, learners experienced negative feelings towards Afrikaans as a second language, as they found the oral work demanding and almost unachievable, but after working collaboratively as a group they did not experience any negative feelings towards oral work. The creativity of language teachers, through the innovative use of technology, played a very important role in the positive way in which this research was completed.

## **5.2.2 Planning of the research**

This study utilised a Likert-type questionnaire designed in Google forms. The questionnaire was compiled by the researcher concentrating on 6 constructs obtained from Vygotsky's Activity triangle seen in Figure 2-1 Activity Theory Triangle: Viral Video (adapted from Engeström, 1999). The results are attached hereto as (Annexure 2: Questions posed to learners together with responses) was completed by 161, Grade 7 learners at the research site, as a means to obtain a database of how these learners experienced the research project. The information used in this investigation was obtained from the questionnaire and the use of reflective diaries kept by the teachers that were involved in this project. What was of particular interest was the fact that learners were so excited to get involved in the project that they did not mind the amount of research and translation work.

## **5.3 FINDINGS**

### **5.3.1 Findings from the literature study**

From the literature study, it was found that education in South Africa and the rest of the world has changed drastically with the introduction of new technology on a daily basis. Traditional teaching methods had to make way for a technological explosion leading to the birth of the 21<sup>st</sup> century classroom. Teachers had to change from being "traditional lecturers"

to innovative facilitators of learning as educational technology has changed drastically over the last decade. Schools are equipped with state of the art computer centres and interactive whiteboards. These whiteboards, computers and projectors in classrooms assist teachers to bring the world digital media and video to the classroom.

Although most language teachers rely on the use of professionally manufactured video material for oral lessons, very few have been involved in the production of their own video material. With the on-going development of the World Wide Web and associated social media applications, the technology has become more accessible to both teachers and learners and that has led to a constantly changing market. Traditional classrooms have become 21<sup>st</sup> production centres of excellence where learners are collaboratively given the opportunity to use ICT tools of mediation in language development. By using these technologies learners and teachers are exposed to visuals, graphics and sounds that did not previously exist in classrooms in general. By using educational technology innovatively in the Second Language classroom learners and teachers are exposed to the following:

- Both learners and teachers can use technology to their advantage in the Second Language classroom.
- Instead of concentration on the traditional oral speech assessment, learners can, with the help of educational technology, produce their own video material.
- The collaborative language research and production of video material not only assists learners in an environment whereby they can share the workload, but they are also exposed to new learning styles whereby they are able to scaffold on the knowledge of teachers and peers.
- Through collaborative learning all learners can either support one, another or receive support from one-another and the teacher.
- Working collaboratively on the preparation of oral work or videos exposes the learners to a community where they will be sharing certain social responsibilities and certain rules.
- Producing oral tasks or videos in the classroom environment, and not at home, led to more creative pieces of work from the learner and not the parent.
- Learner and teacher development in the educational media will not be possible if schools do not have a plan of action in place to ensure that both parties are exposed to the latest ICT.

- There is a definite shift towards collaborative learning at the research site as it leads to the creation of suitable conditions for learners to succeed and develop in a positive direction.

The acquisition of a Second Language (paragraph 2.2) is not an easy task and can take place over a very long period of time, but by exposing learners to an array of learning styles information now enters the learner's brain in three ways by touching, hearing and visually experiencing the learning process. By using educational media in the classroom to produce videos, instead of watching professional productions, helps the building of learner confidence especially when it comes to error correction. Learners are able to see and hear what mistakes were made and the teacher can give guidance on how these could be rectified. This not only helps learner to gain an understanding of what is right and wrong but assists them in becoming more tolerant towards one another in the learning process.

One cannot progress in a social environment without being tolerant and not understanding the basic concepts and terminology used in a Second Language. As explained (paragraph 2.3) oral work in the traditional language classroom relies solely on the performance of the individual, but in the 21<sup>st</sup> century classroom, by means of social interaction and scaffolding as created in this research study, it becomes as communal responsibility. What better environment could one ask for, as language development is regarded as a social process. Classrooms have to change to provide for the needs of learners and assist them in exploring new horizons by making educational multimedia more accessible to both teachers and learners.

Multimedia and digital video used in the Second Language classroom promotes good practices of teaching and learning and exposes learners to a whole new world whereby they can see body language and hear the correct use of the language.

### **5.3.2 Findings from the empirical study**

The empirical research shows that by integrating technologies such as the computer, digital camera and video production software, not only assisted the teacher in ensuring that oral assessments were done according to departmental requirements, but by gauging from learner responses, it was found that they enjoyed the project and would love to do a similar activity.

The empirical study shows that there are a number of factors which influenced learner's perceptions towards the preparation of oral speeches in the second language classroom;

- Feelings of inadequacy when requested to prepare oral work at home
- Feelings of adequacy when working collaboratively at school with the assistance of teachers concentrating intensely on the production and delivery of oral work by means of a viral video.

The empirical study revealed that second language teachers at the research site are faced with changing needs of learners and that creativity is needed from the teacher through the innovative use of technologies not only to ensure learner enjoyment, but also effective delivery of oral work prepared by the learners and not parents. Learners are battling with the second language and they feel that assessments are sometimes harsh and unachievable. They feel that by working collaboratively in class in a fun, innovative way, that they have achieved more, than by preparing an oral speech with the help of parents at home.

The findings below can all be distilled into design principles for future implementations of similar interventions.

#### ***5.3.2.1 Biographical data***

- Learners (33%) Black, (9%) Coloured, (17%) Indian, (41%) White that took part in the viral video project is true reflection of the current school demographics.
- Learners (45%) Male learners, (55%) Female learners formed part of the community and comprised of the following age groups; (21%) 12 year olds, (71%) 13 year olds and (8%) 14 year olds.

#### ***5.3.2.2 Enjoyment and eagerness to be part of a similar project***

- Learners (56%) strongly agreed, (39%) agreed that the making of viral videos is considered to be a very “cool” or pleasant activity.
- Learners (49%) strongly agreed, (45%) agreed that they enjoyed the viral video production session and (73%) strongly agreed, (24%) agreed that there should be more activities at school that include the use of computers.
- Learners (36%) strongly agreed, (56%) agreed that they would like to be part of a similar viral video project as they focused well on the activities

- Based on the responses an average of (94%) of the learners contributed positively to the project and supported future viral video projects.

### **5.3.2.3 Motivation**

- Learners (91%) agreed that they were motivated by this project and would enjoy being part of a similar activity in future, whilst (9%) of the learners were of the opinion that they would not like to be part of a similar activity.
- Learners (5%) as per Table 4-8, reacted negatively to the question; “I think making my own viral video is cool”, compared that to the averages obtained from Table 4-7, an average of (6.25%) of the learners were of the opinion that they did not think it was fun and would not like to be included in a future activity. What is important to the researcher is that on average (41%) of the learners “strongly agreed” and (53%) of learners “agreed”, which makes up a total of (94%) that positively responded to the project and therefore these learners focused well and gave their best effort in completing the project.

### **5.3.2.4 Anxiety**



- By employing a statement such as: “working in a group” can create a feeling of security which will build learner confidence.
- Although (76%) of the learners that took part in the research spoke English at home whilst (1%) spoke Afrikaans, (8%) Zulu and (14%) other languages, on average (65%) of learners did not worry about their Afrikaans ability when operating as a group.
- The researcher is of the opinion that learners must have experienced some form of anxiety, but due to the way in which sentences were constructed, (76%) responded that they are not worried about their computer skills when working in a group. Only (24%) of learners that took part in the research did not agree with the statement. One should not lose sight of the fact that 89% of learners that took part in the survey had access to computers. I think learners were more comfortable with the use of computers.
- The researcher is also of the opinion that due to the fact that learners were exposed to different forms of technology, this helped overcome discomfort and worries that learners might have experienced. On the question whether learners were worried about their

camera abilities, (73%) were not worried about their abilities. The reason for this was that (82%) of learners had access to a digital camera and (90%) had access to a cell phone with a built-in camera.

### **5.3.2.5 Enjoyment**

- Working together as a group not only motivated learners to overcome emotions of fear but to complete oral preparation in a positive way.
- By empowering learners through the process of scaffolding, learners became more comfortable with the use of the Second Language. They were not only able to successfully manage the oral speech process, but enjoyed the company of peers.

### **5.3.2.6 Skills and abilities of learners**

- Learners were very fortunate when it came to the use and exposure to ICT in the school as this contributed to their ability to use computer hardware and software without fear.
- With regard to the learner's second language abilities, they found traditional oral speech preparation very difficult. During the collaborative speech preparation, the same learners were happy to report that they did not find oral speech preparation difficult, because they were able to consult with their peers if they did not understand a concept.

## **5.4 Limitations of the study**

The investigation was constrained by a number of factors that may have influenced the reliability and validity of the questionnaire:

- No focus groups were used during the research, but 161 learners from the entire population of 179 learners. Only 161 learners received permission from their parents to take part in the research. The alternative was to include all 180 learners but this may have resulted in unethical research conduct.
- Although learners remained anonymous throughout the research, learners might not have been open and honest in their responses.

The age of the learners also created problems for the researcher as a large group of learners were under-aged and could not gain access to social media sites.

The main aim of this study was to understand how primary school learners experience the innovative use of technology in the second language classroom. The reason why my research was done using the quantitative method was due to the availability of numerical data. When working with numerical data one can analyse and present it in columns and graphs.

This research is investigating a vast array of skills used by Grade 7 learners in a primary school second language class. One should not lose sight of the fact that this study called for independent second language research, collaborative acting, as well as production and editing of videos.

The learners displayed very little anxiety when it came to the use of technology, but they battled with the Afrikaans language component. The use of computers, cameras and Moviemaker software, as this almost happened instinctively, but the use of the Second Language was way harder than anticipated.

Time constraints hampered the research and learners struggle to understand basic language concepts and vocabulary in Afrikaans second language. The project was planned for a period of 4 weeks and took almost 9 weeks to complete. A lot of time was spent on translations and language structures. The video recordings could not start due to the fact that learners were not comfortable with the language usage and battled to put a 90 second presentation together. One should keep in mind that this was an integrated project. Teachers from 3 Learning Areas; Life Orientation, Second Language and Technology assisted learners with the use of computer technology, as well as language structures and vocabulary from a second language that they struggled to understand.

Although learners experienced problems with language usage, they experienced the project as most enjoyable and have indicated that they would love to get involved in a similar project.

As indicated before, a lot of time went into the execution of the project, but the curriculum did not allow for an extensive research project. Learners were expected to complete a specified curriculum during the academic year, and by putting more emphasis on the production of videos would not have been beneficial to learners.

One of the biggest drawbacks experienced during the project was the fact that the learners were too young for research of such magnitude. The learners had to learn to act in Afrikaans, use a video camera, video editing software and do translations from the Language of

Teaching and Learning (LOLT) into the Second Language of the school. The translations were extremely difficult to complete as certain learners experienced the school's LOLT and Second Language as a Third- or Fourth language.

One should never lose sight of the fact, that although Grade 7 learners were used in the project, 21% were under the age of 13, years which prohibited learners, in terms of the Children's Online Privacy Protection Act of 1998 from accessing social media sites such as YouTube.

Taking the above into consideration, one should keep in mind that the project was most enjoyable and very innovative. Based on this, it is recommended that a follow-up study be done in a different way, in whereby the researcher concentrates on drawing up a more sophisticated plan of action over a longer period of time. This plan of action should concentrate on skilling learners in the technical aspects of video making and then, the preparation and execution of oral work in the second language.

Criticisms that emanate from this study include the following:

- Although the project was executed with great success, it was very taxing on the educators in the sense that the learners were slightly immature and also not entirely prepared for an assignment of such magnitude.
- The researcher is of the opinion that a research project of this nature would have been more successful in a secondary school where learners are more mature, have better knowledge of the second language and ICT tools and software applications.
- Although the learners enjoyed the integrated learning activities they found it difficult to find people within the group that would contribute a specific skill. Most groups were chosen based on friendships and not specific skills and therefore not all videos were executed successfully.
- Using a second language such as Afrikaans also made the execution of the project very difficult in the sense that although Afrikaans was offered as a Second Language, this language was a third or a fourth language to some of the learners in the group.
- Learners were required to do extensive research in Afrikaans second language before the actual video productions could have been started.
- When attempting a viral project of this nature with Grade 7 learners, one should keep age-appropriateness in mind. Learners under the age of 13 years are limited in the use of



certain online applications or to open their own e-mail accounts. A 13 year old learner has the freedom of choice when it comes to online application access. The problem that was experienced with this research project is that (21%) of the learners could not be exposed to e-mail accounts or certain online applications and therefore the Institution had to provide internal application servers to expose all learners to the research project.

- The anticipated timeframe available for the preparation and planning of an oral speech in a Grade 7 class would run over one week. The viral video research project took more than 3 months to complete. This could be due to the fact that learners were immature or that they battled with the basic language concepts. Submission dates for the actual viral video project had to be re-negotiated with the learners and teachers from the different learning areas.
- Although the learners enjoyed the project, the teachers became frustrated as they had to concentrate on the completion of a set syllabus. Learners were running behind schedule and catch-up plans had to be put into place to ensure that the syllabus for the year was covered.
- The challenge that the researcher is faced with is that the research could not be accurately determined by a questionnaire alone. Reflective diaries and informal interviews as an extra source of information may have proven to be more helpful.

The researcher will, in future, place more emphasis on what, exactly, teachers have to record in reflective diaries as these have could have been more helpful if kept properly.

## **5.5 Value of the study**

Teachers find it very difficult in the research school to assess Afrikaans second language orals because learners do not have the ability to prepare speeches on their own, and therefore parents are getting involved with the preparation and planning of these speeches. It sometimes happens that learners recite speeches without having the faintest idea of what they are talking about. This also has an effect on the learners in the sense that they find the speech preparation in the second language very difficult and boring. By using tools of mediation this process can become more acceptable to learners and they can actually enjoy what they are doing without experiencing fear and incompetence. The basic principles as set out in the CHAT-theory could help enhance this study and could assist teachers in second language classrooms to change the way in which learners acquire knowledge. Learner collaboration

and the process of scaffolding (Roth & Lee, 2007), could change the way in which vocabulary and language structures are used in oral speeches.

The current study will also point out a new direction in the way in which oral speeches will be prepared and assessed in future. By employing collaborative strategies in the second language classroom, learners can now learn through the process of scaffolding to complete their own oral speeches at school. By using technology such as computers, cameras and the Google Translate learners can become more confident in the use of Afrikaans as a language. This will help to close the gaps that exist in the preparation of the oral speeches.

Furthermore the study will not only have impact on the research school, as this will also help teachers in South Africa to understand their learners' needs by equipping them with innovative tools that will excite learners in language classrooms.

## **5.6 Recommendations**

### **5.6.1 Improvement of the viral video concept for future use**

Based on the literature study, the scientific data and the results obtained in chapter 4 of this study, the researcher has reason to motivate the production of viral videos in the second language classroom. Much progress has been made at the research site with regard to the preparation and presentation of speeches. I feel that it is very important that further research be done in the production of viral videos as learners find the collaborative work much easier than preparing speeches on their own. The following aspects need to be addressed in future research:

- Research should be conducted on a regular basis with oral work preparation in second language the second language classroom;
- Multimedia software provides with a large number of skills to be practised and learners should be trained in the use thereof;
- Instructional video material and production should be encouraged by all teachers as it helps with the building of needed language skills.
- The Mixed-method research method should be used in future in order to record both the qualitative and quantitative aspects involved in second language oral speech preparation;

- The focus of the research should be directed far beyond language attainment, feelings and apprehension.

## **5.7 Conclusion**

The production of viral videos in the second language classroom can be an exceptionally valuable intrinsic motivator and can enhance feelings of enjoyment. The result of this research study has shown that the production of viral videos in the second language classroom, together with tools of mediation, had a significant and positive impact on the learner motivation and interest.

I trust that this study will be of value to all second language teachers in South Africa and that the recommendations from this study will be implemented in language classrooms to contribute to the effective management of oral work through the innovative use of technology.

William Glasser once said that we learn 10% of what we read, 20% of what we hear, 30% of what we see, 50% of what we see and hear, 70% of what we discuss, 80% of what we experience and 95% of what we teach others (Whitaker & Lumpa, 2005). Taking all aspects as quoted by William Glasser into account, learners were exposed to visuals, discussions, group work, and sound and I think that the research was a huge success.

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## Annexure 1: Assignment handed to learners on the making of the viral video

### Afrikaans First Additional Language (AFAL)

#### Grade 7

#### Assignment: Making viral videos promoting healthy eating.

A viral video is a product of an amateur that contains some humour or message that users want to share with friends or family. In most of the produced viral videos, it was never the producer's intention for the video to go viral. "A video becoming viral is often unexpected, and an accident, and therefore a video cannot be called viral purely in the creator's intention at the time of recording" (Wikipedia Internet source).

In your case the making of a viral video will be different. You are going to create a video on healthy or unhealthy eating with the intention to go viral. You want as many possible people to enjoy your work. The aim of this assignment is to promote the use of Afrikaans as a First Additional Language (AFAL) and will give you and your friends the opportunity to work together as a group and learn from one another. This video will purely be for educational purposes. Your video is not an advertisement or a promotion; it is about the healthy and unhealthy choices, or what children of your generation would like to eat and consider healthy or unhealthy. You have to stick to the underlying theme of whether your food choice is healthy or not.

#### **Very important:**

All communication in this video must be done in Afrikaans, and the group will receive an oral mark for their production.

No swearing, political views or "belittling" of any person may be recorded in this video.

Keep your video clean and funny and make sure that there is a message for the viewer.

All recorded videos are the property of the school, and may not be placed on any web or social media site, or on YouTube without the permission of the School Principal and parents of learners that are acting in the video. There are a number of legalities involved in the placing of videos on the internet. Cyber-bullying is also a very serious matter and has to be prevented at all costs.

You are not permitted to use any images, videos, songs or music taken from the Internet or any other digital source. You do not want to get in trouble with lawyers, record companies and television companies by using licensed music, videos or images. You have to be creative and produce your own images, songs and music.

Although topics are given for the video, you are most welcome to come up with your own topic, as long as your message is about healthy or unhealthy eating. Topics for the videos are:

Gemorskos is koningskos!

Gemorskos is 'n mors van kos!

Gemorskos is nie goed vir jou nie!

Gemorskos is gesond en goed vir jou!

Gemorskos generasie!

Gemorskos is gemaklik, goedkoop en gesond!

Die ideale dieet: burgers, koeldrank en slap tjips!

Die ideale dieet: brood, melk en konfyt

Gee my springbokbiltong, gee my boerbeskuit, gee my lekker koffie en smyt die ander uit!

Pizza, pasta en spaghetti – die gesonde keuse

Pizza, pasta en spaghetti – die ongesonde keuse

Kerrie en samoosas – dis nou koningskos!

Braaivleis is die beste!

Braaivleis – gesond en eg Suid-Afrikaans!

Braaivleis, eg Suid-Afrikaans en ongesond!

Pap en wors – dit is mos kos!

Sjokolade smeer is manjifiek!

Grondboontjebotter en stroop op brood is die beste!

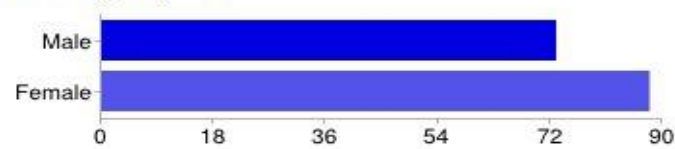
Warmbrakke, burgers en slap tjips is kos vir die nuwe generasie!

Lekker eet is: pampoen, boontjies, wortels en beet!

Tjokkies, Tjippies, Swieties en Koeldrank is koning!

## Annexure 2: Questions posed to learners together with responses

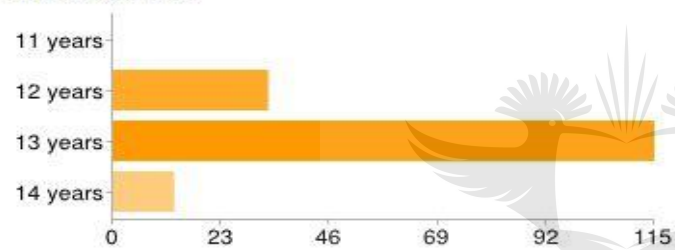
### Indicate your gender



Male	73	45%
Female	88	55%

People may select more than one checkbox, so percentages may add up to more than 100%.

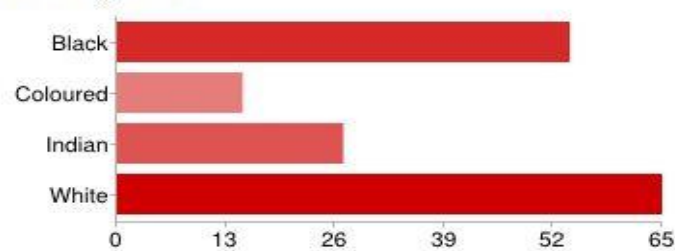
### Indicate your age



11 years	0	0%
12 years	33	20%
13 years	115	71%
14 years	13	8%

People may select more than one checkbox, so percentages may add up to more than 100%.

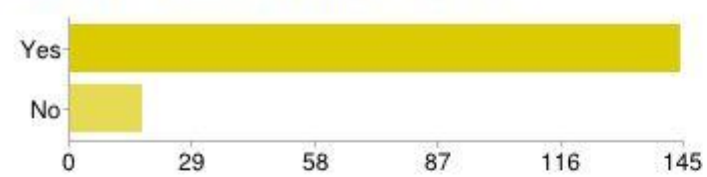
### Indicate your race



Black	54	34%
Coloured	15	9%
Indian	27	17%
White	65	40%

People may select more than one checkbox, so percentages may add up to more than 100%.

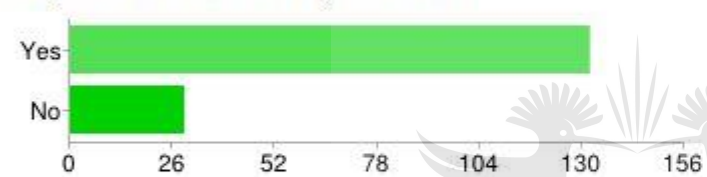
**Do you have access to a computer at home?**



Response	Count	Percentage
Yes	144	89%
No	17	11%

People may select more than one checkbox, so percentages may add up to more than 100%.

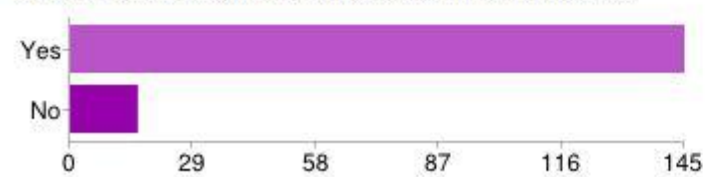
**Do you have access to a digital camera?**



Response	Count	Percentage
Yes	132	82%
No	29	18%

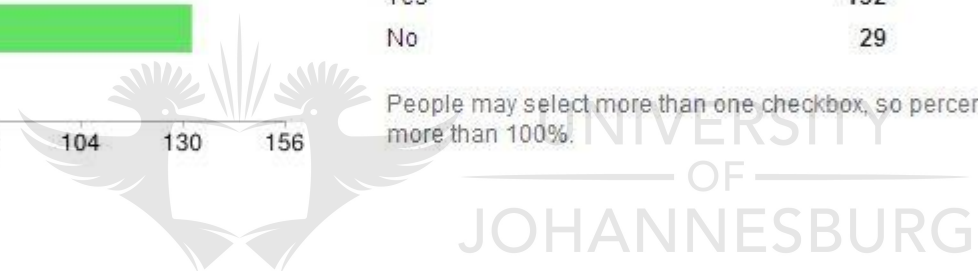
People may select more than one checkbox, so percentages may add up to more than 100%.

**Do you have a cell phone with a built-in digital camera?**

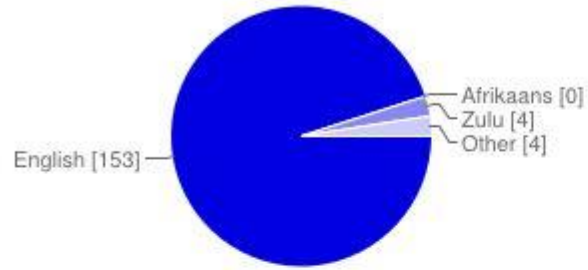


Response	Count	Percentage
Yes	145	90%
No	16	10%

People may select more than one checkbox, so percentages may add up to more than 100%.

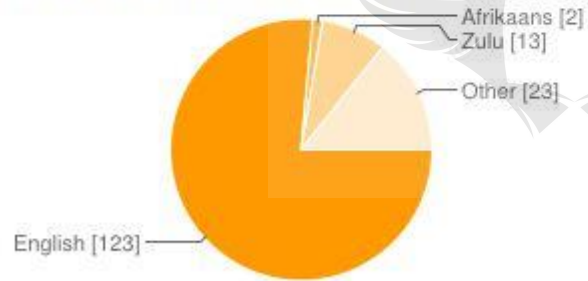


**What language do you use to speak to your friends?**



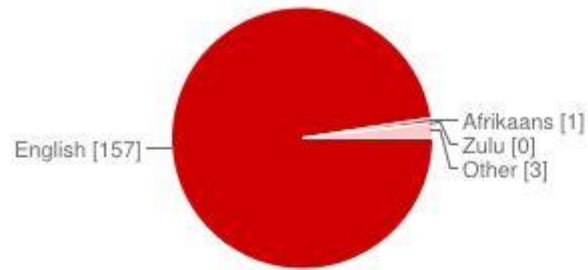
English	153	95%
Afrikaans	0	0%
Zulu	4	2%
Other	4	2%

**What language do you speak at home?**



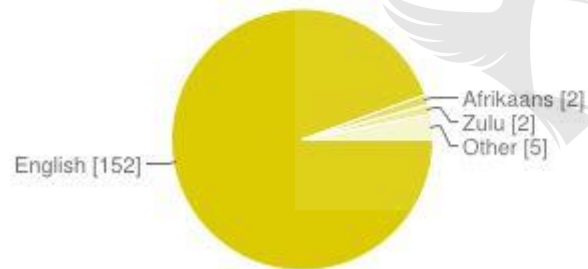
English	123	76%
Afrikaans	2	1%
Zulu	13	8%
Other	23	14%

**In what language are the television programmes you normally watch?**



English	157	98%
Afrikaans	1	1%
Zulu	0	0%
Other	3	2%

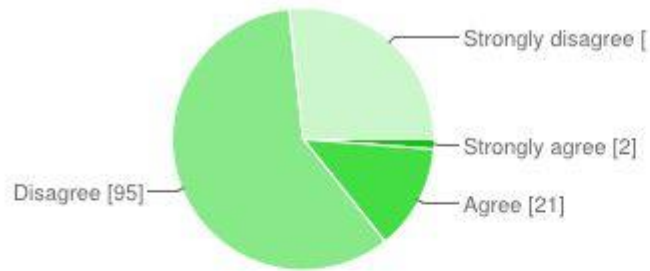
**In what language are the radio programmes you listen to?**



English	152	94%
Afrikaans	2	1%
Zulu	2	1%
Other	5	3%

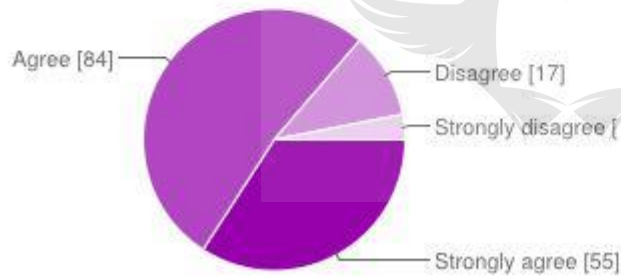


**I often speak Afrikaans to my friends**



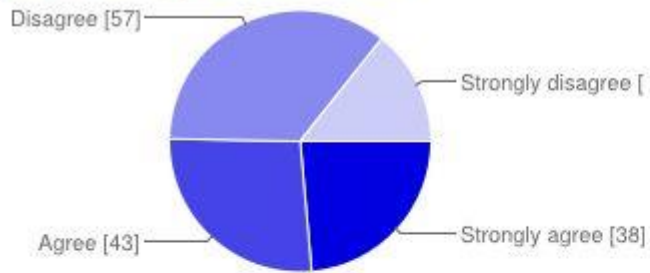
Strongly agree	2	1%
Agree	21	13%
Disagree	95	59%
Strongly disagree	43	27%

**I believe that learning Afrikaans is very important for my future success in life**



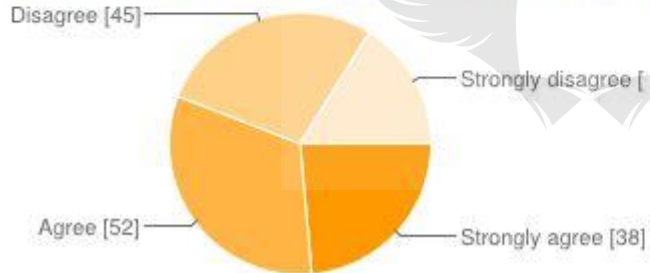
Strongly agree	55	34%
Agree	84	52%
Disagree	17	11%
Strongly disagree	5	3%

**My parents never speak Afrikaans to me**



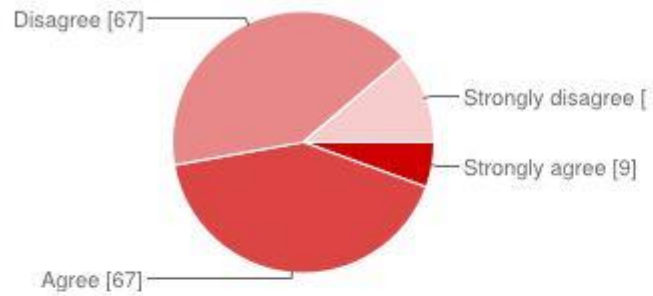
Strongly agree	38	24%
Agree	43	27%
Disagree	57	35%
Strongly disagree	23	14%

**I have at least one family member that speaks Afrikaans to me**



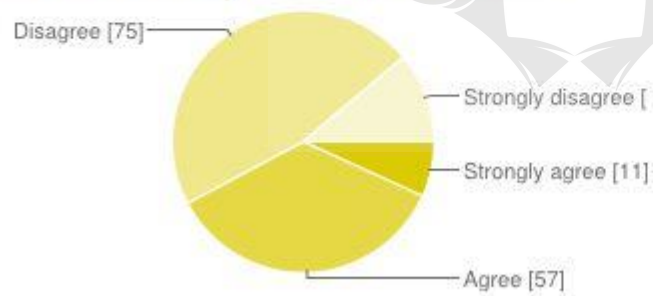
Strongly agree	38	24%
Agree	52	32%
Disagree	45	28%
Strongly disagree	26	16%

**I find writing a speech in Afrikaans difficult**



Strongly agree	9	6%
Agree	67	42%
Disagree	67	42%
Strongly disagree	18	11%

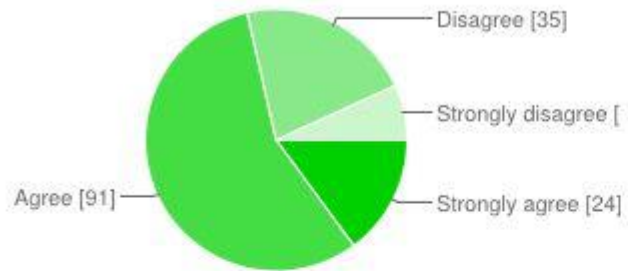
**I feel comfortable having a conversation in Afrikaans**



Strongly agree	11	7%
Agree	57	35%
Disagree	75	47%
Strongly disagree	18	11%

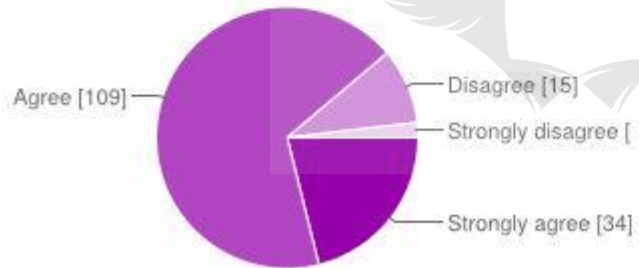


**My parents help me prepare Afrikaans oral work or speeches**

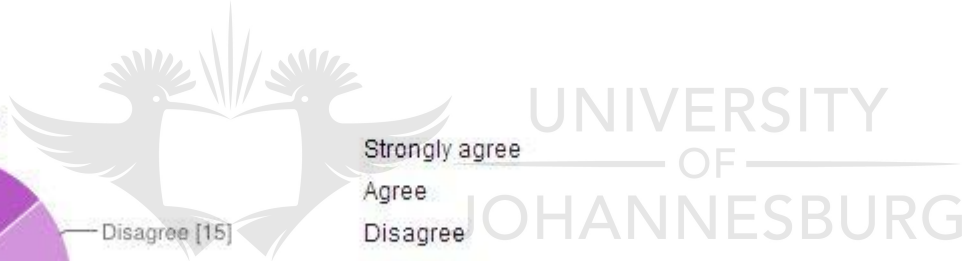


Strongly agree	24	15%
Agree	91	57%
Disagree	35	22%
Strongly disagree	11	7%

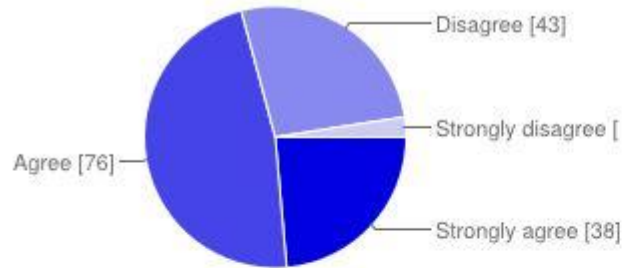
**I can pronounce words in Afrikaans**



Strongly agree	34	21%
Agree	109	68%
Disagree	15	9%
Strongly disagree	3	2%

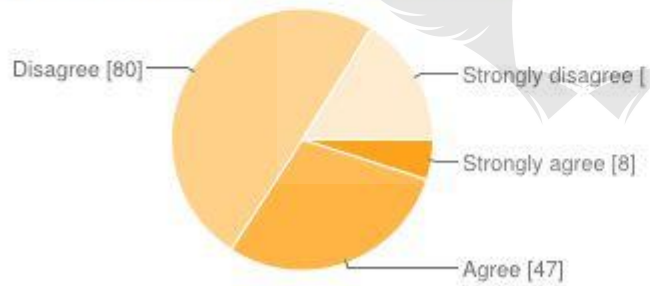


**I love singing and acting in Afrikaans**



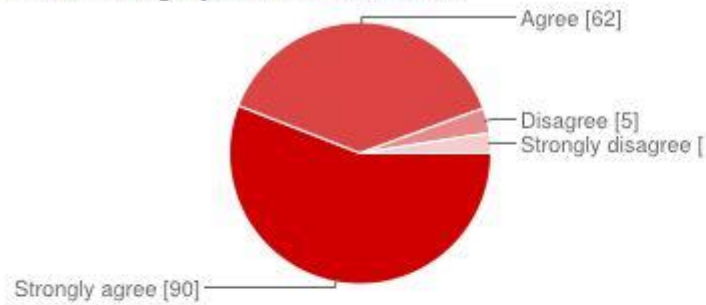
Strongly agree	38	24%
Agree	76	47%
Disagree	43	27%
Strongly disagree	4	2%

**I use words in Afrikaans that I do not understand**



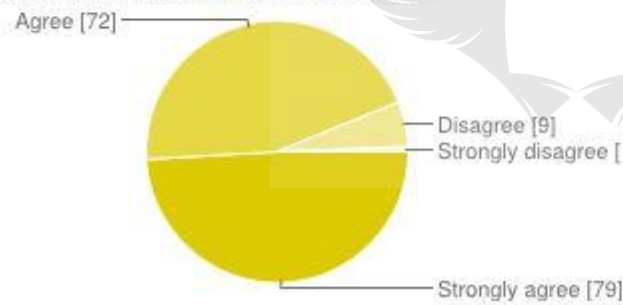
Strongly agree	8	5%
Agree	47	29%
Disagree	80	50%
Strongly disagree	26	16%

**I think making my own viral video is cool**

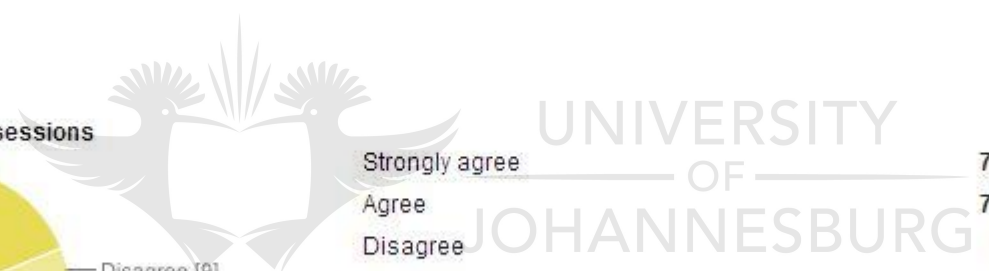


Strongly agree	90	56%
Agree	62	39%
Disagree	5	3%
Strongly disagree	4	2%

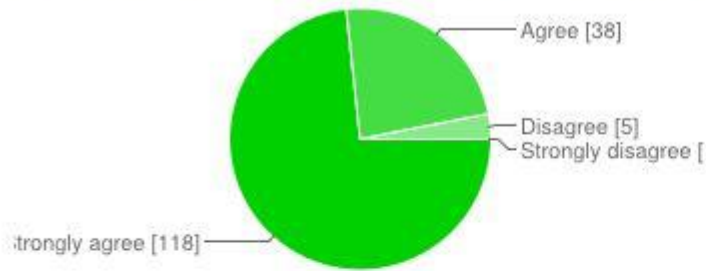
**I enjoyed the viral video production sessions**



Strongly agree	79	49%
Agree	72	45%
Disagree	9	6%
Strongly disagree	1	1%

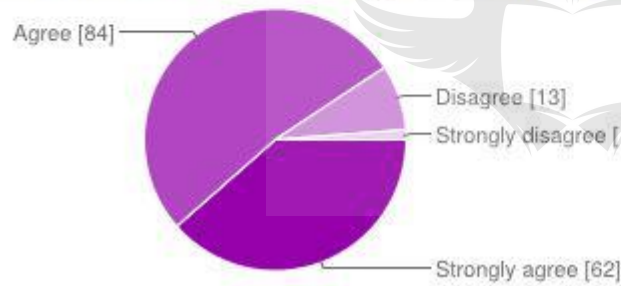


**I feel there should be more activities at school that include the use of computers**



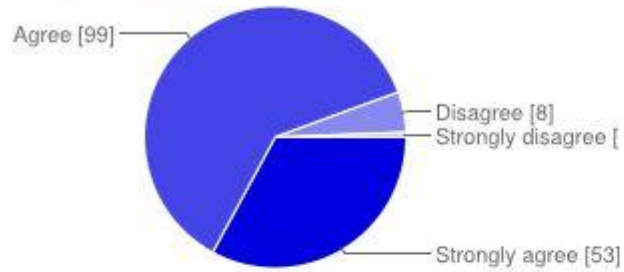
Strongly agree	<b>118</b>	73%
Agree	<b>38</b>	24%
Disagree	<b>5</b>	3%
Strongly disagree	<b>0</b>	0%

**Since I am curious about the viral video project, I would like to be part of a similar activity**



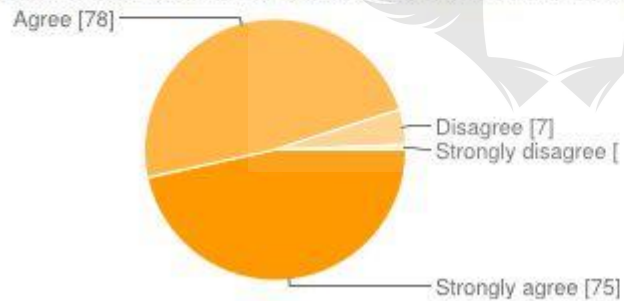
Strongly agree	<b>62</b>	39%
Agree	<b>84</b>	52%
Disagree	<b>13</b>	8%
Strongly disagree	<b>2</b>	1%

**I focused well on the activities**



Strongly agree	<b>53</b>	33%
Agree	<b>99</b>	61%
Disagree	<b>8</b>	5%
Strongly disagree	<b>1</b>	1%

**I feel using a combination of language and computer technology is fun**

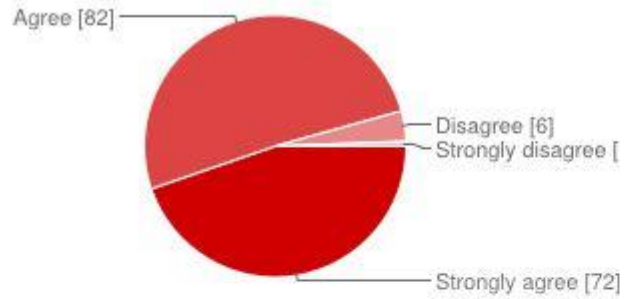


Strongly agree	<b>75</b>	47%
Agree	<b>78</b>	48%
Disagree	<b>7</b>	4%
Strongly disagree	<b>1</b>	1%



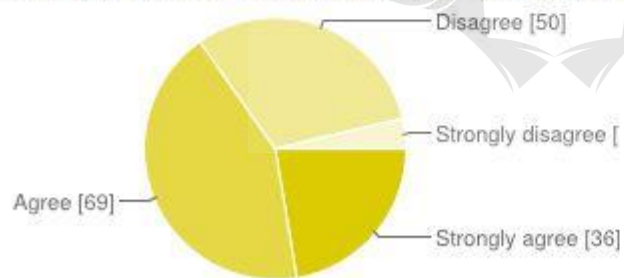


**I gave my best effort in completing this project**



Strongly agree	72	45%
Agree	82	51%
Disagree	6	4%
Strongly disagree	1	1%

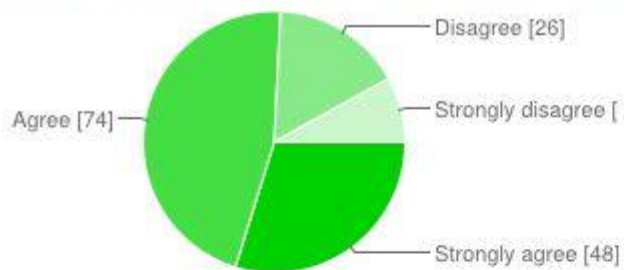
**When working in a group on oral work, I am not worried about my Afrikaans ability**



Strongly agree	36	22%
Agree	69	43%
Disagree	50	31%
Strongly disagree	6	4%

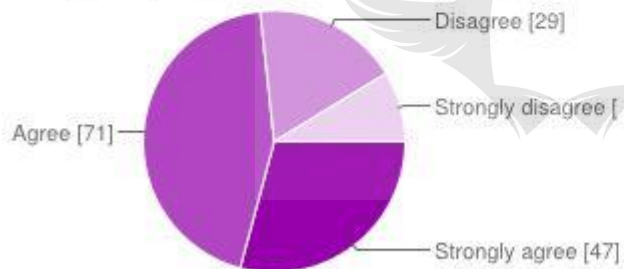


**When working in a group, I am not worried about my computer abilities**



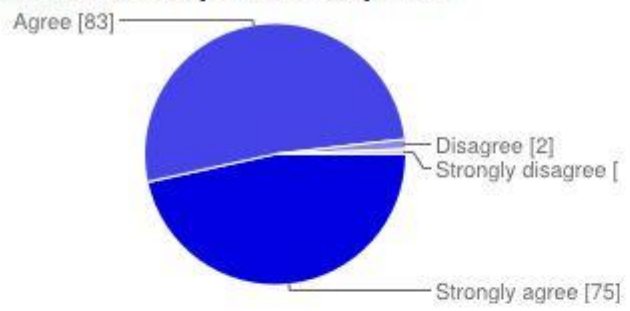
Strongly agree	<b>48</b>	30%
Agree	<b>74</b>	46%
Disagree	<b>26</b>	16%
Strongly disagree	<b>13</b>	8%

**When working in a group, I am not worried about my camera abilities**



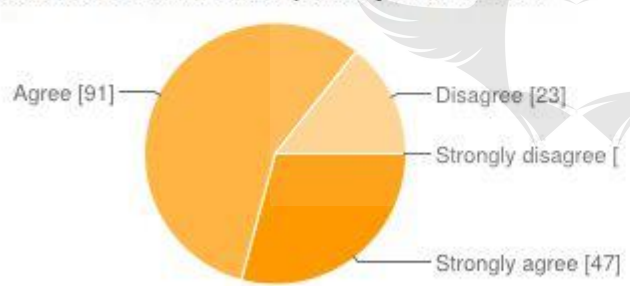
Strongly agree	<b>47</b>	29%
Agree	<b>71</b>	44%
Disagree	<b>29</b>	18%
Strongly disagree	<b>14</b>	9%

**I prefer to think seriously about the way I learn**



Strongly agree	75	47%
Agree	83	52%
Disagree	2	1%
Strongly disagree	1	1%

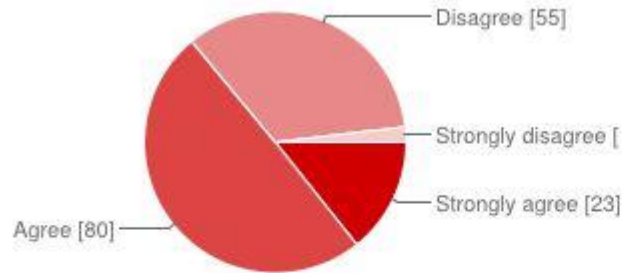
**I prefer that others ask me to explain my ideas to them**



Strongly agree	47	29%
Agree	91	57%
Disagree	23	14%
Strongly disagree	0	0%

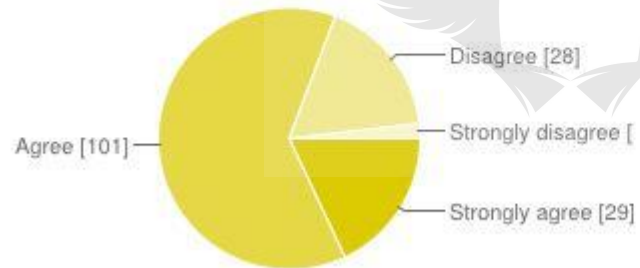


**I prefer to ask my friends for help**



Strongly agree	23	14%
Agree	80	50%
Disagree	55	34%
Strongly disagree	3	2%

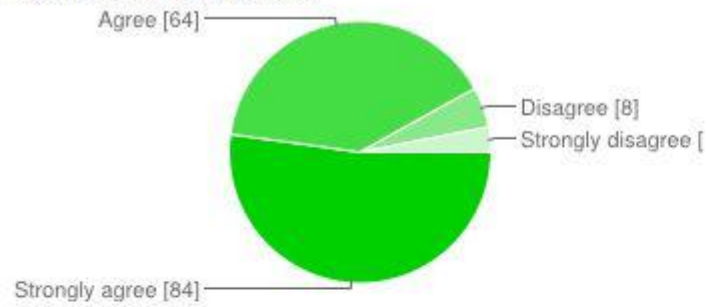
**I prefer to ask my teacher for help**



Strongly agree	29	18%
Agree	101	63%
Disagree	28	17%
Strongly disagree	3	2%

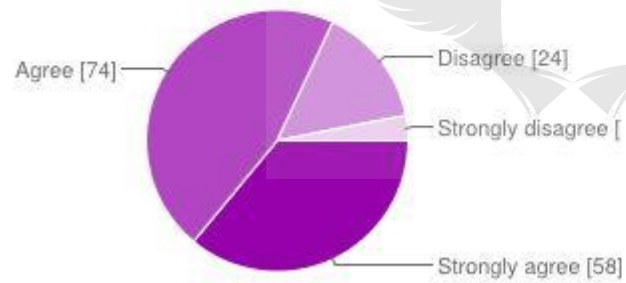


**I prefer working in a group**



Strongly agree	84	52%
Agree	64	40%
Disagree	8	5%
Strongly disagree	5	3%

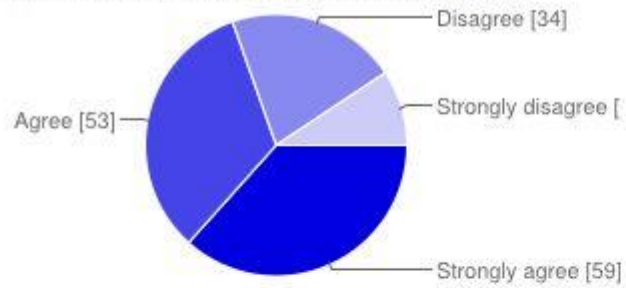
**I am happy to show our video to other learners at school**



Strongly agree	58	36%
Agree	74	46%
Disagree	24	15%
Strongly disagree	5	3%

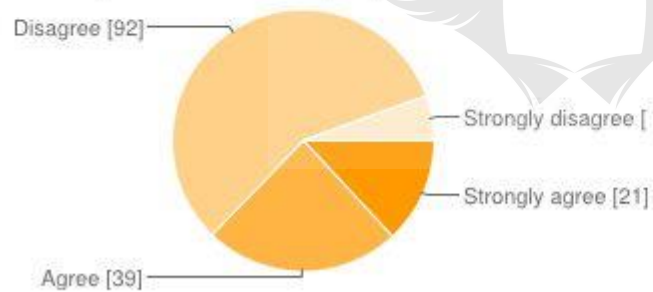


**I am happy to let the world see our video on YouTube**

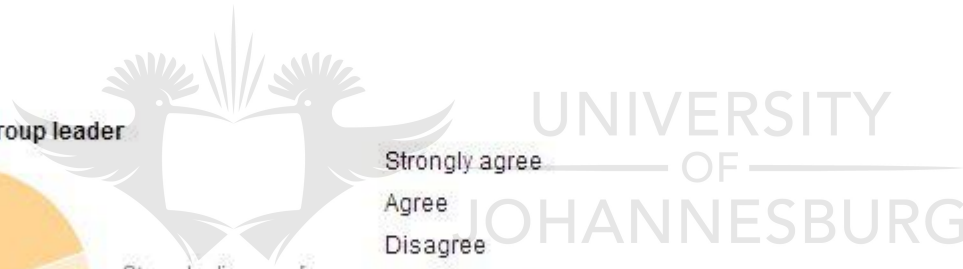


Strongly agree	59	37%
Agree	53	33%
Disagree	34	21%
Strongly disagree	15	9%

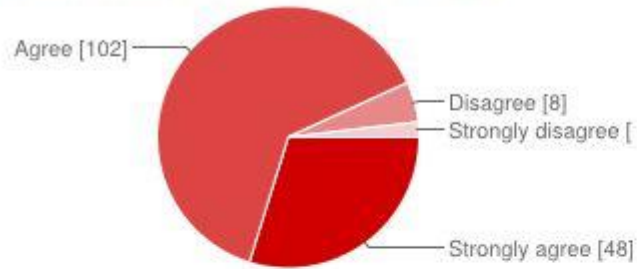
**I would have preferred to be the group leader**



Strongly agree	21	13%
Agree	39	24%
Disagree	92	57%
Strongly disagree	9	6%

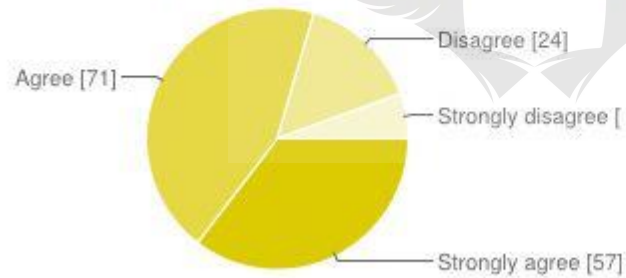


**I was happy with the tasks assigned in the group**



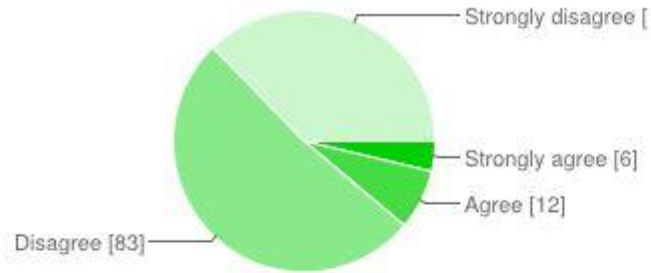
Strongly agree	<b>48</b>	30%
Agree	<b>102</b>	63%
Disagree	<b>8</b>	5%
Strongly disagree	<b>3</b>	2%

**Every person in the group worked equally hard at completing the task**



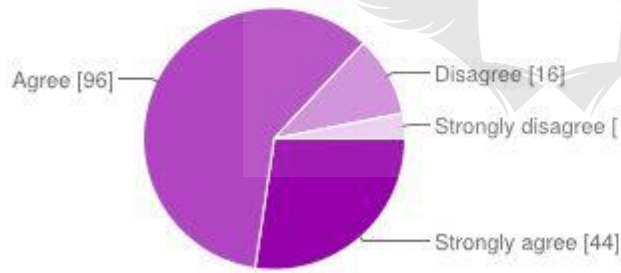
Strongly agree	<b>57</b>	35%
Agree	<b>71</b>	44%
Disagree	<b>24</b>	15%
Strongly disagree	<b>9</b>	6%

**I preferred to be working in another group**

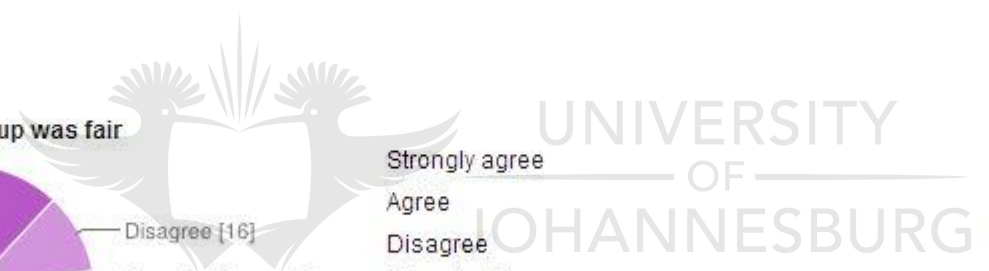


Strongly agree	6	4%
Agree	12	7%
Disagree	83	52%
Strongly disagree	60	37%

**The distribution of work in my group was fair**

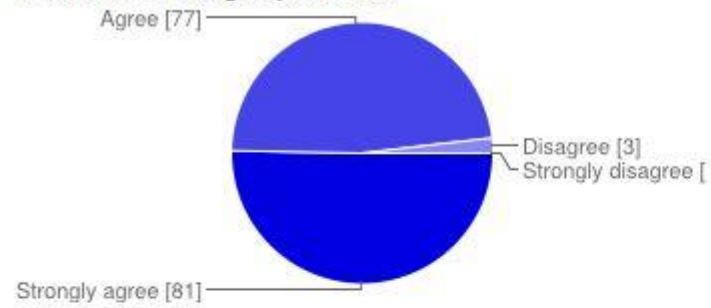


Strongly agree	44	27%
Agree	96	60%
Disagree	16	10%
Strongly disagree	5	3%



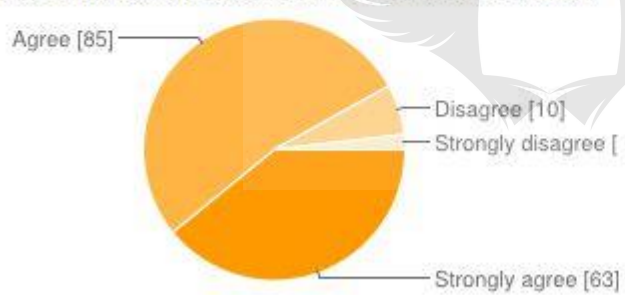


**I was trusted as a group member**



Strongly agree	<b>81</b>	50%
Agree	<b>77</b>	48%
Disagree	<b>3</b>	2%
Strongly disagree	<b>0</b>	0%

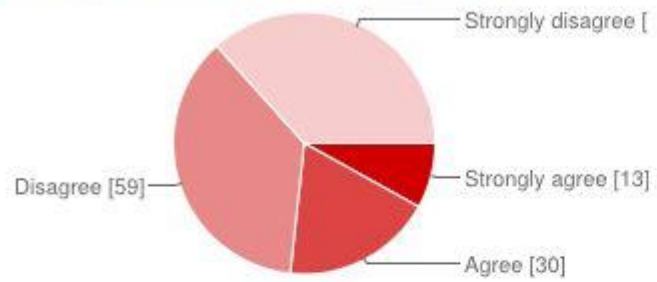
**The group could depend on me to complete assigned tasks**



Strongly agree	<b>63</b>	39%
Agree	<b>85</b>	53%
Disagree	<b>10</b>	6%
Strongly disagree	<b>3</b>	2%

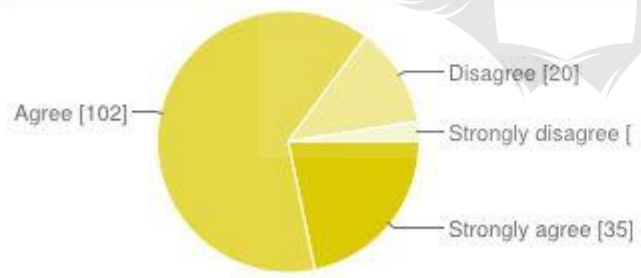


**I could not get along with certain group members**



Strongly agree	13	8%
Agree	30	19%
Disagree	59	37%
Strongly disagree	59	37%

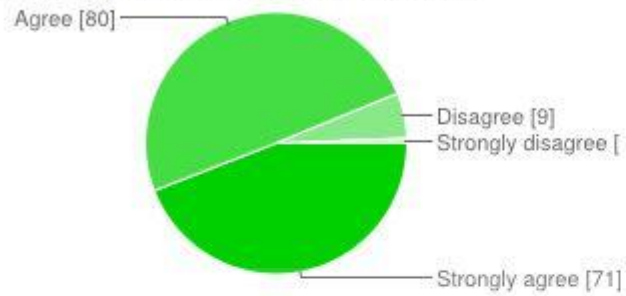
**My strengths were taken into account when the tasks were assigned to the group**



Strongly agree	35	22%
Agree	102	63%
Disagree	20	12%
Strongly disagree	4	2%

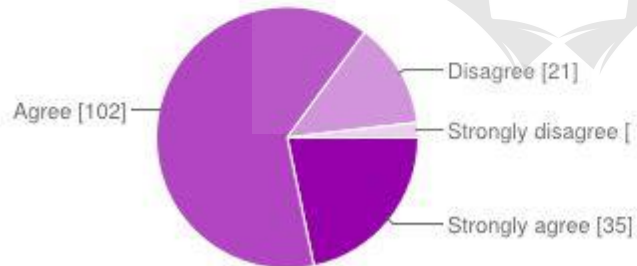


**I have learnt new technology skills in this project**



Strongly agree	<b>71</b>	44%
Agree	<b>80</b>	50%
Disagree	<b>9</b>	6%
Strongly disagree	<b>1</b>	1%

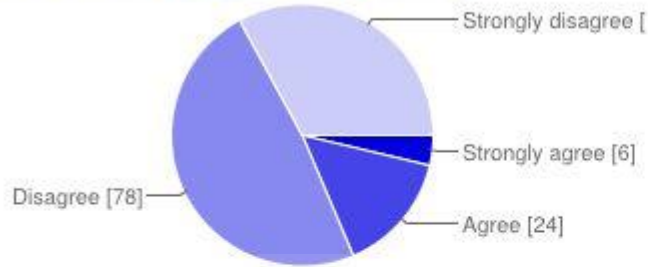
**I have learnt from other groups**



Strongly agree	<b>35</b>	22%
Agree	<b>102</b>	63%
Disagree	<b>21</b>	13%
Strongly disagree	<b>3</b>	2%

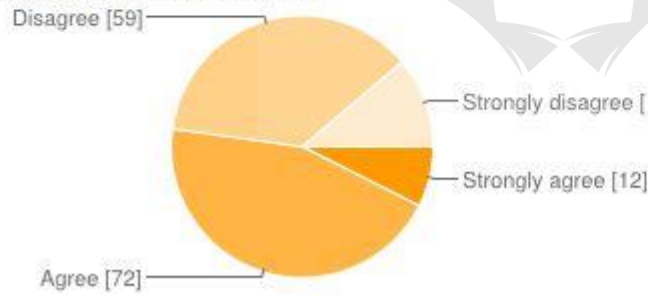


**I have used ideas from other groups in my video**



Strongly agree	<b>6</b>	4%
Agree	<b>24</b>	15%
Disagree	<b>78</b>	48%
Strongly disagree	<b>53</b>	33%

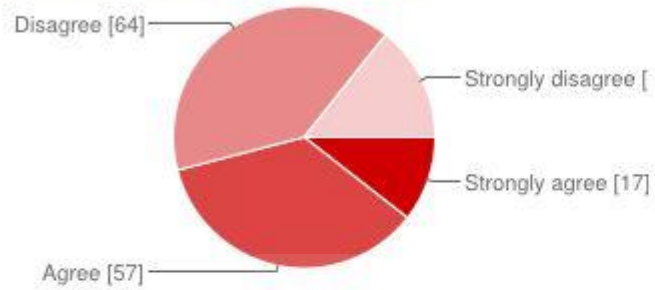
**I was eager to help other groups**



Strongly agree	<b>12</b>	7%
Agree	<b>72</b>	45%
Disagree	<b>59</b>	37%
Strongly disagree	<b>18</b>	11%

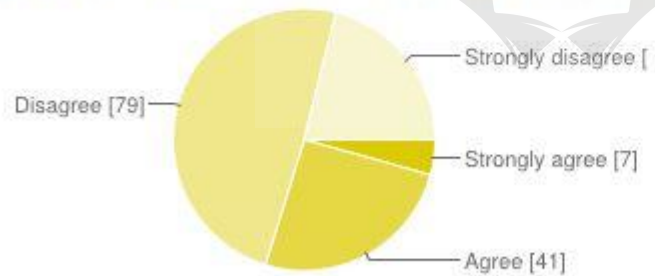


**My group members all did their own work**



Strongly agree	17	11%
Agree	57	35%
Disagree	64	40%
Strongly disagree	23	14%

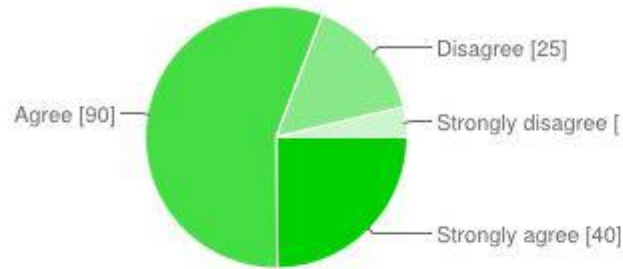
**I made use of people outside the group to help me with using technology**



Strongly agree	7	4%
Agree	41	25%
Disagree	79	49%
Strongly disagree	34	21%

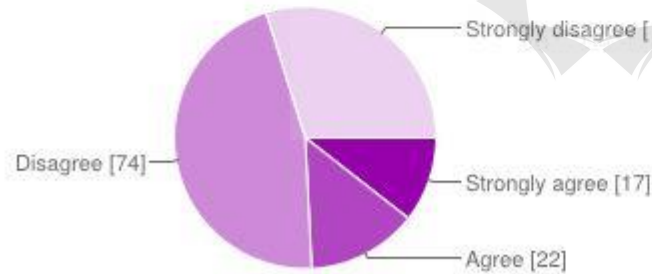


**My teacher was able to help me**



Strongly agree	40	25%
Agree	90	56%
Disagree	25	16%
Strongly disagree	6	4%

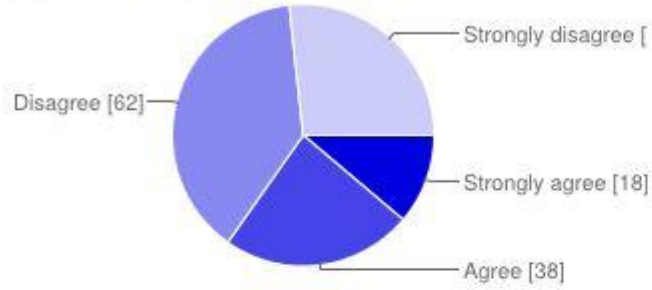
**Girls are better at using cameras than boys**



Strongly agree	17	11%
Agree	22	14%
Disagree	74	46%
Strongly disagree	48	30%

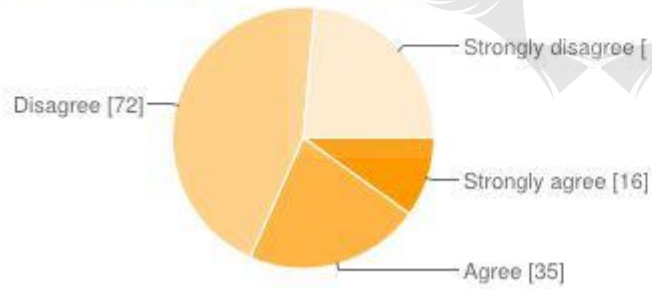


**Boys are better at using computers**



Strongly agree	<b>18</b>	11%
Agree	<b>38</b>	24%
Disagree	<b>62</b>	39%
Strongly disagree	<b>43</b>	27%

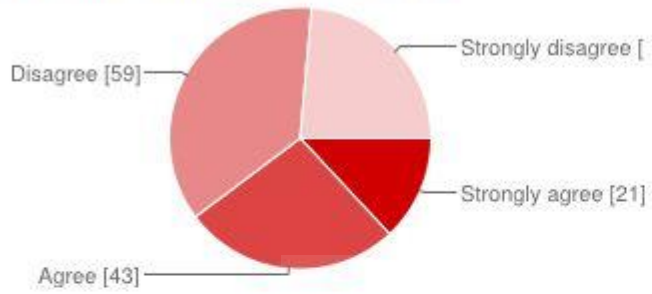
**Girls are better using video editing software**



Strongly agree	<b>16</b>	10%
Agree	<b>35</b>	22%
Disagree	<b>72</b>	45%
Strongly disagree	<b>38</b>	24%

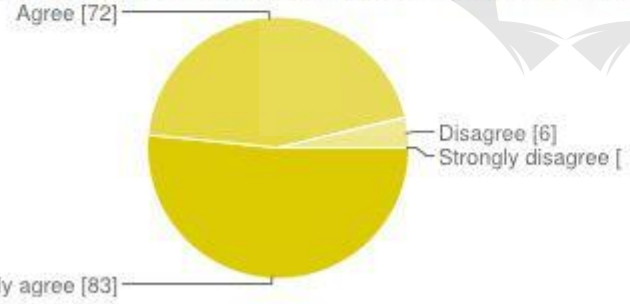


**Boys are better at understanding technology**



Strongly agree	21	13%
Agree	43	27%
Disagree	59	37%
Strongly disagree	38	24%

**I prefer to work in a mix gender group ( a group with boys and girls)**

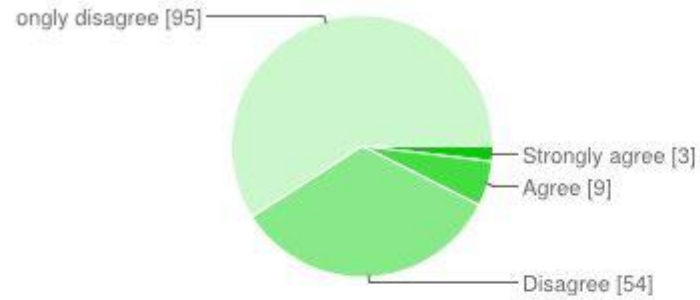


Strongly agree	83	52%
Agree	72	45%
Disagree	6	4%
Strongly disagree	0	0%



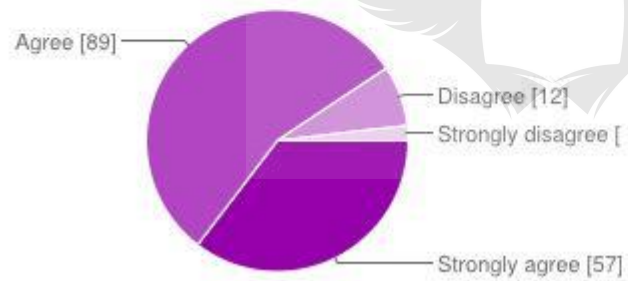


**I was excluded from some activities because of my gender**



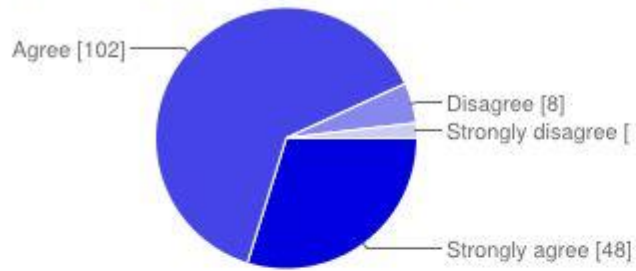
Strongly agree	3	2%
Agree	9	6%
Disagree	54	34%
Strongly disagree	95	59%

**I am happy with the distribution of work among all members of the group**



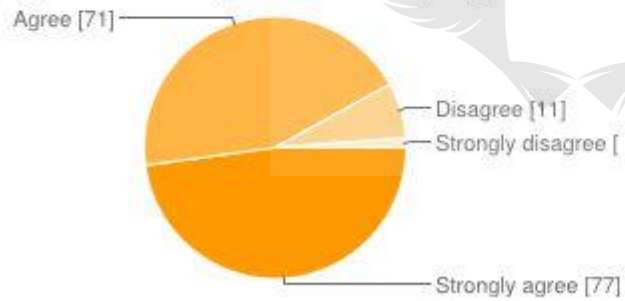
Strongly agree	57	35%
Agree	89	55%
Disagree	12	7%
Strongly disagree	3	2%

**Every person in the group had a specific task to complete**

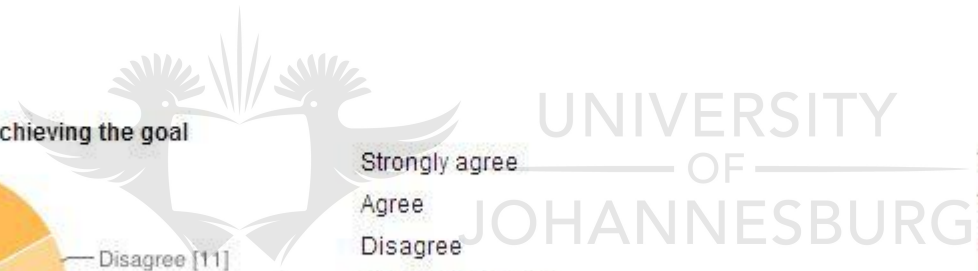


Strongly agree	48	30%
Agree	102	63%
Disagree	8	5%
Strongly disagree	3	2%

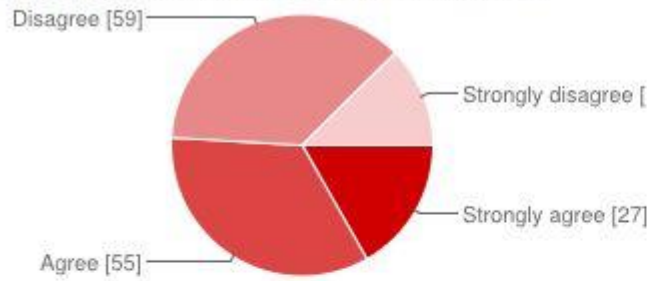
**The group worked well together in achieving the goal**



Strongly agree	77	48%
Agree	71	44%
Disagree	11	7%
Strongly disagree	2	1%

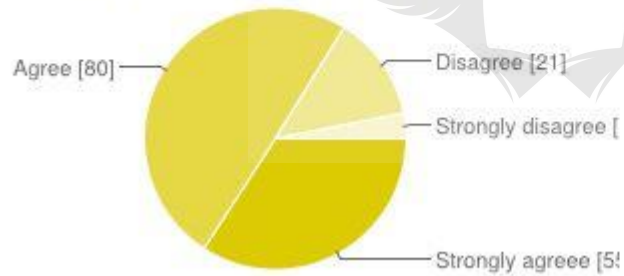


**I can follow a conversation in Afrikaans on television**

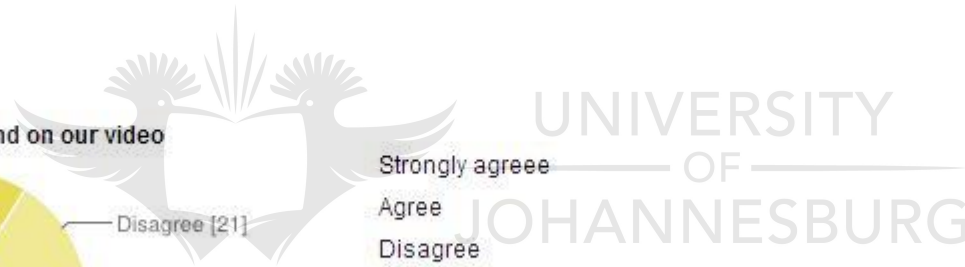


Strongly agree	27	17%
Agree	55	34%
Disagree	59	37%
Strongly disagree	20	12%

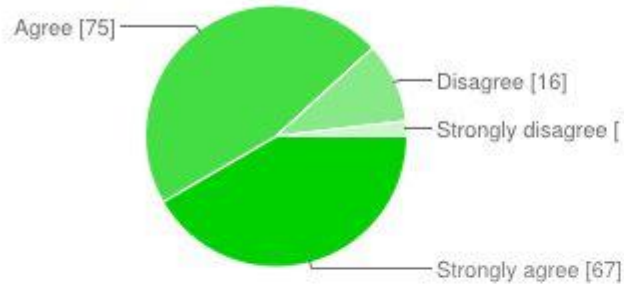
**My group managed to edit the sound on our video**



Strongly agree	5	3%
Agree	80	50%
Disagree	21	13%
Strongly disagree	5	3%

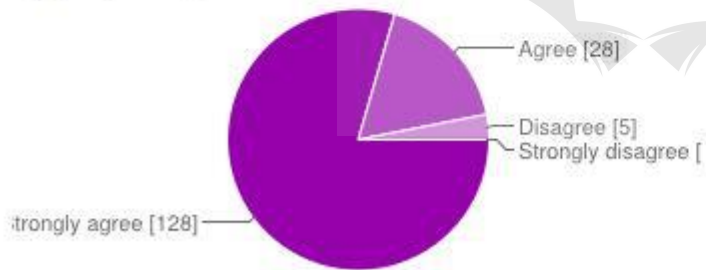


**My group managed to add animations to our video**



Strongly agree	67	42%
Agree	75	47%
Disagree	16	10%
Strongly disagree	3	2%

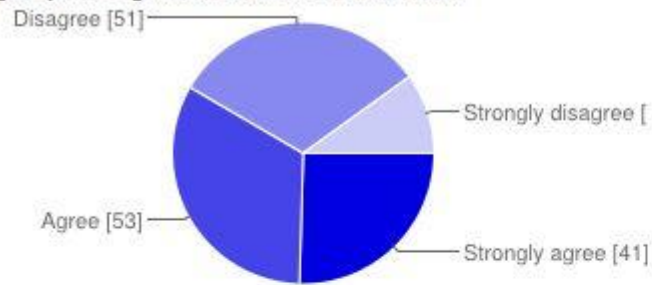
**My group managed to add credits to our video**



Strongly agree	128	80%
Agree	28	17%
Disagree	5	3%
Strongly disagree	0	0%

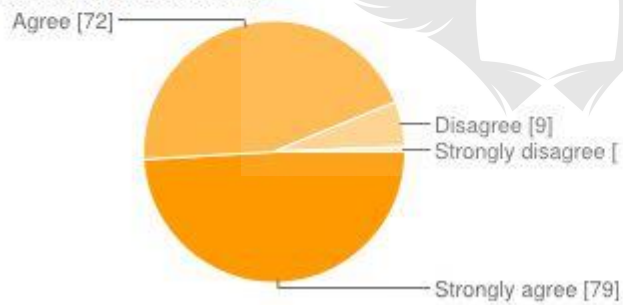


**My group managed to add music to our video**



Strongly agree	<b>41</b>	25%
Agree	<b>53</b>	33%
Disagree	<b>51</b>	32%
Strongly disagree	<b>16</b>	10%

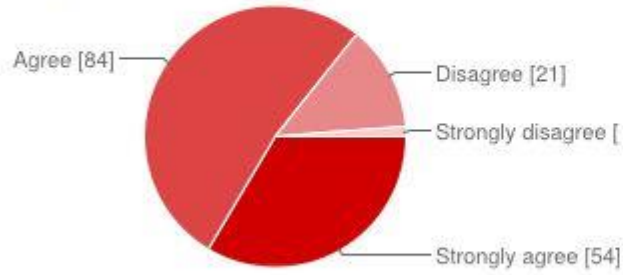
**I enjoy making my own videos**



Strongly agree	<b>79</b>	49%
Agree	<b>72</b>	45%
Disagree	<b>9</b>	6%
Strongly disagree	<b>1</b>	1%



**We manage to edit our video without the teacher's help**



Strongly agree	54	34%
Agree	84	52%
Disagree	21	13%
Strongly disagree	2	1%



### Annexure 3: Reflective diaries

Collaborative work (GROUPS)	- PAGE 1 -
<p>This project was linked together with PE (physical education) in order to broaden their knowledge not only about the theme covered but also to challenge them in a manner that forces them out of their comfort zone. Group work plays a very important role in teaching of a learner at any age. They were all of a sudden dealing not just with other cultures but learners with different ways of thinking. Some difficulties were faced when working in groups. Learners have to listen with an open mind and not forget to give their own ideas. Learners struggled at times to manage their time accordingly. Apart from difficulties learners had loads of fun. They were given the chance to choose their own groups and had to write their own song about healthy living and food. Some groups needed a bit of help with this as most families unfortunately do not follow a healthy lifestyle anymore. In my opinion the learners really enjoyed this project. Singing and dancing is always fun and put a smile on the face, especially some of the dancing. Learners were working on their performances during breaks, P.E lessons and some even after school. Many groups were very determined to shine bright on the camera and deliver a stunning performance including song, dance, narrating. The biggest factor was that it was done in Afrikaans.</p>	

Language usage (Afrikaans)	- PAGE 2 -
<p>Learners were faced with several challenges:</p> <ul style="list-style-type: none"><li>- Working together</li><li>- Time management</li><li>- Having the courage to perform on camera.</li></ul> <p>The biggest challenge was to do all of this in a language which is a 3<sup>rd</sup> language for some of the learners. I had a role in this being a native Afrikaans speaker. Learners would get all of their information together and plan their songs in English. (language of teaching) After translating it I would help with the odd grammar mistakes and guide them in choosing better suited words. Some learners struggled with this as Afrikaans has many rules and exceptions which could confuse the weaker learners. This is where groupwork played a key role. There were many learners in each group that has a fairly high level of knowledge. Working in Afrikaans proved as a challenge to the learners but provided loads of entertainment to them. Learners would practice and end up laughing so much at how "silly" it sounded to them. I believe that working in another language boosted not only the learner's knowledge but also their emotional development being so far out of their comfort zone.</p>	

Use of cameras

- PAGE 3 -

Learners were quite shocked when they were informed they would be completing the task in another language. What really shocked them was that it would be recorded on a video camera. Recording a group provides some challenges that the learners had to overcome:

- Using a high enough volume to be heard but not be overpowering.
- Spatial awareness
  - \* The camera has a specific range left and right. If learners were to spread out they would be cut out of the recording.
- Learners had to overcome "stage fright".
  - \* To achieve this the camera was placed in the recording position while the learners were practicing on stage.

In doing this learners would forget that the camera is there and were able to perform. An obvious difficulty was that a member could not be excluded from the recording in order to record and movement of a camera affects the end result. To overcome this the learners were provided with a tripod to help get a smooth recording. With the use of computer technology the learners were helped to "tweak" their recordings to the groups specifications.

Dear Educator,

Thank you for assisting me with the viral video research project. As explained to you, I am specifically looking at the following research question: "How do primary school learners experience the innovative use of technology in the Second Language classroom?"

You are kindly requested to keep a reflective diary. Kindly concentrate on the following aspects:

Collaborative work (groups)	Language usage (Afrikaans)
See page 1	See page 2
Use of computer technology	Use of cameras
Was not involved in this part of the project.	See page 3



Dear Educator,

Thank you for assisting me with the viral video research project. As explained to you, I am specifically looking at the following research question: **"How do primary school learners experience the innovative use of technology in the Second Language classroom?"**

You are kindly requested to keep a reflective diary. Kindly concentrate on the following aspects:

<p><b>Collaborative work (groups)</b></p> <p>The learners enjoy working in groups. They learn from each other and each learner uses their strong point to benefit the group. Some quieter learners do however need some encouragement.</p>	<p><b>Language usage (Afrikaans)</b></p> <p>Most learners struggled with the language, but each group had a few learners to guide them on language usage. Although some learner's made mistakes, their message was still understood.</p>
<p><b>Use of computer technology</b></p> <p>The learners were new to the Movie Maker software. They had little time to practice and get use to the interface, their knowledge was somewhat limited.</p>	<p><b>Use of cameras</b></p> <p>Some learners have knowledge about cameras and understood the technical part of videos. They knew when they were "in the shot" and planned their video around that aspect.</p>

### Collaborative work in the Computer room

The learners work on, and recorded their videos in the hall with no problem, but when they had to edit the videos in the Computer room, the space was limited. They struggled to sit a group at one computer to work together. Some groups that had more learners worked on two computers and then decided which video they are happy with.

Viral Video project started.

- learners in hall.
- Must divide into groups - not to big. ± 6 per group. - can be more. Must be manageable.
- NB - Must choose person on following merits
  - ① Be able to assist the group
  - Ensure can do the work
  - Groups must be based on ability
  - Need to complete task

Subject - Group of people working together  
- Subj each person responsible for a task. - Then as group.

- Rules
- ① Must find people with ability  
Ability very important fact.
  - ② Division of labour
    - Their responsibility to get job done
    - Inter-dependent.

Production → Consumption → Exchange  
→ Distribution

Production - Objects which correspond to given needs

Distribution = Divides them according to social laws

Exchange = Further parcels out the divided shares according to individual needs

Consumption = Product steps outside the social movement and becomes a direct object and servant of individual need and satisfies it in being consumed

## Interviews with Grade 7 classes

Problems experienced in Grade 7 M learners (Mdv) who had not behaving

Moved - both split into different groups

One of behaviour problems (ZT) problem not always behaving in teacher classes doing extremely well in project

- Came up with brilliant ideas.

learners do understand Afr. but better with pronunciation

## Viral video project

learners not all capable of using hardware

- some groups cope well
- Grade 7 & missed out on computers

- Doing well with their practise runs

- Good quality performance
- language quality not good

Better with translations

## Interviews

- Prefer working in groups
- Love getting involved
- Not shy to speak Afr. in front of others

## Viral Video observations

learners coped well with the Technology but struggled with the translations from English to Afrikaans. During observation of classes the following questions were posed to the group.

① How do you feel about the viral video project?

We love it, wish more teachers will do it in classes. I am not afraid of Afrikaans. Like working in a group it is much easier than on my own.

② Do you feel motivated/demotivated? motivated when working together in a group. We have learners that do not always perform well in Maths and other hearing Areas that turned out to be "Stars". Person "X" normally give teachers uphill - but he is very positive and work well with us. He is very motivated. That help us to be motivated.

## Observation:

Do you battle with Afrikaans as a language?

- learners struggle with translation and sentence construction. The meaning of words in dictionary confused them.

① What motivates you?

- Working as a group - Choosing own group
- A nice project
- Fact that I can do the work
- Work with my friends

② What de-motivates you?

- Boring classwork activities
- When I cannot use creative flair
- When peers do not work together
- Working on my own

- learners laughing at one-another
- Trying to cope with sentence structures
- Experience feelings of enjoyment
- Want to be part - All learners fit in and experience a sense of belonging
- learners happy - do not see any unhappy faces.

## Annexure 4: Informed Consent



### Informed Consent/Assent Form

*Project Title:*

Innovative use of technology in the second language classroom: design principles for teaching and learning

*Investigator:*

Mr. Percy Peter Human

*Date:*

10 October 2012

I hereby:

- Agree to be involved in the above research project as a participant.
- Agree to be involved in the above research project as an observer to protect the rights of:
  - Children younger than 14 years of age;
  - Children younger than 18 years of age that might be vulnerable\*; and/or
  - Children younger than 18 years of age that are part of a child-headed family.
- Agree that my child, ~~XXXXXXXXXXXX~~ may participate in the above research project.
- Agree that my staff may be involved in the above research project as participants.

I have read the research information sheet pertaining to this research project and understand the nature of the research and my role in it. In addition, I have had the opportunity to ask questions about my involvement in this study and to receive additional details I requested. I understand that I may withdraw from the study at any time.

- Please allow me to review the report prior to publication.

Name:

~~XXXXXXXXXX~~

Phone or Cell number:

~~XXXXXXXXXX XXXXXXXXXX~~

e-mail address:

~~XXXXXXXXXXXXXXXXXX~~

Signature:

~~XXXXXXXXXX~~

If applicable:

- I consent/assent to audio recording of my/the participant's contributions.
- I consent/assent to video recording of my/the participant's contributions.

Signature:

\* Vulnerable children refer to individuals at risk of/exposed to harm (physical, mental, emotional and/or spiritual).

Auckland Park Kingsway Campus | Cnr Kingsway and University Road Auckland Park  
PO Box 524 Auckland Park 2006 Johannesburg Republic of South Africa | Tel +27 11 489 2911 | www.uj.ac.za



**Faculty of Education - Research Project Information**  
**Innovative use of technology in the second language classroom: design principles for teaching and learning**

*Background to the study*

The school where the research is conducted, performed very well in a recent e-maturity study done for the Gauteng Department of Education. Although the school is well resourced and was placed highly in this survey, it was noticed that the use of technology for teaching and learning does not always extend to all classrooms. In the Second Language classroom for example educational technologies have not always been used to the advantage of the learner. This research investigates innovative use of technology to address issues related to the teaching of a Second Language.

*Intention of the project*

Research associated with this project attempts to:

Determine how Grade 7 learners experience the use of selected educational technologies in the teaching and learning of a Second Language. To achieve this aim I will implement an intervention based on design principles derived from personal experience as a language teacher and a review of the literature on Web 2.0 and 3.0 tools that are available to educators. In the empirical part of the research I will explore learners' experiences with the technology and derive draft design principles for engaging Primary School learners using educational technologies for teaching and learning.

*Procedures involved in the research*

A mixed method research process will be followed. Grade seven learners will be exposed to technologies such as video cameras, Windows MovieMaker software and the concept of Viral videos. After learners are exposed to new technologies and examples of viral videos they will be interviewed in four focus groups (at least four learners from each of the 5 classes) on how they experienced the use of these technologies in the Second language classroom. Purposive sampling will be used to select participants with written consent from parents and assent from learners but any learner with a desire to take part in the interviews will be accommodated. All learners will be informed both verbally and in writing that their participation is voluntary and that they may be approached to take part in focus group interviews or the subsequent key informant interviews. These interviews will take place shortly after interventions at the school during school time in the allocated periods. Interviews will be analysed and findings will inform future transformative teaching practices regarding the use of technology in the Second Language classroom. A follow up questionnaire will be distributed to all 179 learners to explore findings from the qualitative phase.

*Potential Risks*

It is unlikely that there will be any harm or discomfort associated with your participation in this study. This research is classified as design-based research which addresses a real educational problem in situ and makes a definite contribution to both theory and practice. Participants will be left no worse off than before they participated and there will be no exploitation of any kind. Participants are not vulnerable and the study can be classified as a low risk study.

*Potential Benefits*

As a learner you will be exposed to innovative use of technology in the classroom. Your participation will form the foundation for your future engagement with emerging technologies throughout your schooling career and beyond. By transforming your learning through technologies you may be better prepared for life in the technological age.

*Confidentiality*

Every effort will be made to protect (guarantee) your confidentiality and privacy. I will not use your name or any information that would allow you to be identified. However, we are often identifiable through the stories we tell. Furthermore, if information you have provided is requested by legal authorities then I may be required to reveal it. In addition, all data collected will be anonymous and only the researchers will have



access to the collected data that will be securely stored for no longer than 2 years after publication of research reports, or papers. Thereafter, all collected data will be destroyed.

*Participation and Withdrawal*

Your participation in this study is voluntary. You may withdraw your consent to participate in the project at any time during the project. If you decide to withdraw, there will be no consequences to you. Your decision whether or not to be part of the study will not affect your continuing access to any services that might be part of this study.

*Future interest and Feedback*

You may contact me (see below) at any time for additional information, or if you have questions related to the findings of the study.

Percy Human  
percyhuman@gmail.com  
0797310001

Prof G Lantienbach  
geoffl@uj.ac.za  
Dr J Batchelor  
jbatchelor@uj.ac.za

10 October 2012



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JOHANNESBURG