

**The role of teacher cognition in the integration of technology into  
English teaching: a case study**

A half-thesis submitted in partial fulfilment of the  
requirements for the degree of

MASTER OF EDUCATION  
(English Language Teaching)

RHODES UNIVERSITY

Elizabeth Mary Baron  
December 2010

**Acknowledgements**

Grateful thanks to all the participants for their time and willingness to assist and participate; to Sarah Murray, for her supervision; and to Jane Baron, for proof reading.

**Declaration**

I, Elizabeth Mary Baron, have read and understand the University’s policy on plagiarism.

This is my own work and, where I have drawn on the work of others, I have referenced appropriately. This work has not been submitted to fulfill the requirements of a degree at any other university.

.....

(Signature and Date)

.....

(Student Number)

Abstract .....	4
Chapter 1: Introduction .....	5
1. 1 Personal narrative .....	5
1.2 Broader motivation .....	5
1.3 Context of research .....	6
1.3.1 Teacher Cognition.....	6
1.3.2 Using technology in teaching.....	7
1.3.3 The broader South African context.....	8
1.3.4 Grahamstown schools and sites of research.....	9
1.4 Research goals .....	10
1.5 Case study .....	10
1.6 Outline of thesis .....	10
Chapter 2: Literature Review .....	12
2.1 Technology as a tool to support learning.....	12
2.2 The effect of technology on literacy and learning .....	14
2.3 Curriculum and policy documents relating to the inclusion of technology in learning .....	17
2.4 Integration of technology into learning.....	19
2.5 Teacher cognition.....	21
2.6 Brief overview of previous studies relating to teacher cognition and language teaching.....	23
2.7 Technology acceptance theories .....	26
2.8 Motivation and motivational psychology .....	28
2.9 Post-structuralism .....	30
2.10 Theory to be used in this study .....	31
2.11 Conclusion .....	33
Chapter 3: Research Design.....	34
3.1 Introduction.....	34
3.2 Research Aims .....	34
3.3 Research Approach.....	34
3.4 Site selection and participants.....	35
School 1 .....	37
School 2 .....	37
School 3 .....	37
School 4 .....	38
3.5 Data collection and analysis.....	38
Questionnaires.....	38
Purpose and nature of questionnaires .....	38
Piloting of questionnaires .....	38
Administration of questionnaires.....	39
Interviews.....	40
Purpose and nature of interviews .....	40
Piloting of interviews.....	41
Administration of interviews .....	42
Analysis.....	42
3.6 Validity and reliability .....	43

3.7 Conclusion .....	43
Chapter 4: Analysis.....	44
4.1 Introduction.....	44
4.2 Teachers' technological habits.....	44
4.3 Definitions of technology .....	46
4.4 Role of technology in teachers' own education and professional training.....	47
4.4.1 Own schooling experience.....	47
4.4.2 Formal training received.....	48
4.4.3 Informal training received.....	49
4.5 Practical Issues.....	50
4.5.1 Access to technology .....	50
4.5.2 Nature of technology.....	51
4.5.3 Security and storage.....	51
4.6 Power relationships.....	51
4.6.1 Class, gender and age.....	51
4.6.2 Structural issues .....	53
4.6.2.1 Curriculum.....	53
4.6.2.2 School policy, management and societal expectations .....	53
4.6.2.3 Inequality within schooling system .....	54
4.7 Intrinsic value and expectancy of success .....	55
4.7.1 Value of activity.....	55
4.7.2 Degree of challenge .....	56
4.7.3 Self-efficacy.....	57
4.8 Costs and benefits .....	58
4.8.1 Time factor.....	58
4.8.2 Explicit planning.....	59
4.8.3 Interpersonal relationships and technology .....	59
4.8.4 Learners' reactions.....	59
4.9 Conclusion .....	60
Chapter 5: Discussion .....	62
5. 1 Education .....	63
5.2 Private use of technology.....	65
5.3 Classroom practice.....	68
Experience: positive and negative .....	68
5.4 Contextual and Social Factors .....	70
Power relationships.....	70
Costs and benefits .....	71
Self-efficacy.....	74
Ease of use and practical issues .....	76
Social structures and societal expectations.....	76
5.5 Contribution of study and further avenues for research.....	78
5.6 Conclusion .....	80
References.....	81
Appendices.....	85
Appendix A: Initial letter to schools.....	85
Appendix B: Consent form .....	86

Appendix C: Initial questionnaire.....	87
Appendix D: Biographical questionnaire.....	89
Appendix E: Initial set of interview questions.....	91
Appendix F: Interview questions used in this study.....	93
Appendix G: Transcript of interview with Ms Anderson (school 1).....	95
Appendix H: Transcript of interview with Ms Bird (school 1).....	112
Appendix I: Transcript of interview with Mr Cele (school 2).....	128
Appendix J: Transcript of interview with Mr Dart (school 3).....	143
Appendix K: Transcript of interview with Ms Emoja (school 4).....	159
Appendix L: Transcript of interview with Mr Ford (school 4).....	174

## **Abstract**

Technology, in one or more of its various forms, is now a part of everyday life for most South African citizens. Many schools are equipped with various forms of technology, at great cost to sponsors, schools, parents or the government. However, this technology is not always exploited and full use is not made of it. As access is not the issue, other factors needed to be considered: in this case, teachers' beliefs, attitudes and knowledge.

This thesis explores the cognitive factors which affect the acceptance and use of technology. Teacher cognition and the factors which influence teacher cognition were examined. Following Borg, teacher cognition is defined as “the unobservable cognitive dimension of teaching – what teachers know, believe and think” (Borg, 2003, p. 81).

Teacher cognition determines whether or not a teacher will use technology, if the external barrier of access is removed. In order to study the various aspect of teacher cognition, a case study was performed, which studied 6 teachers at 4 schools. All the schools in this study had some level of access to technology. Following Borg, initial experiences with the educational system (i.e. the teacher's experience as a learner), teacher training, the context the teacher worked in (as well as social factors and private use) and classroom experience were all examined in order to discover the factors which most affect technology acceptance in teaching.

The findings show that having easy access to well-maintained and functioning technology cannot be underestimated. In the study, support from other teachers, particularly those in leadership roles, led to an increase in technology use. This support needed to be explicit; general support did not seem to be effective. These findings suggest that technology integration needs to happen at a ‘whole school’ level.

# **Chapter 1: Introduction**

This chapter provides an overview of the thesis and the motivation underlying the research. Firstly, I will give a personal narrative which explains the impetus for the research. This will be followed by an outline of the broader motivation, which includes a discussion of some key terms and points. I then explain the context of the research. Following the context, I explain my research goals. The type of research chosen will then be explained and justified. Lastly, the thesis structure will be outlined.

## ***1.1 Personal narrative***

Prior to embarking on a Master's in Education, I taught Grades 8 -12 English Home Language in a former Model C school for two years, based in East London. During this time, I taught mainly using traditional methods and rarely used technology. It was only towards the end of my second year that I began to wonder why I had not used technology in my teaching. I was a recent graduate, having finished my Post Graduate Certificate in Education (PGCE) in 2007 and was equipped to use technology in teaching. A requirement of the PGCE course was passing a computer literacy module and my English method lecturer encouraged us to use technology and set assignments which required us to design lessons based on using technology. In addition to being personally capable, there was access to technology at the school I taught at and I was aware of the benefits the learners would gain by being exposed to it. However, I did not make use of my skills or the fact that technology was accessible in various forms. This 'problem' formed the basis for my research, as I became curious as to what exactly affects teachers' decisions, especially with regard to the use (or lack of use) of technology.

## ***1.2 Broader motivation***

This reflection on my own practice created an interest in the underlying reasons for teachers' decisions and an interest in how this affected the decisions to use technology for teaching languages, specifically English. Research into both avenues showed that there were no clear or simple answers. I also became more interested in the benefits of using

technology to teach. Further, not much research into teachers' decisions with regard to the use of technology had been done in the South African context.

### ***1.3 Context of research***

#### **1.3.1 Teacher Cognition**

The decision making process is driven by cognitions: beliefs, attitudes, knowledge and thoughts. The concept of teacher cognition is used here, following Borg (2003), to refer to “the unobservable cognitive dimension of teaching – what teachers know, believe, and think” (p. 81). Thus, teachers' cognitions are a vital part of understanding why teachers choose to teach in a certain way; the underlying processes of teaching can be made clearer through studying teachers' cognitions. It is important to study teachers' cognitions regarding the integration of technology since teachers' cognitions will influence whether or not they incorporate technology in their teaching and the methods they use to do so.

Following Lam (2000), technology, for the purposes of this study, will be defined as any electronic or mechanical equipment which can be reasonably used for the teaching of English (p. 294). The one exclusion I have made is overhead projectors as they are not a modern technology and are commonplace and almost universally accepted by teachers. Although this definition is very general, it does allow one to understand what is meant by the term and it obviously excludes any items which cannot be reasonably used for teaching English. For example, a refrigerator would not be included in this definition.

Borg (2003) maintains “teachers are active, thinking decision-makers who make instructional choices by drawing on complex, practically-orientated, personalised, and context-sensitive networks of knowledge, thoughts and beliefs” (p.81). Thus, it is not enough to believe that access to technology alone will ensure that teachers make suitable use of technology in teaching. Since we cannot assume that access will result in use, it makes sense to further investigate exactly what it is that contributes to teachers' use of technology, especially if we are going to continue providing access to technology at great

expense and believe that the use of the technology will improve our educational system. Further, as attitudes, thoughts, beliefs, experience and, to some extent, even knowledge systems are in constant flux, particularly in a rapidly developing field, there is a need for ongoing study in this area. Teachers' cognitions must be explored in the light of the perceived obstacles and incentives for using technology that they identify in their contexts. There is research to suggest that teachers' cognitions inform their practice (Foss and Kleinsasser, 1996 in Borg 2003, p. 91) and thus the study of teachers' cognitions is valuable.

### **1.3.2 Using technology in teaching**

Much contemporary literature which examines the usefulness of technology in teaching, while acknowledging the difficulties many countries face, outlines the benefits of using technology effectively in teaching practice. For example, technology enables learners to write for an authentic purpose and enables the writing process to happen more easily, with corrections happening faster (Warschauer, 2008, p. 59). Further, learners gain the "ability to access, manage, evaluate and make use of information" (Warschauer, 2008, p. 60). This study illustrates the fact that technology can be a valuable asset in language teaching, especially as the concept of literacy is changing. In the past, the definition of 'literacy' revolved around the ability to read and write. This definition is rapidly changing as technology advances and becomes an integral part of our society. Literacy is evolving as technology around us evolves and, as a result, literacy now involves new, different and (often) challenging activities (Warschauer, in press, p. 15). In order to teach learners to be competent in all types of literacies, teachers need to have access to and use certain types of technology. For example, it would be impractical or impossible to try to teach a learner to read independently and effectively from a screen without using a computer or a similar device. These benefits have been recognised by the educational planners in South Africa, and thus various policies on the integration of technology into our schools have been created. Technology also features in the National Curriculum Statement (NCS) for English. It is important that technology is used in our schools, not only because it forms a part of the curriculum, but also because of the benefits the learners will gain. This will be further discussed in greater detail in Chapter 2.

### **1.3.3 The broader South African context**

The South African Department of Education has recognised the fact that technology needs to be part of our education and, as such, they have incorporated it into the national curriculum. However, not much groundwork has been done to ensure that technology is incorporated in practice; the government has only created a space for it in policy (Dalvit, personal communication, March 2010).

The incorporation of technology into the curriculum has not only happened in obvious ways through the inclusion of subjects such as Computer Application Technology (CAT) – it is now also a part of English language learning, especially at the Further Education and Training (FET) level. For example, the curriculum states that learners should be able to, while engaging with “multi-media texts”, “explain the use of visual, audio and audio-visual techniques” (National Curriculum Statement [NCS], 2003, p. 28). This is one minor example of the vast array of skills learners can gain through the use of technology. Other basics are included in the English FET curriculum such as the ability to produce emails and faxes correctly according to purpose (NCS, 2003, p. 44). More intricate skills, such as the ability to critically analyse a text, are also required and the effective use of technology can enhance the teaching of such skills (Warschauer, 2008, p. 26). Learners need these new skills to interact with and ‘read’ texts successfully in today’s world. However, one cannot assume that learners will gain this knowledge independently. As Warschauer (in press) points out, there is a difference between being able to Instant Message (IM) online and send, for example, an email for business purposes (p. 21). Knowledge of this sort needs to be taught to learners as they are not always critically aware of the audience for whom they are writing. Being computer literate no longer offers a job seeker an ‘edge’ in the market; it is now expected. Equipping learners for this world is essential (Prensky, 2001 and Warschauer, in press, p. 26).

In South Africa, there are many obstacles to including technology in education and, if it is used incorrectly or inappropriately, it is not always beneficial (Prinsloo, 2005, p. 15). Prinsloo asserts that “whether they [computers] offer opportunities for particular users is something that has to be established by situated research, not assumed” (2005, p. 15). It is

important to note that schools in South Africa are of vastly varying standards, with great differences in resources and capabilities. Thus, the unique situation of every school will need to be considered when examining the integration of technology into teaching.

#### **1.3.4 Grahamstown schools and sites of research**

Grahamstown has a range of schools from extremely rich to very poor. Four schools within the Grahamstown area were selected for this study. Two of the schools were township schools with limited resources and two of the schools were former Model C schools, which comparatively had a fair range of resources. The schools either taught English Home Language or English First Additional Language; the differences in curricula were not considered important as both are designed to create, in theory, fluent and capable speakers who have been exposed to a range of materials. Aside from the stipulation that the schools must be government schools, and the fact that I wanted an equal number of township and former Model C schools, there were no other factors which contributed to my choice of schools and they were selected for convenience and willingness to participate.

In general, the township schools had larger classes and fewer resources than the former Model C schools. The township schools also appeared to be less organised, perhaps as a result of a lack of support staff. The teachers from both types of schools were qualified, with all teachers having a Bachelor of Arts degree and either a Higher Diploma in Education, a PGCE or a similar equivalent degree. Three teachers had further qualifications; two of these teachers were teaching at a township school. In general, the former Model C schools cater for wealthier learners, who have greater access to resources at home. These resources are not only limited to technological resources; the presence of reading and writing materials at home gives learners a head start at school. Many learners at township schools do not have access to a great deal of resources at home.

### ***1.4 Research goals***

- To explore the cognitions of selected English teachers regarding the integration of technology in English classes
- To better understand the origins of these cognitions

The main focus of the research was on teachers' cognitions, as I wanted to find out what disposes teachers to make use of resources or to choose not to use the resources, with a specific focus on technology. If the technological resources are available, but are not used, the results of these research goals could then direct interested parties to put other measures in place to encourage use, instead of either spending money unnecessarily on more technology or halting the process altogether.

### ***1.5 Case study***

A small-scale case study was selected for this research for two main reasons. The first consideration was time; this made a large-scale study unfeasible. Secondly, using a case study was the most suitable form for this research as I needed to investigate teachers' cognitions and situations.

The main method of data collection was through interviewing. All teachers were interviewed for approximately one hour, using a standard set of questions as a base.

### ***1.6 Outline of thesis***

Chapter one has offered a brief overview of the research, including the context and the motivation for the study. Key terms have been defined and the research goals have been presented.

In Chapter 2 literature related to the topic of the research is reviewed. The literature is summed up in four main sections: the effect of technology on literacy and learning, the national curriculum and policy documents relating to the inclusion of technology in learning, the current integration of technology into learning and, finally, teacher cognition. A model which attempts to understand teacher cognition and technology inclusion is provided. This model is re-examined in Chapter five.

Chapter three provides a detailed description of the research process. The methods are described and justified. An overview of the sites and participants is provided. The validity of the study is also considered.

Chapter four draws all the data together and presents the findings of the research. The findings are presented under these main headings: teachers' technological habits, teachers' definitions of technology, educational background, practical issues, power relationships, intrinsic value and expectancy of success and the costs and benefits associated with the use of technology.

Chapter five discusses the significance of the findings, with particular reference to the model adapted for use in this study.

## **Chapter 2: Literature Review**

Worldwide, teachers are being encouraged to use technology in their teaching. In Taiwan, the government has initiated training courses, support and reward systems and is funding the purchase of equipment (Yang & Hunag, 2008, p. 1086). In America, a programme was initiated by the Clinton administration which focused on providing a laptop for every child by 2000 and promotes the use of technology in education (Hawisher and Selfe, 2000, p. 29). In Ireland, the 1989 curriculum prescribed that technology should be included as a “cross-curricular theme” (Goodwyn, 2000, p. 35). In South Africa, the 2004 White Paper on e-Education promotes the use of technology in classrooms and envisions that by 2013 all South African school managers, teachers and learners in General Education Training (GET) and Further Education and Training (FET) phases will be fully competent and able to use technology (South Africa, Department of Education [DoE], 2004, p. 17). However, this goal is far from being realised, despite many schools having access to varying forms of technology. In essence there are two main factors which could account for this: firstly, socio-political factors which influence access and, secondly, teacher cognition. Socio-political factors influence a teacher’s options and choices. For example, in a dilapidated rural school with few resources and no access to technology, either at the school or nearby, a teacher would not be able to choose *not* to use technology, as this is not an option. Structural issues will affect the teacher’s choices and options. However, there are cases where teachers have access to technology, but choose not to use it. In order to explain this, we need to examine teachers’ cognitions. Teachers’ decisions are not made randomly, nor are they always conscious. The entire life experience of the teacher affects the decisions that are made with regard to teaching. If we can understand the decision making process, we can attempt to encourage positive change, and work towards the educational goals set for South Africa.

### ***2.1 Technology as a tool to support learning***

The use of technology is promoted in various curricula, including the South African curriculum, as it is generally believed that using technology in education encourages

learners to actively construct knowledge (Prensky, 2008, p. 1). Using technology in teaching can encourage learners to become active participants in the lesson, instead of lessons being teacher-focused and teacher driven. This is in line with current beliefs in South Africa about the teaching of English, which emphasize the personal growth model and the belief that “teaching should be learner-centred and communicative” (Murray, 2009, p.18). It is important to note that the focus of technology in education, as promoted by the curriculum in South Africa, needs to be on learners using technology and actively learning, instead of technology being a distraction or a superfluous ‘add on’ to a teacher-focused lesson.

Most learners have been exposed to technology in one form or another. For those who are exposed to technology on a daily basis, it makes complete sense to teach these learners using technology. These learners are ‘digital natives’, a term coined by Prensky to describe those who have “spent their entire lives surrounded by and using computers, video games, digital music players, video cams, cell phones, and all the other toys and tools of the digital age” (Prensky, 2001, p.1). Prensky claims these ‘digital natives’ have different thought patterns to those who have not spent their lives surrounded by technology. An integral part of these digital natives’ lives is technology: cell phones, televisions, computers, video games and so on (Prensky, 2001, p.3 and Hund, 2009). This should be recognised when teaching these learners, as, according to Prensky, learners are ‘trained’ to want information fast and to multitask, in the same way that the brains of older generations were ‘trained’ into linear thought patterns through continuous reading (Prensky, 2001, p. 3 & 5). These learners are used to technology and they are used to receiving information fairly quickly and in chunks, rather than in linear, logical steps – it makes sense to teach them accordingly, rather than expecting them to absorb content that is presented in an ‘old-fashioned’ way and ignoring strengths the learners have from their interactions with technology (Prensky, 2001, p. 6-7). Although there is a downside to multitasking and receiving information in bursts and chunks (in that it disturbs linear thought patterns), it is important to realise that these learners will be able to absorb more knowledge and information if it is presented in this way. In addition, technology is only

advancing – it is a reality in the world today and will only be more prevalent in years to come.

For those learners who are not exposed to technology on a daily basis, it is equally important that they are taught using technology. At the moment, “unequal patterns of technological access and use in society get reproduced in schools” (Warschauer, 2008, p.53). Teachers need to fight against this in order to allow all learners to become fully conversant with the different forms of technology that are a part of society. Integrating technology into education allows learners to gain skills they need in order to function as fully literate members in our information society. This cannot be a privilege reserved for the upper echelons of our society. Admittedly, this does become difficult when there are learners of different capabilities, technology-wise, in a class. However, there will always be learners of different capabilities in every class, and this cannot be a reason for not attempting to teach them something. If that was the case, we would not have schools. Equally, we cannot shy away from using technology based on our country’s economic status. “Or as the Ethiopian Minister of Capacity Building, Tefera Walwa, put it, ‘While ICT may be a luxury for the rich, for us, the poor countries, it is an essential tool for beating poverty...’” (Rising to the Challenge, 2010). Technology is an integral part of our society, and a part of our society which is constantly growing. The United Nations Educational, Scientific and Cultural Organisation (UNESCO), of which South Africa has been a member since 1994, also emphasizes the importance of technology in education and considers “mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy (Anderson and van Weert, 2002, p. 3). As such a central part of any curriculum, we need to ensure that it is taught in schools across South Africa.

## ***2.2 The effect of technology on literacy and learning***

Technology has been particularly promoted for learning and teaching languages<sup>1</sup> and has changed what it means to be literate (Richardson, 2009, p.130). Visual communication, in

---

<sup>1</sup> As this case study focuses on English language learning, specific examples and references will be made to English.

the form of photographs, sketches, videos and so on, is becoming important again (visual communication was also important in pre-literate society, although the forms it took differed from today), and the ability to 'read' this information needs to be an area of focus in language teaching (Kress, 1997, p. 42 and Ferreira, 2009, p. 210). An example of how communication is becoming increasingly visual is newspapers. In the past, newspapers were almost entirely print orientated. Now, newspapers make use of pictures, graphs and so on in order to tell stories (Kress, 1997, p. 43 & 45). Further, information technologies, in particular electronic information technologies, affect literacy practices (Kress, 1997, p.43). For example, reading is no longer limited to books, which have been edited and are linear in nature. Instead, today's learners are exposed to various types of print and media, all of which require a slightly different set of skills or mindset. Reading on the net is very different to reading a book and requires a somewhat different set of skills. A book has a clear beginning and end. The net is vast, offering a myriad of choices, with no clear beginning or end and one scrolls down pages instead of turning them (Goodwyn, 2000, p. 26). There are various routes one might take as hyperlinks lead to different pages or sites (Goodwyn, 2000, p. 26). The information posted on the web is not always reliable; it has not been edited and been subjected to rigorous checking in order to be published. Anyone can publish anything on the web and, for this reason, we need to create critical readers who question and challenge texts (Goodwyn, 2000, p.26). Reading has become far more interactive than it ever was before. People are now free to comment on, question or, in some cases, even change written work. Reading or, more appropriately, navigating all this information requires skills, and they are not skills one should assume learners already have.

Writing has changed too. It is no longer a private practice, with only a teacher and perhaps a classmate or two seeing the work. Now it is possible to publish work, which changes the purpose of writing as well as the audience one writes for (Warschauer, 2008, p.60). The worth of information increases as it can be easily stored, retrieved and accessed (Goodwyn, 2000, p. 10-11). In the past, this was not the case and the majority of writings done at a school level were only really used for assessment purposes. Writing for a larger audience, and knowing that one's work can be accessed by anyone and everyone,

increases the worth of the activity. In addition, using technology can allow learners to produce writing of a higher standard, as they are able to easily revise their writing based on others' comments, and tools such as spell check allow them to edit their work properly (Warschauer, 2008, p. 60). The process of writing is more interactive or, at least, lends itself to being an interactive process as commenting on others' work, working collaboratively and sharing work with others is done with ease using computers (Warschauer, 2008, p. 58 -59).

Technology can be extended into other areas of language teaching and learning with great benefits. Second Language (L2) learners can use the internet and programmes such as Skype to talk to and listen to native speakers. Even participating in chat room conversations can be beneficial as it has been shown that the linguistic nature of electronic exchanges are “lexically and syntactically more complex than oral discourse” (Warschauer, 1997, p.1). In addition, websites have easy access to up-to-date information on the target language culture, which can help L2 learners to learn the language and understand nuances within the language. Learners can create different types of texts (such as graphs, pamphlets and spreadsheets) using technology, instead of being restricted to essays. In doing so, they are also learning how to interpret the different types of texts they are exposed to on a daily basis. The vast amount of information available to learners also needs to be taken into consideration when teaching. Learners are exposed to and have access to more information than ever before – they need to be taught how to deal with all the knowledge they have access to and how to manage it appropriately (Richardson, 2009, p. 130). Technology can be used as a motivational tool for learners as it is fun and exciting to be able to do something different in class. However, as the use of technology in education becomes more widespread, its motivational effect will decrease (Goodwyn, 2000, p. 12). Finally, technology provides a wealth of resources for teachers to use in the planning and teaching of lessons and this is only set to increase with foundations such as the Open Education Resources (OER), which promotes open resources and technology, on the rise.

Learners today live in a “media-dominated world” and, as such, it is the responsibility of the education system to educate them for this world (Goodwyn, 2000, p. 6). Learners are no longer simply the inheritors of culture; they are now able to shape it. Through their critical interactions with the language, and the technology which enables them to share their constructs, they can visibly influence our society and culture. In preparing learners for the future we must “create English students who can use, produce and analyse ICT texts as well as poetry, novels and newspaper articles, who can cope, contribute to (our culture) and help to control (our society and culture)” (Goodwyn, 2000, p. 71). The use of technology improves employability, encourages higher order thinking and comprehension, and can be used to create knowledge – these are essential to our learners leading fruitful lives (South Africa, DoE, 2004, p. 14).

### ***2.3 Curriculum and policy documents relating to the inclusion of technology in learning***

The South African government has recognised this need and the current curriculum as well as other policy documents, most notably the 2004 White Paper on e-Education, advocate the use of technology in education.<sup>2</sup> The South African National Curriculum Statement (NCS) for English has been specifically designed to enable learners to deal with the various new literacies described above.

The range of literacies needed for effective participation in society and the workplace in the global economy of the twenty-first century has expanded beyond listening, speaking, reading, writing and oral traditions to include various forms such as media, graphic, information, computer, cultural, and critical literacy. The Languages curriculum prepares learners for the challenges they will face...  
(South Africa, DoE, 2003, p. 9)

This illustrates a commitment to educating learners to be able to interact with the various technologies which produce these literacies, otherwise learners would be ill-equipped to participate in a society or a workplace which utilises these literacies and technologies. As technology advances, the need for it in our schools becomes even more pressing in order

---

<sup>2</sup> This discussion will focus on the integration of technology into English language teaching at the FET phase and policy documents as they relate to the teaching of English.

to educate learners appropriately. However, theory must become practice in order for these goals to be realised. The commitment to educating learners to be ‘tech-savvy’ is further reflected in the Learning Outcomes (LO) and Assessment Standards (AS) set in the ‘new’ curriculum. For example, Learning Outcome 2 refers to “Reading and Viewing” – this shows us that reading is not the only skill these learners are required to hone in order to be successful. In addition, this same LO emphasizes the importance of learners being able to “read and view for understanding and to evaluate critically and respond to *a wide range of texts* [italics added]” (South Africa, DoE, 2003, p. 22). It is important to note that the curriculum is no longer focusing solely on traditional written and printed texts (books), but is advocating that learners be exposed to a variety of texts, including texts available only through the use of technology, in order to become fully literate. The curriculum specifically mentions “visual, audio and multi-media texts” and “film study, television and radio drama” be taught to learners (South Africa, DoE, 2003, p. 28). Technology is necessary for these aspects to be taught optimally and in some cases - film study, for example - technology is necessary for teaching to take place.

In addition to the curriculum prescriptions, the South African government has created a White paper on e-Education (referred to earlier), which emphasizes the transformative nature of technology for learning and teaching and advocates that e-learning become embedded “across the education system” (South Africa, DoE, 2004, p. 1 & 37). Alongside this recommendation, the government has also launched various initiatives to encourage and foster the growth of technology in education. For example, awards are given as incentives for teachers to use technology (South Africa, DoE, 2004, p. 26). The government set up a “laptop initiative” in May 2009 which assists teachers in purchasing laptops (van Spaandonk, 2010). These laptops can then be used both in the class and for preparation work, encouraging teachers to integrate technology into their teaching. The government has also launched the ‘Thutong’ website, which gives teachers access to educational forums, policy documents and so on. This supports teachers’ use of technology. There are numerous other projects in South Africa (and internationally) which encourage the take up of technology. Many of these projects are fairly successful and some teachers realise the benefits of using technology through these projects. Some

examples of these projects, focussing on South African examples, are: the iSchool Africa pilot projects, the Khanya project, Gauteng online and Dinaledi. International efforts include the drive towards Open Education Resources (OER) and Microsoft Innovative Teachers<sup>3</sup>.

Lastly, it is important to note that in most South African schools, English is the medium of instruction. Learners need to be able to understand and produce the language, both on screen and in print. The ability to understand and interact with the language in its digital form is becoming increasingly important as we move further and further into the digital age.

## ***2.4 Integration of technology into learning***

Despite the overwhelming evidence that technology can be beneficial and is indeed necessary for education and the ambitious goals set in the various curricula, and vast investments being made in technology by schools, governments, non-governmental organisations and individuals, “the so-called computer revolution in schools [has not yet taken] place as expected” (Handal, n.d., p.1) and “the use of digital technologies in education has so far not fulfilled expectations” (Derry, 2008, p. 505). For example, in South Africa, which aims to have all teachers and learners fully computer literate by 2013, only 32% of schools had access to computers in 2007 (South African Child Gauge, 2008/2009, p. 28). “As is often the case, education has been slow to adapt to these new tools and potentials. In other areas of our lives, however, we can see some of these transformations happening right now, right in front of our eyes” (Richardson, 2009, p. 3). While some schools and teachers are using technology to teach their learners successfully, other schools and teachers are still relying on traditional and sometimes outdated methods. Although in certain cases this can be linked to socio-political factors,

---

<sup>3</sup> Information about the projects can be found at the following sites:

iSchool Africa: <http://www.ischoolafrica.com>

Khanya project: <http://www.khanya.co.za>

Gauteng online: <http://www.education.gpg.gov.za/publications/gauteng%20online%20to%20reach%20public%20schools.htm>

Dinaledi: <http://www.southafrica.info/about/education/dinaledi-161007.htm> In addition, various articles and speeches related to the project can be found at: <http://www.education.gov.za/SearchResults/tabid/37/Default.aspx?Search=dinaledi>

Open Education Resources: <http://www.oercommons.org>

Microsoft Innovative teachers: <http://www.microsoft.com/uk/education/schools/partners-in-learning/innovative-teachers.aspx>

such as poverty, in other cases there are no physical barriers to embracing technology in teaching. Where no physical barriers exist, one must consider other aspects which can influence the uptake of technology.

Some teachers have technology in abundance, either in their classrooms or in their schools, but do not make use of it. Why not? What is the difference between the teachers who are using every chance to integrate technology into learning and those who ignore it? Some teachers do not use technology due to external barriers such as a lack of electricity or resources. Security also plays a role in preventing the integration of technology, as cables, computers and other materials can be (often easily) stolen or vandalised. However, it should be noted that some teachers in seemingly impossible situations have used technology to teach. One teacher in Lesotho and her class sold bananas at school to raise enough money to use a nearby internet café to start and complete a project (Hayes, personal communication, 17 April 2010). What is the difference between this teacher (and the others like her) and those who do not attempt to find solutions to the lack of access? Of course, when discussing teachers and technology uptake, one must keep in mind that there exists a continuum, with complete technological integration on one end and no use of technology on the other and many other stages in between. It would be most naïve if one tried to divide teachers into camps based on the two extremes – instead we must realise that teachers use technology at different levels. The key question here is: what is driving these teachers' use of technology? One cannot simply look at external barriers for an answer as some teachers overcome these. External barriers will play a role in teachers' use of technology, and in some cases external barriers will prevent a teacher from executing a desire to utilise technology in teaching or could even prevent a teacher from ever *considering* using technology in teaching. For example, if a teacher teaches at a poverty stricken school, with high incidences of vandalism and theft, and erratic access to electricity, it would not be feasible for the teacher to consider using technology in teaching. However, simply putting technology into a classroom or school and advocating its use in the curriculum will not create an environment in which successful e-learning can take place. "The implementation of technology requires change, is cumbersome and cannot be forced from the top" (Yang and Huang, 2008, p. 1086). Teachers need to

believe technology is an effective educational tool. This is will not happen automatically and teachers will not choose to use technology just because it there. “The main reasons for the teachers’ decisions regarding technology seemed to depend on whether the teacher was personally convinced of the benefits of using technology...” (Lam, 2000, p. 410) The conviction that technology is beneficial, or not, is dependent upon many variables. If it is understood *why* teachers make the choices they do and where their personal beliefs stem from, this information can be used to change teachers’ beliefs and encourage the use of different methods and practices. In order to understand the reasoning behind decisions and choices that teachers make, we must then turn to the more muddy waters of motivation and teachers’ belief and knowledge systems: teacher cognition.

## ***2.5 Teacher cognition***

According to Borg (2003), teacher cognition refers to “the unobservable cognitive dimension of teaching – what teachers know, believe and think” (p. 81). Some studies refer to teachers’ “beliefs, attitudes and knowledge (BAK)” (Woods in Borg, 2003, p. 87), whilst other studies refer simply to “teacher attitudes” (McFarlane, Green and Hoffmann in Lam, 2000, p. 391). Many different terms have been used, each of which has a subtle difference and some of which have different meanings in different studies, which leads to confusion (Borg, 2003, p. 87). For the purposes of this study, I will refer throughout to ‘teacher cognition’, which is understood to include teachers’ attitudes, beliefs, thoughts, knowledge, theories, emotions, perceptions, experiences, assumptions, biases and other conscious and unconscious thought processes. As the study I am conducting is focused on why teachers make the choices they do with regard to technology, all of these different aspects must be considered as the choices made are affected by attitudes, theories, beliefs, emotions, experiences and so on. The term ‘teacher cognition’ is the most adequate representation of this dimension.

Teachers cannot be thought of as “empty vessels”, merely following a curriculum (Freeman and Johnson, 1998, p.401). A teacher’s own schooling experience, initial training, personal beliefs, assumptions, teaching experience and knowledge (this is by no means an exhaustive list) all affect the teacher’s cognitions, which in turn shapes

decisions made with regard to the teacher’s actual practice (Borg, 2003, p. 82 and Freeman and Johnson, 1998, p. 401). “Teachers need to operate with some personal conceptualisation of how their teaching leads to desired learning – with a notion of causation that has a measure of credibility for them” (Prabhu, 1990, p. 172). This is called a “sense of plausibility” (Prabhu, 1990, p. 172) and it is important to note that teachers will not generally (or wholeheartedly) engage in a teaching method (and this includes the integration of technology into teaching) if they do not feel it holds some value. It is possible that this statement is especially applicable to the integration of technology into teaching, as this is a time-consuming and demanding process. This ‘personal conceptualisation’ is fairly similar to teacher cognition, as both involve the thought process, which is influenced by an array of factors, behind the methods employed by teachers. The following diagram illustrates the various aspects which affect teacher cognition (Borg, 1997 in Borg, 2003, p. 82).

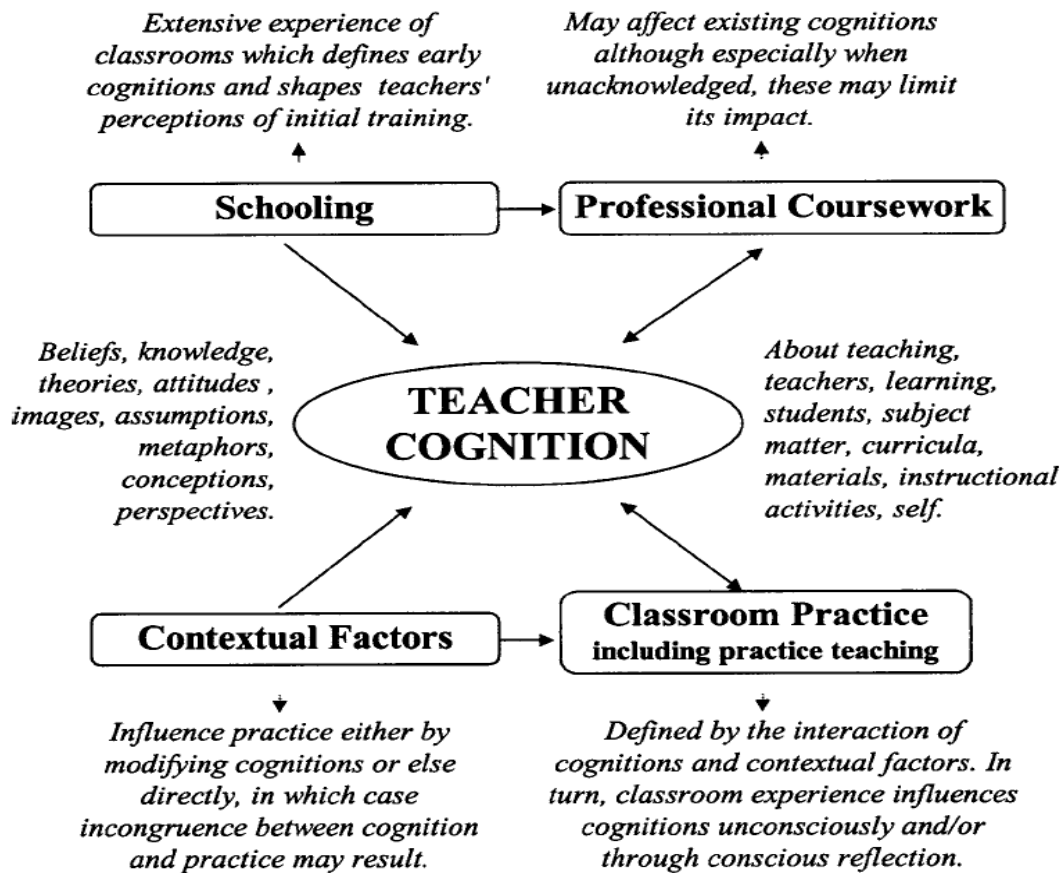


Figure 1: Teacher cognition, schooling, professional education, and classroom practice (Borg, 1997 in Borg, S. [2003] 'Teacher Cognition in Language Teaching' in *Language Teaching*, 36, p. 81 - 109)

As is made clear from figure 1, classroom practice is informed by teacher cognition as well as, amongst others, contextual factors. For example, contextual factors which are known to influence a teacher's use of technology include strong ICT leadership and "a whole-school approach" (Yelland, Neal and Dakich, 2008, p. 158). These contextual factors impact on teacher cognition, which in turn determines classroom practice. Thus, when considering why some teachers use technology whilst others do not, it is important to examine teachers' cognitions in order to attempt to understand this. Removing external barriers does not necessarily mean that teachers will use the technology put in place. It must be remembered that integrating technology into education is not a simple process; it involves many aspects, such as training, support, accessibility of resources, time management and so on. In addition to training programmes and other logistical measures, "...the funding of *the change process*, i.e. *the attitudinal elements* associated with the implementation and adoption of new models of learning is vital... [italics added]" (South Africa, DoE, 2004, p. 35). Interestingly, teacher training does not always result in teachers implementing what they have learnt, nor does it necessarily result in a change of attitude or belief (Borg, 2003, p. 89). In many instances, schools in South Africa have been donated (or have purchased) equipment which sits idle. Studying teacher cognition will help us to understand why this is the case.

## ***2.6 Brief overview of previous studies relating to teacher cognition and language teaching***

Studies in teacher cognition within the language field have increased since 1990 (Borg, 2003, p. 82 & 83). The majority of these studies have focused on grammar teaching or literacy, with very few examining the role teacher cognition plays in using technology in teaching English (Borg, 2003, p. 84 -86). Notably Lam (2000) studied reasons for the inclusion or rejection of technology by L2 language teachers, focusing on the teachers' "own beliefs and experiences" (p. 391). However, the majority of studies which focus on cognitions, particularly when examining technology, are learner centred (Lam, 2000, p. 391). Further, very few studies focus exclusively on English language and literacy teachers; most studies examine teachers in general. As "prospective ICT integration

significantly correlates with all teacher related variables” (Sang et al, 2009, p. 103), it is important to limit potential differences and one way of eliminating large differences is to home in on one subject area. As previously mentioned, English is often used as a medium of instruction in South Africa and the curriculum requires that technology be used in the teaching of English. The above points indicate additional research is needed into teacher cognition in the field of English language, with a particular focus on technology integration.

The importance of teacher cognition in integrating technology into schooling systems is often emphasized in studies which focus on teachers. For example, Abbit and Klett (in a study on pre-service teachers) emphasize the importance of studying teacher self-efficacy and “how (these) beliefs emerge and what factors will have influence” as this is seen as having a direct effect on technology integration in education (2007, p.36). Cuban (1993) in Sang, Valcke, van Braak and Tondeur emphasizes teachers’ “knowledge, beliefs and attitudes ...since they ‘shape what they choose to do in their classrooms’” (p. 103). Similarly, Lam (2000) and Yang and Huang (2007) found that “positive beliefs” (Yang and Huang, 2007, p. 1085) and personal conviction (Lam, 2000, p. 410) played large roles in whether or not technology was integrated into teaching. Lam further asserts, in her study on L2 teachers and their use of technology, that the teachers’ personal convictions have been “underemphasized in previous studies” (2000, p. 410). Sang et al (2010) agree that a positive attitude towards technology plays a large role in whether or not a teacher would be willing to use technology and point out that “while many teachers have positive attitudes to the use of educational technologies, they do not necessarily believe in their own abilities to use technology in a classroom” (p. 105). Thus, it is clear that teachers’ perception of self-efficacy, along with teacher attitudes, beliefs and knowledge, are all integral when considering technology integration into education. Teachers’ previous experiences are equally important, as they will inform attitudes, sense of self-efficacy, beliefs and knowledge. Dewey’s (1938) notion of “the continuity of experience” proposes that experiences lead to knowledge and impact on existing knowledge (Golombek, 1998, p. 448). Thus, if a teacher repeatedly has negative experiences when attempting to integrate technology into learning, this will lead to an

unenthusiastic attitude and the teacher will not recognise the potential benefits of technology integration. Examining external barriers<sup>4</sup>, while interesting, cannot fully account for teachers' decisions regarding technology. In many situations there are few to no external barriers to technology, yet technology integration does not take place (Sang et al, 2010, p. 104). "For ICT to be productive in teaching and learning processes it is not enough to put one or many computers at the disposal of pupils. The introduction of ICT in schools necessitates a profound reflection on the part of the teachers..." (Toure, Tchombe and Karsenti, 2008, preface). Thus, it is most worthwhile to consider internal barriers, which can lead to an understanding of why technology integration has or has not taken place<sup>5</sup> (*Ibid.*).

Thomas and Cronje, in a South African study, found that "existing research suggests that the integration of computers into schools is greatly influenced by the extent to which staff is able to adopt, and adapt to, innovation" (2007, p. 764). The White Paper on e-education recognises that it might not be easy for teachers in South Africa to adapt to technology as "many teachers have grown up in environments with limited electronic technology, and thus find the adaptation to working with ICTs more difficult than their learners do" (South Africa, DoE, 2004, p. 22), but points out that teachers' attitudes play a crucial role in the acceptance or rejection of technology (*Ibid.*, p. 35). Although the studies mentioned do not refer specifically to 'teacher cognition', the aspects of teachers they are studying (such as attitudes, ability to adapt and so on) all form a part of or are influenced by the cognitive realm. Thus, studying teacher cognition can be seen as worthwhile as, firstly, it affects whether or not teachers will make use of the technology at their disposal. Secondly, there have been very few studies which focus on teacher cognition in the integration of technology into English Language. This number decreases as we begin to look at South African studies and, more particularly, studies conducted in the Eastern Cape. A recent study was conducted in Grahamstown, at Rhodes University, which analysed the integration of technology in high schools (Grade 8 – 12), focusing specifically on the challenges faced by the school (Maholwana-Sotashe, 2007). Although

---

<sup>4</sup> 'External barriers' (as previously mentioned) refers to issues of access, maintenance and so on

<sup>5</sup> 'Internal barriers' refers to teacher attitudes, positive or negative beliefs and so on

this study did not focus specifically on teacher cognition or on English teachers, it broadly explored both external and internal barriers. Internal barriers are closely linked to teacher cognition and, as such, the results of the study are pertinent in this context. It is especially interesting to note that the study found that “contrary to expectations, the degree of ICT integration within the curriculum did not correspond directly with the availability of sufficient hardware, software or Internet connectivity...” (Maholwana-Sotashe, 2007, p. ii). This indicates that teachers’ cognitions are integral in the adoption of technology.

## ***2.7 Technology acceptance theories***

Various theories with regard to technology acceptance have been created, tested and refined. The Theory of Reasoned Action, a largely behavioural view on the adoption of technology which takes the position that a person’s intention to perform an action is the most important deciding factor (Dörnyei, 1998, p.119), has led to the Technology Acceptance Model (TAM), which has been widely accepted and focuses on perceived usefulness and perceived ease of use as determinants in predicting whether or not technology will be used (Venkatesh and Davis, 2000, p. 187). Perceived usefulness is an especially strong determinant of technology use and it is impacted upon by various factors including “social influence and cognitive instrumental processes” (Venkatesh and Davis, 2000, p. 186). TAM has been extended in order to include key social and cognitive determinants and to understand how these factors can change in different circumstances, particularly when user experience increases (*Ibid.*, p. 187 & 188). TAM2, the extension of TAM, shows the impact of three “interrelated social forces” and considers cognitive factors and experience on the eventual rejection or acceptance of a new system or technology (*Ibid.*, p. 187). Voluntariness, subjective norm and image are considered to be social influence processes (*Ibid.*). Experience impacts on social influence processes. Job relevance, output quality, result demonstrability and perceived ease of use are viewed as cognitions factors (*Ibid.*). The following diagram provides an overview of TAM2.

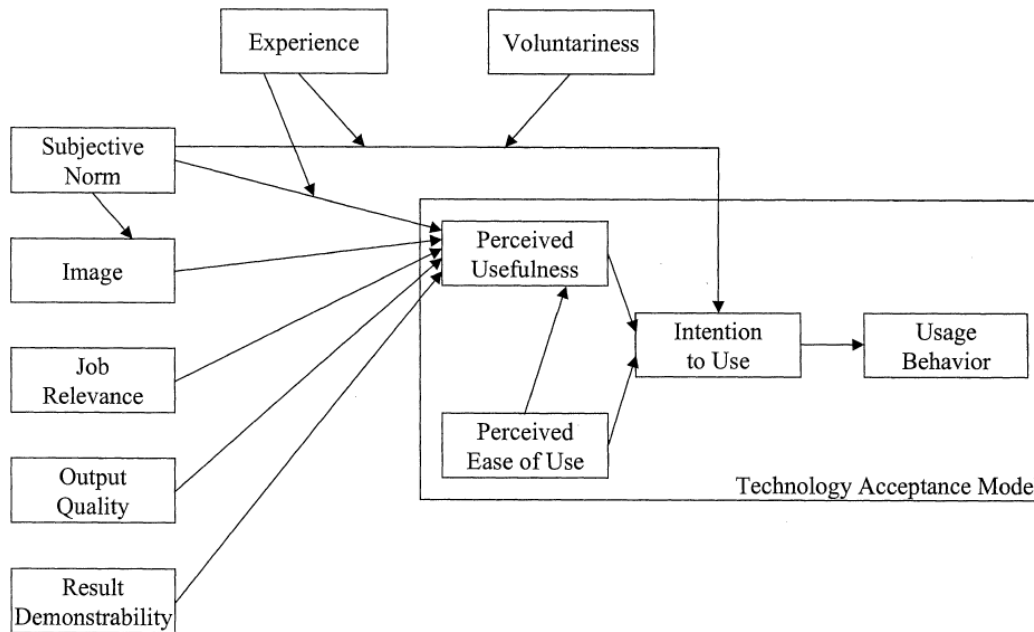


Figure 2: Proposed TAM 2 - Extension of the Technology Acceptance Model (in Venkatesh, V and Davis, F. (2000). 'A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies' in *Management Science*, 46, 2, p. 186 - 204)

The social influence processes affect the adoption of technology in different ways. Subjective norm refers to a “person’s perception that most people who are important to him (sic) think he (sic) should or should not perform the behaviour in question” (Fishbein and Ajzen in Venkatesh et al, 2000, p. 302). Thus, one will modify her/his behaviour if a person (or a group of people) who is regarded as important or influential expects it. Sometimes this influence is internalised (one’s own beliefs shift to incorporate the beliefs of others), which greatly influences behaviour albeit indirectly (Venkatesh and Davis, 2000, p. 189) Social influence has greater sway when compliance with use of the system or technology is viewed as mandatory. When it is perceived as voluntary, social influence, while still holding some power, is not as influential in the short term (*Ibid.* p. 188). However, voluntary systems are more successful in the long term (*Ibid.*, p. 201). The last subjective norm deals with image. Technology can be used in order to obtain a certain image or status (*Ibid.*, p. 189). This will not be affected by the voluntariness of the system and often leads to an increase in influence and/or power as status increases, which can make the person’s job easier (*Ibid.*). It is important to note that TAM2 predicts that

social influences will decrease as experience increases, as one's own considerations and experiences will take preference over the thoughts/ideas of others. Cognitive functions play an equally important role in the acceptance of technology, and will not necessarily decrease in importance as experience increases. These cognitive functions include job relevance (whether or not the system will support one in executing tasks necessary to the fulfilment of one's job), output quality (the degree to which the system is able to complete the task), result demonstrability (whether or not one will be able to identify how the system is benefiting her/him) and, finally, perceived ease of use (the less effort it is to use a system, the more likely people will be to use it) (*Ibid.*). Although TAM2 has been able to account for the use of technology (or lack thereof) at an individual level, certain aspects need to be included or expanded upon.

## ***2.8 Motivation and motivational psychology***

Motivation is one aspect which has possibly not received enough attention in TAM2 (or in the social and behavioural psychology theories which TAM2 stems from). Dörnyei (1998) maintains that motivation can make up for numerous other deficiencies and “is responsible for determining human behaviour by energising it and giving it direction” (p. 117). As there are numerous motivational theories, I will only be focussing on those which are most pertinent to this study. There are two main camps (although the gap between these camps is rapidly closing) which attempt to explain human behaviour: social psychology and motivational psychology (Dörnyei, 1998, p. 118-119).

Motivational psychology focuses mainly on the individual, while social psychology focuses on the social context and group relationships (*Ibid.*, p. 118). The Theory of Reasoned Action (TRA) which, as previously mentioned, led to the development of TAM and later TAM2, belongs in the realm in social psychology. Another theory in this camp which is worth mentioning is the Theory of Planned Behaviour (TPB). This extends TRA by including “perceived behaviour control”, which refers to the level of ease with which a person can carry an action/behaviour (*Ibid.*, p. 119). If a person feels s/he is in complete control of the situation (i.e. has access to resources, support, few to no obstacles and so on), intention alone will predict or explain the action (*Ibid.*). Although these theories have

many valid points, they do not always adequately consider the role of motivation. Interestingly, motivational psychology does not always sufficiently consider social psychology. However, this is beginning to change as each sector is embracing aspects of the other (*Ibid.*).

Within the vast arena of motivational psychology, much attention has been focussed on the expectancy-value framework (*Ibid.*). Within this framework, theorists believe that actions are shaped by expectation of success and value of success. One's expectancy of success is dictated by one's experiences (attribution theory), one's perceptions of one's own capabilities (self-efficacy) and maintaining self-esteem (self-worth theory) (*Ibid.*). Attribution theory is similar to Dewey's continuation of experience, which has been previously discussed. The notion of self-efficacy bears some discussion as it will determine which activities will be engaged in, how much effort will be put into the tasks or activities, level of persistence and level of aspiration (*Ibid.*, p. 119 – 120). If a teacher has a low sense of self-efficacy with regard to her/his technological capabilities, s/he will be unlikely to seriously attempt to integrate technology into her/his teaching, as this task will require dedication and have a high level of expectation. Self-efficacy is a "product of a complex process of self-persuasion that is based on cognitive processing of diverse sources... (including) other people's opinions, feedback, evaluation, (and) encouragement" (*Ibid.*, p. 120). It is important to note that one's own perception of self-efficacy is not always accurate, but is very influential. Thus, when exploring teacher cognition, tapping into teachers' sense of self-efficacy is vital. The value one places on success is the second part of the expectancy-value framework. Very basically, 'value' deals with weighing up the costs and benefits of engaging in a certain activity. Attainment value (value placed on achieving goal), intrinsic value (enjoyment) and extrinsic utility (usefulness of task to achieving future goals) are all on the positive side of the scale (*Ibid.*, p. 120). Costs include time, effort and emotional costs (*Ibid.*). Thus if a task has low intrinsic value, medium attainment value and medium extrinsic utility, but is high in effort and emotional costs, it is unlikely that one will be very willing to engage in the task. In order for teachers to be willing to integrate technology into English language teaching, they will need to be convinced of the benefits. Otherwise the costs can

be seen as too high, and teachers will not be willing to undertake this task. Expectancy of success and the value placed on the success constantly interplay and lead to actions.

## ***2.9 Post-structuralism***

Post-structuralism can add to the understanding of teacher cognition (and how teacher cognition affects technology use). Social structure and human agency, and power relationships are two of the most important concepts in post-structuralism that can contribute to the understanding of teachers' use of technology.

Social structures which, in this case, can include the school and the different positions of authority people hold within the school, the School Governing Body (SGB), the parents, the teacher's post level, race, class and gender can all affect human agency (one's own decisions and actions). For example, if the teacher in question feels the parents and the SGB discourage the use of technology in teaching and learning, then the teacher will be less likely to implement technology use. Studies which have considered whether or not gender plays a role in the use of technology for teaching and learning have not yet come to a consensus (See Lam, 2000 and Borg, 2003). However, "power operates within society, constraining or enabling human action" (Norton, in press, p. 3). Thus, all power relationships need to be considered when examining why teachers do or do not use technology. For example, a teacher may consider using technology in the classroom, but decides against it because s/he feels as though, perhaps because of a senior teacher's views and stance, that s/he should not be making use of the equipment.

Power relations are an important consideration. Generally, the power within a classroom resides with the teacher. It can be argued that teachers do not want to lose their sense of power, which may occur if they attempt to introduce technology into their teaching since learners, in general, often have a better understanding of the workings of technology. A teacher's private use and understanding of technology could also influence this, as, in theory, if a teacher is conversant with technology in her/his private life, it may be easier for her/ him to use technology in the classroom, without this fear. In addition to power considerations, it is important to note that attempting to use technology in front of a large

group of people can be extremely unnerving and this may cause the teacher to make simple errors. These ‘forced’ errors could cause the learners to become impatient and restless, and could also influence their view of the teacher’s general ability level. A teacher who attempts to use technology and is unsuccessful (or requires assistance from a learner in order to be successful) may feel as though s/he has lost credibility or power. This possible loss of power can deter teachers from embracing technology. “...One is either subject *of* a set of relationships (i.e. in a position of power) or subject *to* a set of relationships (i.e. in a position of reduced power)” (Norton, in press, p. 2). Although Norton’s work (and many others within this field) refers specifically to L2 acquisition, the ideas are applicable to other situations.

### ***2.10 Theory to be used in this study***

As Borg’s theory of or understanding of teacher cognition includes aspects of both motivational and social psychology, it will be used as a foundation for this study. Certain aspects of post-structuralism and social and motivational psychology will be added to Borg’s understanding of teacher cognition. This is not to imply that Borg’s work in teacher cognition is lacking; I am merely explicitly stating precise contexts to be studied, some of which may have been included in his theory under more general headings. Thus, value-expectancy framework will be considered as a contributing factor toward teacher cognition, with a particular focus on self-efficacy theory and cost-benefit analysis. Contextual factors, which I understand to also include social factors, will also include power relations, social structures and human agency, support structures for the implementation of technology within the school and greater educational community. Classroom practice will consider the teachers’ experiences and their ability to directly relate improvements in their class to the use or exclusion of technology. It must be noted that classroom practice will not be observed in this study, as the emphasis is on how the teachers interpret their own practice and experiences and not what I make of it. The private use of technology has been included as the teachers’ familiarity with technology could influence the inclusion of it in their teaching. The following diagram illustrates the foundation for this study, which draws largely on Borg’s work. The arrows indicate the direction of influence which is, in some cases, bi-directional. For example, teacher

cognition influences classroom practice while classroom practice influences teacher cognition.

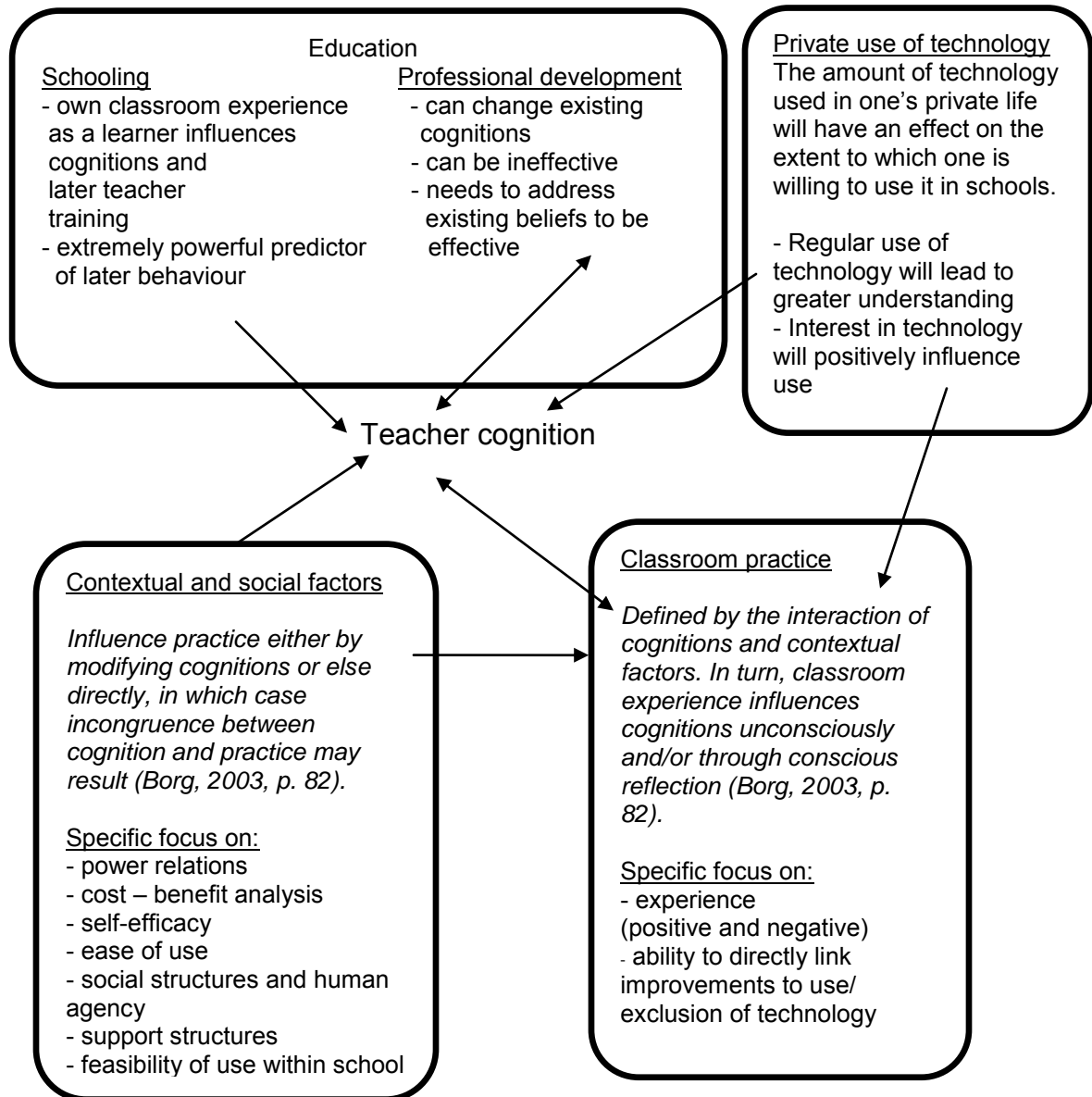


Figure 3: Theoretical model underpinning this study

## ***2.11 Conclusion***

In summary, technology integration into English language teaching is both desirable for the learners, as they will benefit from it, and in terms of the curriculum, as it requires that technology be used. 'Literacy' has evolved from the (straightforward) ability to read and write to today's notion of 'multiliteracies', which require learners to be able to read, write, interpret, interact and engage critically with various text types. The book is no longer sacrosanct; visual literacy is becoming increasingly important, the internet provides a wealth of reading materials and audio material is easily available. Our learners need to be prepared for this world. Using technology in classrooms would lessen the difficulty of this task. However, teachers have been reluctant to embrace new (and sometimes old) technologies. Why is this? External barriers may play a role, but they cannot be seen as defining the level of technological integration. Merely having a computer in a classroom is not technological integration - using the technology is required. To understand why this does or does not take place, teacher cognition must be explored. In order to explore teacher cognition as deeply as possible, Borg's work in teacher cognition will be used as a background to the study, with post-structural features as well as motivational and social psychology aspects added. Chapter 3 will explain the research process which was undertaken in an attempt to answer some of these questions.

## **Chapter 3: Research Design**

### ***3.1 Introduction***

The purpose of this study was to ascertain how English teachers' cognitions affect their use of technology. In order to achieve this, a sample, which consisted of six English teachers across four different schools, was identified. A set of semi-structured interviews was conducted. This was identified as the best method as it allowed for the respondents to give detailed and in depth answers, which could assist in achieving the research aims. The interviews were then transcribed and analysed to find common themes. A detailed description of the research process is provided in this chapter.

### ***3.2 Research Aims***

The aims of this research, as previously discussed in Chapter 1, are to explore the cognitions, and the origins of the cognitions, of selected English teachers regarding the integration of technology in English Language classes. Teachers make certain pedagogical decisions based on their system of knowledge, beliefs, values and so on, which is why studying these cognitions is important; they help us to understand the pedagogical choices teachers make.

### ***3.3 Research Approach***

The approach towards this research was qualitative and interpretive in nature. As Cohen, Manion and Morrison explain "The interpretive paradigm...is characterized by a concern for the individual." (2001, p. 22) As this study focussed on 'the individual', rather than on the institutions within which the individual is located, and on understanding and interpreting phenomena in context, a qualitative framework was deemed appropriate. The ultimate point of this research was to attempt to understand why certain teachers make certain choices. Although structures (such as the curriculum, school policies and so on) can be said to influence the individual choices, they cannot fully explain the choices made by individuals in different contexts. Thus, my concern was for the individual and understanding, and interpreting, the specific, rather than the general. (Cohen, Manion and

Morrison, 2001, p. 25). This also allowed for an understanding of how the individual is affected by structures such as school or government policies.

The interpretivist approach also allows for the fact that “knowledge is constructed not only by observable phenomena, but also by descriptions of people’s intentions, beliefs, values and reasons, meaning-making and self-understanding” (Henning, 2008, p. 20). This was crucial to my study, as I aimed to gain an understanding of teachers’ cognitions – if I had relied solely upon “observable phenomena” I would not have been able to achieve the purpose of my study; it was crucial to gain a deep understanding of the interviewees’ beliefs, world views, experiences and understandings. “To retain the integrity of the phenomena being investigated, efforts are made to get inside the person and to understand from within” (Cohen, Manion and Morrison, 2001, p. 22).

This research took the form of a case study, as this type of study is the most suitable to attempt to answer questions regarding beliefs, attitudes and behaviours. “Thickly described case studies take multiple perspectives into account and attempt to understand the influences of multilevel social systems on subjects’ perspectives and behaviours” (Babbie and Mouton, 2001, p.281). Due to time constraints, a small sample size was used, with each participant being interviewed for approximately an hour. In addition, each participant filled in a biographical questionnaire.

### ***3.4 Site selection and participants***

The selected sites for the study were four schools within the Grahamstown area. The study was delimited to government schools: two of the schools were former Model C schools and the other two schools were township schools, one of which was in the Rhini area. This selection of schools provided for the maximum possible diversity within such a small sample. The schools were stratified in a deliberate effort to ensure two types of schools were represented in this study. As a prerequisite, all of the schools needed to have access to technology in some form. Since the study focused on teacher cognition with regard to technology integration, it was necessary for my sample to have had experiences with regard to the use of technology as these experiences would inform their

thoughts, beliefs and knowledge systems. Aside from the sample providing maximum diversity, the schools were also ideal as they are not inundated with technology in the same way as many private schools. I chose not to include private schools as the culture of the institution often ‘forces’ the use of technology and this could have led to teachers being apprehensive to share negative views with me, which would have impacted on the validity of my study. Secondly, most private schools do not use the NCS and, while their policy documents may well call for the integration of technology, it must be noted that different policy documents could affect teacher attitudes, beliefs and thoughts in different ways. Thus, including private schools would have complicated this study unnecessarily and private schools were not included. The FET phase was selected as there is a particular focus on the integration of technology in this phase.

The six participants in the study were English Language teachers who were practising at the selected schools. I first approached the school head, in writing (See Appendix A) in order to obtain permission to include the school in my study, and then approached the schools’ English teachers. The English teachers were not compelled to participate in the study; having the permission of the school head did not guarantee the teachers would participate as participation was strictly voluntary. In some cases, the school indicated which teachers would be willing to assist me. This was very helpful as it saved me a great deal of time – instead of approaching each teacher and explaining the project and distributing and collecting biographical questions in order to discover which teachers would be interesting in helping me, I only had to approach the teachers who had already indicated that they would volunteer. In cases where there were only two English FET teachers at the school, I approached both of the teachers. No school had less than two FET English teachers.

All participants of the study, including the school principals, interviewees and other relevant persons, were clearly informed about the process and reasons for the study. Consent forms, which clearly explained the purpose of the interview and the study, were signed by all interviewed teachers (see Appendix B). Confidentiality could not, unfortunately, be guaranteed as Grahamstown is a small town and, for example, a

school's ethos might make it recognisable. However, I changed all the participants' names and the names of the schools in order to preserve anonymity as much as possible.

Each school was numbered 1 – 4, keeping with the order in which I conducted the interviews. Each teacher was given a pseudonym, with the initial letter of the name corresponding alphabetically with the order which the interviews took place.

Unnecessary detail which could make a school recognisable was not included. It was made clear that the schools would not be financially rewarded or receive access to technology as a reward for participating in the study.

### **School 1**

School 1 is an all girls, former Model C school in Grahamstown. This school is fairly well resourced and maintained. There are approximately 410 learners at the school, with 26 teaching staff. The learner to staff ratio is approximately 16:1. The school has both day scholars and boarders. The school has approximately 70 computers, which are linked to the internet. The learners have access to the computers and may use the internet. Two teachers from this school participated in the study. Both teachers (Ms Anderson and Ms Bird) teach Grade 8 – 12, English Home language.

### **School 2**

School 2 is a co-ed, township school in Rhini. There over 1000 learners at this school, with only 40 teaching staff, making the learner to staff ratio 25:1. All the learners are day learners. The school has access to only 30 computers, while the average class size is between 36 – 40 learners. Access to the internet is very limited. Not all equipment at the school is well-maintained. One teacher from the school participated in the study, Mr Cele. He teaches Grade 10 – 11, English First Additional language.

### **School 3**

School 3 is an all boys, former Model C school in Grahamstown. There are 86 computers at the school; 66 are set aside for the learners to use. There are 33 teachers at the staff, with 614 learners. The learner to staff ratio is approximately 19:1. The school has both boarders and day scholars. The school was about to receive an interactive white board at

the time of the data collection. One teacher from the school participated in the study, Mr Dart. He teaches Grade 8 – 10, English Home language. Although this teacher only teaches one grade in the FET category he was used in the study as he does fit the relevant criteria. Further, he was able to offer some valuable insight into the different teaching styles and methods that are effective in the different phases. In addition, there were only two English teachers at this school and one withdrew due to work pressure.

#### **School 4**

School 4 is a co-ed, township school. Two teachers from the school participated in the study. The learner to teacher ratio at the school is approximately 34 to 1. The school is purely a day school. The school has only 25 computers in total; this number includes the computers used solely for administrative purposes. Access to the internet is provided for educational purposes only. English is offered at both Home language level and First Additional language level. Ms Emoja teaches Grade 10 and Grade 12, English Home language. Mr Ford teaches Grade 11 – 12, English First Additional language. The principal of the school highlighted the need for staff training in the use of technology.

### ***3.5 Data collection and analysis***

#### **Questionnaires**

##### **Purpose and nature of questionnaires**

Initial data collection consisted of two questionnaires, in order to gain background knowledge of possible schools and participants (See appendix C and appendix D). The first questionnaire was labelled ‘initial questionnaire’. The initial questionnaire was a tool designed to provide background knowledge about the school’s access to technology. The second questionnaire was biographical questionnaire, aimed at gathering factual details from teachers who were interested in participating in this study.

##### **Piloting of questionnaires**

In order to ascertain the value and the suitability of the questionnaires, piloting was carried out. The respondent was an English Home language FET teacher at a Grahamstown school. The respondent was not used as a part of the study; nor was the

school she taught at. There were two questionnaires involved in this study and both were piloted. The respondent commented positively on both of the questionnaires in terms of layout, ease of understanding and time consumption. Minor changes were made to both the initial questionnaire and the biographical questionnaire.

The questionnaires were only piloted once due to a number of reasons. Firstly, time constraints played a role. Secondly, the questionnaires followed a fairly routine format. Thirdly, although the questionnaires were important, the interviews were the focus of the study, and, as such, it made more sense to focus on piloting the interviews twice. Lastly, the changes which were necessary were fairly minor and I did not believe that any major changes would arise from a second piloting of these questionnaires.

### **Administration of questionnaires**

The questionnaires were delivered to, and collected from, the schools I hoped to use in the study. All the schools I approached agreed to participate in the study. The results of the questionnaires were used to gain knowledge of the schools' access to technology and to gain biographical knowledge of the teachers who would be willing to participate in the study.

The biographical questionnaires were given to English teachers within the schools in order to gain biographical information and details on aspects of their teaching, such as class sizes (See Appendices C and D). The biographical questionnaire did not assess the teachers' attitudes, beliefs or thoughts about technology. If the questionnaire did assess attitudes, beliefs and so on, and teachers were selected on the basis of the answers, this could have raised questions of validity as I may have unwittingly created a skewed sample, with either a majority positive or negative attitude towards technology. Since the questionnaires did not examine beliefs and attitudes, I could not be influenced, consciously or unconsciously, to select participants based on their beliefs or attitudes.

Initially I had hoped that the questionnaires would assess the respondents for suitability according to enculturation, current involvement and availability (Babbie and Mouton,

2001, p.289). However, in many cases there were only one or two teachers at each school who were willing or able to participate in the study; this limited my ability to assess respondents based on current involvement and so on. Instead, I needed to use the respondents who were willing to assist and fitted the criteria I had laid out. However, the questionnaires were still valid as they provided information about the respondents which assisted in conducting the interviews and prevented time being wasted on simple straightforward questions. For example, as a direct result of the answers provided on the biographical questionnaires, the questions aimed at teachers who had never attempted to use technology in class before were removed.

In total ten teachers completed the biographical questionnaire. All of the six teachers in the study filled out a biographical questionnaire and returned it. Two teachers who initially filled in a questionnaire chose to withdraw from the study, due to time constraints and work pressure. A further two teachers filled in the questionnaire, but did not return it despite requests. These teachers were excluded from the study as they did not appear willing to partake. This resulted in six teachers taking part in the study. Of these six teachers, three were from former Model C schools and three were from township schools. This allowed for equal representation.

In addition to the biographical questionnaire which was completed by the teachers concerned, a person at each school completed an initial questionnaire which pertained to technological access. This person was not necessarily one of the teachers involved in the study and was not interviewed further, unless it was a teacher already involved in the study. Most commonly the school principal or a teacher who was knowledgeable with regard to the school's technology filled in this initial questionnaire.

## **Interviews**

### **Purpose and nature of interviews**

Following the administration of the biographical questionnaire, a series of semi-structured interviews took place. Semi-structured interviews were deemed to be a suitable method of data collection as they allow for the interviewee to “to speak for him/her/itself rather than to provide our respondent with a battery of our own predetermined hypothesis

based questions” (Babbie and Mouton, 2001, p. 289). These interviews were challenging, particularly with the teachers who did not often choose to use technology. As I probed to discover their reasoning, teachers sometimes became defensive. Since the values of using technology are being extolled by everyone lately, it could be that they assumed that I was of a similar opinion and was questioning their judgement or choices. Teaching is a very personal matter and this could also be a part of the reason. Lastly, it may have simply been my style of questioning and interacting. Most likely, it is a mixture of all of these factors. My experience here has taught me to attempt to affirm my interviewees more in the future and to carefully reconsider any assumptions I may have prior to interviews.

### **Piloting of interviews**

Two pilot interviews took place. Both interviews were with teachers who taught English Home language at the FET level. Neither of the teachers taught at a school which was used in the study. The teachers involved in the pilots were made aware of the purpose of the interviews before the interviews took place, and agreed to have the interviews recorded and used for the purposes of this study. The first respondent had been involved in piloting the questionnaires. This situation was ideal as she was able to offer feedback on the entire process. It also allowed me to practice the entire process and note any problems.

Both of the pilot interviews affected the set of questions which were asked (See Appendices D and E). The interviews also affected the manner in which many of the questions were asked, and raised my awareness of the need to ensure that my interviewees felt comfortable and were not pressurised.

One of the most notable changes occurred with the initial question, as I had planned to simply ask interviewees to provide their definition of technology. The pilot interviews illustrated that this was complicated, as the interviewees’ definition did not necessarily fit with the definition of technology that I had been using and there was not space for discussion of possible meanings. Thus, I decided instead to discuss the meaning of technology with each interviewee and agree upon a basic set of examples which would

serve as a definition. This ensured all the interviewees were discussing the same thing. This approach was helpful as it created more of a conversational atmosphere, rather than a rigid question and answer session.

In addition, I noted a tendency on my part to ask more than one question at once, which prevented the interviewee from answering the initial, and often more important question, on quite a few occasions. I attempted to curb this behaviour, as well as steer clear of questions with a yes/no answer. This attempt to change these habits was not always successful, as transcribing revealed. However, I do believe it occurred to a lesser extent overall.

### **Administration of interviews**

The interviews were conducted at a time and place deemed suitable by the interviewee in every case. The questions were carefully structured in order to allow the topic to be explored as naturally as possible as the interview progressed. In addition, the questions were set specifically to avoid influencing the interviewee with leading questions or personal bias. Each interview was recorded with a digital voice recorder (with permission granted by the interviewee) and transcribed in full (see appendices G to L). One interviewee requested a copy of the transcript; this was emailed to the interviewee concerned once transcription had been completed.

### **Analysis**

Data analysis was an ongoing process from the outset of this research. As Henning points out, it is important for the researcher to “constantly reflect on impressions, relationships and connections while collecting the data. The search for similarities, differences, categories, themes, concepts and ideas forms part of the continuous process” (2008, p. 127). Once the data was collected and transcribed, it was analysed and coded. For example, responses which had similarities were grouped together under fairly general headings. Responses to questions which focussed on one area were also grouped, and differences and similarities were noted. As well as grouping responses, colour coding was used fairly extensively. This allowed for main themes or principal ideas to emerge from

the data (Lichtman, 2010, p. 198). Once the coding process was completed, the “principal emergent ideas in each piece of transcribed data” were identified (Davies, 2007, p. 193) and categories were established (Lichtman, 2010, p. 199). The categories were also largely informed by Borg’s model, which was used as a framework for this study. The data was then colour coded again according to its place in each category. Lastly, meaning was made clear by identifying concepts or themes within the categories (Lichtman, 2010, p. 200), which answered the research questions at hand.

### **3.6 Validity and reliability**

One threat to the validity of this study lies in the fact that the interviews were completely optional. This could mean that the interviewees are just enthusiastic teachers and willing to try new methods, which could predispose them to the use of technology.

Further, cognitions are difficult to express and sometimes interviewees could provide valid reasons, but these could be only partial truths or subject to change. The answers may have been influenced by a perceived need to answer ‘correctly’. However, experts can generally talk about their field and their practice because of their experience within the field (Gladwell, 2005, p. 182).

### **3.7 Conclusion**

This chapter has explained the nature of the research and the methods used to complete it. In the following chapter, the findings of the research will be given.

## **Chapter 4: Analysis**

### ***4.1 Introduction***

In this chapter, the findings of the research are presented. Firstly, an overview of the teachers who participated in the research and their habits with regards to technology use will be presented. The teachers' definitions of technology will then be given. Following this, the data will be presented under the following headings, as these dominant themes emerged from the analysis of the data: 1) Educational background, 2) Practical issues affecting the use of technology, 3) Power relationships, 4) Intrinsic value and expectancy of success and, finally, 5) Costs and benefits. In conclusion, the key issues arising from each school type will be discussed and contrasted.

### ***4.2 Teachers' technological habits***

The sample of teachers in this research, although small, covered a broad spectrum : the youngest teachers were both 28, the oldest teacher was 55; 3 women and 3 men participated; and experience ranged from over 20 years of teaching to below 4 years. Interestingly, their technological habits and background did not vary as much as one would expect. All the teachers in the study had access to technology in form of cell phones, computers and so on. One teacher did not own a television. All the teachers had access to the internet, either at home or at work, and all teachers had used technology in teaching before. Only one teacher expressed a dislike of technology, specifically cell phones.

Of the six teachers, five had received formal training in using technology. The type of training received by the teachers varied. Three of the teachers received training in using technology as a teaching tool. All of this training was done as a part of a degree course. Of the other two teachers, one teacher participated in a computer literacy course, while the fifth teacher, Ms Bird, partook in a *PhotoShop* course. The types of courses these two teachers chose to participate in could reflect the ability levels of the teachers in question, as participation in a photo shopping course often presupposes other computer skills to be present, even if only at a basic level. Ms Bird also ran a course on innovative teaching

methods, most of which relied on some form of technology, earlier this year (2010). The one teacher who had not received any type of formal training received informal training and assistance from colleagues.

It is interesting to note that the majority of these teachers received some of their computer training from Rhodes University. As the university also provides rationed internet access to some of the schools, the involvement of the university must be noted as this could have an influence on the teachers' use of technology and acceptance of technology as teaching tool.

	<i>Technological training (formal)</i>	<i>Personal access to technology</i>	<i>Frequency of computer use</i>	<i>School's access to technology</i>	<i>Use of technology in teaching</i>
<i>Ms Anderson (former Model C)</i>	None	TV, laptop, internet, cell phone, Radio, DVD player	Daily	School 1: Computers, internet, TV, VCR/DVD player, Radio/CD player, data projector, cell phones (used for academic purposes in Mathematics department), cameras, video camera	Yes
<i>Ms Bird (former Model C)</i>	Photo shop course	Radio, CD player, cell phone, computer, internet access	Daily	School 1: See above	Yes
<i>Mr Cele (Township)</i>	Computer literacy course	TV, computer, internet access, DVD player, Radio, CD player, cell phone	Weekly	School 2: Computers, internet, TV, VCR/DVD player, data projector	Yes
<i>Mr Dart (Former Model C)</i>	As part of degree course: ICT BEd (Hons)	TV, computer, internet access, DVD player, VCR, Radio, CD player, cell phone	Daily	School 3: Computers, internet, TV, VCR/DVD player, radio/CD player, data projector	Yes
<i>Ms Emoja (Township)</i>	As part of degree course: PGCE	TV, computer, internet access, DVD player, Radio, CD player, cell phone	Daily	School 4: Computers, internet, TV, data projector	Yes
<i>Mr Ford (Township)</i>	As part of degree course: PGCE	TV, computer, internet access, DVD player, VCR, Radio, CD player, cell phone	Daily	School 4: See previous	Yes

### ***4.3 Definitions of technology***

The teachers involved in this study all had varying definitions of technology. These definitions are interesting, as they reflect part of the teachers' views on technology. For the purpose of this research, technology was defined as any electronic or digital device, excluding the overhead projector, which could reasonably be used as a teaching tool. Overhead projectors were specifically excluded as I wanted to focus on teachers using more challenging and newer forms of technology; the overhead projector is generally as accepted as the chalkboard in classrooms. All teachers agreed to use this understanding of technology for the interview process, but their definitions of technology were also discussed beforehand. It must be noted, however, that since the teachers all filled in an initial questionnaire (discussed in detail in Chapter 3), which questioned their use of technology and provided examples of types of technology I was interested in, the definitions of technology they provided may have been affected.

Ms Anderson's definition of technology was affected by the novelty of the equipment she was using. For example, as she often used DVDs, she no longer considered them to be technology. Thus, when she considered using technology in teaching, her focus was on PowerPoint and computers. This reflects the level of comfort this teacher felt with certain types of technology. Ms Bird, who teaches at the same school as Ms Anderson, considers technology to be anything "electronically governed", but also distinguished between modern and older technologies. Similar to Ms Anderson, her focus falls on computers initially.

Mr Cele defines technology as machinery. His initial examples of technology that could be used in the educational context are radios, video players, tape recorders and computers. It is interesting to note that computers were his final example, and he qualified computers with the comment, "I thought you were probably more interested in computers..." (Baron, 2010c).

Similar to Ms Bird, electronics was also the focus for Mr Dart. He also felt it was important that technology was something we used to make our lives or work easier; it was viewed as an electronic tool which aids us.

Ms Emoja viewed technology as a very broad term. She included a pen in her broad definition of it. She did point out that she does not really consider using a pen technology, however if one were to define the term, such items would have to be included. With regard to technology used in teaching, which narrows the term 'technology' a bit, her main focus was on using a data projector and computer. Mr Ford, who teaches at the same school as Mr Emoja, also emphasized, as did Mr Dart, the fact that technology is here to assist us. In his examples he included overhead projectors, tape recorders and data projectors.

#### ***4.4 Role of technology in teachers' own education and professional training***

##### **4.4.1 Own schooling experience**

All of the teachers involved in the study were taught at some stage through the use of technology. Although all were exposed to some form of technology in English, the reflections here were not necessarily limited to the English classroom. The most commonly recalled instance involved music being played as inspiration for an essay, or as a link to a poem. Notably, all four of the older teachers (ages range from 40 to 55) spoke of this form of technology being used, whereas the two younger participants (both 28) spoke mainly of movies being screened and the introduction of computers towards the end of their schooling careers.

All of the teachers felt that they had enjoyed lessons more when some form of technology was involved. This was mainly due to the fact that it was novel, and thus the lesson deviated from the norm. It was also mentioned by the majority of the participants that work was not taken as seriously in the classes where technology had been used.

#### **4.4.2 Formal training received**

All of the teachers, except one, had received some form of training in the use of technology. Training was viewed as generally helpful or at least beneficial in a few ways by all respondents who had been trained. The study made the distinction between being trained to use technology and being trained to use technology for educational purposes. Of the five teachers trained, three were trained to use technology for educational purposes as part of a degree course. Two of the teachers used technology and the skills they had learnt frequently, while the other participant did not. The two who did make use of this training frequently in their professional lives were both at a township school, while the teacher who did not frequently use technology is at an arguably better resourced former Model C school. Of the two teachers who were not trained to use technology for educational purposes but were trained in using technology, one does make fairly frequent use of technology in teaching, to the extent that she was a finalist in the Microsoft Innovative Teachers competition in 2009. The other teacher does not make frequent use of technology.

The participants in the study also made it clear that, although parts of the training received were helpful, chunks of the training were also pointless or not useful to them in any way. This could be due to a mismatch of expectations and outcomes; the teachers could have expected or hoped to learn certain skills which were not part of the training course and might have not expected to go over skills they already had, which were a part of the course. As courses need to cater for a wide variety of skills and abilities, it is unlikely that the training course would be able to ensure that the material is new for every teacher and builds on the teachers' prior knowledge. Thus, for more experienced and skilled teachers, the training may be repetitive, but for teachers with less training or experience, the course may be challenging. The teachers at the better resourced, former Model C schools were more vocal about training not living up to expectations. This could be due to the fact that the schools are better resourced and thus the teachers are more exposed to the technology and have more experience in dealing with it. It could also be a possible effect of having a strong community of users within the staff.

#### **4.4.3 Informal training received**

In School 1 (former Model C, Ms Anderson and Ms Bird), the level of informal training was fairly high, as there were quite a few teachers who were knowledgeable with regard to technology and shared this knowledge frequently and freely. In addition, the school had a technological assistant who could assist the teachers if needed. Training in programmes such as Excel was also offered by the school in order to actively encourage the staff to use technology. This type of training can be viewed as more formal training, but as it is the school running a session and not a mandatory government-led initiative, it has been included here. It has also been mentioned here as I believe it is representative of the community of users these teachers are exposed to; the school is obviously very encouraging. Although Ms Anderson had never received any formal training in the use of technology, it is unsurprising that she is willing and able to use technology given the support for its use the school has created.

Mr Cele, at School 2 (township), has not really been exposed to much informal training. Within the school, only one teacher, who had already left prior to the start of the research showed an active interest in using technology for teaching purposes and promoting its use. Many other teachers at the school use technology, but it is mainly seen as an administrative tool.

Mr Dart (School 3, former Model C) is a young, fairly technologically savvy teacher. He set up the school's Audio-Visual room and reports having little to no difficulty in using technology and has taught computer literacy for junior learners at his school. Much of his experience in using technology seems to be self-taught or a direct result of his formal training. Although there are other teachers who use technology in the school, they do not form a part of the English department and Mr Dart is not directly involved in any of the projects. Informal training may not be highly noticeable in this situation due to his formal training and familiarity with technology. Interestingly this teacher does not use technology frequently.

Lastly, Ms Emoja and Mr Ford are both well-trained with regard to technology use. Ms Emoja seems to be more affected by informal training than Mr Ford. Mr Ford is involved in training learners at school 4 to use technology and is involved in formal training through Rhodes University. When he discusses learning to use technology, formal training or practising and learning by himself are brought to the fore. In contrast to this, Ms Emoja mentions learners in her classes explaining how to use some technology and she mentions Mr Ford (who is the head of the English department) encouraging the English teachers to use technology.

## ***4.5 Practical Issues***

Findings with regard to the nature of technology and the accessibility of technology will be presented here, as both have a bearing on the use of technology. Security and the storage of technology will be discussed.

### **4.5.1 Access to technology**

Having access to technology cannot be underestimated as a driving factor behind the choices teachers make when considering how to teach. All teachers mentioned this as a factor, to varying degrees. In certain cases, for example Mr Cele's situation, a lack of accessibility seriously curtailed the use of technology while in other cases, for example Ms Bird's situation, access to technology increased the use of it. Mr Dart, who has access to a fair range of technology, found it mostly problematic that the technology was not instantly available. One had to book for it and move classes in order to use it.

Interestingly, however, when he was in a class which did have technology housed in it, his use of it did not increase.

The teachers at school 4 also raised the issue of access to technology. Ms Emoja and Mr Ford both raised the positive side of access to technology: a large part of the reason they use technology is that they have access to it. However, as they are at a fairly under resourced school, they do not have technology in abundance and this is a cause for worry, particularly for Mr Ford. Access to the data projector or computers is not always

guaranteed, which means that one needs to plan lessons using the technological equipment quite far in advance so the equipment can be booked. In addition to this, the school does not have enough computers to accommodate the average sized class. Both teachers felt that this made it impossible to teach the learners using the computers in a lesson.

#### **4.5.2 Nature of technology**

Faulty technology was raised as an issue more often by the township teachers than the former Model C teachers. This could be due the fact that the technology used at the township schools is older and not as well maintained. Both the former Model C schools had a member of staff who was in charge of technology; neither of the township schools had such a position. Former Model C teachers tended to emphasize other issues, such as power failures, which made using technology unreliable.

#### **4.5.3 Security and storage**

None of the teachers or schools reported any issues with regard to the security of technology. This may be due to the fact that the technology is stored in well-secured areas. School 4, for example, stores all their mobile technology in a safe. The only issue which was raised with regard to the storage of the equipment was gaining access. Mr Cele pointed out that sometimes the equipment is locked away and tracking down the keys can be problematic. This could be discouraging to teachers who wish to make use of the technology.

### ***4.6 Power relationships***

#### **4.6.1 Class, gender and age**

Gender was not seen as a real issue by any of the respondents when it came to technology use. The only example given which could lead to it being seen as an issue was given by Mr Cele. He spoke briefly about boys being ‘in charge’ of rewinding or fast forwarding a video which the learners were watching during break time. The girls were instructing the boys on what to do. However, when he discusses other instances of technology being used, this pattern does not re-emerge. Ms Emoja pointed out that boys are perhaps more

vocal about what they know, but that this does not necessarily indicate that they do in fact know more about technology than their female counterparts. Ms Anderson, Ms Bird and Mr Dart all teach at single sex schools, which made it difficult for them to comment on gendered behaviour. With regard to staff, gender did not seem to be a determining factor.

All the teachers who participated in the study seemed to accept and embrace the fact that their learners knew more about technology than they did. The majority of teachers believed that it was only natural that the younger generation should understand technology better. This was true of the two younger teachers too.

Social class was raised as an issue as it can be a determiner of access to technology, which would then limit the familiarity learners would have with using technology. Ms Bird saw cell phones as a way of bridging this gap, especially as many cell phones are internet enabled and the majority of people have a cell phone or have access to one. However, one's social class does not always determine the technology one has access to, as Mr Dart pointed out. In some cases, technology is highly valued and is purchased despite expense.

All teachers at the township schools (Mr Cele, Ms Emoja and Mr Ford) spoke of the importance of preparing their learners for a world in which they would have to use technology. For Mr Ford, this realisation translated into after school computer classes, which he runs and are strictly voluntary. Mr Cele does not use computers in his teaching, or only rarely does so. Despite his realisation that it is necessary for the learners to have an understanding of technology, especially as they are not privileged enough to have sufficient home exposure, computers are not integrated into his teaching. This seems to be a school-wide phenomenon though; many teachers have discussed the need for the learners to have access to the computers, but they remain locked up unless used for a class. There is no access for the learners in the afternoon. This will be discussed further under structural issues.

## **4.6.2 Structural issues**

### *4.6.2.1 Curriculum*

As discussed in the literature review, the curriculum and government policies can be seen as structural factors which construct teachers' motivation for teaching in a certain ways. However, the curriculum and government's educational policies did not seem to be a driving factor in any of the teachers' decisions regarding the use of technology. Mr Cele was unclear about where technology fits into the English syllabus and Mr Ford also viewed some of the policies and aspirations of the Department of Education as unrealistic. Ms Bird uses technology in her teaching as way of teaching learners "important real life skills" (Baron, 2010b) and not necessarily because it is part of the curriculum.

One interesting point made by Mr Ford was that the curriculum is already very challenging for learners, and often there is not really space or time to teach them using technology, as it adds to the difficulty of the task and the amount of time spent on the task increases. The curriculum needs to be covered at a certain pace, and using technology can be an impediment. This was also mentioned by Ms Bird, who feels that if technology is to become an integral part of the English curriculum, it cannot simply be added into the curriculum without anything else falling away or the time span changing. Mr Ford runs computer classes after school because it is not feasible for learners to learn to use computers in class whilst also struggling with English.

### *4.6.2.2 School policy, management and societal expectations*

In cases where management was seen as actively and explicitly encouraging the use of technology, use appeared to increase. For example, Ms Emoja stated that the head of the English department, Mr Ford, really encouraged them to use technology and the teachers within the English department used technology more than other teachers. Ms Anderson and Ms Bird also felt that they were encouraged to use technology.

In contrast to this, although Mr Cele believed that technology use was encouraged in general, no one at the school actively encouraged it. Previously, the deputy principal had

encouraged the use of technology and had made announcements when, for example, new programmes were installed on the computers. Mr Cele felt that this had led to an increase in use, which has, since the deputy principal's departure, tapered off. Mr Dart's situation was similar, with no one within the English department directly encouraging the teachers to use technology. No teachers in the English department used technology frequently. In contrast to this, an initiative was set up in the Mathematics department, which allowed the learners to use computers to play Mathematical games with other learners across the world. This resulted in the Mathematics teacher becoming involved too and eventually culminated in an international Maths Olympics day. This illustrates how encouragement and a supportive system can draw teachers into using technology. However, it does appear that the encouragement and support needs to be explicit.

#### *4.6.2.3 Inequality within schooling system*

Although apartheid officially ended 16 years ago, the education system in South Africa is still far from equal (Fleisch, 2009, p. 82). This inequality plays a role in the relative ease or difficulty of using technology to teach. For example, poorer schools have larger classes, which means that there is less one-on-one time available to assist learners who need help. As learners are not all at the same ability level at the same time, using technology with a larger class is more difficult and more time consuming than using it with a smaller class, which could be a deterrent.

Added to this is the issue of resources. Both of the former Model C schools had a computer laboratory which could accommodate all learners in an average sized class. Neither of the township schools had this luxury, which means that if a teacher wanted learners to, for example, participate in a cyber hunt, the learners would have to either work in groups or in shifts. Ms Emoja points out that this makes it impossible for the learners to gain skills in using computers during class time. Mr Cele, who had once created a project in which his learners were required to use computers, also mentions the difficulty of this, as the learners could not all finish in the same time frame. Mr Cele sums up the issue of access to resources in reply to a question about whether or not he had planned, prior to starting his teaching career, to use technology: "Had I had any

hopes? ... I had no hopes that I would be confronted with a situation where I'd have to use technology. It was... no, inconsiderable... Even now I still believe it's going to take a long while for the schools, for the majority of the schools to be resourced enough for teachers to rely on technology" (Baron, 2010c).

## ***4.7 Intrinsic value and expectancy of success***

### **4.7.1 Value of activity**

All the teachers discussed the value of learners actively using technology to create something and learn new skills. If the learners were given a project which required they use technology, the new skills it could provide were seen as important. Ms Anderson and Ms Bird have, for example, an English project that is run every year in which the Grade 11s have to create a curriculum vitae. This project was chosen specifically as it was a skill the learners would need later in life. Thus, although it was difficult to arrange time for the learners to use the computers and so on, the worth of the project superseded these types of concerns.

Mr Cele had one project last year, for English, where the learners created an advert on the computer; this project allowed them to gain experience in using a computer as well as teaching them the basics about advertising. Although he has not repeated the project, he felt that it had been worthwhile as the learners had gained new skills.

The teaching of visual literacy was viewed as an integral and important part of the English syllabus by all the teachers, apart from Mr Cele. Mr Cele felt that the learners did not regard visual literacy classes as work and so did not take it seriously and were unlikely to learn much. The other teachers saw it as being an important literacy, especially considering our society, which is becoming more and more visual. The teachers felt that visual literacy could not be properly taught without the use of technology. Thus, when they taught visual literacy, all the teachers used technology despite problems they may have had with the equipment. The importance of the lesson, for those teachers who valued the skills it taught, outweighed any reservations the

teachers may have had about using technology. Some of the teachers did not even consider using visual aids such as films as technology anymore, because it was used so frequently in their lessons. It was important for the teachers that technology be used for worthwhile activities and not just for its own sake. Ms Bird was particularly vocal about this.

Mr Ford saw the value of using technology, but felt it was better used in other learning areas and not always useful for English, or useful in limited ways. Mr Ford ran an after school computer class in order to equip the learners with some computer skills. It is important to note that it would not be feasible for him to have integrated these skills into his English classes, as there were not enough computers for an entire class to use at once. In addition, the classes were fairly large and with learners at different levels of computer literacy, integrating computers into, for example, a lesson which focuses on writing skills would most likely have been unsuccessful. However, in other situations he did use technology with his learners in English lessons.

It is also important to note that the teachers involved in this study also felt that some aspects of English could be better taught without the use of technology. For example, Mr Dart pointed out that writing skills are a fundamental and an integral part of English teaching. Using technology does not assist one in teaching these skills and may even be harmful. For example, if learners only ever use computers to write their essays, they will not learn how to spell unknown words, because these words can be easily corrected using spell check. Most of the teachers also mentioned the fact that they believed smses and Mxit had a negative influence on the learners' writing abilities.

#### **4.7.2 Degree of challenge**

The degree of difficulty in using technology was mentioned by all of the teachers. Interestingly teachers still tried to use the technology despite the problems, to varying degrees. If the teacher felt strongly that the lessons which incorporated technology were teaching the learners important skills that could be taught no other way, then the drive to use the technology and iron out problems increased. If the degree of challenge was too

high, this served as a deterrent. For example, Ms Anderson, Ms Bird and Ms Emoja discussed the fact that they were not always familiar with technology, which it made tricky for them to use it. For Ms Bird, this was motivating factor, however, as she did not want to stop learning how everything worked or find herself in a situation when she was unable to use devices.

In four cases faulty equipment or malfunctioning equipment increased the degree of challenge and this did lessen the teachers' attempts to use the technology in three of the cases for certain tasks or projects. Ms Bird felt that she had to use the technology in spite of problems because the benefits outweighed the challenge. In one case, the teacher, Mr Cele, did not feel that the technology was really useful in trying to teach and so when it became problematic he stopped using it.

#### **4.7.3 Self-efficacy**

Previous experiences are one of the biggest contributors towards one's sense of self-efficacy, which can be a determiner of future behaviour. All the teachers involved in this study were positively affected by their previous successes. Previous failures affected different teachers to varying degrees. In general, the previous successful experiences seemed to carry more weight than the unsuccessful experiences.

Previous successes were a driving factor in all of the cases and teachers tried to use technology again based on the results of a previously successful experience. Mr Cele also seemed markedly more excited about the prospect of using technology again after recalling a project and identifying successful aspects of it. Perhaps reflecting on the experience and recognising the success is key. Building on previous knowledge and experience also played a role as all the teachers felt it became easier to use technology with experience.

Mr Cele seemed to be the most discouraged by previous failed attempts. He experienced a high number of failed attempts due to a faulty television, which seemed to have discouraged him from using any technology. The project he designed for his learners in

which they were required to use computers to create an advertisement ended badly, with printers malfunctioning and learners being unable to complete the project. This may have coloured his entire experience of the incident, as it was the focus of much of his discussion about the project and it was only later that successful aspects were recalled. Ms Anderson also did not always repeat certain technology-driven lessons again if something did not work. She felt this was due to laziness though, a lack of drive to sort out the problem. This stopped her from repeating lessons which did not work well but did not stop her from trying new lessons or repeating ones that had worked.

## ***4.8 Costs and benefits***

### **4.8.1 Time factor**

If the technology took a long time to set up, participants were fairly negative about using it. In particular, Mr Cele struggled with faulty equipment, which was rarely used as a result. The faulty technology (or, in other cases, the technology in general) took up too much of the lesson time. Ms Emoja also discussed how faulty technology impeded her use of technology, with a special focus on the aspect of time. Interestingly, she still planned to use the technology, but was not sure how successful the lesson would be. Part of the reason she felt she had to persist with using the technology was because her lesson plans and the way she had structured her year plans revolved around the technology being used at a certain time in the year.

Some teachers also commented on the amount of time it can take to plan and prepare new lessons which relied on technology. However, the benefit of then later having quick and easy access to the same lesson was recognised. In particular, Ms Anderson stated that she would plan to use technology fairly often in lessons which were new, but she would not rework old lessons which she had enjoyed to include technology because of the time it would take.

#### **4.8.2 Explicit planning**

Two respondents, Mr Cele and Mr Dart, both felt they hadn't really considered how to use technology in teaching and so did not make much use of it. This could perhaps reflect the need to invest time and consideration into integrating technology into one's lessons. Ms Anderson, Ms Bird and Ms Emoja had all specifically planned to use technology in teaching and all did use it on a fairly regular basis. The extent and type of use have evolved for the two older women, Ms Anderson and Ms Bird, as technology has evolved a great deal since they first starting teaching.

#### **4.8.3 Interpersonal relationships and technology**

The majority of the teachers felt that technology should not be used too often as it impacts negatively on the interpersonal relationship between teacher and learner. When using technology, the focus is often on the technology and not the teacher or learner. For many of the teachers this was seen as an issue, as they felt that the learners need to interact with people. For example, Mr Dart discusses the issue of learners using Mxit on the playground instead of actually talking to each other. Ms Anderson specifically mentions the fact that learners use so much technology outside of the classroom that it has become even more important to emphasize the fact that human relationships are important too. She also feels that it is important that the learners get a chance to interact with adults, which often does not happen frequently outside of the classroom.

#### **4.8.4 Learners' reactions**

All the teachers felt the learners reacted positively to their lessons which incorporated technology, and this was seen as benefit of using technology. The majority of the teachers felt it was the novelty of the situation which led to the increased interest and the fact that the learners were interested in technology. Ms Anderson mentions, for example, that if she were to try to use technology in every lesson, the learners would soon become bored by it and would no longer react positively.

Mr Cele and Mr Ford felt that although the learners enjoyed lessons which incorporated technology, this did not necessarily mean they were learning more. Both teachers thought

that the technology could distract the learners or that the learners would just see it as fun rather than work and so would not take it seriously. Both mentioned having this reaction when they were exposed to technology in their own schooling.

#### ***4.9 Conclusion***

The factors which influence teachers' use of technology are numerous and vary in importance from teacher to teacher. When examining the costs and benefits of using technology, it is notable that the costs are mostly borne by the teacher, with the learners receiving the majority of the benefits. Some benefits do fall to the teachers (such as the ease of recalling a lesson for the next year) but as they have to bear the cost, it is often not feasible for teachers to use technology. It is especially the case when teachers are over-burdened by large classes, excessive administrative tasks and marking. Thus, the costs associated with using technology often prevent the teachers from using technology. The value the teacher places on the task can propel the teacher to make use of the technology despite the costs. This was true of all the teachers.

The teachers at township schools were limited more by the type and amount of technology they had access to, in comparison to the teachers at the former Model C schools. For example, it was not feasible for the teachers at township schools to design lessons that involved the learners using computers, as there would not be a sufficient number of computers to accommodate the class. The teachers at former Model C schools had access to a greater amount of technology. These teachers, especially Mr Dart, compared the situation of former Model C schools to private schools, which had more technology than the former Model C schools. Through this we can see that all teachers have different points of reference, which will influence how they view their situations. It also illustrates how access affects the teachers' decisions. All the teachers desired greater access as they felt it would make it more feasible to use technology. Ms Bird points out that it was only when certain technology was set up for her personally in her class that she started using it.

Societal expectations also played a defining role in teachers' decisions to use technology or not. In two cases, there were expectations that technology would be used, and there were fairly strong and active communities of users. In these two cases, the teachers felt supported in their use of technology and they used technology fairly often. In contrast, in the two cases where there was no explicit support, technology use was irregular and occasional.

The implications of these findings will be discussed in the following chapter.

## Chapter 5: Discussion

This chapter discusses the findings of the study. The model given in Chapter 2 is re-examined in light of the findings, in order to determine if the model can help to explain the findings. The data is discussed with reference to the model and pertinent literature. For clarity's sake, the headings from the model are used to discuss the various findings. As the study is small, generalisations cannot be made, but the contribution of the study is considered, and avenues of further research are identified.

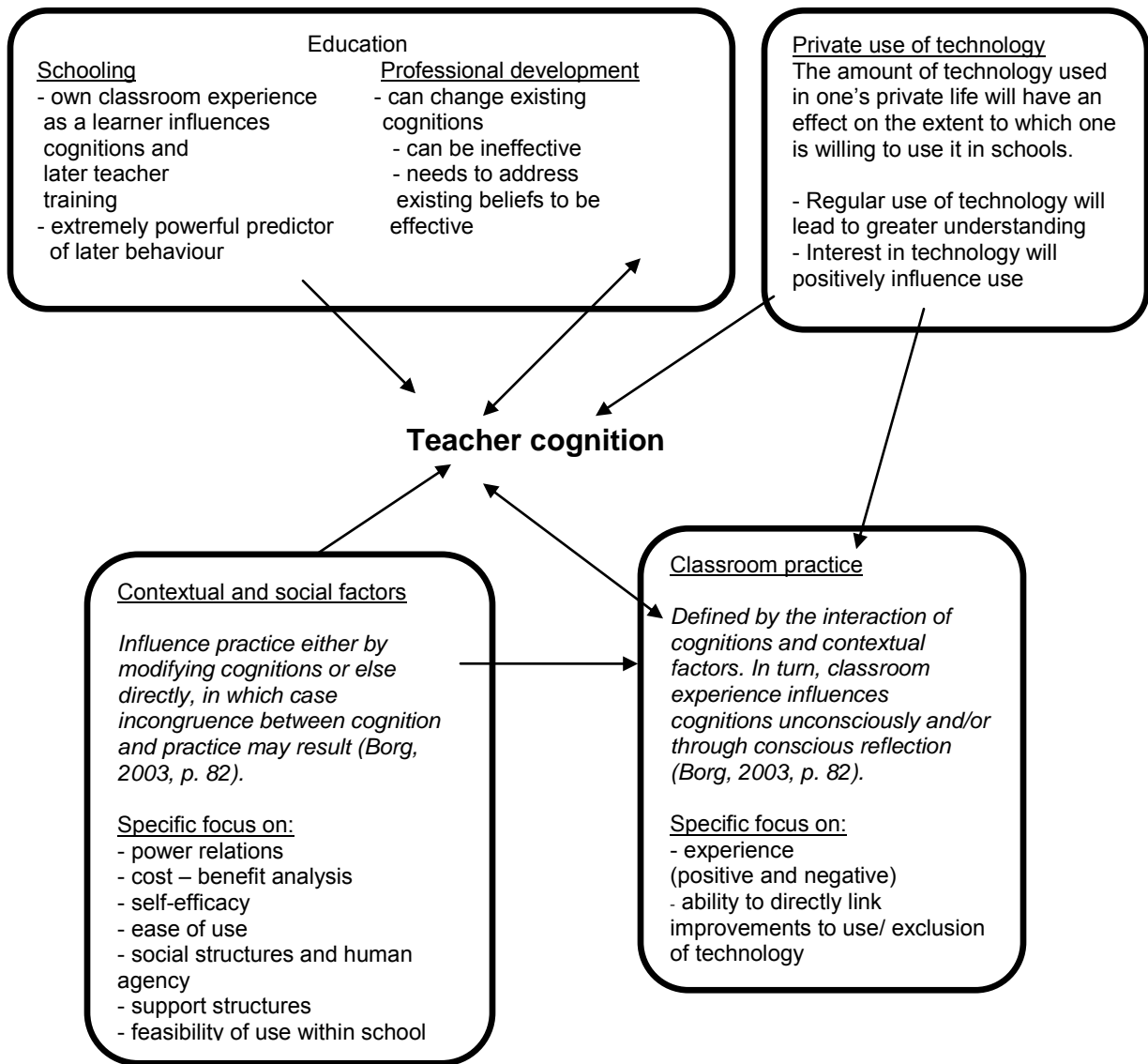


Figure 4: Theoretical model used in study (Based on Borg, 2003)

## **5. 1 Education**

Both the participants own schooling experience and their professional training seemed to have had an impact on their inclusion of technology in teaching. In particular, the older teachers all used very similar types of technology to the technology with which they were taught. For example, they all used music in the classroom as a learning aid. However, the teachers also moved with the newer technology and also included newer technology in their teaching. The ways all the teachers in the study were taught seems to have had a lasting effect, as they mimicked some styles of teaching or repeated certain ideas. In addition, the type of technology used in their own schooling experiences is not the only remnant of their experiences; the sense of enjoyment they gained from these experiences has also remained. For example, Mr Dart, in reference to his experience of being taught to use computers said, “It was cool. It was something different again. I think it just keeps going back to that something different side of things. You know, you get so used to the normal and then you get taken out of it and you enjoy it, and you remember it” (Baron, 2010d). Similarly, Mr Ford, in reference to being shown films expresses how the variety made the situation memorable and enjoyable: “So you watched the film with that whole feeling of it not being like sitting in classroom maybe, making it different” (Baron, 2010f). This sense of enjoyment they gained from being exposed to technology could form part of their motivation for using it in their own teaching as engaging with learners is a priority. However, as some teachers did not take lessons which included technology seriously when they were learners, this could also prevent them from integrating technology. This links with Prahbu’s sense of plausibly; teachers need to feel that their choices will lead in some way to the desired learning goals. If being taught with technology did not result in much learning for these teachers, they could then believe that if they teach with technology that not much learning will take place. “Teachers need to operate with some personal conceptualisation of how their teaching leads to desired learning – with a notion of causation that has a measure of credibility for them.” (Prabhu, 1990, p. 172). Thus, teachers who did regard learning with technology as beneficial would be more likely to be willing to use technology in their own teaching and vice versa. For example, Mr Cele did not regard lessons which involved forms of technology as real learning: “at the time we didn’t take it as seriously... It was a fun period

whenever... we had those [lessons] for English... I'm not sure if... we learnt any more from the recordings than... ja, but ja, that was, it may have been just a few of us. Maybe others took it more seriously" (Baron, 2010c). Part of the reason he gives for not utilising technology in teaching is the lack of seriousness the learners regard these lessons with.

Mr Cele: The attitude is the same as the attitude that I had (laughs) when I was a learner. I regarded it all as a fun thing.

Ms Baron: Okay, so they don't take it seriously?

Mr Cele: No. No. But a few... because I used to do this, this uh preparation for introduction to film studies... not too many of my learners are interested in that...as something to learn about - film study, it's... their view of it is for entertainment. That's just about it (Baron, 2010c).

In contrast to this, Ms Emoja, who does frequently use technology with her own classes and believes it helps them to learn, also valued the exposure she had to technology in her own schooling. "... it was great in that at least when you came to varsity it wasn't like the first time you use a computer. That was really helpful" (Baron, 2010e). Thus, it is evident that the teachers' own schooling experiences shaped their cognitions and their beliefs about what effective teaching includes.

Although professional training, whether formal or informal, was regarded as useful in some ways, it was not seen as a catalyst for integrating or using technology in teaching. This could be due to the nature of the formal training courses; most were either completed as a part of pre-service training or the courses were relatively short courses. These courses might not have spoken to the daily realities of teaching and, as they are not ongoing courses, the participants responses cannot be take into account and the courses adjusted. As the courses were generally fairly short or did not demand a great deal of practice, skills learnt may also be easily forgotten. As professional learning is often not "sustained, targeted, ongoing, nor job embedded", it often does not result in real changes (Huber, 2010, p.42 – 43). For example, Ms Bird discusses student teachers who, despite having to pass a Computer Literacy course as a component of their degrees, do not know

how to use many programmes which they were taught as a part of the course. Mr Ford also mentions the difficulties of gaining all of the skills one needs at the actual course.

I was lucky every time that the software was loaded onto my personal laptop so I can play around with it you see. So yes maybe some of the stuff that they talked about there wasn't really relevant and they could have done it another way. You know we all feel that we could do this better. But ja I've learnt from those situations and like I've said, you walked away with the software and then you have all the time in the world to train yourself, you know once you got that (Baron, 2010f).

This speaks to the necessity of actually using the technology yourself and exploring it in an organic way. This is similar to Borg's (2003) findings that technology training does not necessarily result in a change of technology use or even a change of attitude (p. 89). So although technology training is useful, alone it will not necessarily result in any changes in technology use. Other factors, such as access, are necessary. Ms Bird's comments illustrated this clearly:

And again, I mean of the people who went on the course ... Qhama<sup>6</sup> shortly after that got a laptop herself and she and Andile both came on the course, they're our Xhosa department... Qhama is using the excel, Andile isn't. They both were at the same level of competency on the course, but the fact of having a computer, your own computer, I think is in the solution. Because otherwise every time you want to fill in marks, you must, what? Go to the computer lab? No, I mean, practically it's not going to pan out.

Using technology in teaching is reliant upon many different factors. Training staff to use technology and providing access will not necessarily result in use. Technology take up needs to be examined and dealt with on a holistic level, as different factors will influence different teachers in different ways, depending on their cognitions and situations.

## ***5.2 Private use of technology***

All the teachers in the study used technology fairly regularly in their private lives. The degree of interest in technology and understanding of technology is theorised to have an effect on the integration of technology into teaching and one's private use of technology will affect one's interest in it and understanding of it. Lam (2000) and Cuban (1993) in Sang, Valcke, van Braak and Tondeur both emphasize teachers' personal attitudes

---

<sup>6</sup> The names used here are pseudonyms

towards technology. “It is not simply teachers’ pedagogical approach that influences their management of materials and learning, but their entire world view” (Czerniewicz, Murray and Probyn, 2000, p. 61).

Ms Anderson’s integration of technology into teaching was affected by her personal use of technology, as she finds it can be invasive and demanding, especially when considering cellphones. Ms Anderson does not use a cellphone (although she owns one which she uses when she travels and as an alarm clock) and only uses email at work, not for personal communication. Thus, when discussing the use of cellphones as a teaching tool, she could not imagine using it to teach and found the learners’ use of cellphones quite worrying.

It absolutely amazes me that the kids will sit on the field, all on Mxit, in a circle, and not speak to each other. They’ll lie in beds next to each in hostel and they’ll be talking to each other on their phones. And they’re a metre apart...That for me is very scary (Baron, 2010a).

She even specifically excluded cellphones from her definition of technology in teaching because she could not see a way to use them. She does discuss the fact that cellphones are used in her school as an educational tool in the Mathematics department but also states that she does not know much about it.

So things like cell phones I don’t... ah, I wouldn’t, I’ve never considered using them and would never really so (laughter) I won’t, I wasn’t considering them as technology in the classroom so... (Baron, 2010a).

With other types of technology, for example the use of film in teaching, Ms Anderson’s personal attitude and use differed and so did her use of the technology in teaching. For example, email was seen as a form of communication which should be taught to the learners. Ms Anderson’s view of email was that it is useful for work purposes and this was given as the main reason for its inclusion in her teaching. These examples clearly show that Ms Anderson’s personal use and views of technology have affected her decisions with regard to integrating technology into her teaching.

Mr Dart had a fairly positive attitude to all types of technology and used it fairly often, but did not use it often in his teaching. This could be a result of a belief that fundamentals needed to be in place before integrating technology into teaching. For example, Mr Dart believed that learners would not learn to spell properly if they just used a computer to type their essays. He also believed that Mxit and smses eroded their abilities to spell. Thus he did not want to use these types of technology with his learners, as he believed they had not yet gained the necessary fundamental skills.

Mr Dart: My spelling is sometimes down the drain. You know, the computer's so easy, you just write what you think it is and then right click and then you're away. Instead of actually stopping and thinking, 'Ah, let me actually learn this now so I never have to do that again.' And I think that's it's worthwhile, because we are in a computer age, for the guys to write [using a computer] but then if they don't know how to spell...

Ms Baron: So it's more about getting fundamentals right before you move onto that?

Mr Dart: Before you move on. So I mean I teach Grade 8, 9 and 10. So I'm thinking Grade 10, towards the latter part of Grade 9 to Grade 10 onwards then I think it's fine, you can start introducing that. But not with the Grade 8s and 9s, who're still sort of developing their vocabulary (Baron, 2010d).

Possibly if Mr Dart was teaching an older set of learners, who had the fundamentals in place, he might have been more willing to use technology in his teaching.

Mr Cele used technology less than all the other teachers in this study. His private use may have been a contributing factor to his limited classroom use. For example, he rarely uses computers in his private life and he has only used them once in his English classes. For Mr Cele, computers do not seem to be a big part of his life or the lives of his learners; teaching and working without them seems to be easier and more natural.

Mr Cele: Nnnno. I'll tell you what, for English I haven't...They, the kids that I deal with are easier to teach when the lessons are put in context. And I find it easier to put the lessons into context here, in class, using elements [other] than

technology. In fact, I haven't figured out how I could bring this into context by using technology.

Ms Baron: Can you just explain, what do you mean by bringing into context?

Mr Cele: Uhh, the examples that we, I use... examples that organically...come from them. They are situations I, I, I try to build my, my lessons around, their own situations. Which for now I don't know how they could be related to computers. Do you know what I mean? (Baron, 2010c).

The remaining teachers in the study all used technology fairly frequently in their teaching. This may be due to a number of factors. For example, the increased use of technology in one's private life could lead to a greater understanding of how the technology works. This could translate to a greater sense of self-efficacy and willingness to attempt to use the technology in teaching. In addition, the teachers' private use of technology may have created an understanding of the different ways technology could be used in teaching.

### ***5.3 Classroom practice***

#### **Experience: positive and negative**

Teachers' experiences affect their use of technology in teaching. As previously discussed in Chapter 2, one's experiences will affect one's sense of self-efficacy and the repetition of using technology in teaching will also rely partially on the outcome of the previous experience. Dewey's (1938) "continuity of experience" speaks to this: knowledge is created by experiences and experiences impact on existing knowledge (Golombek, 1998, p. 448). Thus, if a teacher believes that using technology will make teaching easier and discovers the opposite in her/his first attempt at using technology, her/his future plans to use technology in teaching may be altered or put on hold. Throughout the analysis of the data, this theory was corroborated by the findings. For example, Ms Anderson, Ms Emoja and Mr Cele all had negative experiences with certain uses of technology which then resulted in them not using that technology again. Ms Emoja discusses practical difficulties she had with trying to use the school's television, an experience which led her to state that she would not ever attempt to use it again.

The TV, which is in the staff room, is also, we can use it, us teachers, so it had to be moved to the venue. So we were using one of the Science classes, no weren't, we were using [name of teacher]'s class, so it had to be moved to [name of teacher]'s class and set up and then I had to bring a DVD player from home because I've got one um, no a VCR player not a DVD player because it doesn't have a connection for... it's really old so it only has the VCR one. And then, you connect it – that took ages. And then the channels weren't working properly, I don't understand why, I don't understand old TV technology 'cos now you just stick things in and they work. Ah, so it didn't work. Then we had to go and call someone to come and sort it out. And then they found it was like the cords, I'd used the wrong cord and put it in the whole hole. Then we had to fix that and then got the movie, we finally started watching it (Baron, 2010e).

Ms Anderson spoke more generally about using technology in lessons and the fact that if the lesson did not work, she would be unlikely to repeat it with adjustments. “So, um, I think what's happened with me as well is things, when I have tried things, some things have gone wrong and instead of trying to fix things, I've gone ‘ah, well that didn't work’, so...” (Baron, 2010a). Mr Cele struggled with faulty technology, which frustrated his attempts to use technology.

Just as negative experiences discouraged teachers from using technology, positive experiences encouraged the teachers involved in this study to use technology again. The reasons for the teachers viewing these experiences in a positive light varied and did not always depend on the ease with which the lesson could be executed. For example, Ms Bird designed and executed a project which involved the learners creating and delivering a PowerPoint presentation. She recalled the project, especially in its early years, when PowerPoint was not used often, as “Horrible! Horrible! Horrible! Waste of time, frustrating, absolute teacher's nightmare!” (Baron, 2010b). However, she continued to use the project as a part of her teaching because, overall, she viewed it in a positive light because of the skills the learners gained.

Why did I carry on? Because I strongly believed in the value of it and the importance of it. Education is nothing if it's not preparing the kids to go out and function in the real world. And so... if I'm going to be supposedly teaching kids to do formal orals, realistically where are they going to use that skill the most? Probably in business presentations. What business presentation do you know these days that doesn't involve some form of visual aid? Technological visual aid.

So just because it's a problem, to say then let's not do it, when you completely believe in the educational value of it – you have to fight through the problems. If you believe strongly enough that it's important, and I did (Baron, 2010b).

Mr Ford also recalled a lesson which made use of technology in a positive way because the learners remembered and understood the poem he was trying to teach them. Mr Cele discussed a design project his learners executed using computers. In particular he mentioned the pride that the learners had in their work, which made the project worthwhile and positive in his eyes. He was also keen to repeat the project based on this experience. These positive experiences reinforced the notion that using technology in teaching is beneficial. The perceived benefits varied from teacher to teacher, but it is important to note that the teachers were able to identify benefits gained from using technology. This encouraged the teachers to use technology in teaching. In addition, the positive experiences can be linked to an increased sense of self-efficacy, which again encouraged the use of technology.

## ***5.4 Contextual and Social Factors***

### **Power relationships**

This study assumed that power relationships would influence teachers' take up of technology, as suggested by the literature. However, it is remarkable to note that the teachers were not intimidated by the thought that they might 'lose' some of their position of power in classroom through the use of technology. In Chapter 2, I discussed the idea that as teachers are generally seen to be a position of power in the classroom as a result of, amongst other factors, their knowledge, they may be apprehensive to attempt to use technology that their learners may be more proficient in using. I supposed that teachers may regard learners helping them to use the technology as a loss of power. However, the data does not support this theory. All of the teachers found it natural that the learners would have a better understanding of technology than they did, and wanted to use this strength in class. For example, Mr Cele referred to the learners assisting each other when involved in a project when they needed to use computers and Ms Emoja referred to the learners explaining to her how something on her cellphone worked when they were using their cellphones in a class project.

Similar to other studies in this area, Lam (2000) and Borg (2003), gender was not necessarily viewed as an issue but there appeared to be no real consensus on its role. This could have been a result of the fact that two of the four schools catered to a single gender only, resulting in half of the respondents being unable to comment on the learners' gender as a factor in their use of it. Race was not viewed as factor at all.

Class was viewed as a factor, mostly with reference to access. As a result of poorer learners not having access to technology, the motivation to expose them to technology at school increased for two of the three teachers who taught at township schools. The third teacher did note its importance and commented that the importance of access was noted by the whole staff, but there were practical issues of supervision which needed to be resolved. The teachers at former Model C schools did comment that some learners did not have a firm grasp of technology due to a lack of exposure, but this did not seem to seriously hamper their desire to teach using technology. Thus, although class may affect the learners' access to technology outside of school, it does not affect their access to it in school, as it was not a serious deterrent for the teachers involved.

### **Costs and benefits**

This study found that the majority of the costs were borne by the teachers, and the majority of the benefits were experienced by the learners. The literature suggests that if the cost of executing a plan or idea is seen as too high, one will be more reluctant or unwilling to execute the plan. The ease of using technology is important (Venkatesh and Davis, 2000, p. 189). The biggest costs for the teachers were time factors and planning. The amount of time spent on trying to set up the technology, as well as the amount of time it took to either get the learners to the technology or vice versa, was a deterrent, especially as the time spent increased. Mr Cele, for example, discussed the impracticality of trying to use technology when it eats into lesson time. "Because, because of having to struggle with the machinery (laughs) half, half of the time is trying to fix the problems instead of getting into the business" (Baron, 2010c). The teachers were unwilling to use technology if the costs were seen as outweighing the benefits. Thus, to encourage

teachers to use technology more, its ease of use (and other factors which could result in high costs) need to be considered. Teaching time is (or should) be considered sacred and when it is eroded through activities which are frustrating and not educational (such as struggling with machinery), it is unsurprising that teachers take a dim view of using technology.

Explicit planning to use technology was also regarded as a cost, as the majority of teachers referred to the time it would consume or did consume and the renewed effort they would have to dedicate to sections which have already been planned out and taught previously. As Ms Anderson points out, more work is involved if one were to redesign lessons. "I've a got a lesson that's worked for years and... I don't make the effort to think, well, can I bring technology into this and how can I do it" (Baron, 2010a). As teachers are fairly busy, it is not really feasible to expect them to redesign all their lessons, which is possibly part of the reason for the slow introduction of technology into our schools: teachers are easing technology into their teaching rather than massively overhauling every lesson.

It is also important to note that teachers do not believe that technology is better (or even useful) in all situations. It has not yet been universally accepted that technology is beneficial in all spheres of education and it may never be, as it is fairly likely that there are situations in which it is not beneficial. Deciding when to use technology is then a reflection of the personal beliefs of the teachers as they will use it when it is considered to be beneficial (Lam, 2000, p. 410). One cost that the teachers in this study mentioned, and is borne by the learners and the teachers, is the loss of human interaction. This prevented the teachers from using technology, as they felt that the learners needed to be exposed to adult conversation and needed to learn to communicate in person as well as through the various forms of media. Thus, the teachers chose not to use technology in certain teaching situations, specifically because they believed it would be unhelpful or even detrimental to their teaching. Overusing technology would have prevented learners from having access to adult, personal communication and, in the drive to encourage the use of technology in schools, such considerations may have been forgotten or overlooked.

Ms Bird was especially adamant that she will never use technology in every lesson, precisely because of such reasons.

I would hate... Heaven forefend that I get to the point ... where I have my data projector on every lesson. I'd rather slit my wrists. Because there's also, the disadvantage of it is that there's a remove, there's an emotional remove. If you're teaching through the technology, it's almost a barrier, you don't have the same interaction with the class. You can easily get stuck behind the computer or stuck, the kids are looking now at the screen and not at you and so there's an emotional connection that isn't there, it's not the same. It's different and so I think it needs to be used thoughtfully. I think technology needs to be used thoughtfully. I don't think we should be aiming at a position where we try and shove technology in every lesson because we have it (Baron, 2010b)

It is clear that there are also situations in which not using technology is important, and this should not be forgotten.

Another reason the teachers in this study gave for not wanting to overuse technology was the fact that the learners will or would be likely to become too familiar with it and would no longer be inspired or motivated by its presence or use. Similar findings have been mentioned in Goodwyn's work: as learners become used to technology, its motivational effect decreases (2000, p. 12). At the moment, the motivational effect was seen as a benefit and one which the teachers were fairly keen to keep. Ms Anderson discussed this in reference to film study.

They... do like it. But again if we do... even film study they LOVE... and but... you know, if you do three or four lessons in a row, it... even by then they get bored as well. So I think variety is the most important thing so if you're using technology for a specific reason and not all the time, for me it works better. Then it's exciting and then it's something different, whereas if it became the absolute norm, I think they wouldn't even notice, it'd just become like everything else (Baron, 2010a).

This shows again that an overutilisation of technology could be considered a cost. A final reason that was mentioned by the teachers for not wanting to integrate technology into every lesson or too much, was the fact that learners could have then lost out on learning other skills. Mr Dart was concerned about his learners' writing abilities, especially those

in the younger set. Other teachers in the study were equally concerned about their learners in the higher grades losing basic or fundamental skills as a result of relying on technology too much. Ms Anderson made this point clear:

But (laughter) except, still I say that but I think we have become so reliant on computers especially and the girls have to the point that I find it quite problematic too. So things that really could be easier not using them, we automatically only think of the computer. And I had a student teacher yesterday that was doing um teaching a story that had some Afrikaans words in it, and she said oh she'd googled but google isn't good at Afrikaans so she hadn't found out what they were. And it was, like, we've got an Afrikaans-English dictionary right here. The teacher in the classroom next door to you is Afrikaans and I think, that showed me how dependent we've got that we're actually really losing out on basic skills because we've become too obsessed with, I think, technology. Because I'd hate to get to the point where every lesson was always done on data projector, every lesson because then I think we lose the variety again. So, whereas before we might not have had variety with not using technology, I think we run the risk of getting into boredom again with using it too much. So we have to become pretty aware of mixing things up and not presuming that because it's on a computer, it's better (Baron, 2010a).

Many of the concerns about the overuse of technology were intertwined. Here we can see that Ms Anderson was concerned about losing basic skills, interpersonal relationship as well as a lack of variety in teaching methods, which could lead to boredom. These concerns are valid and illustrate the need for teachers to be thoughtful practitioners when it comes to integrating technology; using technology for its own sake can be harmful.

### **Self-efficacy**

Teachers' senses of self-efficacy were largely determined by positive or negative experiences, as has been previously discussed. However, other factors do also have an effect on one's sense of self-efficacy. Dörnyei sees self-efficacy as a "product of a complex process of self-persuasion that is based on cognitive processing of diverse sources... (including) other people's opinions, feedback, evaluation, (and) encouragement" (1998 , p. 120). The feedback in this case relates largely to the learners' reactions and the way in which the teachers experienced each lesson. Various teachers mentioned the role that encouragement played in their use of technology. In this case, Ms

Anderson and Ms Emoja seemed the most affected by the encouragement of others. Ms Anderson saw herself a technophobe and commented on the input of other staff in a positive manner.

If you hear somebody else's used it and it's worked, then 'ah, well, I'll try it out.' So, people... we are very lucky with people sharing ideas and information and so most of it is from that – it's chatting over tea. Um and ja, ... and because people are very willing to share, they will also help. So you can say, well what isn't working here and what will work? So that is nice (Baron, 2010a).

This illustrates how others affected Ms Anderson's sense of self-efficacy. Because she was able to gain feedback and ideas from others, she was more willing to attempt to use technology.

Ms Emoja commented specifically about her head of department, who was also involved in this study (Mr Ford), being supportive and encouraging her to use technology. This had a positive effect on her sense of self-efficacy and resulted in a willingness to use technology. Thus, it is important for teachers to be supported in their efforts to use technology, as this can increase their confidence and lead to repeated or further efforts.

Teachers' senses of self-efficacy can also be influenced by their training and use of technology as well as others' encouragement and feedback. Mr Cele provided an example of this when discussing training.

We didn't get to, to too many exercises that would make me confident enough to do what I needed to do by myself. And as a result I kept asking for help from other people. And if I have this problem and somebody comes along and helps me out and then I learn that one skill and then I come up against some other snag and then call someone and then I get to learn that one (Baron, 2010c).

Although the formal training Mr Cele attended was not viewed as particularly or completely useful, the informal training he engaged in and help from other people allowed him to practise new skills and learn new skills, which increased his sense of self-efficacy. The development of confidence is important here; it is unlikely that Mr Cele would have attempted to use these new skills if he had been trained but had not

developed confidence. This re-illustrates the point that training alone is not a catalyst for use.

### **Ease of use and practical issues**

Access to technology is very important, and was mentioned by all the teachers in the study. Although in exceptional cases, some teachers do work around the lack of access to technology, this cannot be expected of teachers on a regular basis. A lack of access increases the costs involved in using technology. Thus, in order to integrate technology into teaching, teachers need to have easy access to it. Again, however, the mere presence of technology would not be solely responsible for its integration and use.

Practical issues also need to be taken into consideration, as many of these issues are out of the control of teachers. “The most inspired teachers can have their efforts ruined by factors beyond their control” (Beeby, 1985, p. 43). For example, power failures may be a deterrent. When considering the integration of technology, one will have to consider practical factors, which will vary from area to area, depending on the level of sophistication that the society operates at. In this study, practical issues included power failures, viruses and equipment malfunctions. It seems that practical considerations would need constant attention in order not to impinge on teachers’ desires to use technology. An example of this in this study was the fact that practical issues, aside from access, were mentioned far less by the teachers at former Model C schools. Both of the former Model C schools had positions within the schools for a technological aide; the township schools did not and the teachers at the township schools mentioned practical issues fairly regularly and more frequently than the teachers at the more privileged schools did.

### **Social structures and societal expectations**

The curriculum did not affect the teachers as much as I had expected. This may be a result of the curriculum and syllabus being changed or reworked fairly often (Robinson, 2002, p. 295). As a result of the frequent changes to the curriculum and syllabus, teachers might not be able to constantly keep up-to-date with changes or integrate all the changes into their teaching. For example, Mr Cele questioned whether or not technology was

actually a part of the curriculum and/or syllabus. This illustrates the point that teachers are not always aware of what the curriculum and/or syllabus expects of them and when changes are made frequently, this situation worsens. Another factor mentioned by the teachers in the study, is the fact that the syllabus and curriculum are already demanding and they felt that technology integration could make the learning goals unachievable. This could be especially problematic in cases when one's learners are weak or struggling, as they have to deal with the technology too, which may be unfamiliar to them.

In terms of broader social structures, one cannot ignore the inequality found in our schooling system (Fleisch, 2009). The larger, often crowded, classes found in township schools make the integration of technology much more difficult as the teachers are trying to teach larger numbers of learners with fewer resources and less one-on-one time is available. In addition, poorer schools do not always have the support necessary to integrate technology into teaching.

Societal expectations did play a role, especially if these expectations were made explicit. If the expectations were implied or were general, the teachers did not seem to be greatly affected by them. Thus, the school's culture is very important when considering how to increase the use of technology in education. The policies need to support the integration of technology into teaching and the teachers within the school need to buy into it. Just changing the policy on paper will not be effective; active support is necessary. Obviously this will not happen overnight - the process will be slow and will start out with a few teachers only and then momentum can be gained. People in positions of power need to show overt support for the change in order for others to follow (Beeby, 1985, p. 42). This was illustrated through the study: in Ms Emoja's case, support was visible and she was encouraged to use technology and did; in Mr Cele's case, the support was not overt, and he did not regularly use technology in his teaching.

As discussed in the literature review, teachers at various schools will be at various stages; the process of integration cannot happen all at once. We need innovative teachers to start the process and lead others; we cannot expect only the school management and leaders to

be involved in the process. For example, Ms Bird could be seen as an innovative teacher, as she has been using technology for years and integrating it into her classrooms to teach real skills. When she first started her PowerPoint presentation project, the computer programme was not well-known or frequently used: “when I started with that, I think if two kids had in my class had ever used PowerPoint before it was a lot. So it was very, it was big, new, stressful stuff for them” (Baron, 2010b). Yet she persisted with the project. It is this type of teacher who is needed to take the lead (alongside school management, governing body and so on) and encourage others to use technology. Ms Bird’s colleague, Ms Anderson, mentions how the teachers in the school have helped her (Ms Anderson) to integrate technology into her teaching through their assistance and guidance. This clearly illustrates the point that teachers need to be supported in their use of technology and that teachers need to be guided or helped by those who are already using technology in their teaching. These societal expectations can be very influential. Just as the support and expectations of others can encourage the use of technology, it must be noted that if teachers are exposed to systems which do not support the use of technology and colleagues who either explicitly or implicitly discourage its use, it is likely that the teachers in these situations will use technology less frequently or perhaps even not at all.

The factors which influence teachers’ uptake of technology in English teaching are varied. The support teachers receive and societal expectations have been shown in both the literature and this study to be important factors. However, the point must be made, again, that these factors alone will not determine the teachers’ use of technology. There are many factors which connect and interact, as has been discussed. All these factors need to be considered when examining teachers’ use of technology in teaching, as the effect of each factor varies from teacher to teacher and from situation to situation.

### ***5.5 Contribution of study and further avenues for research***

As the sample for this study was small, generalisations cannot be made. However, the study can be used to illustrate the complex nature of technological integration. The interplay of various factors cannot be underestimated as technological integration requires all parts of the puzzle; no one piece would be both necessary and sufficient.

In addition to this, this study can be used as a base for other researchers interested in carrying out similar research in an Eastern Cape or South African context.

One finding which was unexpected related to power issues – teachers did not seem to be threatened by the capabilities of their learners to use technology more effectively (in some situations) than themselves. This could have been due a high sense of self-efficacy on the teachers' part. All of the teachers in the study had access to technology and could use technology fairly well. They did not feel completely out of their depths when attempting to use it. Thus, when the learners did know more than they did and were more authoritative in that situation, it did not necessarily worry or concern the teachers as their senses of self-efficacy were high. This finding cannot be generalised due to the fact that these teachers had training and access to technology and relatively high senses of self-efficacy, which is not always the case. It does suggest that a high sense of self-efficacy can change power relationships, but further research on a larger scale is needed to discover if this is universally true.

There are many different ways to expand on this study and many other avenues for further research, as this study was limited in terms of size and scope. One possibility for further research which I think is worth mentioning is to increase the sample size and include both the management or leadership of the various schools with the 'ordinary' teachers. This could create a better understanding of the dynamic and interplay that needs to exist in order to allow technology to be integrated into schools. This was done in this study (Mr Ford was Ms Emoja's head of department), but on a small scale. This would also allow different perspectives to be seen, as what management believes is necessary and what teachers believe is necessary may not be the same at all.

Exploring the perceived value of 'traditional' schooling materials would have added to the study and should be considered in future studies, as an understanding of this could be contrasted with the perceived value of technology equipment. This could have been used in this research to better understand what the teachers believe technology is necessary for and what they believe the limitations of technology are. Diverting the focus from

technology could have also provided a better picture of the teachers' teaching styles and methods.

### ***5.6 Conclusion***

This study has attempted to provide an overview of the benefits of using technology in schools, the policies which are in place to encourage its use, and the very complex phenomenon that is teachers' cognitions. Integrating technology into education is extremely complex and involves dedication and persistence. The lack of integration is often a result of more than one factor, and all of these need to be addressed for any change to occur. Although teachers are key to this process, they cannot be expected to make the changes alone. A great deal of support is needed, and resources must be available and maintained. Unfortunately this is too often not the case in many South African schools, which illustrates the need for strong leadership and funding. In addition, one must remain aware of the fact that teachers do sometimes consciously choose not to use technology, and it is not viewed as universally useful or good. Each situation must be considered carefully as the merits and demerits of technology use or integration are not constant across varying situations.

## **References**

- Abbit, J and Klett, M. (2007). 'Identifying influences on attitudes and self-efficacy beliefs towards technology integration among pre-service educators' in *Electronic Journal for the Integration of Technology in Education*, Vol. 6, p. 28-41
- Anderson, J and van Weert, T. (Eds.). (2002). *Information and Communication Technology in Education: A Curriculum for Schools and Programme for Teacher Development*. France: UNESCO
- Babbie, E., & Mouton, J. (2001). *The Practice of Social Research*. (Cape Town: Oxford University Press)
- Baron, E. (2010a, August 6). Teacher cognition and technology use in English teaching. (Interview with Ms Anderson, teacher, Grahamstown).
- Baron, E. (2010b, August 12). Teacher cognition and technology use in English teaching. (Interview with Ms Bird, teacher, Grahamstown).
- Baron, E. (2010c, August 12). Teacher cognition and technology use in English teaching. (Interview with Mr Cele, teacher, Grahamstown).
- Baron, E. (2010d, August 18). Teacher cognition and technology use in English teaching. (Interview with Mr Dart, teacher, Grahamstown).
- Baron, E. (2010e, August 19). Teacher cognition and technology use in English teaching. (Interview with Ms Emoja, teacher, Grahamstown).
- Baron, E. (2010f, August 30). Teacher cognition and technology use in English teaching. (Interview with Mr Ford, teacher, Grahamstown).

Beeby, C. (1986). 'The Stages of Growth in Educational Systems' in Heyneman, S and White, D. (eds.) *The Quality of Education and Economic Development*. (Washington: World Bank)

Borg, S. (2003). 'Teacher cognition in language teaching: A review of research on what language teachers think, know, believe and do.' *Language Teaching*, 36, pp81 – 109. Retrieved March 17, 2010, from <http://journals.cambridge.org>

Cohn, L., Manion, L., & Morrison, K. (2001) *Research Methods in Education (5<sup>th</sup> edition)*. London: Routledge/ Falmer

Czerniewicz, L., Murray, S., Probyn, M. (2000). *The role of learning support materials in C2005*. Pretoria: National Centre for Curriculum Research and Development

Davis, M. (2007). *Doing a Successful Research Project, using Qualitative or Quantitative Methods*. (Palgrave MacMillan, New York).

Dalvit, L. Personal Communication, March 2010.

Derry, J. (2008). 'Technology-Enhanced Learning: A Question of Knowledge' in *Journal of Philosophy of Education*, Vol. 2, No. 3-4

Dörnyei, Z. (1998). 'Motivation in second and foreign language learning' in *Language Teacher* 31, p. 117 – 135. (UK: Cambridge University Press)

Ferreira, A. (2009) 'Reading Pictures: Using a text-based approach to images in the language classroom' in Ferreira, A (Ed.) *Teaching Language*. (Northlands, Gauteng: Macmillan)

Fleisch, B. (2009). *Primary Education in Crisis: Why South African schoolchildren underachieve in reading and mathematics*. (Juta & Co.: Cape Town, South Africa)

Freeman, D and Johnson, K.E. (1998). 'Reconceptualizing the Knowledge-Base of Language Teacher Education' in *TESOL Quarterly*, Vol. 32, No. 3, Autumn 1998, p. 397 – 417

Gladwell, M. (2005). *Blink: The Power of Thinking without Thinking*. (Clays Ltd: England)

Golombek, P. (1998). 'A Study of Language Teachers' Personal Practical Knowledge' in *TESOL Quarterly*, Vol. 32, No. 3, Autumn 1998, p. 447-464

Goodwyn, A (ed.). (2000). *English in the Digital Age: Information and Communications Technology and the Teaching of English* (Cassell: London and New York)

- Hawisher, G and Selfe, C. (Eds.). (2000). *Global Literacies and World Wide Web*. (London: Routledge)
- Hayes, N. Personal communication, April 2010.
- Henning, E., van Rensburg, W., & Smit, B. (2008). *Finding your way in qualitative research*. Pretoria: Van Schaik publishers.
- Huber, C. (2010). 'Professional Learning 2.0' in *Educational Leadership*, Vol. 67, No 8, May 2010
- Hund, J. (25 August 2009). 'Reality the loser as the Internet puts brains into overdrive.' *Daily Dispatch Online*. Retrieved April, 1, 2010 from <http://www.dispatch.co.za/article.aspx?id=339876>
- Kress, G. (1997). 'Literacy: The changing landscape of communication' in McClelland, N (ed.) *Building a literate nation: The strategic agenda for literacy over the next five years*. (Stroke on Trent, Staffordshire Trentham Books)
- Lam, Y. (2000). 'Technophilia vs Technophobia: A preliminary look at why Second-Language teachers do or do not use technology in their classrooms' in *The Canadian Modern Language Review* 56, 3.
- Lichtman, M. (2010). *Qualitative Research in Education: A User's Guide*. California: Sage Publications Inc.
- Norton, P. (in press). 'Language and Identity' in Hornberger, N. and McKay, S. (Eds.), *Sociolinguistics and language education*. (Clevedon, UK: Multilingual Matters)
- Maholwana-Sotashe, N. (2007). *Challenges Faced by Secondary School Teachers in Integrating ICT into the Curriculum – A Multiple Case Study in the Grahamstown Circuit*. Unpublished master's thesis, Rhodes University, Grahamstown.
- Murray, S. (2009). 'Teaching language structure and use'. In A. Ferreira. (Ed.). *Teaching language* (pp. 194-209). (Northlands, Gauteng: Macmillan.)
- Prabhu, N.S. (1990). 'There is No Best Method – Why?' in *TESOL Quarterly* 24, 2, pp. 161 - 176
- Prensky, M. (2001). 'Do They Really Think Differently?' Retrieved February 2010 from [www.marcprensky.com/writing/default.asp](http://www.marcprensky.com/writing/default.asp)> (Originally published in *On the Horizon*, Vol. 9, No. 6, Dec 2001 [MCB University Press])
- Prinsloo, M. (2005). 'The new literacies as placed resources.' *Perspectives in Education*, 23, 4, pp. 87 – 98.

- Richardson, Will. (2009). *Blogs, Wikis, Podcasts and other powerful web tools for classrooms* (Corwin Press: California)
- Rising to the Challenge – Bridging the Digital Divide*. (2010). Retrieved May 21, 2010, from <http://www.elearning-africa.com/newsportal/english/news240.php>
- Robinson, M. (2002). 'Teacher Reforms in South Africa: Challenges, Strategies and debates' in *Education Papers and Reports* (Paper 21). Retrieved 17 December 2010 from [http://dk.cput.ac.za/ed\\_papers/21](http://dk.cput.ac.za/ed_papers/21)
- Sang, G., Valcke, M., van Braak, J and Tondeur, J. (2010). 'Student teachers' thinking processes and ICT integration: Predictors of prospective teaching behaviours with educational technology' in *Computers and Education*, 54, p. 103 - 112
- South Africa. Department of Education. (2003) *National Curriculum Statement: Grades 10 -12 (General). Languages: English Home Language*. (Pretoria: Seriti Printing (Pty) Ltd)
- South Africa. Department of Education. (2004). *White Paper on e-Education: Transforming Learning and Teaching through Information and Communication Technologies*. Retrieved April 10, 2010, from <http://www.capecgateway.gov.za>
- Thomas, H. and Cronje, J. (2007). 'Computers in schools: implementing for sustainability. Why the truth is rarely pure and never simple' in *South African Journal of Higher Education*, Special Edition 6, Vol. 21.
- Toure, K., Tchombe, T.M.S and Karsenti, T. (2008). *ICT and Changing Mindsets in Education*. (Cameroon: Langaa RPCIG)
- van Spaandonk, RJ. (2010, February). 'Good laptops = great results'. *The Teacher*, p. 8.
- Venkatesh, V and Davis, F. (2000). 'A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies' in *Management Science*, 46, 2, p. 186 - 204
- Warschauer, M. (2008). 'Laptops and Literacy: A Multi-Site Case Study' in *Pedagogies: An International Journal*, 3, pp. 52 -67
- Warschauer, M. (In press). 'A literacy approach to the digital divide' in Pereyra, M. (Ed.), *Las multialfabetizaciones en el espacio digital*. (Spain: Ediciones Aljibe)
- Warschauer, M and Whittaker, F. (1997). *The Internet for English Teaching: Guidelines for Teachers* Retrieved February 15, 2010, from <http://iteslj.org/Articles/Warschauer-Internet.html>

Yang, S.C and Huang, Y-F. (2007). 'A Study of High School English teachers' behaviours, concerns and beliefs in integrating information technology into English instruction' in *Computers in Human Behaviour*, 24 (2008), 1085 – 1103

Yelland, N., Neal, G.A. and Dakich, E. (Eds.). (2008). *Rethinking Education with ICT: New Directions for Effective Practices*. (Rotterdam: Sense Publishers)

## Appendices

### ***Appendix A: Initial letter to schools***

3 Leander Court  
52 Beaufort Street  
Grahamstown  
1 May 2010

Dear

#### Request for participation in research

I am currently completing my Master's in Education at Rhodes University, specialising in English Language teaching. As a part of my course, I am conducting research into teachers' beliefs, values and attitudes with regards to the use of technology in English Language teaching. The study hopes to discover what enables or constrains teachers' use of technology, beyond physical barriers (i.e. lack of access and so forth).

As I am interested in the teachers' mindset towards technology, it is not necessary for the teachers who participate in this study to use technology in the classroom. I will not be assessing the extent of technology use in the classroom, but rather how certain attitudes and values (positive or negative) are formed towards the use of technology in the teaching of English. Thus, I am as interested in teachers who do use technology as those who do not.

The research process will be conducted as follows:

- 1) An initial questionnaire will be filled in by the school to ascertain the technological facilities available at the school. It is important that all the schools involved in the study have access to some technology, as my study is focussing on the internal thought and reasoning process which drives teachers' choices with regards to the use of technology. Complete lack of access will obviously change this process. The intended understanding of 'technology' is devices such as computers, data projectors, videos, DVDs, cell phone, televisions, radios and so forth. Overhead projectors are specifically excluded.

- 2) Biographical questionnaires will be delivered to teachers who would be willing to participate in the study. The purpose of this questionnaire is to ascertain level of training, age, experience and so forth.
- 3) An individual interview will be conducted, which will take approximately 1 hour. The interview will be recorded (with the participant's permission) and transcribed. The teacher's identity will not be revealed.
- 4) It might be necessary to contact the teachers after the interview, if any clarification is needed.

The research aims to understand why some teachers are or are not willing to use technology in teaching. The government, schools, parents and companies are investing in technology in schools. In some cases technology is not always used in our schools, while in other cases the use of technology is the norm. This research will attempt to understand why this is the case.

If you have any further queries, please do not hesitate to contact me.

Yours sincerely  
 Elizabeth Baron  
 xxxxxxxx@gmail.com (email)  
 08x xxx xxxx (cell)

***Appendix B: Consent form***

Consent form

I, ....., hereby confirm that I have given Elizabeth Baron permission to record an interview with me. I understand the interview will be used in the creation of her Master's thesis, focussing on teacher cognition and technology. I know the interview will be focussing on a discussion of my thoughts, beliefs, experiences and practices with regards to technology in teaching.

I am aware that my name and the name of my school will be altered to protect my identity.

I understand that my participation is voluntary.

Signed:.....

Date:.....

## ***Appendix C: Initial questionnaire***

### **Initial questionnaire: access to technology**

**School name:**.....

**Date:**.....

Please answer the following questions as accurately as possible. If you feel none of the options reflect your school's situation, please mark 'other' and clarify your answer.

The questionnaire should be filled in by a member of staff who is knowledgeable about the facilities the school has access to.

The name of your school and the name(s) of any teacher(s) mentioned will be changed to help maintain anonymity. The answer provided will be used in guiding the interview process and can be used in the write up of the study.

Technology, for the purposes of this study, refers to devices used to create non-printed forms of communication such as cell phones, radios, computers, data projectors, smart boards, cameras, televisions, DVD players and so on. Overhead projectors are specifically excluded.

#### **School details**

1. Number of teaching staff:.....
2. Number of learners:.....

#### **General access to technology**

1. Does the school have access to computers?

- Yes                       No

2. If yes, approximately how many computers does the school have access to?.....

3. Where are the computers kept? (you may select more than one option)
- In admin offices                       In the staff room                       In classrooms  
 In a computer laboratory     In the library                       Other.....
4. Do staff have access to the computers?
- Yes, upon request/ booking                       Yes                       No                       Certain staff only  
 Other.....
5. Do learners have access to the computers?
- Yes                       No
6. If yes, approximately how often are the learners able to use the computers?
- Daily                       2 - 3 times a week                       once a week                       2 - 3 times a month  
 once a month                       once a term                       other.....
7. Are the computers linked to the internet?
- Yes                       No
8. If yes, may staff and learners use the internet?.....
9. Do learners have cell phones?
- Yes, the majority do                       Yes, about half do                       Yes, but only a few do  
 No, only one or two do                       other.....
10. Are learners allowed to carry cell phones at school?
- Yes, if on silent/ switched off                       Yes                       Not at all                       other.....
11. Are staff allowed to carry cell phones at school?
- Yes, if on silent/ switched off                       Yes                       Not at all                       other.....
12. Does the school have data projectors?
- Yes                       No
13. Does the school have smart boards/ interactive whiteboards?
- Yes                       No
14. If yes, how many do the school have?.....
15. Where are they kept?.....
16. Does the school have a viewing room/ place for films/ videos/ DVDs to be screened?
- Yes                       Yes, but it is not operational                       No
17. Is this facility used?
- Yes, often                       Yes, but not often                       No                       other.....

18. Does the school have any sound equipment? (you may tick more than one)

- Radio       Microphone       DVD player       CD player  
 voice recorder       None       other.....

19. May staff and learners use this equipment?

- Yes, staff only       Yes, staff and students       Yes, some staff members only  
 Yes, students only       No       Other

20. Please add anything else you would like to mention about the school's access to technology.....  
.....  
.....

Thank you for your time

### ***Appendix D: Biographical questionnaire***

**Biographical questionnaire**

**Date:.....**

**School:.....**

Please complete the following questionnaire as accurately as possible. If you are unsure about any of the questions, please feel free to ask for clarification. If you feel none of the boxes provided reflects your situation, please tick 'other' and elaborate on your answer.

Please note that the answers you provide in the questionnaire may be included in the write up of this study. Your name, the name of your school and any other names mentioned will be changed to protect your identity. The answers provided will not be shared with third parties until the names have been altered. Please answer as accurately and as clearly as possible.

#### **Personal information**

1. Name:.....

2. Age:.....

3. Gender

- Female       Male

4. Contact details:..... (c)      ..... (email)

5. Preferred method and time of contact:

- call       email

Preferred time:.....

#### **Teaching and Teaching experience**

6. Years of teaching experience

- 1-3 years       4-7 years       8-11 years       12-15 years       16-20 years       20 years+

7. Time in current post

- 1 – 12 months       1-3 years       4-7 years       7-10 years       10-15 years       15 years+

8. Current subjects and grades taught (eg. English Home Language, Gr 8):.....

.....  
.....  
9. Average class size

- 10-20 learners       21-30 learners       31-35 learners       36-40 learners  
 41-45 learners       45-50 learners       other (please specify).....

10. Length of period:..... minutes

**Education**

11. What qualification(s) do you have?

- Teaching certificate (please specify) .....  
 BA  
 BSc  
 MEd  
 MA  
 PhD  
 Other (please specify).....

12. Have you ever be trained to use technology in teaching?

- yes                       no

13. If yes, please elaborate.....  
.....

14. Have you ever been on a computer course?

- yes                       no

15. If yes, please provide name of course. If you can't remember the name, please give a brief outline of course.....  
.....  
.....

**Use of technology**

16. Personal use of computer

- Daily       Weekly       Monthly       Three times a year       Yearly       Never

17. Do you own a

- TV  
 computer               at work               at home  
 internet access       at work               at home  
 DVD player  
 VCR  
 Radio  
 CD player  
 Cell phone

18. What do you mainly use your computer for? (if you have access to one)

- communicating with friends and family (email, facebook, twitter)
- entertainment
- word processing
- information (internet, news etc)
- marks (excel)
- other (please specify).....

19. Have you ever tried to use technology in teaching?

- yes, often
- yes, a few times
- yes, once or twice
- no, never

20. Does your school have access to (you may tick more than one)

- computers
- internet
- TV
- VCR/DVD player
- Radio/ CD player
- data projector
- smart board
- other (please specify).....
- no access to any of the above

☺ Thank you for your time ☺

### ***Appendix E: Initial set of interview questions***

*Questions must be asked in same order*

*Probe answers!*

*Informed consent*

**\*\* What do you understand ‘technology’ to mean? \*\***

1) Did your teachers use any technology when you were at school?

*What did you learn?*

*Did you enjoy it?*

*Did the teachers all seem enthusiastic about it?*

*Were you allowed to actively use equipment or not?*

2) In the biographical questionnaire, you indicated that you did/did not receive any training on using technology in education (Delete whichever is not applicable). At the time, can you remember how you felt about this?

*Did you think it was worthwhile?*

*Did you feel it should have been included?*

*Why? Specific examples.*

*Were you enthusiastic/ willing to learn about technology?*

3) Before you first taught, did you plan on using technology in your classes?

*Was it a specific plan or more of a general idea?*

*Can you remember how you felt about the idea of using technology?*

4) Can you remember the first time you tried to use technology in your class?

What happened?

*How did the learners react?*

*Did you struggle?*

*Was it fun?*

*Did the lesson go well/ according to plan?*

5) Was it more difficult to prepare for the lesson using technology than preparing for a lesson without technology?

6) Has it become easier to use technology in your lessons since your first attempt?

*Do you struggle to use the technology?*

*Do the learners react positively?*

*How do you feel after a successful lesson?*

OR (if the teacher I'm interviewing has never used technology before in her/his class [extremely unlikely considering film study etc is part of the curriculum])

4) Have you ever considered using technology in a lesson before?

*What stopped you?*

*Why do you think you never considered it?*

5) Is it easier to teach without technology?

*Why?*

*Film study?*

6) Do you think you will ever consider using technology?

*What factors would need to change for you to consider using technology?*

7) Are there many other teachers who use technology in your school?

*Is it encouraged by management?*

*Power issues?*

*Learners and their reactions?*

8) Do you know if your school has a policy about the use of technology in teaching?

*What is it?*

*Do you feel it helps or hinders you?*

9) Do you think the learners benefit from being exposed to technology in school?

*Specific examples*

10) What technology do you have access to?

*Is it easy to gain access?*

*Do many people use it?*

*Who do you have to ask to gain access to the technology?*

11) Do you read educational journals on technology? Have you been exposed to 'new' methods of teaching? Do you talk to other teachers/ friends etc about advances/ new methods/ ideas in teaching?

12) What do you think the role of technology in language teaching is? Do you think it plays a role?

## **Appendix F: Interview questions used in this study**

Interview questions

*Questions must be asked in same order*

*Probe answers!*

*Informed consent*

\* Discuss the definition of 'technology'.

1) Did your teachers use any technology when you were at school?

*What did you learn?*

*Did you enjoy it?*

*Did the teachers all seem enthusiastic about it?*

*Were you allowed to actively use equipment or not?*

*Why do you think they used it?*

2) In the biographical questionnaire, you indicated that you did/did not receive any training on using technology in education (Delete whichever is not applicable). At the time, can you remember how you felt about this?

*Did you think it was worthwhile?*

*Did you feel it should have been included?*

*Why? Specific examples.*

*Were you enthusiastic/ willing to learn about technology?*

*Were you trained to teach with technology or were you trained to use technology as an individual or as an admin tool?*

3) Before you first taught, did you plan on using technology in your classes?

*Was it a specific plan or more of a general idea?*

*Can you remember how you felt about the idea of using technology?*

4) Can you remember the first time you tried to use technology in your class? What happened?

*How did the learners react?*

*Did you struggle?*

*Was it fun?*

*Did the lesson go well/  
according to plan?*

5) Was it more difficult to prepare for the lesson using technology than preparing for a lesson without technology?

6) Has it become easier to use technology in your lessons since your first attempt?

*Do you struggle to use the  
technology?*

*Do the learners react positively?*

*How do you feel after a successful lesson?*

7) How do you gain access to the technology at your school?

*Is it easy to gain access?*

*Do many people use it?*

*Who do you have to ask to gain access to the technology?*

8) Are there many other teachers who use technology in your school?

*Is it encouraged by management?*

*Power issues?*

*Learners and their reactions?*

9) What role do you feel gender, age, race and class play in technology?

*Teachers*

*Learners*

10) Do you think the learners benefit from being exposed to technology in school?

*Specific examples*

11) Do you read educational journals on technology? Have you been exposed to 'new' methods of teaching? Do you talk to other teachers/ friends etc about advances/ new methods/ ideas in teaching?

12) What do you think the role of technology in language teaching is? Do you think it plays a role?

## ***Appendix G: Transcript of interview with Ms Anderson (school 1)***

**Interview with [name]**

**English teacher: Grade 8 – 12**

**6 August at 10.30 am**

**School Library**

It's 6<sup>th</sup> of August, interview with [name]. I just wanted to explain to you the whole point of it and everything, just so I make sure you understand. Um, basically what I'm doing is – I'm looking at what drives teachers to use technology or what prevents them from using technology, other than having access to it. Um, so, I'm basically interviewing teachers and then looking at the different reasons they give from using or not being able to use technology and then I'm writing it up into my Master's. So after I'm finished interviewing you, I'm going to transcribe, um, the interview and sections of that transcription might be included in my Master's. But I'll change your name and the school you come from.

**Okay.**

Okay. But, I mean, some people might still be able to figure it out.

**A girl's school in Grahamstown!**

(Laughter)

Ja, it is hardly a huge place. Is it alright?

**Ja, it's fine. Okay.**

Thanks very much. So, the first thing I just wanted to talk to you about is what you sort of understand by the word 'technology'. I mean, what would you include in 'technology'?

**It was very interesting filling in the questionnaire because I actually ended up changing some answers because I realised that things like DVDs and TV I wasn't considering as technology anymore.**

Oh.

**And so, for me, if I think ‘using technology’, I’m thinking more PowerPoint, um, and, so it’s ja, I suppose maybe that. So things like just playing music and that – I don’t really consider technology anymore. So it’s more using computers like taking girls to computer labs and making a PowerPoint presentation that I do for them – that’s more for me what I think of as technology. But obviously after reading that (referring to the questionnaire) I worked out that, hang on, I’d forgotten, there’s things we take for granted so much I wasn’t considering anymore.**

Okay.

**So things like cell phones I don’t... ah, I wouldn’t, I’ve never considered using them and would never really so (laughter) I won’t, I wasn’t considering them as technology in the classroom so...**

Ja. [pause] So basically because you use videos and DVDs and that sort of film, media quite often, do you, was just run of the mill, you didn’t even think that that was using technology?

**Ja, almost like overhead projectors – they’ve just become second nature.**

Okay, that’s really interesting.

**So it’s more for me – if I think technology – it’s more computer than, ja, than using DVD and stuff.**

Okay, but that’s from, obviously, your exposure to it.

**Yes.**

And then overhead projectors, do you not consider that technology?

**No, I mean I suppose I do, it’s just in your questionnaire you said ‘other than...’, so I didn’t... Um, I suppose they are! (laughter) I suppose anything electrical could be considered it, ja, but um I think it’s probably because they’re sort of such manual things, they’ve sat in classrooms forever so I didn’t consider them, but... um, I don’t know if they are technology. Do they... Do you consider them as, because they’re not doing anything really...**

Well, at a push you can consider a book tech... Well, a book is technology, a pen is technology...

**Ja**

Um, but I wanted to specifically exclude overhead projectors because I feel like they are used... like you say, actually, in your class film is used so often that you’ve stopped considering it technology...

**Ja**

I feel a lot of teachers use an overhead projector but that’s maybe all they use. Um...

**Yes**

So it would be a bit difficult if I considered that technology. Okay. Um, and then when you were at school did your teachers use any technology?

**Um, overheads. And I think a lot of mus... CDs, well I suppose tapes. Um, music. And we did have a TV room. So TV and video.**

And what did you um use the music for?

**Mainly for inspiration for essays, that sort of thing. Background, sometimes I remember with poetry playing things that were similar. So I don't know even if I've changed that much from what I experienced with the music actually.**

Okay.

**Um, I don't use it that much. I sort of plan to but I forget.**

mmmm

**But it's more that – inspiration for essays. Just, ja, if we're doing a setwork that's similar to the song but I actually don't use it that much.**

And then when you use, well when it was used for you in school did you enjoy it? Did you find it useful?

**Oh yes, definitely. And I think just the variety as well. It's something different. Because I think that's often what technology does – it just gives, ja, something different from the norm. And obviously people like music so that works.**

Ja and then your films? Did you guys do film study or...?

**We didn't do film study at school.**

Okay.

**I was... before that. When I was at school it was only, I think, Gauteng, Transvaal then, that had it on their syllabus I think. We didn't have it.**

Okay, so what did your teachers use the TV and everything for?

**It was more for showing... ah, I can hardly remember, to be honest. Sometimes... it was like showing a Shakes, the movie of a Shakespeare or something like that. So it was showing setworks that had been made into film.**

Oh, okay.

**Um, but...ja, it wasn't used much.**

And so did you not ever get an opportunity to really use technology yourself in school?

**No.**

Okay, so it was controlled by a teacher.

**Yes.**

Um, and then you said you had received some training on using technology in education in your questionnaire... I think... ooh I might have looked at [name of other teacher at the school]<sup>7</sup> one just before this so...

**Yes, I think [name of other teacher] would have.**

---

<sup>7</sup> The two teachers I was interviewing at the school swapped interview times at the last minute. When I arrived at the school I had been reading over the other teacher's questionnaire beforehand, unaware of the swop. Hence the confusion here.

Ja, because I've put that one on top. Okay, so you haven't received any training? Do you feel as though, do you feel as though if you had received training, then it would have been useful?

**Well, as with all training, if it's good training – yes, if it's bad – no. And I think what's happened with education at the moment is that we're all pretty negative about training. Actually, I can't speak for others – I'm pretty negative about training because I haven't experienced any good training for years. Um, so... and also because we're very lucky in that, even, you know, the resources of other teachers is more useful to me because so often we are ahead of other schools. And so the training is pitched much lower than what we are already doing.**

Okay.

**So I haven't... if it was really amazing training on how to integrate it in a very simple way, ja, stunning. But I have never seen any courses like that. I've never... we've certainly never for English been offered any training for technology in English or anything like that. It's just going through policy documents. That's the training we've had.**

And so that obviously

**Ja**

isn't really helping you to use technology. I mean, in the policy document, when they do go through it with you, even though... I've actually been to one of those training courses so I know what you mean...

**Ja**

Um, do they ever emphasis using technology in education or mention... not?

**No. The only thing that has been, that I think might have been endorsed by the department<sup>8</sup> was something that SAOU – the union, Afrikaans teachers' union – organised in East London and it was on film study and when we went through what they were going to teach, we realised we did it all already so...**

Oh.

**It was pitched more towards people that hadn't done much film study before whereas we've done it for years. About 20 years or so that I know of.**

Okay.

**So there just hasn't really been anything. The one thing that [name of teacher] might speak about is the Microsoft um, competition, the innovative teachers thing and so that's something that, but it's not through the department, and so that's one possibility, that's one opportunity we have had.**

Did you um go to that?

**I didn't.**

Was it just...

**I, I think I couldn't go that weekend or something.**

Oh, okay.

---

<sup>8</sup> The National Department of Education

**The first one and then the second one, [name of teacher] was running and she said well she'll just fill me in if I need to know.**

Ok okay, so I mean because she's obviously... I mean I know she's won competitions and things and she... I went to the one she ran, so um because she helps you then you didn't really feel it was necessary to be...

**Ja, yes. Definitely. But the first one I, I just... I was sort of aware of it but wasn't really, uh, wasn't even thinking about it really at that stage. I definitely, I think in our department<sup>9</sup> there're 5, 5 English teachers in our department and I think I'm definitely the most technologically challenged (Laughter)**

Okay

**So I'm also really lucky because all the others can, can help and do things if I need anything so ja.**

Um, and then, if you can sort of think back to before you first started to teach or when you were first in a training course, did you ever plan to use technology in your teaching?

**I would say music again, because we had a method lecturer that really stressed using music in poetry a lot so that, very much. And we did, um, film study was the only thing that I ever really thought about. Um, can't remember considering it much more. Also when I was doing PGCE schools, very few schools even had computer labs so it wasn't that integrated. I don't think we could imagine what was coming and so it was a very, very minor part of the course.**

Okay, so it wasn't stressed.

**No, we didn't even have to type our own essays. (Laughter). I mean we could literally still handwrite stuff then. They didn't care, so that's... I know it's changed quite radically.**

Ja! And then, you said okay you thought about using music and you thought about using film study and so from what I've gathered you do use that?

**Ja, the film study we do quite a lot. Um, in sort of, we've brought it into 4 grades now. Music I don't and it's laziness.**

Okay?

**Um, basically I sort of often think in a lesson – ah! I should've done that! And forget and that sort of thing. But when you... we often do grade lessons of things like... [Name of teacher], who's one of the teachers, does, in Grade 11 we do a whole section on humour, and he does a few days on that...**

Ja

**and playing different things<sup>10</sup>... do you know him?**

Um, no I actually went to one of those lessons when I was doing my observation<sup>11</sup> so it's funny.

**Oh! I see... ja, I thought I recognised you – I've been trying to picture who or where. So we do that sort of thing – I'm just trying to think of other, propaganda we put in there and some poetry. Generally I think, or certainly for me, I use it a lot more if I'm doing a lesson for the grade. So if I'm doing introduction to Shakespeare then, and I want photos, then I'll do a PowerPoint thing. So something like that, but I don't use it in my day to day teaching with my class as much... we often do**

---

<sup>9</sup> The school's English department

<sup>10</sup> video clips

<sup>11</sup> Observation classes during PGCE course in 2007

**grade lessons so I think if I'm preparing something for the grade then I'll think more about using technology but I don't generally, with my own classes, the other times.**

Do you think that's, do you find that maybe it's easier to teach the whole grade with technology or is it...

**Um, I think it might be more the things we choose to teach the grade. So if, you know, [name] will say, 'well, I've done this humour presentation so send your classes as well.' So it's more... I don't think it's necessarily the size of the group, I think it's, it just happens... I think it's by chance a lot but it's often if we think, alright we want to do this lesson and how shall we do it best? Then it sometimes comes in. And also things that, more recent ideas of lessons or new things we might bring in, then we might think technology more because it's more used now.**

So do you guys get to choose the lessons you'll present to the whole grade?

**Yes, ja.**

Okay, so it's normally something you're quite passionate about?

**Yes, yes.**

Okay.

**We just like mixing it up so we don't have, um, always the same thing. It very good for the, um, pupils to be exposed to other teachers so that's why we do it as well. So it's more trying to just keep interest and try different things. That's the idea.**

When you first started teaching and you were going to, well going to be doing film study and um using music, did you feel that it would be problematic or were you excited about it?

**You know, I think I barely thought about it because it was such a small part of my experience at school and my training. And, at that time, there was very little technology being used. I'm talking 1991. And, so, it just, we just didn't really speak about it. We did film study in 1 grade then and other than that we just didn't use it. It just wasn't spoken about.**

And then, as sort of technology was introduced into schools, did you see it as a threat or were you happy about it?

**I can see the value of it, very much. Um, but I was very resistant myself to using computers myself for ages because um I couldn't see the point of them for a long time. I kept saying, 'But it's quicker for me to just do my marks in front of the TV with my calculator one evening.' So personally I was resistant to even using computers. Um until about maybe 5 years ago and then switched and realised that I'd been insane. But (laughter) except, still I say that but I think we have become so reliant on computers especially and the girls<sup>12</sup> have to the point that I find it quite problematic too. So things that really could be easier not using them, we automatically only think of the computer. And I had a student teacher yesterday that was doing um teaching a story that had some Afrikaans words in it, and she said oh she'd googled but google isn't good at Afrikaans so she hadn't found out what they were. And it was, like, we've got an Afrikaans-English dictionary right here. The teacher in the classroom next door to you is Afrikaans and I think, that showed me how dependent we've got that we're actually really losing out on basic skills because we've become too obsessed with, I think, technology. Because I'd hate to get to the point where every lesson was always done on data projector, every lesson because then I think we lose the variety again. So, whereas before we might not have had variety with not using technology, I think we run the risk of getting into boredom again with using it too much. So we have to become pretty aware of mixing things up and not presuming that because it's on a computer, it's better.**

---

<sup>12</sup> referring to learners at the school

Okay.

**Which, and especially because the kids, because they're obviously such a different generation are, they are only exposed to that a lot of... and so they forget there are other options like books in the library. (Laughter)**

So can you remember the first time that you used technology with your class?

**It would've been film study.**

Is it?

**Ja.**

Or, um, can you think back to doing it, I mean, can you remember much of it?

**It's quite hard because it's sort of blurred. We did the same... we've done for a while, but sort of?**

And, how did you prepare to do it?

**With teaching it, I had, um, there are books on film theory and how it works so I learnt through that and watching other people.**

Okay, so...

**That was mainly, ja, just looking up what line means and camera angle and stuff like that in books.**

And then um did you show them a film?

**We haven't really changed our structure that much. We generally start for, with a couple of lessons on film theory and actually use graphic novels to teach it a lot because they've got the stills with the line, angle and shadow and all of that. And then we show them whatever film it is, we show the whole film, and then we choose sections that we are going to focus on and I think this hasn't really changed where we take different, there are 3 teachers per grade and so each teacher will take one section and he or she will teach that. But the others, it's quite an interactive thing, the others are often in the room and then we all chip in and um all speak. And so then we'll take that section and stop start it and freeze different frames and teach as we go and go over it again and things like that, kids answer questions and so it is showing, they're watching it as we're teaching.**

Did you ever struggle to use the technology um I mean maybe with film study and even if you did computer lessons later?

**Um, me physically, my...?**

Yeah.

**Oh, absolutely! No, I...definitely because I have been resistant to using it myself so I generally want to feel secure with using one thing before I move onto the next. So um I think I also probably used video longer than DVD as well because I like that you can just stop it at a place and it's still there! DVD still frustrates me, for me the technology has actually gone backwards where video, sadly they're all broken now, but it's easier... obviously there are good and bad things, I mean you can skip forward but... so I need to know how what I'm doing before I do it. I don't like going in and trying things out, which others are quite happy to do – oh well, does this work, does it not – but I need to work it out myself first.**

So you're very specific about exactly what's to happen in the lesson?

**Um, no, just how the technology works. The lesson – I'll teach whatever, I mean that's, that's not that specific but ja, how the physical technology works.**

And then if something does go wrong and a student helps you, is that... does that bother you?

**No, it often happens. It's fine, ja. Um, that I think I also had to get used to probably realising that they know much more maybe so um, that's fine. Often though, they don't know as much as they think they know. And so we've often had girls trying to do things and actually they don't know so um I think it's quite, it surprises me how little, if I look at computer usage, how little they can transfer information from one programme to another or even, if they can use word they can't use excel, you know, that sort thing. That bothers me, some obviously play with computers and try different things, but I think the majority of our kids certainly spend most of their time on Mxit if I'm looking at technology and email but they don't really try, they don't experiment, they don't play with it as much as I would expect. Because that's what I thought would be happening. So I don't know if they would know as much as I would expect them to know.**

Ok, but they are willing to...

**Oh, they'll try out things in lessons. But some classes as well, they have done amazing things with... so... other subjects maybe use it more. I know geography they use... for... GPS things and that. But I certainly... I almost never will actually take the class to the computer lab in a lesson.**

Is it just because you don't want to use the computers or is it time or...?

**I think maybe ... um... a number of things. First of all, there's booking the lab because there's clashes. That's a very basic thing. I think a lot of it is laziness because I've got a lesson that's worked for years and... I don't make the effort to think, well, can I bring technology into this and how can I do it. So, um, I think what's happened with me as well is things, when I have tried things, somethings have gone wrong and instead of trying to fix things, I've gone 'ah, well that didn't work', so...**

Mmmm.

**For example, in Grade 8, we do a newspaper project and when I did do it with the kids in the lab then there was... What happened was some have got [some computer programme DT projects??? Check] at home, and so their parents did their layout for them and so I've got quite resistant to that sort of thing. But what I should say is 'alright, you have to do it here and with me.' So I think I haven't tried hard enough, to be honest.**

Okay, so it's the amount of effort that goes into it and the difficulty of preparing...

**I think so... it's...ja... because, I mean, teaching's a big... we've busy and I think, I think I'll spend more time on something new, if I bring a new topic in, but if I've done something for years I think...ja... I am lazy and just, 'oh, well, that's worked, going to keep doing it like that.' Where... maybe I... ja...**

And then the times you have used technology, I mean, you were saying obviously it's more difficult to prepare and to monitor and sort out the kinks, but did you find it fun or...

**Ja, definitely. I mean, if you're teaching as I said the one thing was an introduction to Shakespeare it's, I mean, it's obviously so much better if you can say 'this is where he lived and this is where he grew up and he went to school'. It makes it more alive. Um and 'this is the kind of theatre', instead of just describing it – this is what the kind of theatre would have looked like and this is the Globe now and... things like that. So I think it's definitely worthwhile, for, for certain lessons. But for me, I**

can't imagine putting... doing grammar notes on a data projector because what's the point? I've got them on the overhead whereas other people like to have everything on the computer... I can see that very much, that it's a whole lot easier if you've got everything saved on your computer and then you can just bring it up and find it easily so... I might get there. You know, if it helps me...probably with my filing system (laughs)... it might be easier.

So basically you do novel things with technology rather than trying to... I mean, retyping an overhead.

**Ja, trying to rework stuff I don't often do, ja.**

Okay, um, okay... and then... um... has it become easier for you? You said initially you were very resistant to using technology and now has it become easier for you?

**Oh, ja, definitely! And I think just that feeling that, you know, you can't break it, you can do it again. I think that's the one thing really, when people... if I'm watching somebody and they're showing me how to do it and they do it so quickly, I'm like no sorry, ah, I'm lost, I lost you five steps ago and so I think I do still have a fear of losing information. And of doing things so quickly I suddenly press 'delete' by mistake so I definitely have that – I like to have my piece of paper with my information on, it makes me feel secure (laughs). But ja, no, I definitely got more relaxed about it.**

And the learners' reactions? To the use of technology, do they...

**They...they...they do like it. But again if we do... even film study they LOVE... and but even to the poin... but you know, if you do three or four lessons in a row, it... um... of, of, even by then they get bored as well. So I think variety is the most important thing so if you're using technology for a specific reason and not all the time, for me it works better. Then it's exciting and then it's something different, whereas if it became the absolute norm, I think they wouldn't even notice, it'd just become like everything else.**

Okay that's ... so their reactions are positive but, again, that they do also get bored?

**Yes.**

And then when they use technology themselves? You were saying in Grade 8 you had that newspaper project, is their interest sustained for a longer period of time or not really?

**Um... it was a few years ago I did that... so I can't... I haven't taken the girls to lab for two years maybe. I'm really... ja, I'm just, ja... I haven't done it. And I think part of it is – sorry, I'll come back to your interest in a minute – um, is, you were saying, is the time. I think so often if you've got 30 computers some won't be working and so often you end up not being able to do the lesson properly and think that's maybe what my resistance is as well, that, um, if I knew it was always going to work and is efficient and then, I think I'd do it more, but the time thing is a problem. But the kids definitely... they love playing on computers, so... if they get... what's nice is that they are active for a lesson I think their interest is sustained if they are physically doing something but um... on the computer ja...**

So, then, you're talking about... basically if the systems are unreliable then it's a lot more difficult?

**Yes, and because we also work through Rhodes so, we've been having problems recently and, I've just been seeing people – their lessons have fallen apart because, you've planned a lesson and suddenly you can't do it because our system's overloaded and Rhodes has shut us down and... so they're very practical things about, ja, being scared that it's not going to work and so rather just don't bother.**

Ja, because it would be almost like you have to set up two, two lessons.

**Ja, ja, that's the thing. So I do think that time is one of my major problems. Time and the time of setting up the lesson and then the time you could waste um in that lesson as well.**

Um, how do you get access to the computers and things in your school? What is the whole process of doing it?

**We've got two computer labs filled with about 30 computers and an audiovisual room and um, which has got one computer and a data projector and we just have a booking, we have a file, that... any teacher can just book them at different times. But some people, if we know we're doing something, if we do film study for a term then we can just book it for the term for that grade. So, it's just a booking.**

And then , how does it... so you book it and then does that guarantee that you will have it?

**Yes.**

Okay, so there's not then any... like, interference with other teachers...

**No, if your name's in the book, it's yours. And if someone else goes there they must leave. So that's not a problem.**

So there's no, I mean, there's no way, say for example, like the principal or vice-principal would sort of say they need it or...

**No. The only time there'd be problems is if somebody didn't know that we'd hired out the venue for a conference or something. So it's a communication issue but generally it's a minor issue. We haven't really, if your name's down, it's yours. That's it.**

Okay so gaining access isn't difficult?

**It isn't difficult but we've got 25 teachers and two labs – if we're looking at computer labs so, if you get your name down, you can have it. But often it's ... the... you can't get it because somebody else has it. And I know some people have had big problems with the way the timetable works. So, for example, History and CAT (Computer Application Technology) are timetabled together so... [name], who teaches the History class, can never use the lab and he would really want to because he really uses computers quite a lot so it's timetabling issues that are a problem, because he can never use it during his lesson.**

Oh. Okay, so they are at the same time.

**For every, for every day.**

So then from the sounds of it, there are quite a lot of teachers who use technology at your school?

**Yes.**

Okay, and then do you think you sort of encourage and drive each other to use technology? Is there a sharing community?

**I think that's the main thing. If you hear somebody else's used it and it's worked, then 'ah, well, I'll try it out.' So, people... we are very lucky with people sharing ideas and information and so most of it is from that – it's chatting over tea. Um and ja, ... and because people are very willing to share, they will also help. So you can say, well what isn't working here and what will work? So that is nice.**

And then is it also encouraged by management?

**Um, well, yes. The ... the... Sorry, the reason I'm hesitating is who's management? There's the governing body who, um, we have got a programme for every second year so we'll have on the programme for buying new computers and they're very aware of having to keep up and all that.**

Okay.

**Management is also the English department. Three of us are on management so... (laughter), it's a bit of an overlay but uh, yes, I say yes.**

So it's the governing body and teachers within the school who are in positions of power, everyone is sort behind it?

**Um, I think everyone's behind it. I don't think everyone will use it but I think everyone on management definitely recognises that it needs to be used and if we want to keep up to date with kids and, and do things that are relevant and prepare them for the world, yes.**

So do you think that's a massive driving force, is that, the learners' wants and needs?

**Sorry say that again? Driving force?**

How much consideration is given to the learners and the fact that they want to learn in that... I mean, some people see that they need to do it.

**I think for... I think it's more from teachers. Um, I think we all accept that the kids, most of the time, would want to be in front of a computer or TV and we need to, sometimes the resistance comes from realising that that's not good for them to do that all the time. So I certainly don't consider the ... what they want a lot of the time because I know they would just want to be behind the computer. Even though... if they really were, I reckon, I don't think they would want to be there all the time. So I don't know if they are old enough to recognise what they would miss out on by having a computer teacher or whatever it is. So... so, I think most of it comes from talking as a staff about what we think would be best and what lessons would work the best than saying to kids, 'well, what do you want? Do you want to do this thing or not?'**

So you're trying to balance obviously interpersonal and the use of technology, instead of just going for the use of technology?

**Absolutely, ja, ja. Um, because... ja, once again, I don't always think it's better and so I think because the learners' lives are so controlled by technology outside the classroom I think we need to show, that that's not all there is. Um and they just need to speak to adults as well a lot of the time, which they don't do. And often with lessons that are very technology based there isn't as much speaking and so I think they miss out on that as well. So again, it's balance. I think we need the balance all the time between the talking lessons, the interactive and group work things as well as technology.**

And then what role do you think age and race and gender and class play in the use of technology? Trying to use technology as a teacher?

**Um, I don't think age and gender, I've only taught in a girl's school so I can't really help with that, but I don't think age makes that much difference, I think the major thing – or race- I think the major thing is class. So girls that are going home to houses that are technology based and they've got their own laptop and they've got everything they need and internet connections, then it's obviously much easier for them and that's a problem when, because we've got a lot of kids that are, you know, from... living in shacks, and there's no way they've got any support from home. So there the only technology is from us and from cell phones. So... that's what's also quite hard if you're teaching and it is very interactive, that they've all got very different skills. Um and so sometimes you end up spending a lot of time with the kids who can't use the computer at all and the you're missing out on**

**helping the others and that's a really hard thing because they're all at totally different skills levels. Because they do basic computer, how to use the computer but it's very basic if they're not um doing CAT as a subject... but the girls who are the best at using it are the ones who have got it at home.**

Because of practise.

**Ja, so we've got an incredible range of access for the girls. They can use the computer labs in the afternoons so if they want to there are sort of 8 hours a week they can use them. And then just go and if there's a free computer, they can... but they've obviously got sport and other things so... it's hard to fit it in.**

So that's obviously one way you guys try and, and lessen the impact of class, by having that space for them to use it. And then what else do you, I mean in class, what else would you try and do to, to sort of, to help the girls who don't have it and make it less glaringly obvious?

**I think sometimes if the lesson is planned so that some can just go ahead and do it on their own and then you can spend time with the ones that, that need the basic skills. But then, the, I still think those are, the ones that could go even further, the ones that are really good, I think often we lose the opportunity to teach them more because we're spending time with the ones that are at a very basic level. So... but I think it has to be like that. It has to be, you know, very clearly laid out what the tasks are so that they can do... so they can do as much as possible (so they can move at their own pace).**

And for you as a teacher, did you ever feel that your gender played a role or that your age played a role in how much technology or how little technology you would use?

**Um, I don't think gender at all. Um, age, just because I didn't grow up with it very much so my first instinct, well, it's changing, but my first instinct would never be to use a computer whereas I think now because of management duties I have to do a lot of admin all the time on the computer so I use it like a lot of the day but ja... but I still think it's quite focussed on that. My instinct would never be to watch a movie on my computer, it would still be to watch it on TV, so whereas a lot of the kids, they'd just put it on their laptop and so thing like that where I, I... ja, just because I didn't grow up with that I think I am different.**

So do you see it more for admin use than recreational?

**Oh, not recreational at all. Mine's absolutely job.**

Oh.

**Email I'll see if I have to at work. I don't take my computer home, it's... I leave it at school, even though it's a laptop. I leave it at school. The only thing I will... I will very rarely send an email that's personal and the only thing I really use it for is photographs, if I download because I'm a photographer so I use it for that, but that's the only recreational thing I'll do. I'll play games maybe once every 6 months on it, but I don't even, ja, take it home.**

And then your use of photography, have you tried to sort of ever include that in your teaching at school? You were saying it's a passion.

**I haven't. I never really... no. I haven't really worked out how, I never thought about it. I could I suppose.**

I think it's interesting that you totally leave it at school, so you still have that big separation between your home life and school.

**You must realise I don't even carry cell phones (laughs). I'm really technophobe, I hate it a lot of the time, so, that's, that's where I have had to be quite conscious about what it's better with. I hate the**

**thought of being able to be contacted all the time, so my cell phone stays at home as I use it as an alarm clock or if I need it. I don't carry one. (laughs)**

I find that fact amazing (laughter).

**I know. I've just been overseas and I won't take a phone with me because my whole thing of being on holiday is not contacting people, is being in a different world. And the kids, the kids do also find it amazing but I, um, I hate the thought of being able to be found all the time that I can never um not be reached. If I don't want to answer the phone, I don't want to answer the phone.**

Fair enough.

**But, so, ja, it's a very...**

Um, I mean, this is just off the topic but then do you sms people?

**No.**

Or...

**I phone them, if I want to. I've got a phone here, I've got a phone at home.**

(Silence) And... okay.

**No, ask, it's fine. I know I'm a freak.**

And then, and then if people sms you will you just not reply or ...

**Well, if I turn the phone on in two days time then I might get the sms. But I don't have it on, so they don't phone, they don't sms me. My friends phone me and leave a message on my answering machine if they want me to phone back.**

And then when you travel do you use it?

**Yes. So I take it in the car; I take it as a safety thing. But um, that's... that's ja... Grahamstown, if you want to find someone, drive around and find them. I think it might be different if I lived in a big city. But I, I just seldom need it. I just don't...**

This is so... maybe because I always have a cell phone or... if my cell phone's off I panic a bit really.

**You see also, you must remember at school, I know some people do it but they're not meant to, during school hours we're not allowed to have it on. So from, for the majority of the day it doesn't help me to have a cell phone. If anyone phones, they must phone the school. So I would only be turning it on in the afternoon and at night. And at night I'm at home, where I've got a phone, a land line. So for me, we're talking about a couple of hours a day.**

So you just see it as pointless. You don't need to maintain that constant contact.

**No, I can't bear it.**

That's actually so interesting because technology has obviously just changed us, to the point that we think it's normal.

**Yes, absolutely. I mean, I, it absolutely amazes me that the kids will sit on the field, all on Mxit, in a circle, and not speak to each other. They'll lie in beds next to each in hostel and they'll be talking to each other on their phones. And they're a metre apart.**

Ja, that's quite scary.

**That for me is very scary. We teach, I don't know if you know Fahrenheit 451, Ray Bradbury. It's a ... we do it in Grade 11. He wrote it in the '50s. And this man was a genius, because you can't believe how much stuff he predicted and is just coming true. Every year we say, 'can we still teach the book?' Because it's not science fiction anymore, a lot of the stuff. So... and... that for me, because the society there has got to a point where they're totally unconnected and they're totally controlled and, and I think that's always a fear for me of how... of losing connections between people. People in restaurants who're talking on their phones and they're not talking to each other... aaah... it freaks me out. It's like why?? The person's here, in front of you. So... and I think cell phones have made us so lazy that people can't cope if you say, 'well, just phone and leave me a message at the office.' It's like we've lost all other options. Um... it's ja...**

Do you think it also makes communication more instant than it needs to be?

**Absolutely. And I think people demand that. It's, 'well, I'm phoning now, I want the answer now.' But you only need the answer next week, you don't need it now, why? I think we have become, ja, we need things instantly all the time and we're losing the plot a bit.**

I really find that quite fascinating... I mean for me to switch of my cell phone is just... I mean, I can do it...

**What's your fear?**

I don't know. It's just, I feel, what if someone needs to get hold of me or um... what if someone I want to talk to, like (name) tries to phone me or something and then I totally miss it... and I know that's totally ridiculous because I can phone them back, but I hate it. I hate not having that... communication.

**Ja, it's just a different...**

But it's also interesting because you're questioning is it actually communication.

**Ja.**

I mean, how much does a text really tell?

**Ja, and it fascinates me how the kids, if you speak to them about Mxit, they will say things on Mxit that they will never say face to face. And so we talk about privacy and sharing information, and there they are sending their private stuff out to the world, anyone can find out about it, but they feel too scared to say it one to one. And it seems like they've got all mixed up about what's private and what's personal and what's not. Like facebook and things like that, which I don't do either (laughs), um... and, ja, to the extent that you'd wonder, 'does anyone care that I'm eating lunch now?' I mean, why would I tell them? It's nuts to me that we're sending so much irrelevant information like 'yoga was fun', so you can tell me that tomorrow, I'm going to see you at tea. Um, why do I need to know it now? And I think we... and so much with smsing, you can't do more than the basic, 'what's happening', it's nothing about feelings or anything beyond that and I think we might be losing the texture a little bit because it's become so shrunk. It's almost like a book's been shrunk into ok well what's the basic plotline? Where's the rest? Where's the texture, where's the descriptions, where's all that?**

That's so interesting. So have you heard about these books, like, there's instalments they send out via text messages. Basically a chapter is a text.

**Ja. Ja, now that's Fahrenheit, we're getting... I mean, you have to read it.**

Ja, I will actually. Is it similar to *1984*?

**No, it's not as... It's got some elements... It's got that idea of big brother watching, very much. Um and the basic thing is that firemen (sic) in the community set fires and don't put them out and they burn books. Nobody can read books, because books have got information against the state. So they've got books, but it's just the basic plotline of books, so it is like the text thing. So you'll read *Macbeth* in a page because the rest is irrelevant, this is the story. Um, so... it's ja, we're getting there. And big screen TVs and things like that. And hand – like Rhodes has got now – those fingerprint things. And he predicted this in, ja, early '50s.**

And everyone probably mocked him.

**Ja, oh, it was REAL science fiction and I've been teaching it for over 10 years and I cannot believe the difference between teaching it then and now because the kids are like, well, this is normal for a lot of it, which is quite scary.**

So there are obviously down sides to technology, I mean, like you were saying we lose a lot of the texture and when we have communication it's not actually communication and they lose interpersonal relationships but do you think, do you think that they do benefit from using technology specifically in school?

**Definitely... They definitely do if the lesson is taught well. If the technology is used well, it's amazing when we can do stuff that we could never do before. Definitely. I think my problem more with technology is what's outside the classroom at the moment um things like that they do waste 5 hours on Mxit when they could be reading a book or watching a movie. I'd rather be watching a movie. It's not technology, it's the type of technology they're using, because kids now definitely can't write as well, their spoken... the difference, if you take almost any of our kids, other than the top five in the grade, their spoken ability is amazing, it's really, really good and their writing is bad. They don't know the difference between what is slang and what is formal. They try to write formally for us, but they don't know what that is anymore. And so Mxit and sms speech, definitely...**

Do you think that's where it's come from?

**Ja, I do. I think a lot of it's come from there because that's their norm. That's their instinct.**

Ja, they use it so often. And then when you use technology to teach do you guys ever try to teach against that and say this is what you'd say in an sms and...

**I haven't really. I joke about smses all the time and so in essays I'll say look what you've written here, this isn't English. So it's more from response to what they written, but I've never used smses or anything like that. Even though, they sometimes in exams now, they ask them – one piece of writing will be 'write a sms or an email or...' things like that.**

Ja.

**And so... they're using, the maths department, is at a programme at the moment using cell phones. They've got maths things on the phones and they've got a set of phones in the classroom that they use. But I don't know much about it.**

Say, for example you were talking about in exams they ask to send a sms, send an email...

**Not send it, write it.**

Write it, ja. Do you, do you think that a worthwhile exam question?

**I think email is, because they will need that in business. Sms I can't see any point in it. Because it doesn't matter what you say in a sms; there isn't a format, there isn't a... You just write what you**

**want. So I don't see any point in that. Email I think, ja, because it's more practical. There's application in their lives beyond just fun.**

Okay. And you were saying you had a lot of support within the school, with teachers who use technology. And then how, how much... and then you said you hadn't done any training, but do you guys read sort of educational journals or articles on technology or...

**I don't. I think everyone that I know of in the school that uses it, they've always been, they've always shown themselves. And from friends. And so it's from playing that they've worked it out. They might be the quick thing, but I don't know, they might, but I've never been aware of it.**

But then, from the sounds of it, your community, um, with using technology is obviously quite strong.

**Ja, I think there's a lot of people who're pretty good that are... so there is generally. And we do have a, for a half the day there's um, a computer ...technician or whatever... We've got someone here for the physical thing to help if we need somebody so you can call.**

And then could he be in your class? I mean, if you wanted to do a lesson but you weren't sure how it [technology] worked.

**He generally... Ja, he is in some, the grade 8s and 9s do a reading skills thing on the computers once a cycle, um, and it's working on comprehension skills and he generally is there for those lessons so, ja, I'm sure he could be if we needed him sometimes.**

Is that [reading lessons] an English department thing?

**No, it's just one of their subjects that they do. It's a timetabled thing. The principal actually runs them.**

Oh, right. So that's obviously emphasized quite a lot, like, just reading comprehension and...

**Ja, it's just because we were so concerned by how bad their comprehension is and how bad their writing is, so this, um, I can't remember the name of it off the top of my head... um, so we bought this programme that they do once, probably once every two weeks only because we have a 9 day cycle. But they can in the afternoons, it's called *Reading Excellence*, um... in the labs in the afternoons, they can at any stage, the whole school, can go and do *Reading Excellence* and work on their computer, comprehension skills using that. And it tells them [unclear] and you can move up levels.**

Do feel that it has helped them?

**I don't know, it's so hard to judge. Um, I think it must have. Um... but I, we haven't really worked out exactly... it's a hard thing to quantify. And so, I'm presuming it's helping. That's as much... I don't know.**

And then the fact that it's on computers? Do you think it makes them more interested? Because that's quite similar to those old reading labs hey?

**It is. It might... I haven't really been in a lesson so I can't really judge. It helps us, because it's very easy for us on their reports we say, 'go to *Reading Excellence*' and so then they... there's a staff member who will check, if we recommend that, that they've done their 8 hours or something like that. So it's a very easy thing. I can just write it there and they will go and do it. So, it's a nice academic support tool. And we also have *CamiMaths*, which is a maths programme which is a similar thing. They do some in maths class, but they can also go in the afternoons and work on their maths on the programme. So, so we are using it beyond the classroom as academic support.**

So you're saying, with *CamiMaths* and everything, technology can be seen as a form of academic support?

Yes.

And do you think, other than that, that technology has evolved in specifically language learning and language teaching?

**I think...yes, if... again, again, you know if there are good programmes. Language like grammar language you're talking or language as English, as a subject...**

As a subject

**Um, I think it could be an amazing support for girls that need extra work in the afternoons if they can do language programmes and that sort of thing. Um, definitely in the classroom, the way it is used, and we can extend it, um absolutely. I don't know of many good programmes for, that they can use. I've see a couple that've been rally basic and had... So I would love to know if there were some support programmes that we could use very easily which would be great. But of course the problem with English is that someone still has to mark it so ... you know it's not such a right wrong thing all of the time, unless they're grammar questions so... so... you know if it's going to make more work for me I don't want to do it (laughs). To be honest. Even if they, so... we've got enough marking anyway. If somebody can come up with some system that can help that, that would be amazing and I think every English teacher in the world would want that, but... if it could be marked, you know and we could get scores from the computer and that sort of thing.**

Would you trust that?

**Prob... uh, I don't know. I'd have to test it. I mean, if it was a good programme, yes. But I think that's been the problem, that we have had some that have been really inaccurate. And that's part of the problem with the *reading excellence* programme, that's why we would never use it for marks for anything like that. Um, because everytime, so even on a grade 7 level, so everytime the child goes in, it's a different text, different questions so you can't compare two, it's not going to be exactly the same level. So that's why it's a guideline, it's not, you're not definitely on this level. Ja so every person in the room at that time will be doing a different text and answering. So that for me is very much a support thing; it's developing skills but it can't ever be used for marks.**

Okay. And then for learning, is it just the same – do you think it'll help them to learn faster or...

**What's difficult is that...they'd... to read off a screen is hard and so... that's also very different, so some, some will be able to read better off a screen and some will be able to read it better off paper so I think it'll be great if we could get to the point of being... of them doing what works for them. So if they could do an exam on the screen and we could block all the help things, then that'd be great. The people who be doing what is good for their ability. But, you know, that would be a really hard decision.**

It would change from child to child

**Ja. And so ja so I can't see it happening for a while because exam venues and different places, the same exam... but it is, that's one of the problems with *Reading Excellence*, that they are reading off a screen, which they might be good at and then they still can't do it on paper. Ja, there are concerns. But I, I still think it's, it is a good thing. It's, to have that. Also for girls that just want to do something else and they don't know what to do, to help themselves at least... even if it's a crutch, they can feel that they've got something that they can do. Ja.**

Thank you, thanks very much. [End of interview – time ran out]

***Appendix H: Transcript of interview with Ms Bird (school 1)***

**Interview with [name]**

**12 August 2010**

**English teacher: Grade 8 – 12**

**School Conference room**

Okay, and then just before we started, I just wanted to check that you know this is voluntary (interviewee bursts out laughing) and that it's going to be written up into my Master's. And I'm going to change your name and the name of the school.

**And the name of the school – great.**

But people still might be able to figure it out, because Grahamstown is not that big.

**Such is life.**

Okay. Um then I just wanted to talk to you about what you understand by the word 'technology', what you consider technology.

**Okay, well the first thing that, ah, always springs to mind is computers, um, but, um, obviously it's everything from TV, video, whatever to cell phones. Ja. Anything that electronically governed I suppose.**

And are you happy to exclude overhead projectors, just from this conversation?

**Okay, sure. I must tell you that by giving us the questionnaire first you lead us to the answer of this question. (both laugh)**

Ja, I did want to try and exclude it because, I don't know, I don't really feel like it's a technology, I don't think it's a new...

**Well, certainly not a modern technology.**

Ja.

**Ja, definitely not.**

Um, did your, when your were at school, did your teachers use technology?

**Well, there wasn't any. If we're excluding overhead projectors. Oh then... you see, if we're excluding overhead projectors, shouldn't we exclude tape decks?**

You see, that's, that's why this thing became so difficult to, I actually struggled so much with the wording. Because at first I was going to saw digital technology and then I realised, but then I'd be excluding tapes and VCRs and I wanted to include that...

**Okay**

But exclude overhead projectors, and I thought I'd just try and discuss before, like, the different things that we included and excluded.

**Ah. I think that, ah, I mean, ah, once, a couple... radios, tapes, and um once or twice I think we looked at TV adverts.**

Okay. And did you enjoy it when you did it at school?

**Yes, in a random sort of way. It's certainly not something that particularly stood out for me. I mean, because as I'm thinking back I honestly I can't even remember if we did TV adverts but I think we probably would have (laughs). So it's not something that was particularly, this great moment in my life and oh wow this is such an amazing lesson, ah... There are lots of other lessons that I remember ahead of those so it wasn't anything desperately significant for me.**

And then what'd they use music for?

**Um, response to poetry, creative writing. Ja, those were the two...**

Was that across the board? Did all your teachers do that?

**No, no, I think that was probably my Grade 10 teacher springs to mind. Oh no! And my Grade 12, English... are we talking specifically English or...?**

Uh, no, just in general.

**Um, ja, my senior English teachers all did it but, you know, if it was two lessons in a year that was a lot. So, like when we did *Preludes* we would listen to the song from *Cats* sort of thing, you know, not as a regular thing, but ja. And then, we would've watched some movies somewhere along the line. Did we watch movies in History? We watched movies in primary school, it had nothing to do with what we were studying, it was just to entertain us.**

Mmmmm.

**(laughs) ja, mmmmmm. Um, we did have an AV room at school so I'm sure we would've watched some movies.**

Okay.

**But nothing that... oh! Yes, I do, I remember something from History, there was something about... saving people from the island during the war (laughs). [unclear] impression.**

So it was all, I mean, you guys never really had the chance to use technology yourselves?

**No. I mean, there wasn't, because, look I matriculated in '87, so I mean there were 5 Apple computers at the school and there were 4 children who did computer science as an extra subject and they had to go through from [place name] to Durban, which we 30kays away, to go for the lessons on Friday afternoon. They were very 'other'. (laughter). Um, so, ja, definitely not. I mean, PCs weren't readily available at that stage. I mean my father was involved in computer programming but it was, wasn't like, you bring it home, he did it at work so. And they only started with office networking then in South Africa so ja, it was definitely not a part of schools.**

And then in your training? Was it encouraged to use any form of technology in teaching?

**No. I mean, again other than English – like play some music, that sort of thing, but it wasn't ever really. We were taught to do excel, with the idea that you would use that for marks that was it.**

Okay, because I saw in your questionnaire that you said you hadn't received any training on using technology in Education.

**Ja, the workshop that you went to<sup>13</sup>, I ran, I gave. But that... I mean even on that workshop we did more than we should have in term... than the workshop was supposedly about. It was more supposedly about innovation rather than about using technology so ja beyond that nothing. And then two years ago I went on a photoshopping course for my publicity job, but that's ja.**

And did, did you ever feel like you missed out on receiving that training?

**(Sigh) I suppose, I mean... when I saw the advert for that workshop, for the Microsoft workshop<sup>14</sup>, I had thought that they were going to show us more applications and things on how you could use technology, which I would've liked. But it's, in someways... you recognise that it's an organic thing. The use of technology has to happen organically. I don't know if the training really helps. I mean you speak to the PGCE students about the computer courses they go on, there's a computer literacy module, and they're like, 'well, I went to the course but I don't know how to use excel.' So, which is understandable, if you don't use it, if doesn't become integrated into your life it's never going to really be that helpful. So ja. I mean the one thing... it's possibly film study would've been helpful. But I was very lucky because my mother was teaching, while I was training, she was teaching herself to teach film study so I sort of learnt with her, I suppose. From her. So I think felt more con, confident with film study when I came into teaching than many other people who trained with me. Um, and then in terms of computers, I mean it's interesting... until you've got, I've got a data projector this year. Until you've got the data projector you don't start thinking of all the ways you can use the data projector. It's... you sort of have to have it...**

Access

**You have to have it if you're going to use it, otherwise it's not going to make sense to you so. Also before I had a computer in my classroom I mean it was a mission to do anything with a computer so.**

Did that discourage you even, I mean, if you... because you have computers at your school other than the computers in your class...

**Ja, absolutely.**

So before you had it in your class, would you not really use it?

**Very seldom, hardly ever.**

---

<sup>13</sup> Microsoft Innovative teachers workshop run in early 2010

<sup>14</sup> This refers to the same workshop, but the one run in 2009

And then when you went on the Microsoft um that innovative teachers thing, did you feel... did you feel it was a waste of time for you or did you feel it was useful?

**(silence) The workshop itself?**

Mmm. [must have nodded too]

**I felt it was largely a waste of time. Um... (silence)**

Was the pitch<sup>15</sup> wrong or...

**Ja, I thought, I thought it had been misadvertised. Cos I felt... the advert this year was reworted, I think largely because I complained so much. Um, because I felt, so this year's advert said a lot about what this workshop is about, is about the entering of this competition and la la. Last year it said... the focus was more about... innovative ways to use, of using technology in the classroom. So I suppose it was more about what I expected from the workshop. What I'd expected was to find out, to be exposed to new technologies that I hadn't encountered, really new software that I hadn't encountered or new ways of doing things. It's not fair to say that it was a total waste of time because it did spark some ideas about looking at other people's... you know they showed us one or two of the other people's projects from the previous year so that was...ja, so that was helpful. It wasn't, no, complete waste of time is unfair. It wasn't what I expected it was going to be.**

Okay, so parts of it were useful?

**Ja.**

Okay, and then before you started teaching, you were saying your mum was learning how to do film study and then you sort of learnt with her – so did you plan to use technology in your teaching?

**Well, I definitely knew I would definitely do film study that's ... because visual literacy is so much a part of our society. Well, was increasingly becoming at that stage and has just continued... but you could just see the trend that it was going to become a massive aspect of our, of our society and so the importance of visual literacy as a literacy component in English was always very clear to me. Um, but, ah, but beyond that I never specifically thought, well I certainly would never have thought 'how would I use a computer in teaching English?' no, then definitely not.**

So it was just for film study?

**Ja, ja.**

And then can you remember the first time that you used technology in teaching?

**Like, like beyond film study?**

Or film study or... well, I suppose you could answer for both.

**Okay, film study I don't specifically remember, I just know it was in my first year and we studied 'The Witness'. Ja. Um...**

So presumably it went quite well?

**Yes. Ja.**

And the first time you tried to use other technology in your class?

---

<sup>15</sup> Meaning level it was pitched to

(silence) um, it probably... I mean again beyond showing the odd video and the odd bit of music and whatever, I think probably the first time... what I can definitely tell you is that probably the first time I got the kids to use technology, besides just data, word processing for assignments and things, was probably power point presentation about 6 years ago. And man it was a performance and a mission and I don't know how I, how I ever got through and did it again. Because you know, nobody's – well, stiffy disks I suppose in those days would speak to each other's computers and there were virus and njah, njah and when you got to the AV room it took you 15 minutes to load up and then the, you know, someone switched it from computer to video and ahhh, mission, nightmare.

So it was just horrible experience

**Horrible! Horrible! Horrible! Waste of time, frustrating, absolute teacher's nightmare!**

Did the kids enjoy it?

**NOOO! They hated it! They absolutely hated it because it, when I started with that, I think if two kids had in my class had ever used PowerPoint before it was a lot. So it was very, it was big, new, stressful stuff for them. And then they were also obviously frustrated by the frustrations of the technology and...**

Okay, so they hated it and you hated it?

**Mmmm.**

And it was, it seemingly was just a massive waste of time, so why did you decide to do it again? Was it not a massive waste of time?

**Because... there was massive time wastage in it, but I wouldn't say the project itself was a massive waste of time. Why did I carry on? Because I strongly believed in the value of it and the importance of it. Education is nothing if it's not preparing the kids to go out and function in the real world. And so,... if I'm going to be supposedly teaching kids to do formal orals, realistically where are they going to use that skill the most? Probably in business presentations. What business presentation do you know these days that doesn't involve some form of visual aid? Technological visual aid. So just because it's a problem, to say then let's not do it, when you completely believe in the educational value of it – you have to fight through the problems. If you believe strongly enough that it's important, and I did.**

And then it obviously sounds like it was quite difficult to prepare and execute that lesson.

**It was difficult to execute, not to prepare. The preparation part was the kids – ja, for them it was difficult. But that's also one of the reasons why I knew I had to keep doing it, was because it was so difficult for them. And it's like, well, that's good, you're learning stuff that you didn't know and if you – if I didn't force you to do it you wouldn't have done it, so ja you learnt, you grew. So that's good.**

Do you think it's become easier (indecipherable)?

**Infinitely. In the past five years? Infinitely. Partly just because of infrastructural changes. I mean, those things happen and then you moan and then someone gets put in charge of the AV room and it starts to go a bit more smoothly. And you learn from your own mistakes as well, so you load everybody's stuff up at break time, not during class, onto the computer in the news room and then you put it on one flash and you scan the one flash for viruses and then you bring that through... so you know that sort of, that sort of functional stuff you learn very quickly. And I think more of the kids have access privately, at home, both at home and in hostel now, to the software which helps. And more and more, I think more people are starting to use technology in education so for a lot of the**

kids it was...it's not necessarily the first project they've ever had to do on PowerPoint or ja, I mean, the first time I did it I think there were two kids in matric who'd used PowerPoint before and everybody went to them for help. It was such, it was such a big deal, such a scary thing. And now, you know, if there, if there's half the class who's never used it before, that's a lot. So, um, ja, I think they have more access and it's more familiar to them. I'm probably going to have to start on a new project soon (laughs). This one's getting too easy.

Ja. Um, so it's definitely become easier for you to use technology but is it, do you find, okay, you obviously have lessons without technology.

**Many. Most.**

Ja, do you think that it's easier to prepare a lesson without technology?

(silence) a pah pah pah (silence, thinking) Yes, absolutely. Because if it has to have technology, you have to be with the technology in order to prepare it. Whereas if it's just, if it's a non-technological lesson, you can do it you know at the bus stop. So... that's obviously an oversimplification because of [indecipherable] and things. But definitely it's, it's more of a mission if you have to include technology or if you decide to. Ja, definitely. And also, the technology will always let you down. I mean, it's a given. You always have to have a back up plan as well because, inevit... something will go wrong. You know, the data projector will blow up the whole corridor, seven times this year already (laughs). You know, it... the power will go because of Eskom cuts, technology will, I mean that's the philosophy I learnt from stage, is that the show must go on but know that something... if you have tech, the tech will go wrong so you have to always have Plan B. So it's the same with lesson plans as well, you always have to have Plan B because you must assume the likelihood is, something's going to go wrong with the tech, so then you can't... you've got 45 minutes, you can't then spend the whole lesson fiddling with the technology to get it right.

Ja.

**So, ja...**

So time is a big factor.

**Massive, ja.**

And then how easy is it or how do you gain access to technology at your school?

We're very lucky – it's very easy. I mean, I've, I've got one of the data projectors this year because I'm, I'm bossy. Um, but for anyone else, and for me in previous years, you can sign them out. The last two years (I think) they've had data projectors available for signing out from the office. Um you can sign out tape decks, also from the office. The AV room underneath us, there's a booking file and you just have to book in advance when you need it. Sometimes, especially towards the end of term, it gets a little tight in there! Um, and the computer labs is also on the same booking sheet. There's a booking form in the staff and you can book either of the two computer labs, you can book the AV room. So, ja...

And does anyone take preference over someone else?

Ja, obviously the CAT lessons – the Computer Applications Technology- take preference in your, in the computer labs and the *Reading Excellence* lessons, um, which is sort of a literacy building programme but, so those have set lessons, you can't mess with those. Unless, I mean, like the... was it last year? The year I did the Microsoft thing I think, ja, was the year I, I would, drama was always blocked against CAT on the timetable so then I had to beg the CAT teacher if there were some theory lessons that she could negotiate to give me a few lessons in the lab, ja, but people are very accommodating.

Okay, so then, it wouldn't really happen that... I mean if you booked it you would be able to use it?

**Yes. Absolutely. Ja, provided... you can definitely use the room... will the internet be up? Go ask Rhodes. Ja, so there're often... and then things will happen. So in theory, yes, but I think it's one of the things that puts people, it's one of the things that puts me off, booking to use the computer lab is that so often unanticipated things will go wrong. Like the internet won't be up or the internet will be excruciatingly slow that day. Or they've decided to put in a new password system and you don't realise oh half the kids haven't signed up with passwords so half of them can't get on. Or half the machines are down because of maintenance or whatever, um, ja. I don't want to make it sound like our labs are dysfunctional, I don't think they are, I think they're quite functional and well... but I think those are the realities of... school computer labs are quite problematic things because nowhere else in the world do you have 60 people suddenly logging on now! Or all trying to do the same thing. It, it, it, the whole network system isn't really designed for that so, ja.**

Um, and are there other teachers at the school here who use technology a lot?

**Definitely, especially um geography, biology, they use for um like GPS stuff and, no that's wrong, Geographic Information Systems, I don't even really understand what it is but, anyway I know (name) does it. Um, I know that they do other things like virtual dissections in the Biology department, um, they use internet research a lot. Um, they, they particularly in those two departments they seem... I think it's more about the individuals more than the department as a whole but um they're very ja sort of quite enthusiastic users of technology in the classroom.**

And within the English department?

**Um, I don't think any of us are particularly enthusiastic. Technology is... (Name) is very enthusiastic, he enjoys technology more than any of the rest of us. He plays computer games at home and he, you know, he takes his laptop home, to school and things. I mean, I don't have a laptop. (Name) uses hers only at school. Um and we're sort of on a spectrum; I'd say (name) is a technophobe and (name) is a technophile and I'm somewhere in between. Um and we're the three main English teachers. Um, ja (name) I can't comment on it, she's new so I don't really know her. (Name) doesn't really use it. He uses it with History but not with English. Um but we have, there are certain things we've set down, like the PowerPoint presentation, that's, we've put that as part of our term planner, you have to do a PowerPoint oral with your Grade 11s. Um, it's just not negotiable, so whether you like it or not you do it. Um, but ja um I think I probably use it a bit more than anyone else. It's hard to know actually, what other people do in their classrooms but ja I would say I probably if, like definitely in terms of data projector, I would say I'm using it the most, in terms of the English department, and it's not like I'm using it that often.**

And so, as you use it more, do you find that you become more enthusiastic about it or more willing to do it?

**Yes, um, unfortunately I have this problem of ... sorry, just a second (goes to pick up a slip of paper that was slipped under the door) ... um the... kept tripping, the lights, there's something wrong with the PowerPoint I eventually worked out um, so when I first got it I did definitely find that but now I find I've sort of tapered off but I think it was probably because it was too much of a mission to get the thing on um and also you then have to uh it was this whole performance of plug points and things so you had to turn the computer off every time and njah njah. But yes, when it was actually functioning, which, there was a short time that it was actually really functioning well, definitely. Because things like you just suddenly realise how easy it is to call up a memo and use the, so just the data projector as an overhead projector, which I would never have really thought of before and then you've got the advantage of course that whatever you write on it, you save and you have for next time or you can haul up the thing you already have. Um, for me in a way, the biggest plus of it is for visuals. We said, I was saying earlier that we're such a visually literate society so... at... the cliché of a picture paints a thousand words, but you can explain and explain what a word means... an example from the other day, was there's a poem that talks about plantain um and I said to the kids, before we**

did it we did a vocab list a few days before and I'd, we'd spoken about how plantains were basically like big bananas and nnn nnn... Then I happened to have the data projector on from the previous lesson, the day they came in to do the poem, so I quickly googled, google image plantain and I had it up on the board and they can in and went 'Oh! So that's what it is!' And I was like ja, but I told you that last time (laughter). But it's um sort of clicks, it falls into place. And I suppose, especially for some learners who're more visually orientated and whatever, but I think most of our learners these days are more visual than literate. I mean, I think it's an international phenomenon so, so it's very useful for visual stimulus.

So the learners' reactions have also been very positive?

(silence) um... (silence) y, y, yeeesss. They don't much like it when they have to use the technology. Um...

Okay?

It's a mission for them, but ja if I'm using it they're fine. But also, I mean, it's not one of those things – it's not categorical because it's, like, I wouldn't to... I will use a data projector more and more, now that I have it, I'll definitely use it more. I would hate... Heaven forefend that I get to the point where I get to the point where I have my data projector on every lesson. I'd rather slit my wrists. Because there's also, the disadvantage of it is that there's a remove, there's an emotional remove. If you're teaching through the technology, it's almost a barrier, you don't have the same interaction with the class. You can easily get stuck behind the computer or stuck, the kids are looking now at the screen and not at you and so there's an emotional connection that isn't there, it's not the same. It's different and so I think it needs to be used thoughtfully. I think technology needs to be used thoughtfully. I don't think we should be aiming at a position where we try and shove technology in every lesson because we have it, um, but I think it's, for certain things I think it's got an amazing ja an ability to really enhance education. But I, ja, and I'm also still frustrated because I still also feel like there's so many ways... I mean, I feel like I, somebody used the term... (silence) like the metaphor of immigrants vs nations and that for my generation we will always be technological immigrants. We didn't grow up with the stuff, it's not second nature to me. I... sending an sms is a mission. For me, really. It's just like, must I? Um I'm not saying, I know that I'm necessarily, I know that to that extent I'm typical of my generation. But... it's the learnt skills. It doesn't matter how much you use it, it's learnt skills. It's not something... you know, TV only came in when I was 6. So if you compare that to children of today from the same sort of economic strata that I'm from, who will be playing on computers by the time they're 3 – many of them. We're never going to have the same relationship with technology. Um, well, I'm not. And so I'm also a bit frustrated by it because I always feel a bit like a techno-peasant and, and so I have this technology that's there and I'm sure there are amazing things that I've never even imagined that it can do, but I don't know what they are. And I'm never going to find out because I will never play on the computer for fun. That's the big thing – I will never, playing on the computer... being on the computer is something that I do because I know that it's right, and good, and useful and sometimes time saving and da da daa. It... and I have to. I also recognise that I have to try to keep up because I'll be in... if I'm 80 and I'm not working with a computer now, I mean I'm just not going to be able to function in the world. But... it's bad for my eyes, I don't like the radiation, I'm like... this thing is an alien and I have to use it and there we go, I use it. But I'm not going to sit and spend hours playing with new software and downloading stuff off the internet. I mean that's, that's just alien to me. It always will be. So, ja, I mean I sit in a very complex place with technology so ja.

Hmm. And do you think that the kids do do that, that they play on it and...

Absolutely. But, does that result in anything meaningful? Probably not. In fact, I probably get a lot more meaningful out of my computer than they do because, ... what they will spend a lot of time with is downloading stuff off youtube, whether it's whatever... (laughs). A few weeks ago we (laughs) Rhodes network cut us off permanently because we were using so many, what do you use when you... gigabytes I suppose. Is that right?

Ja, I think so.

**When you suck things off the net. And we... So there was this big investigation. Oh my hat, who's downloading what? It was HD<sup>16</sup> preaching. (laughs) They were downloading it at the hostel. Like hours and hours of preachers preaching, but in HD, so it was using MASSIVE... but it was like, it was destroying the whole Rhodes network.**

Ja.

**Um (Laughs) So bless their hearts, you know, it couldn't have been more innocent if they'd tried. Um but, ja, so that's what they'll do and they'll download all their favourite music and all their favourite songs and all their favourite preachers and whatever else (laughs) and I don't really want to know...**

(laughs) But preachers?

**Who knows? No, that's just... (laughs) the mind of teenager. Who can... who can expose it? Um...**

But that's such a strange thing to download.

**Yes! Isn't it?**

Oh well. So they play with it, but they don't like working with it?

**That's probably a brilliant summary of them. Ja. But some of the kids who've got computers would really much rather type their essays than, so to that extent but... I think most of the kids see it as more of a toy than a as tool.**

Okay. And you then obviously make them work with it? Instead of playing with it.

**Ja.**

Do you think that, once they've completed the projects, perhaps in retrospect, they might think it wasn't that bad or

**Definitely. Definitely, ja. I think um one of the things, especially for things that involve a presentation aspect, especially if the presentation aspect is part of their mark, because, you know, at school we all pretty much do everything for marks (laughs)**

(laughs) Yes, you have to do it for marks!

**Um, but there's also a level – you know, if it's not for marks then what's the point? Well, it's education. No, we don't care – was it for marks? (laughs) You know, so if there's a presentation aspect you can achieve such a higher quality of apparent professionalism, with using technology than without using it. But it often results in a very satis... a sense of satisfaction. So, if you've done your oral on PowerPoint and you've built in pretty pictures and da da daa, whatever, and it looks – fancy, I think you get quite a rush out that. Out of feeling that it's a job well done. So it might have been irritating, it might have been hard, but once you've done it, you know that it's a better presentation than it would have been if you hadn't used the technology and that, I think that brings a sense of satisfaction. And I mean it's the same with... there's certain projects in the year that we'll insist like when they do their CV projects, also the Grade 11s, but that has to be done on computer and they have to take care with the presentation, the choice of font and all of those things come into the mark and... and I think at the end, they, they feel like they've got something that they're proud of, so ja.**

---

<sup>16</sup> High Definition

And it's something that they can use.

**Mmmm, ja. But that's only in two years time, so it's irrelevant – it doesn't exist.**

Oh, so...?

**Two years time does not exist.**

Okay?

**If you're six, if you're fifteen. For the majority of fifteen year olds. It's like it's too far removed from their daily existence to be of any concern. So abstractly they know they can use it one day. Emotionally it's for marks.**

Okay, there's ... so you don't think, that it... so they're not investing more in it because it's... I don't want to say...

**Real life?**

Because it's real, ja.

**No, because it's not real life for them.**

So it's just marks?

**Ja, ja...and, and, and, you see, what you'll find is at the end of Grade 12, when they are suddenly now needing a CV, they'll, they'll, they'll make comments like, 'Shjoo, I wish we'd been taught how to do some of this stuff!' Like, at school. Like – you did this project last year! (laughs) You know. And some of them will remember and go, 'Oh, ja, I suppose we did but ja, it's not the same.' It... it's, it's just, ja, one of those remarkable things that you can't convince someone of something's importance until they experience its importance. I mean, I can tell them all I like – this is a really important real life skill. But until that becomes a truth in their lives, they... they can believe me at an abstract level, but it doesn't make emotional sense.**

And, and so then can they not transfer the skills across?

**Yes.**

I mean, you were saying how they say it's not the same, so the... is it...

**They, they can transfer the skills but they... yyy, I think teaching can be one of the most rewarding jobs in the world, it can also be entirely the most frustrating. Because so often... we, human beings, don't recognise the value of what we've been given or what we've been taught. And so, they might have the skill, and they might be able to transfer the skill, but they don't necessarily go, 'Oh, wasn't it nice that we learnt this skill in English last year? And now, even though this is a little bit scary, it's so much easier for us because we did that.' No. That's... ja.**

But you think it is there?

**Definitely. I mean, if you suddenly have to produce... I mean, whatever, if we take a presentation. You suddenly have to do a presentation in assembly. Then it becomes real. Job in 5 years time – not real. But presentation in assembly tomorrow is real and you've done it before, the stress is just so, so minimised. Um like we do sport/ cultural assembly – all the heads of um sports and cultural societies have to do a 30 second presentation on their highlights from all the, a one minute presentation for each, each club for the sport and cultural assembly and their parents and it's a whole big formal do, it's like a mini prizegiving. Um, and, again when we started that a few years back, before they'd all**

been forced to do it in English, it was a massive... it was trauma, trauma, trauma! But now, because they've done... because they've used those skills in English it's not... when I say to them, you've got to have a, a PowerPoint, slide, it must have this and da da daa. Oh, fine, cool, that's not a problem. Okay, so they don't necessarily recognise the skills that they're learning, but they do have the skills so ja.

So they're much more equipped to deal with the whole situation.

Ja, and I think for me that's also one of the things um I think so many things about technology can look intimidating, if you only see it from the outside and that's one of the reasons why I believe so strongly in, particularly things like PowerPoint and movie maker, that software is made for idiots (laughs). You know, it's been designed to be user friendly. It's so easy to use once you've used it. But if you look, if you see someone else has edited a video, most people will be really impressed and imagine that that is something that is an elite thing that only a few people can do. That's there's some kind of archaic knowledge that's involved. When, really, your average 8 year old can do it just fine. But as soon as you've done it, you see how easy it is. Not that there aren't challenges and you recognise the challenges, but ultimately it's doable. And even if you don't remember the steps or whatever, you know you've done it once and so that's quite empowering I think um ja. And so when I think once you've used a few software packages like that, whether it's publisher or PowerPoint or autocollage or um photoshop or movie maker, once you've used a couple, once you've been forced to use a couple, you then also, I've got to the point now where I'm like, well, I'm sure if there's software available, I can use it. I'm not intimidated by the concept of trying new software anymore, which I definitely was in the past. And I hope that's a, an attitude that the kids will develop once they've been forced to engage with it.

So you pushed yourself to engage with it, and now you're sort of trying to get the same result for them. How did you find out about, I mean you were talking about publisher and photoshop and all those things, how did you find out about all of the different software packages available?

Um... when I got the publicity job I suddenly had to do things like, make an advert for the SciFest programme.

Okay, and this publicity job, is it for...

It's a management position.

For (school name)?

Ja. And so, I mean, there it is. Hey, honey this is your job now and then people are talking to you about, do you know this much DPI and this much this and you're like HUH??? Sorry, pardon, WHAT? And so then you have to find the software to do it and you ask around. But movie maker, I actually didn't come to through movie maker. A friend of mine – I had a laptop, which died. It was an Apple, nobody can fix it in the Eastern Cape, which is very sad. And Apple, uh, I don't think I'd have come nearly as far with technology if it hadn't of been for my Apple, because my Apple came, and I think they do standardly, with iMovie and various other things... and Apple redefines 'user friendly' so you, Keynote is just so much easier than PowerPoint and iMovie, at that stage anyway, was even easier than movie maker and so, I had these things and it was a new toy so, ja, and the iMovie I tried out. Um... ja so some things it's from being forced to, some... being forced to find a solution to a problem and asking around. But then I also go to a lot of stuff. I go to SciFest and things and, so one of the things I learnt at SciFest was how to do um stop animations on movie maker. When you use photographs instead of film to make the sort of surreal, I mean like MTN advert, it's an ancient advert now, but the MTN advert where, where the girl jumps up – it's like a little romantic picnic or something, and she's floating around and then she's spinning around and around in the air...?

I don't remember the ad but, but...

**Just where you can make these illusions of people flying and things like that because you're using photographs not film and you're putting the photographs together so I learnt that at a SciFest lecture**

Okay.

**Um, so, ja...**

So you need to be exposed to it.

**Ja, you need to either have a need to do something or you need to have a new toy to play with or you need to be exposed to it in some way.**

And then, did you, do you choose to go these SciFest workshops? Are they freely available to all teachers or is it something that you had to go and do with your...

**Oh no it's going nothing to do with any teacher... I just go because it's here and it's interesting.**

Okay and can anyone go to that?

**SciFest? Ja, absolutely. SciFest is the best fun you can have for like R200 in two weeks, it's amazing. Most of the lectures are so cheap, they – it's generally between R8 –R10 for a lecture or a talk or whatever, so it's amazing. It's just ja, all the stuff comes here. It's like international astronomers and things, so, ja. SciFest is the best.**

Okay, um, and then what role do you feel gender and race and class play in using technology? And even age.

**Okay, I'm going to start backwards in the... okay, age I think I've already discussed.**

The native vs...

**Ja, the native vs immigrant concept. But then, of course, there're individuals... Individual differences will always out but I think, I think generally that is true, um and I think the older people are, the scarer they are of, of computers... Um, I was really lucky, although I wasn't really exposed to computers myself, I mean my father worked with them and I went to his office and I would be so scared and he... This was like way back, when these things first became available, and he was like, but you can't kill it. There's nothing you can do to kill this machine. You mustn't be scared of it. Um... and I think a lot of my contemporaries or people slightly older than me, are still at that stage where they're scared to touch it in case it blows up. Or, not blows up but in case they destroy it or the... literally that's. I think age, there is a big age factor. Um, but I also think the more technology is becoming more everyday, the less that... Like lots and lots of older people, most older people these days use cell phones. So then it's not necessarily such a big jump if you go from using your cell phone to using the computer, it's all technology. So maybe... I think maybe it's becoming easier. Um, class, economic, socioeconomic status, is a massive factor. Massive, massive, massive, massive. If you don't have it, you're not going to use it. It's as simple as that. But again, it's going to be interesting to see how that pans out because I've, we've just done our interviews for new applicants to the school a week ago and one of the girls was saying about doing research on the internet and I said, 'Oh, that's nice. Do you have internet access at home?' And she said, 'No, I do it on my cell phone.'**

Okay.

**So I said, 'Well, you do have internet access at home!' (laughs) But, but, so you don't have to have a computer anymore to necessarily have internet access. Of course, what she spent on her cell phone I'd dread to imagine. But, that's beside the point. I think more and more, it's going to become more readily available to people... to people who would normally otherwise have been completely excluded**

from technology. So that, I anticipate a shift. Um, I mean who would have thought when cell phones came out that poor people would have cell phones? There used to be those adverts that were like a joke about the cell phone ringing and it would be the domestic worker or the cleaner or whatever, that used to be funny. It's not funny anymore. If they bought those adverts out now, there'd be no humour in them at all.

True.

Ja, um, so... ja, it'll be interesting to see where that takes us but right now, it's a massive restrictive factor. Um, so, for us, our boarders have got access at the hostels, but I mean there are 10 computers for the hostel, it's not really enough to go round, but they've also got access at school and they're at school all day, so they're pretty much fine. Also they tend to be from a high end socioeconomic bracket cos otherwise they couldn't afford hostel. Day girls very much split between high and low economic brackets. The ones in the low economic bracket just don't have computers at home or, if they do, they are so old and the software is so old that if they do something at home and they try to bring it to school, very often the printer won't see it or it won't be compatible and naa naa. So even if they try, they often are frustrated by it so ... and they don't, it's not role modelled for them, they're not seeing other people using it whereas the girls who are richer tend to have access to computers at home and they use it a lot more. They see it being used so that makes, it makes all the difference. Um, race – I don't see it particularly as an issue. It's always hard in South Africa to distinguish race and socioeconomic bracket because so many of our poor people are black. But, and certainly even in this generation - and this will change again very soon – even the wealthier of our black families were not necessarily wealthy a generation ago. And so there probably isn't a history of technological use in the family. So that could be a restrictive factor. Um, but I can't say I've ever looked and gone, 'Oh! Black girls can't deal with technology.' You know, ja, they certainly manage their cell phones just as well as any other race (laughs). So I don't honestly think race is a factor.

Um, gender. Very hard for me to tell at an all girls' school. What we do still sit with, is that certainly on terms of gender on the staff – the male staff on the whole are more interested in technology than the female staff. And so what you end up with is if someone has to set up a data projector, they'll call one of the male staff. And, or the male staff will volunteer to be the person in charge of all the (noise on recorder) sorry, all the (indecipherable) in the AV room. And that's an unfortunate stereotype to be reinforced. Um, ja. And we are conscious of it but none of us cares enough to want to do the job you don't want to do (laughs). So (name) and (name) will often make an issue of – that we will rather call each other than one of the male staff when there's a problem, just to get the kids to understand that you don't have to have a penis to operate a machine. But, so beyond that, beyond the gender issue on the staff, and again it's also – I don't know that it is a gender issue or that that's just how it happens to have fallen. Firstly, we've only got 6 men on the staff. You know (male name) is obsessive about computer games, so is (female name), she's also on the staff – they're married- um, so they're probably as obsessive about the technology as each other so I think it's just fell like that, that way.

I think that the gender thing is becoming less and less of a... I think it used to be a thing of ... I mean there's definitely a thing of boys and cars, you know, that sort of stereotype. Boys like to take things apart, put them back together again, that sort of a stereotype, but that doesn't really apply to digital technology you know. Nobody's really taking it apart. It's made so you can't, on the whole. Um, so, it's more about using it, I think – I don't see enough of what boys do with their technology to be able to make an honest comparison. But again, I don't think it's an issue.

And then do male staff – do they get given preference?

**Absolutely not. In terms of technology in the school?**

Ja.

**Not a chance, no.**

Okay, so if stuff's being handed out it's not automatically going to go to...

No. Um, management gets preference because we're management and because we're bossy, that's why we're management. (laughs) And we nag a lot. But also, legitimately, all of us on management have... by nature of the fact that we're on management, more admin than people who're not on management. And so like we get preference, we got preference with printers in our classrooms. Most people don't have printers in their classrooms, they have to go to the Photostat room. Um, but ja, so that's a privilege of being on management, is you get a printer. Um, data projector – I don't think I got because I was on management, I think I got that 'cos I nagged. Um, oh, oh, wait and I did the groundwork and I saw there was money left over in the budget and I said, 'I'll spend this in two weeks if you'll let me have a data projector at the end of the budget year.' And I ran around like a mad thing and got quotes and whatever so I mean I pushed for it. So it's got nothing to do with me being female or on management, it's the fact that I wanted it and I, and I pushed for it.

So if you have an interest in it, the school does try to help you?

Ja. Ja. Look we, we, we applied for I think 4 data projectors in the budget last year and we only ended up getting 3, 'cos of budgetary restraints, but I mean that's fair enough. So, ja, definitely. But the school generally is very supportive. Ja, in general...

So management does try to actually help you guys use technology? They do encourage it?

Ja, definitely. I am the management so... but like for example just this year we ran an excel course for all staff who haven't, or for interns, and for all staff who haven't used excel up till now. Um and we try to push staff to use excel for their own good ... just because it makes life so much easier, but it is a, it is a scary barrier to overcome. And again, I mean of the people who went on the course ... (female name) shortly after that got a laptop herself and she and (male name) both came on the course, they're our Xhosa department, (female name – bought the laptop) is using the excel, (male name) isn't. They both were at the same level of competency on the course, but the fact of having a computer, your own computer, I think is in the solution. Because otherwise every time you want to fill in marks, you must, what? Go to the computer lab? No, I mean, practically it's not going to pan out.

And then we spoke about um the pupils [learners] learning how to C, well, learning how to make their own CVs, at school, and that was obviously an example of a very specific way that they benefited from using technology. Can you think of any other ways they benefit, specifically from using technology in English?

I definitely think about what I said for the presentation skills. I think that's a very real business um... You know, whether you go in business or whether you go into being an entrepreneur and want to get money from the bank or whatever. I mean people have to make presentations the whole time. You ... research projects, whatever so I think that's that's a very real life skill. Um (sighs) I like, and I know I'm going back to quite primitive technology now, but I do think in terms of visual literacy, quite an emphasis on visual literacy. Film study and advertising analysis, that sort of thing, and I think, I like to think that's pretty important in their lives. I like to imagine that they become more critical thinkers and they're less um less easily conned by the media because of the, being exposed to that sort of technology. Um ja, those things – that's it, they spring to mind.

Okay. And then um we spoke about going, well you going to science, to SciFest. Are there any other sort of educational journals that you read on technology, um and how do you keep up to date with it?

I don't. (laughs) Honestly I don't. Um, it was one of the reasons why being on the Microsoft, going to Jo'burg in the finals was great for me because to just be able to see what other people are doing and what people are using technology for in their classrooms and stuff. I ja, there are a lot of things I do try to keep up to date on, I try to keep up to date on environmental issues and I try to keep up to date on gender issues. Technology would be far down on my list in terms of what I would actively use my spare reading time, I don't ever think I ever have enough reading time, I've always got like a pile of stuff next to my bed, so... that's never going to filter to the top of my pile. So, but I, I suppose, just

through conversation and like I'm good friends with the, the design and technology teacher at (name of a school), and so we often chat about new things. Like he was just telling me the other day about 3D printers, which are basically like prototyping machines and how some architect has just printed a house. I mean, wow! So I find that sort of thing interesting so I'd engage in conversation with it and people, there are people on the staff who're interested in it so... I suppose you catch things by the wayside. But ja I suppose no.

There's no conscious effort to find a technology journal.

No, oh God. What? A fate worse than death. No! Ja, no, definitely not.

And then the last question I just wanted you to talk about, well, to consider is: What do you think the role of technology in language teaching is?

(silence) is or should be?

You can answer both.

Um, I think at the moment, on the whole rather than just technology in language teaching, is pretty limited. You sort of think that, we're talking about now, doing the odd project using technology and then the visual literacy element I think is quite strong. Ummm, I think, I probably said this on the course as well, but it was also one of those quotes that quite inspired me, is the concept that the technological tail should never wag the pedagogical dog. So, the technology must always serve the education, the education mustn't serve the technology. Um, so... I, ah, I think that we could use technology a lot um more... I think, I think there's an enormous benefit to be had from self marking software but I haven't found enough self marking software, and there's a lot for primary school<sup>17</sup>, I think in the, ideally in language, if I could, in the ideal world, I would like to hand over a lot of the language exercises, the grammar... you know you need a lot of practice to improve your language skill, in terms of those basic fundamental grammar – using your adverbs instead of your adjectives and that sort of stuff – and that is boring. Quite frankly, in terms of a teacher marking. And you need to do so much of it in order to improve, the kids need to do so much in order to improve that it's hard to justify spending the amount of time that you need. I think that technology could be an amazing resource, if the programmes were in place, for us to be able to send the children forth into the lab for an hour of instant response, because that's what computers can do, they can tell you immediately, you're right or you're wrong, um, so I mean I think that would be an amazing resource to use, just improving the functional, um functional grammatical concepts so, so essentially in terms of improving literacy, particularly in terms of writing. Um, so that's something I think it should be, but at this stage I think it isn't. Um, um, if anybody is using it like that, please let me know. Because I have gone from time to time to try and find that sort of programme or that sort of applicational... there're lots of worksheets and things available but as a say they tend to be more primary school geared. Um, we had something in... at Rhodes, which I've only just remembered, um, in the English department, I think it was called a prosody course or whatever, where they were trying to teach use to scan poetry and you had to do, I don't know, like 50 hours of - it felt like, but it was probably only 10 - but of prosody on the computer so you had to, you know, your stresses and your beats and off beats, and then it told you immediately ja you were right you were wrong and then you had to get a certain percentage before, you had to qualify, it was one of your like DP requirements. And it was a real pain. But that sort of concept of being able to send kids off to say you've got to do you know 5 hours of verbs because you don't ever have a sentence because you don't ever use a verb. Go and practice that until you get it right. So that would be, for me, amazing. So... to underpin the whole grammar. And also see in an ideal world – I can have you working on your verbs, and you working on your apostrophes and you working on... all of that, all at the same time, in the same hour, I mean that's just, that's just educational delight. So that would be, my, an ideal scenario that I would see technology working in the English classroom, language classroom. Um, (silence) I also think one of... so, so that's your very functional side, um, I think it's important for them to use real life skills in

---

<sup>17</sup> We are discussing high school though, so the primary school software isn't much use

terms of, to learn technological skills that they can use in real life in terms of things like presentation of oral, oral presentation, visual presentation, written presentation, all of that's part of the English syllabus obviously and I think technology comes into that, so like things, Grade 8s we sometimes make them construct a newspaper with Publisher so that sort of thing. Um, but I also think that ... sometimes one can and should use technology for fun. And I think it can so easily be used for that. Um, just because it's something different. And I suppose if you overused it, it would become undifferent but just to ... tell the kids to go and explore, whatever, whatever theme you're working on that they can, just let them loose on the internet and they can just have a bit of fun with research. Um, ... ja, the internet's obviously also a valuable source of resources, um, but it's problematic because some of them are really, really bad um but then again there're available. Um,... ja – am I answering this question?

Ja.

Am I? Okay, good. (laughs) Um, ja and the visual literacy aspect you obviously can't have without technology and that's a vital part of the curriculum. Um, I also think more and more we should be moving to a place now, where 20 years ago film study was the new big thing, I think that we should be incorporating new media as one of the fundamental aspects of the reading programme because so much time is going to be spent by our learners, in their futures, on computers, both in social, you know, facebook type concepts and also at work and at play, but that really, it's again something that they need to be literate at. Is the ability to navigate that. But what you get rid of in order to put that in, is a hard question to answer. Because in order for that to become a significant aspect of the curriculum something's going to have to go, so ja. It's hard to balance that, but I do think it should be a basic part of the English curriculum.

Thank you very much.

Pleasure.

***Appendix I: Transcript of interview with Mr Cele (school 2)***

**Interview with [name]**

**12 August 2010**

**English teacher: Grades 10 & 11**

**School office**

Okay, then just before we start I want to make sure that you understand that is voluntary, that you don't have to do it...

**Ja.**

And then what it's for – it's for my Master's project, so I'm going to eventually write it all up into my thesis, but I will change your name and the name of your school, so it won't have... you name won't be in it anywhere so people won't be able to immediately see it's you, but um Grahamstown's not very big and so they might be able to...

**Ja.**

Figure out who it is.

**(laughs) Ja, I get that. Yes.**

Um, are you fine with all of that?

**No problem.**

Okay, great! So the first thing I wanted to talk to you about was what you understand by the word technology. What do you consider technology to be?

**Ah, machinery. All machinery. It, ja, that's that what I think of as technology.**

So what, like, cars?

**That's technology as well. (laughs) But then in your context, your, in the educational context I would figure you, you... I want to think of radio, video players or tape recorders. Computers mainly. I thought you were probably more interested in computers, than ja...**

And then overhead projector?

**We do, we do have a data projector, although I haven't used it myself. In fact, I don't know how to use it. (laughs)**

Okay, data projector... what? Would it link to a computer?

**Ja.**

Okay. And so you do consider that technology.

**It is, it is, ja.**

Okay. And then are you happy, just for the purposes – I mean, obviously a book is also technology and a pen is also technology - ...

**(laughs)**

But (laughs) I'm sort of trying to aim towards newer technologies.

**Ja.**

So when I speak about technology is it alright if we specifically exclude that [meaning books and pens] and also um manual overhead projectors.

**Ja.**

With, the light screen

**Ja, bulb... those. Ja.**

Okay, thank you. Um, when you were at school, did your teachers use technology with you?

**We didn't have computers. We have videos and normal, normal audio tape recorders. That's about it.**

Did they use them?

**Ja. A lot.**

What for?

**We had ... the, no, no it wasn't a computer lab but we had a ... in the labs, the Science labs, we had videos with monitors. Some of our Biology and Physics lessons were supported by the video.**

Okay, and in English?

**Aaaah, we'd have old tape recorded things there. The poem or a song that we would actually... or maybe (laughs) it's the other way around a poem that had...**

Music?

**Had been recorded as, as a song.**

Oh! Okay.

**Like, like some of, of, was it Bob Dylan? We had some recordings of Dylan's songs and we were studying as, as part of our poetry.**

Okay, and did you guys do film study at all?

**Pardon?**

Did you do film study at all?

**Not at high school, not really. I was only exposed to film last year when our kids were part of the film production workshop and I was responsible for that.**

Okay, so when you were taught, it wasn't included? Film study?

**No, no, not when I went to school.**

Okay. And then you were talking about having poems and music used in English lessons. Was that fun, as a class? Was it something you looked forward to?

**It was, it was. Ja, at the time we didn't take it as seriously, when we... It was a fun period whenever, whenever we had, we had those for English. Ja, I'm not sure if, if, we learnt any more from the recordings than... ja, but ja, that was, it may have been just a few of us. Maybe others took it more seriously.**

So it was seen as more fun than work?

**Ja. That's it.**

Okay, that's interesting. And then when you were studying to become a teacher did um, I mean you said you didn't receive any training on using technology on teaching [in questionnaire]...

**No, except for the overhead projector.**

So did you feel like, did you feel like you should have received training?

**Now, now that everybody is extolling the virtues of, of ah the use of computers in the classroom, I wish that I had had the opportunity. To learn to deal with my lessons using mainly technology.**

Okay.

**In fact, right now I have all the intentions of learning how to plan my lessons and deliver them on... data projectors. It saves time.**

So you say now, looking back, you wish that you had had training. And at the time did you feel...? Maybe like why aren't we doing it? Did it concern you that you weren't doing it?

**No... not really. Not really. I figured you could... I mean... I had come from under resourced schools and I was hoping to go back to teach at similarly resourced schools and I didn't have big dreams of coming to class with fancy, new technology. Ja, I didn't so I figured I would do as, as, like the teachers that I had.**

So before you first taught you weren't planning on using technology?

**No.**

Did you think you would use music or film or anything?

**Music, ja. For... I actually, I actually, I used to, I used to bring some of my own recordings to class, especially for English classes.**

And so did you, did you... sometimes it's the way you were taught – you often teach like that. So before you started teaching did you think that that is something you would like to do with your classes?

**Had I had any hopes? Had I had any hopes that the situation at the schools that I knew I'd end up teaching at... I had no hopes that I would be confronted with a situation where I'd have to use technology. It was... no, inconsiderable. I mean, here, here, even now I still believe it's going to take a long while for the schools, for the majority of the schools to be resourced enough for teachers to rely on technology.**

Okay, so for you it wasn't even ... thought about.

**Maybe I'm pessimistic (laughs) and it's just my pessimism but where, where the resources are, are like, like we have a roomful of computers have... Now I wish I could, I could put them to good use.**

Are they not being used?

**They are, but not by me, no. Not for my programmes. I only use computers for my art lessons, where I have to, because of lack of textbooks and things, they... My learners have no access to the [indecipherable] works with visual, culture studies now they are relying on the theorems so go to the computer and learn them in theory works better. But for my English class I've never had reason to try and use the computers.**

Okay, so then I mean... you did say that you do use technology in your teaching. So can you try and think back to the first time or one of the first times, because sometimes the very first time is difficult, um that you used technology in teaching?

**Aaaahhh. Look, I, it's not... while I was teaching here, I've been here for how long now? 7 years? I have on occasion bought a DVD player to class and we've, we've viewed with the learners some movies, some short movies done by people their age.**

Okay... and is that fun for the learners?

**It is, it is. Except like, except like the attitude is the same as the attitude that I had (laughs) when I was a learner. I regarded it all as a fun thing.**

Okay, so they don't take it seriously?

**No. No. But a few... because I used to do this, this uh preparation for introduction to film studies... not, not too many of my learners are interested in that, as, as something to learn about - film study, it's, it's... They, their view of it is for entertainment. That's just about it.**

And then did you struggle – you said you brought a DVD player in, was that your own DVD player from home?

**No, we have, we have a school – the school has a DVD player and a very dodgy monitor (laughs) that wastes a lot of time setting up.**

So did you struggle to use those? If you say it wastes time?

**No, it's not, it's not user friendly here. Look, if I had... a car I would bring my own stuff to work with... I can't, I can't move... So it's quite tricky, the machinery we have for, for the videos.**

So trying to actually use it was very difficult?

**No answer [nodded perhaps?]**

And then did the lesson go according to plan? Was it...

**Because, because of having to struggle with the machinery (laughs) half, half of the time is trying to fix the problems instead of getting into the business.**

Okay... So did you do it again? After that first time you tried?

**I did. Like I am saying, it's... the fault is with the machinery, not, not with... In fact, I don't know who... Oh, the Biology teacher, the Biology teacher just last week, she was struggling with this thing. This machinery. And I don't know, I think she missed one of, of the lessons that she had meant to um deliver via the DVD and she couldn't do it. She was busy trying to set the thing up.**

Okay. So that... So it's obviously very difficult. And then when, when you also prepare the lesson is more difficult? If you're going to be using technology, is it more difficult to prepare the lesson than if you're not?

**Look, I'm not sure if I get you...**

Um, if it more difficult... When you do your lesson prep...

**Mmmm.**

If you want to use technology in the lesson, does it take longer to prepare that lesson?

**Mmmm, no it doesn't. It's when you... if you have machinery like this it delays you. I mean you prepare and then, now you have to prepare for the manipulation of the thing as well. You have to include that in your time, and that's not nice. I mean, you should... if you have 45 minutes for your lesson that should be the... Maybe if we could have a new, maybe a new DVD player... machinery that's easy to work. Like, like nobody struggles with those in their homes but we struggle with this one. So if we could have that sorted, I'm sure, I'm sure it would be a breeze to plan a lesson with the use of DVD in mind and not worry about having to waste time, setting the thing up.**

So it is worry, like... it's that, obviously with wasting time. Um, has it become easier for you to use it since the first time you tried to do it?

**The thing is faulty.**

Oh, okay.

**The thing is faulty, it's faulty. It's not like I've figured it out now, you're set up for life. No. When you struggle with it now, you're going to struggle with it again next time you're use it.**

And then with using computers and tapes and stuff – is that... as you use that more has it become easier?

**Uhhhh... like I say, I've, I've never struggled with thing, the computer... like with the DVDs, like... Of course, I just figured this out, it wasn't like I was trained how to use it (laughs). I figured it out on my own. When I have to take my kids for the visuals, in the computer lab, then no problem. Ja.**

So that for you is quite an easy thing to do?

**Yes.**

And then how do they, how do the learners react when they're using the computers? Do they enjoy it or not?

**They do. They do actually. They, they, they enjoy it. They – I don't know, there's something about computers that excites them. So you'd, you'd ask them, if you give them a task, okay look at these. And then if you look the other way, come back and, and they're struggling to bring down this thing. They've probably zoomed in and now they're struggling to bring it back to size. Because they, because they act around a lot, if you're not paying attention, then you end up not, not...if you're not monitoring, then they'll end up not learning much because they're more interested in the computer and its magic than what you're trying to, ja [teach], through the computer.**

And so is that one of the reasons why you don't use it? Because you said you used it for visual arts but not for English.

**Nnnno. I'll tell you what, for English I haven't, I, they, they, the kids that I deal with are easier to teach when the lessons are put in context. And I find it easier to put the lessons into context here, in class, using elements [other] than technology. In fact, I haven't figured out how I could bring this into context by using technology.**

Can you just explain, what do you mean by bringing into context?

**Uhh, the examples that we, I use... examples that organically they come from them. They are situations I, I, I try to build my, my lessons around, their own situations. Which for now I don't know how they could be related to computers. Do you know what I mean?**

Ja.

**Ja.**

And then for research purposes, do, do they ever use it for research?

**I've, I've, I've never, I've never given them tasks that require the use of computers for reasons of access. They do not have weekend free access to computers and ja.**

And so for research they just use the library?

**Ja.**

Okay. And then the school computer lab, can they not use that in the afternoons?

**For a long time, for a long time we, we haven't had proper access to the internet. We depend on, on donated bandwidth, internet bandwidth, ja, which quickly expires, gets used up. So, I don't know, there's a computer committee that drew up rules and one of the rules is that the kids should not use the internet.**

Okay, so they actually just can't use it at all?

**No.**

Okay and can you use it for your own... for, for research?

**Ja.**

And so then how, um, how would you gain access to technology at the school? I mean the kids obviously can't use the internet but then um say for example if you want to use the TV or if you want to take the kids to a computer lab, how do you go about doing that?

**There are, there are, there is a ...there are times arranged for, for arranged with the computer committee. They know what times have been booked and then try and find a slot to take your class between to the computer centre.**

So do you have to find the person in charge of the committee?

**Silence [must have nodded]**

Okay. And is there a booking form that you fill in, or do you just find the person?

**I haven't really needed to take a whole class to the computer lab so I haven't really gone through the process myself.**

Are there many other teachers who use technology at your school?

**Ja, a lot of times when I go to the computer lab I find the learners from the different fields using the computers. There are these programmes in there that don't rely on the internet...**

Okay.

**Like your Encarta and all the others.**

Okay and you don't um make use of the Encarta or anything.

**Not me, I haven't**

But other teachers do.

**Ja.**

Is it encouraged at your school to try and make use of the computers?

**Ja.**

Who would you say encourages it?

**You have... I guess, I guess everybody does except there's this worry of having someone to do the supervision. Otherwise everyone is keen on kids having access to computers.**

And so do they have access in the afternoons?

**Not in the afternoons, just in class time. It gets locked up in the afternoons, nobody goes in there.**

And then did anybody try to change that?

**The fact that nobody uses the computer when, when... I haven't heard such news.**

Okay. And... and the learners, you said when they are allowed to use the computers you said they were very excited and – do they try and, sort or try and get their teachers to take them there or do they not behave that way?

**They do, they do actually. They do, if, if I can remember with my Grade 11s – last year – they had to design an advert, a poster. Now for, from the beginning to the end they had to use computers. So even, even when the computer was busy they would still insist we go and crash there, the computer lab. I found they love, loved working with the computers.**

Was that, the advert, was that for arts?

**No, English.**

Okay. And how did, I mean how did you feel about that? Because they were obviously so interested in something you were trying to teach them.

**Ex, ex... The problem was that it was towards the exams and a lot of teachers needed to type their question papers there and on one occasion (laughs) they were actually chased out and I felt bad. I felt bad because they were really enjoying this project with computers.**

And would you try and do that again? Would you?

**Ja.**

So it was worthwhile when they started doing it?

**Exactly, although they didn't get to finish it. A few of them, they didn't get to print. So a few of them managed to print and then we had a problem with the printers... and they, they couldn't, they couldn't like all of them look at their handiwork and say, "Ah, I did the design and everything."**

So that must... was that discouraging for them that they couldn't print it?

**Ja.**

Did it bother them?

**Both of us. Them and myself. Because I saw the joy in they eyes of those who worked fast enough to print before the problems arose and then printed it...**

Okay, so that must have been very encouraging for you. To try use that, so will, is that something you will do again this year? I mean, are you planning on doing that again?

**I would love to, I would love to.**

But... I mean, are...

**No, no we haven't. We, I'm, I'm...I have a Grade 10 class and according to my pace we haven't come to that yet so...**

So when you come to it would it be something that um you would do?

**Yip.**

And then what role do you feel that gender and race and age and class play in using in using technology?

**Um, no, I haven't noticed any, I mean with gender and age I haven't noticed any, any discrepancy at all. All kids, boys or girls, love computers. And so the young and the old, they all love computers. They don't, they don't find them intimidating or anything. Just, want to have their hands on the computer and just sit there and ja.**

And do you think that's a huge, do you think maybe there's a gap between your generation and the generation you teach? Do you think it's more difficult for older people to use computers and cell phones and...

**Ja, it is. It is. Actually, it is. There are, excuse me (coughs), there are teachers who are onto a programme that's running right now, a computer training programme that's running with Rhodes, I don't know what, what outfit in Rhodes, but there, I listen to them when they discuss the previous lesson. And when they prepare to write a test and they, you, you find that a whole lot of them find it difficult, dealing with computers. And I, I, I don't know, maybe myself, if I were to go for in depth training in computers I would find it intimidating as well but the kind of training, the basic training in computers that I did, I also did this at Rhodes, I didn't find it intimidating.**

And class?

**Like your...?**

Like how much money people have and their social background. Do you think that that plays a role in whether or not they'll use technology?

**Exposure really. I've noticed, I've noticed that with kids from middle class backgrounds, they, they tend to be more confidence. And you find them involved in a whole lot of extramural programmes that involve computers. Like your, your, uh, journalism thing with Rhodes journalism school and a whole lot of other projects that tend to use computers. That comes from the confidence that they have. And you get the others from less privileged backgrounds, sort of in shells, clinging in shells... without the confidence to reach out and be part of anything other than what they have here at school. That results in being exposed less to the world of computers. Not, I don't think, okay, I know of only one boy who actually has a computer at school, otherwise the rest of them do not have computers... did I say at school? At home.**

At home, okay.

**Who has a computer at home. But a whole of others who, who are involved with the other projects and programmes that involve computers do not have computers at their homes.**

Okay. So then would you say that most of your students come from a background where they aren't exposed to it? Like, so, so they don't have it at home?

**Most, ja.**

Alright. So why did you decide to, when, when, if we go back to your example of getting them to make an advert using the computer, why did you decide to get them to do it on a computer rather than on paper and just draw it?

**Because the experience really. I just wanted them to have... ja, hands on experience of a computer.**

And then what, what benefits do you think they got from that?

**It's... the more professional your, your product is, the prouder you are of it. Ja.**

Ja, and then do you think that they learnt um new computer skills from doing that?

**Ja, although they didn't, they were, they were teaching one another themselves. Those who had more experience in computers were actually teaching the others. Which is why I am saying at some stages I would have to come back and say look, when they, because a whole lot of mess, because they were, they were busy experimenting more than actually trying to finish the project. They were doing a whole experiments like, I'll see what happens if I blow this 200%. What happens when I... Ja. Where do I get the images that go with my text?**

So was it difficult that they were trying to teach each other?

**It wasn't, they were having a lot of fun. Like it, I didn't interfere much with it, except to pull them back on track when they were straying.**

Ja. And then, I know you were saying the monitor that you guys use with your um DVD is faulty but do the... if for example you are trying to use it and you also gave another example of another teacher struggling with it, do the children then ever try to help you?

**Ja.**

Do they?

**In fact, in fact, I knew, I knew, that uh the Biology teacher had a problem because she had boys there trying to fiddle with it... and she had and she told me that she had called another teacher that had last used the thing and she had told her about other boys in her class who could come and help, who had helped her with it.**

And then do you find that difficult, that the the kids... You know, because as a teacher you like to... know things...

**Ja**

To teach the children... do you find it difficult that then the roles seem to be reversed and the children seem to know more?

**Ah, no. No, no. I think we, we, all adults, expect the kids to be... like more techno-savvy than us, so... You don't find it, you don't find it intimidating when, when a kid just comes and presses this, presses that because we expect them to be that.**

And then is it mostly boys who help if you get stuck with the...?

**Boys, ja.**

Do girls not?

**No, no, no, they wouldn't.... I mean, I'd leave them with, the the these, these short movies and at break they'd say look we're to have our lunch, and we were using the library and nobody else uses it anyway because it's not a proper library and so I left them there, I used to leave them there at break. When it came to turning the thing off, or rewinding or fast forwarding the thing it was always the boys who were hands on. The girls would just shout, 'Please don't fast forward that!' (laughs) Or 'rewind this' but they never themselves touched the thing.**

Mmmm? And then with teaching staff? Do more men use the technology or...?

**No, there aren't any marked differences between males and females on staff. Actually... there are more female teachers involved with the computer thing at Rhodes than male. And it has been, it has been like that always since I've been here. Always more women taking computer lessons than than men. But when it comes to actually using the technology then ja it's similar.**

Okay. And you said you did a computer course with Rhodes?

**Ja, a very basic one. To learn like excel, Microsoft word and the basics.**

And how did you feel about the course at the time?

**It didn't, it didn't get... I don't know, it was rushed. We didn't get to, to too many exercises that would make me confident enough to do what I needed to do by myself. And as a result I kept asking**

**for help from other people. And if I have this problem and somebody comes along and helps me out and then I learn that one skill and then I come up against some other snag and then call someone and then I get to learn that one. Ja, it wasn't... although, although as per the written module I was supposed to come out with all the skills I needed but somehow it got rushed. Ja.**

So the level of it was maybe... it just went too fast?

**I, I don't know. Maybe they tried to pack everything in a short, a short space of time and, and we didn't get to a whole lot of exercises. You'd get a demonstration – okay, this is how you do this, you push this button. And then you get to do this thing now, but then you won't be getting any further exercises that involved this thing that you have picked. And you don't have a computer at home, you can't go home and practice there so when you go the next day they bring up a new area to learn so ja. It wasn't quite up to scratch although it was well-planned. It was meant to cover everything but the time span didn't, wasn't enough.**

Were you glad you'd done it?

**Pardon?**

Were you glad you'd done it?

**Ja. Ja.**

And then did you use any of that... new things that you'd learnt in school?

**Ja.**

Okay. What did you use?

**We... excel programmes. Which is, which is, I knew before I went for the course, I could do the rest of... my typing and all that. Ja, the one, the one skill that I did not have was, was with how to manipulate into excel and ja it was (indecipherable)**

And um do you think the students you teach, do they benefit when they use technology in school?

**They should. They should because, I, whenever I go home, I get my email. I can get my email from my phone but whenever there are attachments I need to use proper computers. So when I go to the computer labs at Rhodes I find that everybody, all the students there, they, none of them seems um what? They're all confident when they use this and I wish we could, we could have kids coming from the school with the literacy and the competency that I get to see them work with the computers. So it prepares them for when they leave this place. For when they have to be in front of computers all the time.**

Ja. So then do you try and, and plan to let them use the computers to get that result?

**Look it's, I wish we could have more access for them, but ja. It's not like I wouldn't like them to go there, I would like them to go there when it's possible. Mmmm.**

But, but why... I mean, what stops it from being possible?

**For one, the, there's the problem of access after, after hours. When ja. And then we've got... like, like I'm saying, I was saying I do not plan my English lessons around the computers. Precisely because I never know when it will be possible for them to use the computer.**

Okay, so there's no real system of access? Like, if you go there with your class, you're not going to know if someone's busy?

**I think, I think there is. But like I'm saying, it's the whole hassle. Like just this morning I needed to go to the computer lab and I went to the one person who I know is responsible for the computers and we couldn't get the key because the key was not returned to him via some other teacher. Trying to look for this other teacher and somebody said she's not at school. And I saw some other teacher who just said no I must just call that teacher and then she says the keys are not with, the keys are with someone else so ... it's a whole lot of hassle really. So you don't want to plan around...**

Using it.

**Mmmm.**

Okay. So would it, it would be much more time consuming if you tried to use it than if you just rather don't.

**Silence [must have nodded]**

Okay. And you were saying that, that there is a system in place for gaining access.

**Ja.**

What is it? How do you go about it?

**I don't know. Like I said...**

Ja.

**... I've never tried to book or... so I could hook you up with someone who could...**

No, it's a ... so when, when you did use the computer lab with the Grade 11s, to do the advert, did you just go there and hope it would be empty?

**Ja. I did. There wasn't this, these, those, those, those, those rules.**

Okay, so has it changed since then?

**Mmmm.**

Okay so if you want to use it now you can't just go and hope it's empty.

**Ja.**

Oh okay. And do you, you were saying there are other teachers who use technology at your school. And do you guys talk about using about using technology or do you read articles on it?

**No, we don't. I, we don't read articles. I have never come across any kind of articles on this and we don't talk about it really except when, he's since left the school, he was responsible, our deputy principal, he was responsible for the computer lab and each time a new programme had been installed he would let everybody know, the teachers. Maths teachers – we've got this programme and life sciences – we've got programme for grades 8 and 9.**

Oh okay, and then did... when, does that still happen now or not since he left?

**I don't know if they are bringing in programmes or if it's stopped since then.**

Okay, so when he was (coughs)... when he was...

**Excuse me.**

It's fine. When he was um keeping you updated about the new programmes, were people more enthusiastic about using it?

**mmm.**

Okay. And did they then use it more?

**Ja.**

Okay. So can, like can you give me an example?

**Like my... the, you'd get the, the Science teacher would ... Life Sciences... then the computer centre would get inundated with kids who wanted to, to print stuff for their programmes, for their projects, saying what the digestive or whatever nervous system did. You'd get kids flocking to the computer centre and searching for this that and the other and printing the same stuff.**

So if they know about it they do tend to use it more?

**Mmmm.**

Oaky, that's interesting. And then you were saying you obviously don't, well not obviously, but you were saying you don't read articles and other teachers don't read articles. Um but you guys talk to each other still about using technology in teaching and different ideas?

**It comes with... it comes up when, when you are talking about their [the teachers] computer lessons. Then applications just come up in the conversations. This is how you could apply this or that lesson or programme you are learning about, this is how you could put it into good use. It's not a structured session where they update the whole staff on this, that and the other. Ja.**

And... are there teachers who don't use technology at all at the school?

**Ja. (laughs)**

And then, I just like, in terms of... I understand it's not a structured thing but do teachers who use technology, do they talk to teachers who don't use technology about what they're doing or is it mostly amongst themselves.

**It's more amongst themselves, ja.**

And then when there was a structured thing of the one guy telling everyone about all the new programmes, were more people starting to use technology?

**Ja.**

And was it noticeable or was it just maybe one or two people?

**It was noticeable. It was noticeable.**

Okay. Was that also for... were the kids also using it?

**Ja, they were.**

(silence)

**To give an example, just of, of the kids flocking there to do programmes, projects because the teacher had been introduced to this and she or he would go and tell the kids, 'Look, you can find this on this programme so and go and do this project.' Because they always complain no we don't have computers and when we go the library this that and the other. So the teacher would say, 'Okay, now we've got this programme. Go and do the project.'**

Okay. And so do you, do you like the fact that technology is in the syllabus?

**How is it in the syllabus?**

Well, if you look at film study, if you look at like the idea of reading and viewing, they do talk about the idea of being able to read on screen and things like that.

**We need that, we need that. Because when they, they leave school that's all they get really faced with.**

So what do you think the role of technology in language teaching is? What can it... Or do you think it even does play a role? Do you think it is a part of language teaching? Technology?

**Ja, but, but, it, it, uh, I don't know, it's, it's probably me... Like I was saying, I do not have to... I don't know how I can, how I can help my kids with their language using computers. It's just, I don't know. Maybe someone could come up and say, 'Look, if tried this or if you tried that it would work.' Because with picking up new vocabulary I, I don't... it's not something that you can bring to class, they, they are obviously exposed to this in the home. They watch movies, they, they, there's (indecipherable), there's radio. Of course you don't get too much reading going on at home either because they cannot afford to buy newspapers or because their parents themselves can not, are not good readers so nobody buys magazines or newspapers but I, I don't see the need to bring them any, any... what am I trying to say? They have enough access to the language from TV and radio. Okay, if I need, if I need to make any reference to, to... we don't need to have the TV in class. I can always find examples, programmes that they have watched at home hopefully or ja.**

So you don't feel it's necessary for language teaching to use technology?

**The... no, I don't see too many areas where I'd, I'd heavily rely on the use of technology.**

Okay, that's... so can you just expand on that a bit more? Like you don't... uh, I'm trying to phrase this properly or think of a, even... you don't want to rely on technology for language teaching or it doesn't help?

**It, it, ja, it's the reliance on, on, that I don't see. I can't imagine really relying on, I can't figure out any area of language teaching, not any – like I told you with the designs adverts and things like that – but saying, speaking and listening, I can't figure out how much I can rely more on technology as a vehicle for, for that.**

So for you it's more important for the sort of personal contact?

**Ja, and the reading and writing but it's the speaking and listening... Ja, I have, I have, not doubts or reservations, I, I do not have any grand plans for the use of technology in those areas.**

Okay. Sorry, is school over? (Learners were leaving mid-morning with their bags, was sudden and disconcerting – could not see time and thought we'd run very far over time) A brief conversation about the learners leaving follows, which has been clipped as it is entirely off topic.

And so then, with them doing their orals and we were talking about listening and speaking, you were saying because they are exposed to TV and radio and stuff at home, it's not necessary for it to be done here.

**It, it can be done for, for... it's the, actually relying on bringing this to class, then (sighs) I don't know. Or maybe I'm trying to say I have never seen...I do see the need all the time for planning a listening and speaking lesson, for planning it around the use of technology. That's what I'm trying to say.**

So it's not always necessary in that specific learning outcome [listening and speaking]. And then do you think there are any learning outcomes where it is necessary?

**(silence) uhhhh, look it's actually, it's... I don't know how to say this but you would expect them to have listened to this at home and you do not need to bring the record to class and then have it as part of the class. All I would do is, is remind them of what they had done without bringing the recording to class. So it's part of the lesson, but technology is not here in this moment.**

Okay, I understand what you are saying. And then with other learning outcomes, like if you look at reading and viewing and um... I can't remember what all of them are... It's reading and viewing, listening and speaking, writing and...

**Ja, and presentation.**

And presentation. So if you look at the other learning outcomes...

**You do need...**

Do you think...?

**Ja, like I have just made this example of this advert thing they had to do. The reading, the writing, the collection... they collect the materials, they bring this and then they present the thing. They put it all together and then they present. All is there. It's reading and writing and presenting. What's missing there is listening and speaking.**

So for some of things it is necessary but not all the time?

**Not all the time.**

Okay. Then would you say the majority or the minority? Is it necessary.

**For?**

Is it nec, is technology necessary most of the time or not?

**Not most of the time. Not most of the time.**

And then when you use it, is because it's necessary and you can't do it any other way or...?

**It's, it's easier and better. That's when I use it.**

Okay, so if you think it'll be easier to use it, then you will?

**Eh. And yield better results. Then I will use it. Not for its sake.**

Ja, that's very interesting. So um do you feel like the kids, like they learn additional skills and is it easier for you as a teacher when they're using it or is it easier for them?

**When it's easier for both actually. When it's easier for both. Mmm.**

So you don't feel like they struggled to do the projects on the computer or learning anything?

**Like I said, you point something out once and then they, they... kids being kids and then they discover the rest for themselves.**

So there's that enjoyment and that sort of self-teaching aspect. Okay. Well, thank you very much for your time. I know it's not always easy for you guys to find time.

## ***Appendix J: Transcript of interview with Mr Dart (school 3)***

**Interview with [name]**

**English teacher: Grade 8 – 10**

**18 August 2010**

**School conference room**

**What's the date? The 18<sup>th</sup>? [Participant was signing a consent form and we had been discussing the contents of the form]**

The 18<sup>th</sup>, ja. Basically what it is, is I'm looking at why teachers do or don't use technology and then we try and eliminate issues of access to try and work out how you can encourage teachers to use technology or to see if actually using technology in education in the first place is a good idea. So that's the point.

**Sorted.**

And then I just wanted to ask you, do you teach film study?

**No.**

Not at all?

**Well, we do a section of, of the film study where we do film reviews for English. Ja and then we head downstairs to the AV room.**

Um, okay... I just want to find my interview questions.

**Ja, I think the biggest thing here is, well, I suppose we'll get to that, is just the cost of everything. Especially at a school like this.**

(brief section not transcribed, approximately 20 seconds, mostly silence and an irrelevant conversation about filing)

Um, okay so just to start I wanted to talk to you about what you understand technology to mean? Like what do you understand by the word technology?

**Uhhhh... joh. Well, the most basic level is something electronic. Um... I, ja, when I think of technology I think of something that obviously is, something to aid us. It's to... what am I looking at? Mmmmm.**

You can use examples and stuff. It doesn't have to be a computer.

**Like a calculator.**

Okay.

**That would be an example of technology. Because it obviously helps us instead of having a ... whereas a techno... um, the calculator in comparison to an abacus sort of thing. That's what I think technology is. Something that's computer able to do some of the work for you. So you just import what you need to be done and then you get the result. Or ahhh, but on the other hand you've got your data projectors and stuff like that so I think the most basic term for technology would be something electronic.**

And what would you consider technology to be in, if you're looking at technology in...

**Teaching?**

Ja.

**Computers. Data projector. Ummm, those boards, those uhhh....**

Smart boards.

**Smart boards. Ummm, to the extent of having a whole DVD, surround sound sort of thing.**

Okay. So you would consider TVs and everything as a technology.

**Ja, definitely.**

And overhead projectors?

**Ja.**

Would you consider that technology?

**Ja.**

Okay. Can I just ask if you mind, for this interview, to just... if we can exclude talking about overhead projectors?

**I've never used it, so...**

Haven't you?

**No. Like the overhead projector... ja, I think anything that isn't human. I think anything that isn't you inputting by yourself is technology. You know what I mean? Ummm... so something that obviously if you've planned something beforehand and you're able to put it in and it projects onto the board, that's technology. So I'd say that, you know, overheads are an albeit outdated source of technology, compared to your data projectors and that... smart boards.**

No, I mean, I do, I do agree that it is a technology. I just wanted to exclude it because I felt like it is... (sigh)

**It is still the person writing down stuff and putting it onto the... okay, ja, I'm happy with that.**

Um, and then did your teachers, when you were at school, use technology?

**Apart from a TV, no.**

What did they use a TV for?

**Just to show movies.**

Did you do... Was it film study or were you just w...

**It would more like Geography. I just remember Geography. The teacher would always give us like these, you know those things you find on National Geographic and wildlife? All of those. And apart from going to computer classes, we never had any technology.**

So did you enjoy watching those films? Like in Geography?

**No, definitely. It was a welcome change from just having the teacher there with the note... with the textbooks etcetera.**

Mmmm. Did you... do you feel like you learned from it? I mean, can you remember any of it?

**Ja, definitely. I remember most, most of the movies or films we watched.**

And then do you remember most of the lessons that your Geography teacher taught?

**Uhhh, only the times when he like messed up really. He was a bit of a funny character But otherwise no. Ummm, when you say 'remember', I can remember what it was about but other... I can't remember. So I remember seeing and watching it and where we were and all that. But with the teacher, I can't actually remember hey. No**

So do you... you don't remember the content of the films, you just remember...

**No, I do remember the content but I wouldn't remember... Like I just remember volcanoes and, and that sort of thing. And then um I just remember savannahs and the crocodiles with the water drying up and them having to migrate and that sort of thing or whatever it was. And hippos and all this – but I can't tell you details.**

Ja, no, fair enough, obviously not.

**Jeez, ja, that was about 12 years ago. 14 years ago. 15.**

So you did enjoy it and you do remember it...

**Ja.**

And then when, what did you use the computer lab for? Computers?

**Ja, but that was still very basic so now we're talking, that was like '93. '93, '94, around then. Um and and that was basically... I remember junior school using computers and playing games. That was it. And then high school we, the normal, you know. Word, excel, just getting to grips with the programmes.**

Okay, so it was an actual computer class, it wasn't a teacher taking you there to use it or anything.

**No, no. It wasn't. Remember I was, I'm from Zim so we had min access to internet etc.**

And so no teachers apart from your computer class actually took you there or used it in any other way.

**No.**

Not. And did you enjoy your computer class?

**I did, ja. It was cool. It was something different again. I think it just keeps going back to that something different side of things. You know, you get so used to the normal and then you get taken out of it and you enjoy it, and you remember it.**

And do you feel like you used those computer skills now, like as you...

**No, definitely. Ja I mean obviously the first time you get to varsity and you have to start using computers for your essays etcetera, Word whatever. So it did obviously help a little bit but not to the extent where I was uh competent, completely competent. Ja.**

Do you feel like you're completely competent now?

**Uhhhh.... In office.**

So was that just through your own use?

**Ja. It was just getting used to it and ja... complete, there's ah... I think there have been opportunities to get computer training and that but I just haven't.**

Ja, because you said you hadn't, you haven't been – in your questionnaire – you said you hadn't received any training.

**No.**

You haven't even been on a computer course?

**No.**

Not even in PGCE?

**At Rhodes I have. Ja, yes.**

At Rhodes, okay.

**Uh, sorry, should I have said that? I thought that was during, for the teaching. Because I know we've had those courses in teaching when they go, come round and you to Fish River or whatever and you spend 3 days learning Microsoft Word or something so no, I didn't go on those but I did, I did a... what did I do? You know the ComSci 1L or whatever... and then that computer comp, compe... what is it? Computer competency class for PGCE. Whatever that was.**

Why did you not want to go to the ones that were offered, when, well, for the teachers?

**Ummm, because I didn't think that I'd ever be doing anything other than Office. In the classroom or you know... I never thought that I'd need it. So I just didn't decide to go.**

So you specifically thought that you wouldn't need it, it wasn't what you thought would be included in the training.

**Ja, no. I just thought what I needed. Like a lot of these things, you know, it takes a lot of effort to go to these training things and... the majority of the time you get there and you realise what it really is. And you're like, 'ah, cost. What am I doing here?'**

Okay, so it's also a time factor?

**Time factor as well. I mean, it's massive. When you've finished your teaching you've got marking, you've got sports, you know. And then on a Saturday, your Saturdays are completely taken as well so the only day you rest is Sundays. You know, so it does take a lot – a lot of time, a lot of effort.**

And then the PGCE, that computer competency course, do you feel like that equipped you?

**Well, I'm able to teach junior computers here, at [school's name], with that. And with what I learnt at Rhodes so I was able to teach it. I taught it for a year, so...**

And that was a specific computer class?

**Silence [nods?]**

Okay. Um and then what was the computer competency about when you did PGCE?

**It was the same thing – it was about Office, knowing your way around Excel, the internet, spending emails, receiving emails, the correct way to send a fax or not fax, email. That sort of thing – you know, those email etiquette and all of those sort of stuff.**

Do you feel like it, it prepared you or made you interested in using technology in teaching?

**Not from that course, no.**

It was just sort of for personal...

**Personal, ja. And, well, I suppose for teaching in the long run or just outside of using technology in the classroom, for preparing the worksheets and that. It definitely helped in that sense. Ja, but not to actually use it in the classroom as a teaching tool.**

Mmmmm. And so then before you first taught and when you were doing PGCE did you ever consider that you would use technology in teaching?

**Uh, not directly. No, not in the classroom, not... no.**

So you just... well, what do you mean not directly?

**Well, like I just said, the, with the, preparing worksheets and whatever. Apart from that, not.**

Is it just something that didn't appeal to you or did your method lecturers not encourage it?

**No, well, we just never thought about it. Ja, I never, I thought you know, your stock teaching, is just up there with your overhead projector and, or a blackboard, whiteboard whatever it is and that interaction. And then the occasion going down to do the film reviews or whatever it is. But we have those facilities downstairs, but... never like to think to myself, 'Right, I've got a laptop here, let's use these, let's use visual aids or whatever.' I never thought of that.**

Okay, so for you it's more about what, personal communication?

**Ja, more of that. But, like I obviously can see the need for it because looking back, thinking about stuff that we did, or, or putting myself in the students shoes, I can see, you know, that it isn't obviously the same. Or that it isn't great to have the same thing over and over. Sometimes I would prefer to just have ... you know, data projector and then you can put up your prepared lesson and let them go.**

And then, so, so... you're saying that you see the benefits of it and I mean you guys do have um access to that technology...

**Not IN the classroom.**

Not in the classroom. Is that maybe one of the things that stopped you from considering it?

**Um, ja, 'cos I knew it would never happen so... why would I... Well, I know that it won't happen for a long time...**

Ja. What, getting the technology in the classroom?

**Getting the technology in the class... In the, this school, I'm talking this, this school. I know um you know, the other schools, [mentions a school's name] have got all that. All the smart boards and that. And I fully agree that that's where we need to be but uh just some things are not viable in this environment that we're in.**

Okay. And then is there not general technology that you can make use of?

**Like the AV room downstairs? Ja.**

And is it difficult to do that or...?

**I think the only difficulty is that fact that there's... there's that once venue for everyone else and you so it does... I think I do sort of feel like I need to let it go if I did use it. At the one stage, that's where I was. That's where I did teach. It was great you know, because you could just hook up your laptop and you're away, if you have the laptop. But I mean the school's got the laptop but it's difficult. Because I mean then you know, you go home and you prepare everything on your... and you have to bring a flashstick or your own laptop, you know, then plug it in and away you go.**

And when you taught in that AV room did you use it?

**No.**

No. Did you get disturbed, was it...?

**No. Well, every now and then because I mean about two periods a day I'd have to go to another classroom so you moved out. People coming in to watch to watch they're doing. Junior school etcetera. So you did get disturbed. Not to the point where I was pulling my hair out.**

Ja. So do you think it's easier to teach without technology?

**Uhhh, ja. I do.**

Why?

**Ummm, when you say without technology like...**

I mean without like computers and thing... obviously books are...

**Are we saying like all the ti... I'd say it's probably... it's easier for us, for me, to teach without technology here in my present situation. If, if I had a data projector and a laptop in my classroom, it'd be a breeze. Then I think it'd probably be easier with technology.**

Okay.

**Like I said, because then you can, you're having problems, you don't know quite how to address something, you need examples, whatever. You've got your internet. Whatever it happens to be and you can show them clearly, you know, throw up diagrams, throw up pictures, whatever it happens to**

**be. Whereas apart from everyone having their textbooks or you know... These are limiting factors – the guys having textbooks etcetera but if you have that one internet or whatever then you can show them. You don't have to tell the guys, 'Right, go look up what this is. Or go look up what the leaning tower of Pisa is.' If no-one's seen it before, then you can just chuck it up on the data projector.**

Okay and then it would obviously also save you time.

**Definitely. And then you don't waste... you save paper, 'cos you don't have to print the pictures of what everything is. You don't have to keep printing out worksheets and I mean because you can just save it, what you've done, on your Word. Basic, you just project onto the screen. Saves you having to write it out. Saved there for the next year. Electronic record, so your filing becomes easier.**

So for you it's more about having your own access to it rather than it generally being available?

**Ja, it's having access to it.**

And then the computer lab that's here, could you use that for teaching?

**Ja, you could. Ah, again it's just the space. I haven't even been into the new one because English... I never get the chance to, I mean, I think if we're doing projects and that on Shakespeare and film reviews, whatever it happens to be, then fully. Ja, I'll definitely take them in, next term. But it's not as commonplace as something like say History and Geography where you know there are a lot of visual aids that can help the guys learn. You know what I mean?**

Ja. And then how do you, within the school, how do you guys get access to like your computer rooms and stuff like that? What's the process?

**It's a booking system.**

Is it?

**Ja, so normally um you'd have your 9 day period, 9 day cycle. All the periods are there and you simply go and book for that day. Then you've got that for that period. Um, which, like I said for the AV room causes hassles because junior school and senior school uses it so...**

There's a high demand.

**Mmmm.**

And then how would it work if you want to use it but someone else wants to use it at the same time?

**Then it's just, you talk. Whoever needs it the more.**

Okay. So um so someone wouldn't just be able to boot you off?

**No. No. If you've booked it then you've booked it. If your name's down then you've got it. Ja, unless they come and say, 'Listen, I really need it. What are you doing?' and you say, 'Well, I've actually got it for *Romeo and Juliet* and we need to do this because next period we're doing this.' It's done.**

So it wouldn't work like on a system like if someone's been here for longer or...

**No, no. You get there first, you book. If... obviously necessity, like I said. So if I needed it and say for example [teacher's name] is there, just watching for clubs, for example, for junior school. It's happened before that he's just said okay, go ahead, we'll go make a plan.**

Okay, so you obviously, when you're talking about using it you're talking about for um doing film reviews.

**Ja, just on my, in English obviously, not...**

So why do you not consider that using technology though?

**(silence) That is. Ja, I suppose that is using technology. But I don't use it like in... Are we talking IN the classroom or generally, to teach?**

Ja, generally to teach.

**Oh, well, that would be considered technology.**

So, what, did you not consider it technology 'cos it wasn't specifically in your class?

**'Cos it wasn't aiding me as I teach. In terms of, I thought we were talking about the practical... as actually teaching. The verb 'teaching'.**

Okay.

**Ja, instead of the, the sort of well-rounded, the whole education side.**

Okay. So if, if we are just talking about education in general and we talk about film study, would you consider that...

**Technology.**

Technology.

**Yes.**

Ja. Okay, so what... do you teach that because it's in the syllabus or...?

**I think it just adds to the learning outcomes, you know, your thinking, reasoning without just having this knowledge you've been, been taught and writing down and coming up with something else. You're actually having to process it from a different medium other than just me reading out to they guys. You know, they eventually... eventually have to be able to know you know or be able to interpret different scenarios or different situations. And that's just obviously preparing them so they understand, someone's doing this, or the movie's doing this because of this. And not just because of the words, it's doing this because of the mood. Why's it stormy outside? That sort of thing.**

So you aren't forced to teach it?

**No, no, it's more of a side sort of... you just get bored of, just to get them out of the classroom and get them to do something else.**

Do they enjoy it?

**Ja, definitely. For them it's like a movie you know. They love it. But at the same time when, when you challenge them and say, 'you know guys this is what we're looking for', you'll be surprised. There are a couple of guys who've started looking, picking out...**

And you, when you teach it?

**Well, when I teach it...**

I mean, do you enjoy it, is...

**You know where the, the technology would we great on that side of things is to be able to say, 'Right, um, this is, these are the examples I'm talking about...' uh, you know with different camera angles to suggest different things, you know, the camera looking up at a man, you know, suggesting that this guy's imposing. Then you could, you could use different scenes from different movies, you know what I mean, and just splice them together or have different snapshots of them in classroom. You see that would also help a lot in terms of having that technology. Instead of printing out these pictures from the internet and having them on a piece of paper, which obviously you don't get the most crisp, the most crystal clear images. They'd be up there on screen.**

And then when you do teach a film study and go through it with them, do you enjoy teaching it to them or is it a pain or...?

**No, I enjoy it. I mean, obviously if I have, if I've got 3 classes of teaching it, I would get obviously bored of watching the same things and that. But it's also something different. It just means I don't have to be in front of the class the whole time. You can actually get back and see what they, what they're doing and actually enjoy myself as well. Not that I don't enjoy myself teaching but, you know... less effort. Ja.**

So what you find it less, in that it's easier to teach using the technology?

**Definitely. 'Cos then I can just put it on, they can watch it and I can sit back.**

Okay. So instead of the focus always being on you, it's moved...

**It takes it off a bit, it draws their attention. And then also you can obviously just look at how they're coping with it. You know what I mean, you can watch them a bit, see what's happening. Sometimes we get stuck in the front of the classroom and you think you're teaching and everything's going, but no.**

Okay, that's actually interesting that it offers you what, freedom to sort of watch them more and see if they can actually grapple with it?

**Ja, see if they actually, if they actually, if they're doing something, if they, if they are paying attention and it's not going in, then you know there's a problem. Or if, when something's going on and they're not really paying attention and they're just, you know, messing around or dozing off or whatever it happens to be... 'cos when you are teaching I mean ultimately you want everyone to be looking at you, but sometimes you know it's just ... you can't pay attention to everyone in the classroom.**

And then um when you do your film study and stuff do you ever struggle to use the technology, like if stuff doesn't work?

**No, no. I set up the, the AV room. Well, I rewired it and everything so I know what's going on.**

So you're very familiar with it. Okay.

**So I'm familiar. Ja, I've no hassles hey. I know other teachers do. So I constant... well, last year I was constantly getting called out the classroom to do silly things like, you know, why is this, the data projector not on? Because you haven't switched it on sort of thing. You know, you've got to push this button. So ja um, I think it could be a hindrance to other people but I don't have that problem.**

Are there lots of other teachers at your school that use technology?

**Uh, from what I know, ja. [Names of teachers], the Math's teacher uses it. She, she's got a good initiative going with, with the Math's day or something. There was a Math's day a couple of months back or a month and a half back, where her and [name of teacher] set up this system where the guys**

could log on with their user names and then play these Maths games against everyone in the world. Which was pretty uh pretty cool.

Ja.

And then eventually they... it accumulated into the four guys whatever involved in the Math's day Olympics whatever it was. So they, they represented [name of school].

Okay and this is obviously... you must have known some of the kids reactions to that?

Oh, they loved it! They definitely loved it. Because it's a different medium you know, they don't have to write. They don't have to actually write down stuff and be neat and all that because it's there, in front of them. You know, Microsoft word, write an essay.

And would you never think about taking them, like for that and asking them to write an essay on the computer.

Ahh, def... ahhh, I haven't thought about it. But they can if they ask me in class to do their, to do their essays on a computer, they can, I don't mind. The problem is though is that you've got word check and spell check and all of that. So ultimately you want the guys to write so you know if they've got a problem, you know so they are actually, knowing, getting to the dictionary etcetera. Writing or reading it, learning how to correct themselves. Um... but ja I don't mind them using a computer but it just takes away them actually learning how to spell, not, you know, not just rely on 'fragment, consider revising your sentence' or whatever it is, that thing that comes on.

Okay, so you think that, if, if they rely on computers then they don't hone skills that they need?

Ja, that they need if they're ever faced in a situation where they now have to write something, are they going to be able to write or are they just going to be reliant on computers?

Okay, so it actually helps them learn how to communicate and do it themselves...

**Definitely.**

Rather than having help.

'Cos I mean you obviously know, well I know as well, my spelling is sometimes down the drain. You know, the computer's so easy, you just write what you think it is and then right click and then you're away. Instead of actually stopping and thinking, 'Ah, let me actually learn this now so I never have to do that again.' And I think that's it's worthwhile, because we are in a computer age, for the guys to write but then if they don't know how to spell...

So it's more about getting fundamentals right before you move onto that.

Before you move on. So I mean I teach Grade 8, 9 and 10. So I'm thinking Grade 10, towards the latter part of Grade 9 to Grade 10 onwards then I think it's fine, you can start introducing that. But not with the Grade 8s and 9s, who're still sort of developing their vocabulary.

Mmmm. And at Grade 10 level would you feel comfortable with their fundamental abilities to actually be able to move on, if you let them use computers?

The majority of them. There are still a few who are... a bit immature in that regard, but definitely. And I mean you talking about... dealing with, if, if we're doing a novel, uh, *To Kill a Mockingbird*, then I think it's fine you know but the sad thing applies then they can just go onto spark notes you know or whatever the other ones are. And you can just crib the essay you know, take ideas and, when

**in reality you want them to just be able to process it by themselves, come up with their own ideas. Be able to reason it and then write it down. So...**

Do you think that would happen a lot or does happen a lot?

**It does happen a lot. They don't understand the whole plagiarism side of things. Um, I just know from other, other learning areas. If they have a Geography project they'll just bring pictures, cut and paste volcanoes and then they'll cut and paste underneath, they've got these huge words and you know it isn't a Grade 6 working. You know? So what are they learning from that?**

Do you think they're less likely to steal from books then? Just copy down directly what it says in the book?

**Ummm, well, I don't think anything's stopping them but, I think that then they're less likely to just do it. If they've been told you're not allowed to copy and paste or your not allowed to do it, because it's in their own handwriting now. They know that the teacher knows that they don't know how to spell, you know, whatever the word is.**

So do you feel like they're more ownership if it's in their own writing?

**Definitely.**

Okay. And then for both teachers and for learners, but ah, this questions actually quite long so, you can answer it in sections. Do you think that gender, age, race and class play a role in using technology.

**Ummm... I think the only thing is age. For... I mean, I even struggle compared to someone who's younger than me who's just come out of varsity. They'll have a much better understanding of computers just based on, based on the fact that it's now become such a, or it's come into such prominence. I think age is the only thing. I really don't think that a woman's going to struggle on a computer more than a man would or that a black guy would struggle more than a white guy. I think based on their training, ja, maybe that's the relevant question. But certainly not age, I mean certainly not race or, uh gender.**

Do you think that, ah well I suppose it's difficult for you to say because you teach in a boys' school, so... but I was thinking at co-ed schools there might be a difference between who'd be more likely to use computers. But if you look at your staff, because that is a mixture, is that, I mean, is it the same between male and female?

**Mmmm, I definitely see more females on the computers in terms of preparing stuff. In terms of preparing their worksheets. And they like the fact that they can get all quite creative in terms of (indistinct) or whatever it happens to be, nice pictures, quite flowery and whatever. So I think, ja, I definitely see a lot more women using it for that. Ja, I don't know if that just means that we're lazy, us guys. I definitely use it though for work, for comprehensions.**

And then class?

**Class?**

Like rich or poor or...

**Ja, I think the same thing applies. If you've had access to it growing up, then I don't think it matters much. But I do think that class would hinder you because like here, I mean the difference between us and [names an affluent school]... you know, the levels of education might not be different but how we reach those levels are completely different because of the fact that we can't afford to have this, while they have state of the art, for example. So suppose ja, class does factor into it, a little bit.**

And then with your learners? Um, because obviously some of them, I mean, all your learners don't come from the same social situation.

**No.**

Um, so... do you think that the richer kids are better versed in using it?

**Ja, I think they are.**

And then the kids who struggle [financially] or who don't have access to it at home, are they apprehensive to use it at school or...?

**That would be a factor, ja, definitely. Although it is really strange because I mean there are guys here who are extremely, extremely poor, yet they still have an x-box you know? So it's hard to judge that because what do they place value on? And obviously they place value on having stuff that people can see, you know, like electronics and cell phones and like a x-box or whatever it happens to be.**

Do you think cell phones help to bridge that gap? In technology, in being familiar with it?

**Ja, definitely. I think if you can work your way around a cell phone, then it's, it's the reasoning. Because I mean, I don't know if your folks, but my folks definitely never got into the whole cell phone side of things. Just because they didn't know how to use it. They've never used it. Now they're, they're quite alright but... they never felt that they wanted it or needed it.**

And you? Did you also ever feel like that?

**I only got a cell phone in like 1<sup>st</sup> year varsity hey. But it was fine, after that it was quick enough to learn. And uh I think by using, I think it does bridge a gap towards using other electronic or technology or other technologies you know. I'd say it does. Although it does hinder, in terms of English it does make it a bit of a mess with Mxit language and all of that kak. Can I say kak on this?**

It doesn't matter. So what um how does that affect them?

**What with cell phones? I think it's a preoccupation, they become preoccupied with it almost. I mean, I'm at the stage where I want to ban or I want cellphones to be banned from school. Because as soon you're outside for break, you know the cell phones are out and there's no more of this like interaction between guys. And I'm saying this as a, a, a... what's the word... it doesn't happen all the time. The majority of guys don't do it, they'll go and play sport still, mess around, joke. But you see a growing number of guys who'll just sit on a cell phone you know.**

Okay, you think that's harmful because it stops interaction.

**Social interaction, ja. And interaction, you should be out there messing around, getting into mischief, doing whatever you have to do, you know. Every little thing that every boy does, is meant to do. Instead of sitting there talking on the phone, I mean... I think there's a time and place for it, but not during school.**

So it's harmful if it's used too often?

**Ja.**

And then their language and stuff? Do you feel it affects...?

**Definitely. Definitely.**

Do kids write...?

**They'll write, like, gr8. They'll write it. Or they'll write abbreviated words.**

In essays?

**In essays.**

And if you point it out to them, what's their reaction?

**They're like, 'oh, oh, yes, Sir, oh, okay, ja, sorry Sir.' Ja, it's just...**

And it doesn't change?

**This is also again like I'm talking the minority of the guys. Ja, no, it will change, it does change. Particularly if you say at the beginning when you give out the work, like no Mxit language or whatever. Or slang. Or you'll be punished severely.**

So if you specify genre it sort of stops it from happening?

**It does but I've done it once where I've said, 'Right, you guys can write an essay using slang and Mxit language.'**

Ja.

**And the guys went wild. They just... it was so much easier. They loved it. They were like, 'Yes, finally, doing something we love.' Instead of being so formal. But I don't know how healthy that was for them but... it was alright.**

And did, did you... sorry, what was the essay about? Was it something for marks?

**Ja, no, ja, no, not for marks, not the Mxit one. I just told them to write, write whatever they wanted. Gave them free reign, just write. And they did it. Normally if you say that you guys right I was a creative, I want a descriptive essay, a page and a half long on, something, the spooky forest, whatever it happens to be, you know, then there's 'ah Sir why do we have to do this?' Because then the guys have to think you know, they have to train their brain back into what we're doing. With Mxit you just tell, well, I just told them, 'do it' and they did it. You know, straight away.**

So do you think it's because they use it so often?

**Ja, and they're familiar with it.**

So it does well help them to be able to write in that language. Do you think that can be translated into school achievement?

**Um... it's hard again with English. You want to achieve, you want to be able to, to have a good grasp of English, not on some you know derivative of it.**

So what, a very sort of set, formal, standard English?

**Well, ja. Communication, being able to go out there and converse properly and be able to give a good representation of yourself. Which I don't think, you know, Mxit language is going to change much because you don't, you don't, I don't hear guys speaking much like g2g [got to go] or whatever it is. I never hear that, it's just when they write. So I don't think it's, affects that much with their speech and that but I think in terms of actually getting a better vocabulary and being able to express themselves better, then it does affect them.**

So it is harmful then. And then um can you think of specific examples where learners can benefit from being exposed to technology in school? Obviously there is the whole negative side of, um, you know like we were talking about their vocabulary...

**I think the benefits far outweigh the negative. Personally. Because I mean with the internet if guys aren't keen to go to the library to read they're much more keen to get to a computer, where they think it's a lot easier. You know, type into google the word 'Shakespeare' and you've got all the facts. The only thing then is you've got all the facts unguarded so... I think it definitely benefits them to have some sort of technology... on a limited basis.**

Um, what do you mean limited basis?

**As in we're doing this, uh, we're doing a something on William Shakespeare, the project or whatever. Go out and do it. Go out there and research it. Come back with your facts um... But you don't want to say for everything... we're doing parts of speech homework, uh, identify what these parts of speech are, based on where they are in the sentence. You know, it's so easy to just go onto the internet and type in there, 'what part of speech is whatever' or like 'walking: definition' and you've got whatever it is there, right in front of you and then they don't understand the actual functions of what's going on.**

So, so, so is it balance – so it comes up again to the balance of being able to actually think for yourself and then being able to do things like research.

**The balance.**

And then with any of your classes do you do research with them or teach them how to, like you were saying – all the facts are there unguarded. So sometimes it's not actually a fact. So do you guys address that with them?

**Well, we haven't yet no. Because normally what they're doing is, the only example I can think of is they've got their textbook, you know, doing a play and that's their source of information. We haven't gone beyond that to say how would compare this play with all the other plays you know. Which would mean they would have to go to either the library or a computer. So there hasn't been an opportunity that says. that's presented itself where the guys have to use technology per se.**

And so then do you, do you – ah, 'cos you obviously know a lot about technology and you're sort of involved in it, like you said you set up the AV room and stuff like that, so do you... read up on it or how do you get exposed to technology?

**Only through like uh, I don't know, only through the, the sort of the gaming. Like xbox and that. Magazines and internet and movies, watching... That's the only sort of thing that I ever do. I don't specifically go out there and say which is the next best laptop for this or whatever. I wouldn't be able to tell you what is the best laptop for example or which would be the most viable for teaching – cheap, durable. I wouldn't be able to tell you that.**

And then the teachers who do use um technology at your school? Do they sort of share ideas?

**Um, I know within the Maths department, I just overheard them talking in the little staff room and it's all like sort of centred around or actually the accounts as well, it's all centred around like computers with the excel or whatever it is. Bjut I haven't dealt with it first hand so I wouldn't be the person...**

So in the English department is there not much use of it?

**No.**

Okay... so most English teachers don't use, what, at all or sort of only for film study type things?

**Ja, well I, ja, it's myself and [name of other teacher] ja so we'd only use the AV room and then (indistinct) print outs. So ja I haven't used it in teaching, IN the classroom. Just sort of outside things that influence the classroom.**

And then what do you think the role of technology in language teaching is?

(silence) **The actual teaching of it? See, I don't really know too much about it but I mean I know that for instance on the internet you've got those quick uh quizzes where you have to identify for example different parts of speech with the pop downs and then you get your results at the end. Like quizzes. With that, it's fast, it's interactive, guys can get on there and can do it without having to write a sentence out, you know and then repeat the sentence, repeat the sentence or you know, without having write they're able to go on there and say right actually that's an adjective and then check their answers, no it wasn't, okay, let's do the next test. So I think with that I think it would be extremely good if you could get some sort of programme like that. But um I'm all for as well to get them to think independently, to write a fluent um grammatically correct sentence with no spelling mistakes um because you can tell a lot about a person by obviously the way they write and the way they speak. So I think it comes down again to just balance.**

So it's the drill exercises you'd recommend it?

**Ja, for that continual... for something like grammar, for that continual sort of drumming into you. I think that'd be brilliant because then you could just, there's no mess, you don't have to worry about it. It's just continual, click the answer, reveal your, click the question, reveal your answers, and then keep going try the next one. I think those are great. And it'll save a lot of time and a lot of effort on that side of things. But that's I think specific based um software or you know that obviously technology brings about.**

And then for other sort of things, like you were saying film study can teach them sort of higher order thinking – do you think that's the only example of when you can use technology for that?

**For language?**

Mmmm, or just ja for teaching English in general. Not sort of only the grammar side of it.

**Well, are we talking about having a data projector in your classroom and that sort of thing? Having a smart board? I think it does save you a lot of time and effort as well, you know if you can have that smart board there, you know you can write down things or you can have your prep work already in your folder you know. Then it's quick, you don't have to spend time writing on the board, you don't have to spend time rubbing things out or rearranging things. You know everything's there and your lessons are quicker and it'll leave time at the end for questions, homework, whatever, classwork.**

Do you think it would then require greater effort in preparation?

**For the first year. Ja, and then remember once you've got it, you've got it. Because I mean now you walk around... well, in my classroom I've got a thick file where you know you have to sort of, obviously everything's in order so it's easy enough now, I've been doing it long enough to know that we're moving onto this for the next exercise, but I think with the computer you know how easy it is to just access whatever. So once you've set up some sort of a foundation, some sort of a teaching plan, you're away.**

And so when you first prepared to teach the film study, was that, was it more preparation intensive and difficult the first time you did it compared to normal lessons?

**Definitely. Because then you have to start thinking of the questions, what are we doing, are we just watching it and then asking questions on it, are we getting the guys to actually think about it and how they'd change things? Do we show it in 20 minute intervals, or whatever, 10 minutes, have a break and go for it again? So I think um ja, it did take quite a bit. I've only done one, one film review.**

Was that this year?

**No, last year. I haven't done one... I normally do it in fourth term. Because we reach the end of the syllabus and then you know, we're able to move onto other things and then go back to revision.**

Okay, so you don't do it as part of the syllabus, it's a definite choice.

**Ja, well, it's my... I feel it's good.**

Okay. And so it was more preparation work than normal lessons?

**Only because it was the first time I'm doing it. I think like I mean the next time, I've got [name of teacher] old file and she did Harry Potter and whatever. And she's got about this much on Harry Potter you know. So I think once you've done it and you've prepared it then you're away. Like I said, with anything... I mean the first year of teaching without technology is a mission and the next year is 100%. So I think I do think technology would help but I just know it's not viable, we're not able to do it here. We can't do it here. I mean apart from what I said, outside of the classroom, that obviously helps with education... but otherwise it's incredibly difficult with no money.**

And so then why do you think doing film study in particular was a good idea?

**Again it breaks away from... For example, if we're doing *Romeo and Juliet* their whole idea of how they interpret it is completely different to uh say how William Shakespeare wanted it to be, some people. So they really struggle and then when you introduce them to what's happening on the screen they immediately like pick up on what's meant to be happening. And because say for example the new, well the newer William... *Romeo and Juliet* follows the play word for word almost, it helps if they can have their book and go, 'Okay, we're getting to this part where I didn't understand. I understand now.' That sort of thing.**

Okay, so that visual medium is there to help them.

**Ja and also it gives them a different uh like perspective on how learning should be. If we're doing a film study, *A Time to Kill*, and uh watching a movie and you can tie it to other themes. And say, 'Right, what is the theme in this you know, section?' And the guys are looking and they're able to understand what the theme is because, you know, when you, I don't know how they think, but when you say, 'Let's talk about a theme' the guys immediately think they have to pick something out like out of a comprehension. You know what I mean? So it obviously it does help them to well, it helps you to express what a theme is, tone, that sort of thing. So I suppose... um, it's just given me an idea as well, so you can use it for that. That sort of a thing.**

And what was their... was the fact that they might enjoy it a factor in your selection?

**Ja, definitely. You want to make it enjoyable for the guys in your class. You don't want to be this boring old teacher, same old thing. The chalk dust flying everywhere. So in the regard, it does spice up your teaching and it's uh, now, now thinking, looking into it more clearly, I think it is a good teaching aid to have. But again in moderation because how long does it take before boys are so used to you teaching with a computer and a data projector before they get you know the same old thing as when you were writing on the board? You know what I mean? So in moderation so when they see you setting up the data projector they're like yes, wow, doing something and it sparks their enthusiasm. Which I suppose is positive then.**

Thank you.

**You done, you sure?**

Yip.

**I hope I've been of some help.**

No, you have, you have actually been very helpful.

**Okay, good.**

And if I need to clarify anything then can I email you and just ask.

**Yes.**

### ***Appendix K: Transcript of interview with Ms Emoja (school 4)***

**Interview with [name]**

**English teacher: Grade 8 – 12**

**19 August 2010**

**Teacher's home**

Um, so basically you understand that this is for my Master's thesis and what I'm trying to discover is what encourages or demotivates teachers from using technology, other than issues of access. So what I've tried to do is find schools where everyone has some access to technology and then see what encourages them, what demotivates them from making use of that access.

**Okay.**

Um and then I just wanted to start of by talking to you about what you understand by the word, or what you consider technology to be.

**(silence) Oh! Okay – I must answer. Um, (laughs) well anything really. I guess it's anything that's manmade [sic] that assists you. Like a pen is technology. Um so there's different levels from stationery things to projectors, to computers, to ... stuff (laughs). Ja, so I think it's quite a broad term.**

Ja, no it's very broad. That's also why I want to talk about it before, because it's obviously a – I mean, where, when you teach and the kids write things, do you consider that to be using technology?

**No, not really. Not really.**

So if you narrow like the whole thing down, if you're teaching and you're using technology, what sort springs to mind? What um...?

**For me, it would be maybe using the projector. Not my overhead projector, the data projector.**

So using... and that's obviously linked to a computer.

**Ja.**

Okay. And TVs and?

**No, I've got access but I only used it once. It's too much effort.**

But you would consider it using technology?

**Ja.**

Okay, so is it cool if we just say, because I know technology is such a loose term, but the thing is, it's so difficult to sort of... narrow it down.

**What do you mean by technology?**

Well, um...

**Because from your questionnaire, it's like computers, um...**

And TV, DVDs, that type of stuff. Um and then I wanted to exclude overhead projectors, just because I felt they were very manual. And ja, I know it's a technology, like a book is technology but... I just wanted to exclude it. So are you happy if we just use that [the examples we'd discussed] as our definition?

**Ja.**

Okay. Um and then when you were at school yourself, did your teachers use technology?

**No. But in my last year of school we had computers for the first time, so... No, but we had an overhead projector (laughs) but like we just established... So no. Um we did, we did watch movies and stuff on the TV. Like a DVD, no, what's it? A VCR. So ja. That was the limit of the technology. And in terms of computers, ja, no we didn't have that.**

So what happened in your final year when they brought it in?

**We had to have computer classes. It was disastrous. But it was great in that at least when you came to varsity it wasn't like the first time you use a computer. That was really helpful.**

Why was it disastrous? What happened?

**Ummmm.... We didn't have enough computers, our classes were too big – well, no, look the classes were not big, they were like 30 of us in a class but we just didn't have that many computers. So it was a hassle to get everyone to sit at a computer. So you sat in pairs. And sometimes the whole period would finish and you hadn't done anything on the computer. So...**

So there was a lot of time wasting.

**Ja. But it's because of your partner, you and your partner. Like you are so fascinated by the silly things, you just want to press everything. You know what I mean (laughs), so it wasn't lack of teaching or anything. People were just like, 'Oh, wow this is so cool. Press this' and you miss... the point was to learn things like, then it was MS dot whatever it is, ja, so the point was to learn about these packages that have been designed to help you making charts and things, and, ja, stuff and writing letters. Do you mind if I do my hair while we talk?**

No, I really don't – it's interesting.

**Okay, so ja, let's see, it was... ja, it was just curiosity.**

And then did you have a special teacher for the computer classes?

**Ja. Ja.**

And then was it only used for those computer classes? I mean, they didn't try and say get you to actually write a letter say for English?

English was classical education – you must read a book and you must... book! Ja, anyway. (laughs)

Did you enjoy that?

I loved it. I loved English though. I've always... ja, I prefer, I like texts. I don't like computers. Um, but the kids I teach love computers and texts that are like smses and... You know I can't even sms in sms speak. I don't do that. I write in full sentences. I actually just cannot. So it's just that part of technology has just not got me. And I can't even use cell phones. Like if I want to do stuff on my cell phone – like we had a task once and I asked the kids to sms me like an answer to something. Um, I couldn't use it. And they had to sort of explain it to me. Well, it worked for the task but ja I'm not likely to use cell phones again because it's a mission.

So do you not like sms?

I do but look at my cell phone. I'm not going to buy a new one. Not that I can't afford it, I just, I don't get the... I can't use all those fancy things on it. So anyway and yes you can learn, I can learn, it's not like I can't. It's just – WHY? If I want music, I have a radio. Okay and I can get CDs if I really want music. I don't see why a cell phone must have that too. But that's beside the point (laughs).

And then you said you guys did film study?

Ja.

Okay. Was that for English or was it for other...

Oh um we watched *Anne of Green Gables*. I think it was just for fun. We didn't actually do tests or anything on it. Um ja we just, we were always watching movies and then you'd just discuss them. And talk about what can you learn about character and whatever. But it wasn't, it wasn't linked to particular subject.

So then what teacher did it with you?

Ummm, our class teacher.

And did she seem like enthusiastic about it?

Ja, she... I think, you had to have class period. So I think, I guess the teachers could choose whatever they wanted to do. And that was just one of the things she chose.

So it was an additional thing? It wasn't actually...

Ja no, it wasn't part of school, we weren't examined on it or anything.

Okay, so was... I mean because we've both taught and I know in my class teacher periods, I mean, I used to read to the kids and stuff but I would never have gone, I, it would never have occurred to me to do something like that.

Oh, I see. Okay.

So for you, was it normal that a class teacher would do something like that?

Ja, even like doing a... taking you to a nature reserve or whatever. Or looking at animals or... they, they had, it was very, they had a lot of lateral freedom. The whole point was, they just needed to be able to justify it. And you can justify pretty much anything. So they could do anything. It was just

**limited by their level of creativity and how much they were willing to commit to what they were doing. 'Cos organising... I remember one of our teachers took us to a, well, she brought someone to the school who was looking after cubs, lion cubs, and cheetahs and stuff so she brought them and she talked to us about conservation, just the importance of that. So you know what I mean? It's just personal choice.**

Okay. Why do you think she chose to do the films with you guys?

**I think um it's easier to reach young people with visual things. And you'll remember it more. And not everybody is very verbal. Whereas most people are visual. And it was also really easy for her. To get a video is easy. The TV is there, you know so just ja... so it's less admin and it's always a firm favourite with them.**

So you guys obviously enjoyed it a lot.

**Ja.**

Um, and then in the biographical questionnaire, you said you received training in using technology when you did your PGCE as part of the course. So I am assuming that's a computer literacy course?

**Um ja but it was specifically focussing on teaching, so they do things like doing mind maps... uh, what else did we do? We did mind maps, we did powerpoint presentations as part of the lessons, like how you use them... um like getting little short videos and stuff from Youtube, um to just make a point so um rather than, you know what I mean? Like using it to specifically drive a point home, ja. Um ja so it was more about skills. It wasn't necessarily this is a computer, this is how you use Word and spreadsheets and that. Ja, it's a great course actually.**

So you obviously you enjoyed it quite a lot?

**Ja, it's good.**

And then did you feel like, okay so you obviously thought it was worthwhile and did you think it was, was it something that was mandatory or voluntary?

**Ummmm, it was... no it was mandatory, you had to do it.**

And then um so, so were you glad it was included? Were you glad it was mandatory?

**Ja, ja.**

Even at the time?

**Ja, I liked it. I enjoyed it.**

And then when you did the course were you enthusiastic about using technology for teaching?

**Well I already knew how to do stuff like that anyway. Ja, it was useful. Ja, what I didn't know, what I had, what I didn't know at the time, which was new information, was software called free, creative something, I can't think of the name. And that allows you to do mindmaps that are interactive. So you can click on something and open it in a different place. So it's like they're hyper linked but the whole programme does it for you so it's not like you have to hyperlink. Which is quite cool, which is very useful, especially if you want kids to see connections and stuff but you don't have the paper and stuff. Ja, so there were some interesting...**

Were there any sections of it that you thought were a waste of time?

**Um, ag, they made us do this stupid cyberhunt. On AIDS. I was like, okay, AIDS is overdone, okay, um and then the way they designed the cyberhunt, it was like all the obvious places you'd go to get information, so it was really boring. But some people had never used a computer before, like teachers from other places, um were quite grateful because they hadn't thought of things like that. So it was useful for them but for ordinary um, look, by the time you have a degree it's third year and you're doing PGCE 4<sup>th</sup> year or 5<sup>th</sup> year or whatever, some things just get boring. Especially things like AIDS, that I've done on every single subject at some point. You know what I mean, you go to the same websites – Oxfam and you know whatever, United Nations and you know, the same, pretty much the same places to get the basic information and that information hardly ever changes. And then to do a whole project on THAT is pointless. Maybe they should have done something on alcoholism...**

So it had more to do with the topic?

**Ja, it was... they were trying to do something that all the kids would face. Make it relevant so you can do something interesting and exciting.**

So would you do something like that with your kids based on that experience?

**Um, I would but I can't because I haven't, like not all our computers work so if I really did have all 17 computers then it would be doable but ja I don't even know how many actually work.**

So did the course, did you feel like it taught you how to teach using technology rather than just an admin tool?

**Ja, ja.**

And then before you first taught, I mean you were obviously doing that course and your methods were...

**English and Geography.**

Um and you did your PGCE last, 2 years ago?

**Ja, two years ago, but I did it over two years.**

And then did you plan on using technology in your classes?

**Ja, yes, ja. But I was teaching [name of former Model C school] when I first started teaching, during my course and there is technology but you can't use it in every class. The most you'll have in class is like a projector and that's it. And then you'd have to make stuff up. For Geography for instance teaching waves or slopes or whatever you need a sand table so make that. Ja so you'd have to make other things. And then they have an AV room, which is where all the data projector stuff happens. So if you want to show a PowerPoint presentation, you'd have to take the kids. So it's often sometimes not available so you can't use it as often as you'd like.**

So when you were planning it, did you have specific...

**Ja, you had to be very specific. Orals mostly. Just to show videos for English.**

And then when you thought about using it you obviously thought about using videos for English and... or was it just a general idea that you wanted to use it?

**I don't understand the question.**

Um, like when you were doing PGCE and when you were first teaching, then did you specifically plan to use technology or did you just feel it would be nice and it was more of a general thing rather than okay, this is how I'll go about doing it?

**Um, I planned to use it – because I didn't want the kids bored. And their literacy skills are not that great. So technology's fun because then they'll want to listen to you.**

Um and can you remember the first time you used technology in the class?

**Uhhh, what's the first thing I did? I did a PowerPoint presentation – I'm talking about this year. Because I can't remember...**

Okay.

**This year I did, the first thing I did, let's see, I did a PowerPoint presentation. It was my first lesson.**

How did the learners react?

**Like oh wow, that's so cool. I was really cool. I was like, 'Thanks!' Anyway.**

So it was your first lesson ever with them and you did... okay. So they reacted positively to the lesson and then and to you.

**Ja. So that was cool.**

And then did you struggle with it at all?

**Um, no, that first time it worked properly. For the first two months it worked properly. And then our computers were taken, our laptop was taken by some department people and they put some funny viruses on it. Okay, they didn't do it on purpose but they were putting some stuff on it and they messed it up. And now it's a hassle to get it to work. I don't know what they did.**

Okay, so the equipment started malfunctioning?

**Ja, which is an irritation 'cos now it takes so much longer to set it up and make it work whereas before everything was... ja, pretty much automatic. Like it could read the projector, because they were bought together, the... and now they've added stuff and they've changed the settings on the computer and then different people now use it and it became popular to use the stuff so then more staff members were using it and then they don't really know how to use the computers so maybe... ja, it's just a mess. Really. Ja.**

So before it started malfunctioning and everything sort of going haywire, was it fun to use?

**Ja, and it was great because it always, it worked. Short of a power cut, but it worked. Whereas now, sometimes you connect but the cords are not right and then they won't read. You know I remember the one lesson, so I'd set it up, I'd used it two lessons before and then the next lesson I wanted to use it again, um, what were we doing? It was like a presentation, a PowerPoint presentation for *Animal Farm* so I did like a summary of the thing and all the themes and characters and whatever and so we started it, the two lessons before and the next lesson, you know like those, the connection between the projector and the laptop? That blue cord thing?**

Ja.

**Well, the cord with the little square thing, ja, whatever. And then all of a sudden it didn't read. And it's because people so many people use it, they fold it, so it's faulty for one thing and then now the Department of Education had loaded new stuff...**

The National Department?

**No, the Grahamstown one, the Eastern Cape. Um no, actually it's just the Grahamstown one, not the Eastern Cape because that's in Bhisho. Anyway, they loaded some Maths software and they messed it up. And they put like some viruses because some of the other stuff wasn't working properly anymore so ja. So after that it, sometimes you'd be lucky if it worked so like now, I mean I haven't used it, no I have used it this term, but I've only used it twice, whereas in the beginning, pretty much all my lessons, especially with the Grade 12s, were visual. Um whereas, but, ja, it was just so much effort. Because you didn't know if it was going to work and then you waste a whole lesson trying to get it to work. Because now you set it up and the kids are like, 'No, no, Ma'am, try, come on, try it just once.' Ah, anyway.**

Do they ever volunteer to try and help fix it?

**Ja, there are some kids who are computer literate who do try and help. Especially last year. My Grade 10s were more computer literate than the Grade 12s. Just, I think, the exposure level.**

Was that weird for you? That, that, I mean did they ever succeed in fixing it when you couldn't or that they tried to...

**Actually, yes, once, last year. And I don't mind that. I mean, young people always know more about technology than adults and that's okay.**

So most of your lessons went well and according to plan?

**Ja, because the technology didn't disappoint you. Whereas this year it hasn't worked that way the whole time, so ja...**

So when your lessons did go according to plan, did that push you to carry on using it?

**Ja.**

Okay, so because it was going well and the kids reacted well, you wanted to do it. And what about your lesson preparation?

**What, do you mean just having a lesson plan?**

Well, ja. No, but I mean obviously you plan your lessons – sorry, I wasn't trying to say you didn't...

**No, I didn't think that. I'm trying to understand what you mean.**

Didn't it take you longer to prepare, using...

**No, because um a lot of the stuff I was using was stuff I'd already set up.**

Okay – what do you mean?

**Like the PowerPoint presentations of the different books that I teach and... I set it up like ages ago. Some of it during my course because you had to do certain things for like English and theory and so it was stuff I could use. So no it didn't take me much longer. In fact, doing the worksheets, worksheets you do from scratch, 'cos we do have textbooks but they don't have the right, always the right level or pacing and stuff so one has to often set up their own worksheets and that takes longer than doing a PowerPoint presentation. Because you can just put all sorts of information in a presentation and you're selective about what you use in, whereas in a worksheet you need to be more specific. And you have to photocopy them. So I prefer PowerPoint. That's easier, because then the**

**kids just take notes from the overhead if you want them to take notes or you print them out a, a ja... But I, I don't do that because they must follow. And so I want them to write their own notes.**

Okay. Um, was it easier, if you think back to the very, very first time that you used technology in teaching, has it – okay, obviously you have issues with malfunctioning software -...

**Horribly. Which is hardly worth it.**

Ja, um, so besides that, did it become easier for you to use technology since the first time you tried?

**Ja.**

Did you struggle the first time?

**No. the only reason is, I knew how, what to do. Ja, but I suppose if I didn't... because I struggled after that, because of all this stuff.**

So how did it become easier?

**Um, you just know how long it takes, you know, the computer to come on and connect and things and the order you must do it in. so like you just get used to it. It's like habit. The more often you do it, you're more aware and you also know what to do when something happens and you know, like you just get used to it.**

And then how do you guys get access to technology at your school?

**It's in the office. You just book it.**

What do you mean, in the office? Like the laptop's in the office?

**Ja, we have one laptop, two projectors, so technically we do have two laptops and two projectors, a screen and speakers. So you just book them.**

Okay, and it's kept in the headmaster's office?

**In a safe.**

In a safe. Okay, and how do you book it?

**There's a piece of paper on the safe. You just put, say I'm going to use it this day, this time and then you just go fetch it. And then you just bring it back, sign it back in.**

Do you have to fetch it, what at the start of your lesson?

**You can fetch it like um whenever you want really, if no one else has got it. And ja but normally just before the start of a lesson so you can set it up so that the kids arrive to a set up thing.**

Okay, so you would mostly use it when you had a free before?

**No, I would set it up – you can send a kid, it takes like 10 minutes at most. Which is fine for a 45 minute lesson, you still have more than enough time.**

So it's obviously fairly easy to gain access to it.

**Ja.**

And then is it always there? You were saying, you know, that you sign it back in. Does it ever happen that teachers just hang onto it?

**No, it's cumbersome. 'Cos it's the screen, the laptop, speakers. Ja, it'd more of a hassle to just keep it. And extension cords and stuff. So ja, hardly ever.**

And then what happens if more than one person wants to use it at the same time?

**Uh, whoever got there first. And which is more urgent. So you can't, people don't normally book it like the day you need it. You have to book it beforehand. So at least maybe a day or two days beforehand so you must have thought about what you're going to do. So if people want it on the same day there's normally like some sort of negotiation or the one person will be like, well, I need it for my class and I'll, the kids'll send it to you after I'm done. And then you can set it up or whatever. That also just works fine.**

Okay, so there's no sort of idea of who's been there longer and who's senior.

**No, look a lot of the teachers don't actually use it. Ah, I broke my own hair, damn. A lot of the teachers don't actually use it. Ja, anyway, they don't actually use it (laughs) they don't use it. A lot of them don't.**

Is this because people have stooped using it more recently because I remember like you saying earlier that there were quite a few other teachers who used technology at your school?

**Ja. Um, a lot of those teachers left. Then also with this whole Maths software that messed up the computer, people have just been like, ah, it's such a mission. So now if people use it, they tend to want to use it after school. Because there will be a problem so (laughs) ja you will need a bit more time.**

So what would they use it after school for?

**To show stuff. Like videos or whatever for the kids. So ja.**

So then would they have extra lessons?

**Ja. This year I did that with my Grade 12s with the *Othello* video because I was just like no, it'll take so many lessons in class trying to make it work, because sometimes it works, sometimes it doesn't so ja I was just like we're going to do it after school.**

And the kids? Do they...

**They have to, they have to stay. It's like optional. So if the teacher's doing that and you're their student, you must do it. I mean obviously you don't tell them on the day, they obviously have to tell you in advance so you can plan for it and you have no excuse.**

Do they enjoy it?

**Ja. Well, ah, they enjoy it if it's not like (indistinct). You know, if it's like an hour or something it's fine. (blowing nose) But if it's four hours long, even... no of us would enjoy (laughs) an after school events that's that long.**

So there aren't that many teachers who use technology at your school anymore?

**Ja, there is the History teacher, new guy, he uses it a bit (blowing nose). And then the English department, we use technology all the time. Um, ja.**

Okay, so it's pretty popular in the English department?

**Ja and now Maths has this software. I've only ever heard then use it once, so I don't even know why they bothered but anyway (laughs). It's this new fancy software but they've only used it once and it wasn't particularly successful so they've never used it again.**

And then does school management encourage you to use your, to use technology.

**I guess I'd have to say our HoD [Head of Department] [name of teacher] would because he uses technology for everything, like all the time. He's like a techy dude so... And then we use it for administrative purposes. Like in terms of the English Department we have electronic mark lists or like your mark sheet or whatever. Everyone puts their marks on that one thing ja, so just to make things easier to manage. Um and then of course as an aid to teaching like for listening comprehensions, get them to listen to someone other than you, have music playing sometimes in our classes just 'cos you can. Um, um and then obviously videos and whatever like specifically for teaching, PowerPoint and that. So ja, HoD, definitely. But school management – they just want teaching to happen, they don't prescribe.**

Okay, so no one's ever said to you, you must do it or...

**No, they've, they've just said, 'There is technology.'**

So do you feel like they were supportive from that?

**Sorry?**

Do you think that they... I mean, they I mean obviously told you it was there and they made it...

**Ja, I guess. Some of the stuff – what did the school buy? The speakers, the school bought and the extension cords and all that.**

So they don't prescribe but they have, sort of helped you to...

**Ja, and it can be part of your um budget. Um every year you have to put in a budget and you can buy DVDs and whatever. So you can if you want, but traditionally most people don't, they'd rather buy textbooks.**

And you guys, in the English department?

**We want to be able to buy everything (laughs) so we're quite big, we're quite big on wanting to have everything.**

So do you guys then budget for technology stuff?

**We do, but they haven't passed it yet. So on paper, they are allowed to but we'll see if they'll give us next year.**

Okay. And then we spoke a bit already about age playing a role in technology and you were saying it's sort of natural for younger, people who've been more exposed to technology to...

**It's not really more exposed, just young people. Technology fascinates them. I don't think like a lot of the [school's name] kids have ipods or anything, but they care so much about them. They can even use them. Do you understand what I'm saying, it's not necessarily always about exposure.**

Okay, so it's interest level?

**Ja.**

And do you think it's fairly universal that your students, the younger students are all interested in technology?

**Ja.**

And so what do you think, gender and race and class can also play a role in technology and using technology?

**(silence) Well, class will certainly affect your access to it. Um, I guess it depends how you're raised in terms of gender roles and where you fit so perhaps there's a chance that it would.**

Do you see that happening with your students?

**I see boys more coming forward to talk about how much they know about technology but I don't think that means that the girls don't know anything. I think they just don't say anything.**

The boys are just more vocal.

**Ja, about technology.**

And then in your staff? Is there a difference in the genders of the people who use technology?

**Uh, English department... there's only two males, they use technology, and then the rest are women. And I guess the older ladies, teachers, it takes them longer, but many, many have used technology like once or twice. Um but for them it's really outside their experience. Say for the younger teachers, for us, it's more like we studied like that so I understand watching a movie as a teaching tool, it makes perfect sense. Whereas the older teachers are just afraid of messing up rather than thinking it's not a good idea, it is a good idea. Just they're not very confident.**

So they don't want to make mistakes.

**Ja.**

So when you were saying it takes them longer, do you mean it takes them longer to set it up?

**(sneezes) Bless you.**

**Thank you. Ah, I think it takes them, sometimes it takes longer to get confident to use it. Um and then like some colleagues we had to encourage them to use technology and even promise to set it up to get them to use it. Because they were just not confident to use. Ja so that's what I mean ja.**

Okay. And then do you think race plays a role at all?

**Well, all the teachers at our school are either coloured or black so I don't know. I think maybe the race thing is more related to class than necessarily race. I think if you have access to it, you're more confident in using it. If you don't have access to it, regardless of what race you are, ja, then you aren't confident.**

So at the beginning of the interview, you mentioned teaching using a TV, and then you said you wouldn't do it again because it was just a stuff up.

**Ja, it was too much hassle.**

What happened?

The TV, which is the staff room, is also, we can use it, us teachers, so it had to be moved to the venue. So we were using one of the Science classes, no weren't, we were using [name of teacher]'s class, so it had to be moved to [name of teacher]'s class and set up and then I had to bring a DVD player from home because I've got one um, no a VCR player not a DVD player because it doesn't have a connection for... it's really old so it only has the VCR one. And then, you connect it – that took ages. And then the channels weren't working properly, I don't understand why, I don't understand old TV technology 'cos now you just stick things in and they work. Ah, so it didn't work. Then we had to go and call someone to come and sort it out. And then they found it was like the cords, I'd used the wrong cord and put it in the whole hole. Then we had to fix that and then got the movie, we finally started watching it.

So because, like because of the length of time it took you won't do it?

**Ja, I won't do it and also I mean, moving the TV – it's not light. (coughs) Excuse me. And then you have to carry it and ah no, it's not worth it. (laughs)**

And so when you show videos and stuff do you, do you do it on a laptop?

**Ja.**

And then can they all see?

**No, I don't do it on a laptop, I do it on a projector.**

Oh, okay, okay, sorry I forgot you guys had one of those. Um and can think of specific examples actually of how learners benefit from being exposed to technology at the school?

**Well, a terrible one is when they write answers in their exam and they use quotes from the movie of say *Othello* instead of texts. Or you show them a modern version of *Romeo and Juliet* and they start talking – I did this last year and this year- then they start talking about guns instead of swords (laughs). So they remember the visual.**

It's easier for them, obviously not always in good way, but it's easier for them to remember what they see on screen.

**Ja, it is.**

And what else?

**Um... well, I guess you can't really tell if they've remembered unless you're testing something. So for me that's a good example even understanding improves, when they talk about those things then they use what see on screen to talk about. Especially if the actors are really good, then it shows the character. Then it's easier for the kids to get your point.**

Um, oh, do the learners in your school or in your class ever have sort of hands on time with technology? Like actively using the computers themselves?

**Ja, my Grade 12s. They do computer. Ja, okay, there's programmes at school, you can sign up if you want to do like a computer course. And then you have a proper computer course where you learn how the computer works and you learn how to use Microsoft software. Um, the whole suite. And then for my teaching, like for poetry. I teach them but then I give them they have to go online and do like worksheets and stuff online. And they do it themselves, I'm not there. So ja.**

Um who does the technology course with them?

[Name of teacher]

Do they have to pay for?

**Yes, but what they're paying for it's paper and stuff.**

So it's not obviously... is it expensive?

**No, it's like 20 bucks, that's all.**

And he set that up?

**Yip.**

And he does it, what, after school?

**Ja.**

Okay, so it sounds like you guys have made a massive effort to bring technology into your school, so how do you guys like keep abreast of what's going on? Do you read journals on it or, you know, have you been exposed to that sort of...?

**Not now that I'm teaching and not studying, no. Then I'll read education related things. So no not like journal things. Except for maybe *The Teacher*. Um ja so no it's very different. And it's normally for like lesson plans and worksheets and stuff like that, just to keep abreast of stuff like from the Department of Education because they've got like cool websites where you can get documents and stuff.**

And then within your um department? Do you guys talk about using technology and share ideas?

**Ja, ja. We do.**

And with your friends? I mean, like if you have friends who are teachers or even people who aren't teachers, do you guys ever discuss it?

**No, no, I think it just... happens. Like if you've done something amazing with your class and it worked really well, then yes, you'll talk about it. But it's necessarily always linked to technology. And it's not top of your conversation. You know what I mean? More of a side sort of...**

Okay, and what do you think the role of technology in language teaching is?

**I don't know. I think the point of language teaching is to help the kids acquire a language. Um for instance teaching poetry on a cell phone is easy. And that would be an interesting way to get kids excited and you know they would most probably never forget that poem (laughs) because it was on their cell phones. So I think the point is to create like an enjoyment and get them to acquire some sort of skill. Whether they specifically like a language skill or getting them motivated and inspired enough to just remember what they learnt so I don't know... It's the acquisition of skills and for inspiration.**

And then would that, did that play a factor, did that factor into why you decided to teach using technology? Because I mean, it does seem like it was a very conscious decision.

**Ja, because I want to be cool. You want to be cool, you want the kids to listen to you.**

So that for you is a massive sort of strategic...

**Because look I make kids work hard. So I'm not going to be one of those fun teachers. You'll never come into my class and do nothing so that does not make you popular amongst a generation of kids**

**who are so used to not doing anything. Um, if I'm showing them videos and doing visual things, they begin to think it's not work. But it is work. And they're a lot more relaxed about it.**

So do you pretty much use technology every day?

**I try to. Well, no, not every day. It depends on the section of work I'm doing. So stuff like grammar I can't, but if I'm doing literature then ja.**

So it's also content specific?

**Ja grammar, I haven't... but there's some cool, like verbal things that you can do but the problem is that the kids are strong verbally. They are not so strong in terms of written work. So I can't be growing their oral skills, I should be growing their written work. And so with grammar I focus a lot on getting them to write stuff and read it out, write stuff and read it out. Anyway.**

And now that you haven't been able to use technology all the time or easily have you, have you found that you struggle to teach certain sections?

**Ja, no I've got a film study coming up, I'm planning it into my curriculum in like a week's time. I wonder how that's going to work because I can't make the kids stay after school to watch the film. What am I supposed to do in lessons when I actually have them? So I don't know, I guess I have to figure that out. (sighs)**

So it's becoming daunting?

**Ja it's becoming an irritation. The easiest way is too just a laptop and take my laptop, because it won't have all those problems. Anyway.**

Would you do that? Like you know the government has that laptop initiative drive?

**I will not pay R6000 more than I have to. I worked it out. Um, so I wouldn't do the government initiative thing, I would just buy one.**

What's the thing with the government initiative? Does it cost more?

**Ja, it costs more because you pay in a ridiculous, like so little, like R200 or something a month. Can you imagine how many years you'll pay? (laughs) I was like, that's ridiculous.**

And so they don't give you money?

**What?**

For the laptop.

**No, you pay for it.**

Oh, I was under the impression that they sponsored it.

**No. I think maybe the nice thing is that you can get it even before you pay for it, so I guess they must be giving the supplier something to say, 'no, you'll get your money.' And then every month the teachers put in R200 or whatever. But you do, you have to pay the full R1100. For the laptop. Can you imagine how many years it'll take you to pay back? It's ridiculous! Anyway, it's good idea and that's the point – lots of teachers need access and they will have access from that first month they start paying, which is good.**

So are there any sort of other things that would stop you... I mean, apart from it being a hassle now, do you, do you still strive to use it?

**Ja, I have to. Because it's part of the planning. You have to, for listening comprehensions you do, I have to take my radio in because that's just the way I planned it.**

So because this is the way you planned it, it pushes you to carry on using it?

**Ja.**

Whereas do you think if you haven't specifically planned it you would be a bit more...

**I don't know, I don't think so. Because to be honest, September is a nice time to do film study with Grade 10s, because you've finished all the other work, Grade 12s are writing – because I teach Grade 12 as well – can you imagine the amount of free time that you will have? Just sitting watching movies the whole time (laughs). It's the best!**

So also it frees you up.

**Ja. A lot! And you just have to set it up and stuff like, the things you teach are really quite simple. Like shots for instance, like what do they call... and then you teach synchronised and asynchronous sound or whatever. Um... you know what I mean? Those are simple things, you're teaching a tiny concept in like a whole period and kids are watching something visual and they'll remember those words because it was attached to some great movie they wanted to watch or whatever.**

So do you um change your movies?

**Ja. This year we're doing *Motorcycle*, what's it called? *Motorcycle Diaries*. Which is interesting, it's not a South African so... anyway, the issues are the same. Like the issues of poverty will be something the kids will be quite familiar with but I think it makes them less selfish to see that they're not – this whole, everybody owes me mentality, is not universal. Because there are other places where people are poor and they have no illusions about the world owing them. So ja I chose my movies based on, I want the kids to see that the world is bigger than their experience. That there is more to the world. So I did *Into the Wild* last year and that's completely out of their context, yet the issues are the same, about trying to find your identity.**

Sorry, it's a bit off topic but I don't know what movie you're referring to.

[Brief plot line explained, not transcribed. Basically it's about a young man who shuns all material goods and Capitalism and tries to survive in Alaska over a winter (to find himself through nature) and dies]

So technology can be used to teach them big concepts that, I mean would you not really try and approach it without using the technology first?

**You can approach it, but you just have to be selective and I think literature, that's the point of literature, to teach things like that. And you can do that with books as well. And short stories, get them to read something profound. Anything really um that looks at the lesson you want them to learn and then get them to try and discover and um relate it to their context. Ja, I think that's why I love literature, because it's so broad, you can take anything and make it literature. It doesn't have to be traditional.**

Do you think it sticks in their head more if you do it through film?

**Ja. Or amazing short stories. I think longer texts are difficult for them to remember because they're not used to. I mean they don't read. The syllabus has changed so much that they don't, like in**

language, they don't read very much in their lower grades. Um and so to tackle a full text, and the first time it happens is in Grade 10, which is quite late, um by then you've got readers and you've got those who won't be readers and it's unfortunate but it's the majority, so if you're trying to get them to read a book a whole book, in Grade 10, it's actually quite a mission. Whereas if you show the book in film, they're actually more likely to remember it.

Thank you.

Pleasure.

## ***Appendix L: Transcript of interview with Mr Ford (school 4)***

**Interview with [name]**

**English teacher: Grade 8 – 10**

**30 August 2010**

**Interviewee's home**

The first thing I wanted to talk to you about what was what you understood by the word 'technology', what you would define technology as.

**You mean in a teaching context?**

Ja.

**Alright I think it's pretty much what you put down I think...**

In the questionnaire.

**Ja, not only like the overhead projector but we're also looking at recorders, like tape recorders or data projectors and ja just anything really that could assist. Um you know making the work easier or more understandable for the learners.**

And so then would you include like book and pens and pencils as technology or not?

**Well, I suppose, you know when we speak of technology we don't really add books there because you think maybe ebooks would be technology but not, not, as opposed to your traditional books and pens obviously you know couldn't really in my thinking be considered as technology although they are products of technology.**

Okay. And then when you were at school, did your teachers ever use technology to teach you?

**Oh, it was such a long time ago!**

If you can try and remember.

**Uh, I think the closest that we would have come to technology would have been a tape recorder. You know, that would be maybe in a music class, we would listen to a song or something like that. I mean, other than that... I did my matric in 1972 so you can imagine. There wasn't much in terms of teacher technology available at the time, other than ah chalk and talk.**

And so they didn't use TV or film or anything?

**TV wasn't in at the time. We watched the odd movie you know with the, uh the Department of Education would send films around you know on ummm maybe traffic laws, traffic safety and the if I can recall others were about substance abuse. You know they would send those around. 16 millimetre ah film at the time. You know those ones that work with projectors. And then we'd all go into a big hall you know and we all watched that.**

Okay. So you wouldn't have watched anything for English or anything like that?

**No, no. Not specifically for English as a language or subject.**

Did you enjoy those films when they came out and you guys watched them?

**Ja, ja, for, for, for a number of reasons. I mean it got us all together in a big hall situation. And you know there weren't always enough chairs so we were standing up at times and it was like semi-dark or dark and you know, you're all very naughty being there. So you watched the film with that whole feeling of it not being like sitting in classroom maybe, making it different. But I mean there are some things you could remember from those movies at the time, black and white mostly.**

Okay. And then when you were doing your teacher training, or even more recently if you've done refresher courses or anything, did you ever plan on using technology in teaching?

**Well during my teacher training, the technology that was available then was the overhead projector. And that became like the main tool. And that's also the one I have been using extensively you know until recently. And how recently is recent? Say the last five years you know that I've made more use of um computers but not as a teaching tool as such but, you know, to prepare uh you know stuff and to do my admin on. And then like say in the last two years, I'm dabbling now in e-learning but it's not in the English direction. I'm more into technology teaching.**

And then because the technology teaching changed quite a lot, I imagine, from when you first did your teacher training, did you then have to do any other courses?

**Okay. You know most of what I know I have actually acquired myself as you know buying a computer first of all and then making the mistakes and learning through them. So I haven't had like an official computer literacy course as such but I you know have used the computer extensively to assist me in part-time classes at Rhodes, which I do mostly on PowerPoint and then um uh very recently they have exposed us to e-learning. So what I am busy playing or toying with now is software where you actually prepare lessons, you know, and part of my honours course included ICT so it was ICT and Technology learning. So it's like... it's only recently now that I'm really becoming fairly adept I would put it you know at turning lessons into presentations.**

So a lot of it is trial and error?

**Yes. Yes and like you, with technology every day is something new. You know something that you didn't notice previously.**

Um and so then you were saying that you mostly use technology in teaching Technology, but do you also use it in teaching English?

**Not that much you know. I would you know with the odd listening exercises, I would play um like a recording and they must listen and after that I would give them like a questionnaire you know with questions that are based on you know what we played. Then um now and again for instance now with one of the poems where it was said that zebras had a dove like sound and I actually managed to get that voice clip so I was able to play that. And now and again I would bring in stuff that I would think would be abstract to them. Especially with poetry. And then just show like short video clips on them but it's not like I'm doing what I'm doing with the technology lessons, incorporating technology into teaching. So I just use it as a crutch every now and again not as you know something like I prepare**

lessons based on using technology. Uh, what I also do and this is not you know, regularly. With the oral ah like say just the other day we had a talk show situation so I actually you know did a video recording you know of that and they found that they actually enjoyed it very much. So then I put it onto a CD and they all wanted a copy of the CD you know because it was quite fun projecting it back to them. And I think that could actually be a good thing really if you could do that because people when they speak they don't see themselves. And it was funny you know to them but I also think they learnt a lot from that exercise so it is something that I should really consider doing more often. You know because I do have that technology to do that – a videorecorder and playing it back and people could look at themselves and listen to themselves at the same time.

And then can you remember when was the first time that you used technology in teaching English?

**If we discount OHP?**

Ja.

**That would be, say five years ago.**

Okay. Can you remember what the lesson was about, what you did?

**That was one of them where I've actually for oral had them do a poem, that one... what was it? Two roads diverge. And instead of reading the poem I would have them acting it out you know and they would come... you know go into groups and each would say a portion of the poem. There was a lot of acting first of all you know over-performing really because they know... But it's funny really I still get some of the kids around and they can recite that poem. You know based on what they at the time, so it was quite a novelty. And then off and on, trying to bring ah maybe you know mostly with poetry really, bring in like a river and a bridge, um like Thames river in London and you know trying to show them a if we you know movie where they say say for example *To Kill a Mockingbird* where they say, you know that this happened in the USA. You'd be surprised how many children you know in Grade 12 have no idea where it is and you know what the Southern parts look like and ja.**

And so the first time that you used technology in your class, did, you were saying that the learners really enjoyed it because they can still remember it today. Was it more difficult for you to prepare that lesson and to execute it?

**Ja, I do say it's not really more difficult but it's just not in my stride. If you have to say do a certain number of things over a period of time uh then you tend to take short cuts if unless you have these things all prepared then it could make your task easier. So this becomes almost an add on thing, it's over and above what you do. And I suppose that is one of the put offs about it.**

Ja that it's extra work.

**It, it ja because you need to plan more. It's not a question with me of showing a movie. There should be reason you know why you're doing it and where it's like easier to maybe just stand over there and talk to them, you wouldn't have to set up. And with us it's also a question of access. We literally have one uh laptop and oh recently we acquired a second data projector and the idea is that everybody should have access to it. Now fortunately there's not a huge demand. Is ay fortunately I must actually say unfortunately. Because if you have 34 teachers all wanting to use this technology then you know you'd have a problem with it and then um it's a question of time setting up. You know you have one class coming in and another going out, so I've just had technology now, then my Grade 12s have walked in. so now in between that time to move from one to the next, it's actually just easier to, to be not using technology then.**

So do you feel like it has become easier in, the more used to using technology you become, do you think it then becomes easier to use it?

**I would definitely say so, yes. Um especially when I think of um um you know these tutorials that I'm doing. It's almost like if I don't have PowerPoint, I'm not going to have a lecture so to speak. So I lean very heavily on that. But normally I only teach [at Rhodes] during school holidays so I have a lot of time to prepare. And that makes my life so easy you know when I get there, it's like, it's like a real structure's not a good word but you know having a PowerPoint you know putting something on there and talking to it and interacting with the people and then just going to the next slide, you know it makes you feel more confident and then you can embed other things into PowerPoint too so if you've got a video clip or something you could always fetch that and project it also, so yes I think the more you work with it, the better you become. But it is not really something I have given much thought to for my English uh classes, but more for my technology classes. I use it far more with them.**

So preparation time is obviously quite a big factor then?

**Yes, but once it's prepared, it's there. Um I see with my technology. Once I prepare a unit it's going to be there almost forever so you've got your you know everything cut out for you, it's there for you. So it's a question of the preparation of once it's there, it's there. And it's easy to edit it also. If something changes all the time, you just take something out, put something back again, without writing it out. It's so much easier.**

So you were saying that used an overhead projector until about 5 years ago and then you started switching over.

**I still use overhead projectors but I mean if you could, you look at your overhead projector and you look at your laptop and data projector, you would ask yourself now why use overhead because you can do the same thing with your data projector. You can actually bring up those texts. You know.**

So is it just that you guys got access to a data projector?

**When you ask that question is it because we have access to a data projector...**

Ja, that you decided to switch over.

**I would suggest that, yes. Because if we didn't have one, I wouldn't have bought myself one. And after teachers who are using the data projector in the school, they are mostly in the English department. And now there are two. So you could think you know of a situation where you wonder if you'll be able to have it. Uh you know because ah you'd prepare yourself anyway uh in the in the ordinary way in case it's not available.**

So you end up preparing two lessons sort of?

**Ja, unless you know, well before the time say you want it.**

Okay and then how do you go about gaining access to technology?

**To?**

To the technology. Like if you wanted to use a data projector, how would you...

**Ja, it's, it's being kept in our strong room and it's got a register, you sign it out.**

And then if you do sign it out, is, will you definitely be able to use it or could someone else sort of take it before you?

**Well, that is a possibility but we do have a little roster that you know you will say you took it on the first two then you will know somebody wants it in the third period, so you just make sure it's back.**

Okay and do people stick to that roster?

**They do, because it's not being used that often. So it's like... yes.**

You were saying most of the other teachers who use technology in your school are English teachers.

**Yes.**

Okay and then other departments?

**They're not really that. There was one guy but he's left the school now during the course of the year, who actually also enjoyed using the data projector and he was accessing the lessons that you know the department made available on on on the laptop that they gave to the school. It's funny you know that um people are not really interested in using it for the lessons. Mmmm and partly I think it's because the technology is new. Because if like somebody else wants to use it they have to call somebody else from another class to come and help. So that has been lacking too in our situation that we haven't really empowered everybody to use it. So the few who knows how to use it, they will use it.**

Okay so because you didn't, you said that you hadn't received any um...

**Formal training<sup>18</sup>.**

Not. Um, and so but you have received training from Rhodes hey?

**Personally yes.**

But not any from the department [of education]?

**No and then there would be. Okay in my particular case I've been on two um say workshops really on e-learning. But that would be me.**

Okay and that would be through Rhodes?

**No, no through the department.**

Okay, and did you enjoy them?

**Yes, I actually did.**

Okay was it aimed at teaching you how to use technology in teaching or was it just aimed at just teaching you how to use technology?

**Well, the, no look the both actually but in the one it's a case of preparing, it's there's software that they have where you prepare lessons with it. I just can't recall what the name of that stuff is now. But um you can actually prepare lessons, like build modules with the software and we had to do these and we were presenting you know. The group of us who attended this, we presented it and a lot of people were quite impressed you know with the software. Uh and then the second occasion was another product that they brought in, I think it's called *Reactivity*, where you actually um could make simulations and embed that into your software that builds the lessons. So those were the two occasions that I attended. But when I say, on the one hand, it's developing software where children will be sitting one on one with the PC and you could also develop software where it becomes a tool for the teacher to use. Where you could use the data projector and then address the class. 21 26**

---

<sup>18</sup> It seems that he is referring to formal computer training for all staff here. So the school did not receive any training, but he did personally.

And so those one, those two that you went on, was that sort of more for one on one with the student or was that...

**The software's designed for more one on one. And there I had you know my reservations because ah you know with this latest White paper they thinking, and I mean 2013, imagine, thinking by then that all children will have access to a computer. Which to my thinking is going to be impossible, so I would rather say let's go the other route. You know, we're now, they've got this thing where they want 30 computers per school. That means that there's going to be one room at the school, has to be accessed, now we've got more than 1000 learners. That to me is not going to work. So I rather suggest for the same budget they could have 15 laptops and 15 data projectors. And train the teachers to use it as a teaching tool. But I'm still working on that idea.**

Were you enthusiastic about going on the course?

**Yes I was I mean I'm interested in that.**

And did you feel like when, when – you know sometimes you go to a course and it's not really what you expected or um, it's not what you thought it was going to be about, was this the case or where you happy with the way it was presented?

**Ja, I think I was. I mean I, I, the thing is with any workshop situation you know you have your expectations and but I am primarily interested in the software and I was lucky every time that the software was loaded onto my personal laptop so I can play around with it you see. So yes maybe some of the stuff that they talked about there wasn't really relevant and they could have done it another way. You know we all feel that we could do this better. But ja I've learnt from those situations and like I've said, you walked away with the software and then you have all the time in the world to train yourself, you know once you got that.**

And so that was obviously quite a big thing that you got the software that you can now use. Do you use it in your teaching?

**I do.**

And then you were saying that most of the other teachers who use technology in your school are in the English department and then there was one other guy who left. Um what do they use technology for to teach English with?

**The rest? Um, I think that they they mostly use OHP and then other than that I'm not really knowledge. I do sometimes visit their classes and they would be using their books and the chalkboard. Um you know. Uh but we speak of electronic things, not much. Other than recording marks and stuff like that.**

And then do you feel gender, age, race and class play any role in using technology?

**Well it shouldn't really play a role given a fresh look at things. Uh, it could be argued that maybe boys would want to be more involved in technology than maybe girls but I haven't really found that because with the computer classes that we're offering, for computer literacy, there are more girls than boys. You know so... Age, also depending on what range you are talking about. I would qualify to be very old, okay I mean, 55 is not young anymore. But normally my generation would not be into the technology as such. They would be more comfortable with you know the stuff they were used to. So I'm not saying I'm an exception. It's something I was forced to do because of what I'm doing uh to become acquainted with this. If we speak of school age, then between Grade 8 and Grade 12, I find that the Grade 8s are more excited about joining our computer classes and they keep on nagging. And your Grade 12s are worried again. Because they haven't had anything you know and they're thinking going tertiary that at least they should have, at least some basic knowledge. So the interest level is high with the younger ones and I think with the one of is anxiety of going into the world**

without any computer experience is the Grade 12s. But in between it's funny you know we don't really get many children in say Grade 9, 10 and 11 wanting to join the classes.

Um and then do you feel like is there, if children are younger they're better at using technology?

**I sincerely do. Because I mean things that I would find difficult in say the manipulating of the technology, to them it becomes second nature. Especially you know with cell phones. How they use cell phones where I just use it for calls and now and again sending messages. They are actually using their cell phones as little computers and they are quite adept. If I look at the younger generation even using laptops with the the pad [mouse touch pad], the way they manipulate it, where I am still attaching my mouse. You know I can't work with... So I would say the younger they are exposed to it the better and then the mechanic aspect of it is not the issue, you know where older people are almost scared of touching the keyboard and the mouse. These youngsters don't really care you know, they are quite fluent in terms of you manipulating the technology. So the sooner you expose them to it, there are quite a few things they will be able to teach you in end. Because I only learned what I want to and they are going beyond that.**

And then do they ever help you to use the technology in your class?

**Come again?**

Do they ever help you to use the technology in your class? Like if for example you want to set up the data projector, would they ever help you to do it?

**You know not the way one would have you know um how can I put this to you now? That is not part of the way I set up. Um you know, I would be doing almost everything because I'm acquainted with... but I would ask somebody now and again to log off for me, if you know that person has been to the computer literacy. But I mean they are not exposed to computers in that way where I am actually able to sit down with them and say now you plug this in there and wherever.**

Do you think that's how class has affected their use of technology? That, because they don't have access...

**How...?**

How... is, is that maybe an example of how class affects the use of technology?

**Well, I suppose class in a sense of a.... um, of, of say the political aspect, socialism, gender and that, I wouldn't really say that. Um depending on what one understands by class. But if you look at the school and resources, then yes. Um we're not talking so much about class in the school situation, but more access to resources. And how exposed they were to that could have you know an impact.**

So do most of your students have access to resources or not?

**I wouldn't say most of them have and I suppose you could relate that to you know poverty in a sense. You know if we speak of what is available at home. You know that the only technology they would be familiar with is cell phones, because most of them have cell phones. So it's not a question of being able to manipulate it, it's a question of having access because you know I don't think they will have a problem understanding how it works. So perhaps in another school there would be more uh in other schools yes especially when it comes to the data projector I'm using. It's confined to the teacher setting up and doing it. It's not... even if they were doing computers they wouldn't be able to set up uh the data projector for that matter. So I don't know if you would call that class in terms of where they come from, their income uh bracket, what is at home for them and whether what they have at home that in the class is what a continuation of what is at home. I suppose very few would have that facility.**

And then do you think that learners benefit from being exposed to technology at school?

I would want to argue yes. Um, there are some things that especially if we speak of now having access uh you could simulate things in a classroom situation. Even Science, if you don't have Science equipment, you could screen that. You know I have this thing of 'Bring the world to your classroom', you're able to do that. Instead of talking about something, you're able to bring that thing to the classroom and as much as it is a case of something being on a screen, it helps with the conceptual understanding. You know to see something that you've just seen a word of, does help. Although it's not the best, not better than actually being practically engaged, but if you just use words and children have to attach their own meaning to the words, you will come up with you know different understandings. Whereas with the data projector, ou could bring that thing into the classroom and everybody would have the same understanding of that. So yes I suppose it does help, it can help.

Do the kids get excited when they see the data projector and everything on?

They do, yes. And because it is a novelty, because it's not something that is being used regularly. So it's quite, something else when you do that.

Do you think they pay more attention?

Later on, yes. Ah initially, now it also depends on how often you use it. Because now in the beginning it's like looking around at thing and looking at the machine itself and not really looking there. And then sometimes focusing on you know not the stuff you want them to focus on. So my thing is I don't really like putting movies up, but more interactive situations. Where you start something and stop it and the you interact with them to make sure they are following and then switching it on and then moving on you know. And and the I think in such situations that video clips should not be longer than 3 minutes. Instead of putting, letting them watch a whole half an hour movie or something.

And what about film study? Do you do that with your classes or not really?

Ja, that's quite interesting. We... I do. Actually I haven't thought about that. Yes, I have done film study. It's magic with the film studies where you actually you know you could go into how the film was produced first but then you also go into uh um... What I did was first do some theory. You know producer and all the things you find um, the people, the camera angles and all that. So it becomes quite exciting when you start showing the film. Because I also have a thing where they have to predict. So I tell them, this is a plot and you know start this is what happens and then they have to predict this is how the thing is going to end. So even before you show them the film, that they can go into writing and say what they think is going to happen next. And then when you show it, you know some of them will see no, it didn't go the way they predicted but no that helps with that. Most definitely, all those things you speak of with the theory, with the film study you know you could apply that.

Because they get to see it in practice.

Ja and then they look, watch the film differently. It's not entertainment now, it's studying. So what they need to look out for you know, camera angles, you know with face being in the face and why and eerie music, you know, or how is the music, does that assist with... you know so they're looking out for that and so you would say to them next time, it's not like you're going to study a film when you're watching but um after the film there are lots of words that are coming up – do you ever look at them you know? Recognising who this is, who did that, whose voice was over that voice and so they would be looking at films differently I suppose than when they would be watching for pleasure.

And then um in the school community do you guys talk about your use of technology? Do you read educational journals on it or anything?

You know at the school as a staff? I suppose we do, yes. But that is um like those of us who have done it would share with the rest. And I have on two occasions actually taken the staff through what the

department has made available. Or four lessons but that's where it stopped really. Most teachers use it for their admin, which is at least a step.

And do you feel it's en...does your school encourage you to use technology?

**Ja well that's difficult you know because who is the school you know?**

Um well school management, other teachers...

**I suppose yes and no, you know. Because it's not as if school management is suggesting to everybody, guys we have to become computer literate and we have to do this but if an individual came along and said he or she would like to attend a workshop on this, nobody's going to stop, nobody's going to want to stop them. But there's no overt sort of attempt to get everybody um you know at the level where they can actually use what is available at the school to us at the moment. And I suppose that is where the demand is going to start. If everybody at the school is empowered to use the stuff, then you will have a beeline to the equipment and then we will be forced to acquire more. But now I mean two seems to be enough because they sit most of the time, not really being used.**

Mmm. And then what do you think the role of technology in language teaching is?

**Ah, well, first of all it is going to be assisting the teacher you know in teaching. And if you know you could have a lab situation where there is a one on one thing, you could have the learners developing at their pace and not at the pace of the teacher because there are quite a few interactive things available to them. The one that I'm thinking of now is *Knowledge for Africa* where you know they've got a very nice situation where with the poetry there are questions, you try the question yourself, you know, to answer, and if you can't then they ask you 'need help'? and then you get the help that you need. So that would be like a one on one situation where they could go to if you had enough technology available.**

**Um technology also in terms of resources. If you get stuck you know for information on something as the teacher you could go you know retrieve that, it would be available to you and then you could use it in your classroom. So technology in that sense of accessing information so ja.**

And do you think as a teacher it's difficult for you to use technology? I mean obviously the one on one situation can't actually happen because you don't have that many computers. But do you think it's more difficult to prepare the lesson, more difficult to carry the lesson out?

**I don't think so you know um what I can tell you from experience outside the school set up is the difference between having a PC to a student and having a presentation on overhead. Is that with the overhead pre... say PowerPoint, with that presentation you want everybody to be watching one thing. And some of them do doze off. Whereas with a one on one situation, you know they are so worried about that thing in front of them and to try and get that thing to be communicating with them is you don't get that thing where people are dozing off uh during a session. So that would be a good situation if they all had PCs for themselves. And in our situation at school, we can only accommodate 15 learners and our classes average on 40, 45, even more. So if you were going to use that, in a 45 people group, you'd be looking at at least 2 groups. So what do you do you know with the third 15? So you would have a difficulty in that, unless you had ah 45 PCs. Because you don't want you know 2 children to a computer too you know. Anyway, ja, in that sense, it is difficult.**

So them being able to use technology interactively. Do you think that it's better than just the teacher using it?

**I think ultimately that's going to be the best. That's what we're going to be striving for. But I'm thinking now in the period between now and then, it would be better to empower teachers to be using it as a teaching tool until some time when we reach that point. And also you know when we do use it as a teaching tool that it is used interactively and not as a show here you'll switch on the thing and you'll go sit back and we all watch ah ah a movie or somebody else teaches. So it must never**

**substitute the teacher. You know it must be something in my thinking where there is practical engagement of learners. So you show a little bit, stop, get them to do something, show a little bit, like that. Otherwise you'll just have movies, you know people watching movies from one lesson to the next and that's not going to work.**

Okay, thank you very much for your time.