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Teaching African literature and access to digital media and devices in Gauteng schools

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Teaching African literature and access to digital media and devices in Gauteng schools

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A thesis submitted to the Wits School of Education, Faculty of Humanities
University of the Witwatersrand, Johannesburg
in fulfilment of the degree of Doctor of Philosophy

Supervisor: Prof. Elsie Cloete

Johannesburg, 2019

Abstract

The relationship between technology and classroom practices has become one of the major pre-occupations of modern scholarship; especially in the era where technology is increasingly maintaining a firm grip on different spheres of human life. This study explores the use of digital media and devices in the teaching and learning of African literature (in English) in selected Gauteng schools. This is in the context where the Department of Basic Education (DBE) in South Africa has advocated for the Africanisation of the literature syllabus by prescribing more African texts as opposed to the previous era where European and American texts were predominant. The study explores the use of digital media and devices in researching and teaching African literary novel and drama texts in nine Gauteng high school classrooms. It also examines the potential for digital media and devices in literature classrooms. As the DBE recommends a major shift from Western to African literature, what are the implications regarding access to resources, especially digital (both devices and information sites) for teachers as they navigate their way through the texts? This relates mainly to research, planning and execution of the literature lesson. The study is qualitative and data was collected through questionnaires, semi-structured interviews, selected classroom observations and environmental assessment of the schools. All nine high schools were purposefully sampled and thematic content analysis was used to analyse data. The results show that in the sampled schools, African literature (and literature in general) is increasingly being taught and learned through the use of digital media and devices, with the cellphone also emerging as one of the ubiquitous and key devices used in research, teaching and learning. However, despite observable access by teachers to digital media and devices, web-based resources for African literature are perceived to be severely limited and a gap is identified to give African literary texts more online presence. Equally important is the contribution the study makes as possibly the first of its kind to focus solely on African literature and digital media. Additionally, there is very little evidence that technology engenders collaborative activities in literature lessons and among learners. The study finds – based on literature and empirical evidence – that while some teachers are still reluctant to use digital media and devices, it is becoming increasingly difficult for literature teachers to plan and execute their lessons without these resources. On pedagogical practice, the study concludes that teachers' digital skills and access to

devices and online resources do not appear to instigate a move towards lessons where higher-order thinking and problem-solving are the hallmarks of digitally-aided instruction.

Key terms: African literature, access, digital media, digital devices, digital literacy, technology, collaboration, constructivism, connectivism.

Declaration

I declare that this thesis is my own unaided work and all sources have been duly referenced. It is submitted to the Wits School of Education, Faculty of Humanities at the University of the Witwatersrand, Johannesburg. It has not been submitted before to any other university for any other degree or examination.

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Mahao Mahao

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_____day of_____2019

Presentations emanating from this research

Mahao, M. (2017) “Teaching African literature and access to technology in Gauteng schools - preliminary findings.” Flash and poster presentation at the 8th Cross-Faculty Postgraduate Symposium held at the University of the Witwatersrand, Johannesburg on 25 – 26 October 2017.

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Dedication

This work is dedicated to my family: my wife Anna, daughter Ntsepase and sons Ntsito and Thapelo.

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Abbreviations

DBE - Department of Basic Education

GDE - Gauteng Department of Education

HOD - Head of Department

ICT - Information and Communication Technology

POP - Point of Presence

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CHAPTER 1

Introduction

1.1 Background: the Department of Basic Education takes a position

While paging through the *Sunday Times* newspaper one afternoon, my interest was elevated above just the quest to find out the content that the paper had for its readers that week. An article on the inclusion of more African texts in the Literature syllabus by South Africa's Department of Basic Education (DBE) caught my attention and set me on a path that led to this research project.

This inclusion of more African literary texts has been applauded as a step in the right direction in enhancing the status of local literature (*Sunday Times* November 29, 2015, p.5). In an article titled "Old classics axed as SA schools embrace Africa" by Prega Govender, it is reported that at least 15 of the 25 novels and plays to be introduced across Grades 10 to 12 over the next three years (2016 – 2018) are by local writers. The list (given in the article and also available on the DBE website) includes familiar titles such as *Things Fall Apart* -1958 (Chinua Achebe), *Cry, the Beloved Country* – 1948 (Alan Paton) and *Mhudi* – 1930 (Sol Plaatje). Other titles include *Mother to Mother* – 1998 (Sindiwe Magona), *The African Dustbin* – 2007 (Victor Mtubani), *Tsotsi* – 1980 (Athol Fugard) and *Sophiatown* – 1988 (Malcolm Purkey). The full list is provided in chapter 4 and in the appendices section.

1.1.2 Curriculum decolonisation and Africanisation

Elijah Mhlanga of the Department of Basic Education explained in the same *Sunday Times* newspaper article that "it had always been the department's intention to promote local authors" (p.5). In a Radio 702 podcast on the same issue, Allan Subban, Director for Learner and Teacher Support Material at the Department of Basic Education, explained in an interview that the Department's plan is to "decolonise" the

English curriculum by prescribing more African texts (posted at 2.56 pm on 27-March-2017). I will comment on the decolonisation aspect later in this section. Extending the same notion, Pitcher and Jones (2018: 370) refer to the concept of 'Africanising the curriculum.' Referring to the National Curriculum Statement by the DBE to find out what was written on this matter, I discovered a stated intention to promote "knowledge in local contexts" (p.4). In both documents on English Home Language and English First Additional Language (and those of other subjects) it is stated that the aim of the South African curriculum is "to promote knowledge in local contexts, while being sensitive to global imperatives" (National Curriculum Statement, p.4). The inclusion of more texts by African authors may therefore be seen in the context of both inclusion and promotion of South African and African content. This affects both English Home Language and First Additional Language in Grades 10 – 12.

Jansen (2017, p.159) argues that decolonisation and Africanisation have a nationalistic element attached to them and that they are about asserting one's identity. He also adds that reading books by African authors is fundamental to the process of Africanisation and elaborates:

> …the call for Africanisation in the curriculum is a nationalistic imperative that asserts African identity and rejects the imitation of Europe in the quest for African knowledge, culture, and aspirations in the substance of what we teach and learn. For students, this means reading books by African authors, learning about artworks by African artists, rediscovering African greatness through scientific achievements by Africans, studying African works and so on.

To be able to embrace decolonisation, "decolonial thinking" is required to ask critical questions about whose knowledge, history and creativity are important (Gray, 2017: 101). In the context of this study, literary texts by African authors are instrumental in engendering attitudes that view African creativity as essential to school experience and exposing learners to African literary creativity.

Interviewed for the same *Sunday Times* article referred to earlier, Victor Houliston, professor of English Literature at the University of the Witwatersrand, indicated he was happy with these developments and said that "doing local works, particularly if they do

have an international reputation, is the affirmation of one's own culture…. Also, we are not continually thinking that we are always second best to people elsewhere in the world" (p.5). Houliston thus touches on the important – and often sensitive – element of text selection and where the texts come (or should come) from. I would argue that for local texts to gain the same global recognition that has long been enjoyed by British authors like William Shakespeare and William Golding, they have to gain respect in their home countries first; then internationalising them will become easier once they have built some reputation on the home front.

Coming back to the notion of decolonising the English curriculum by the DBE, perhaps 'Africanise' would have been the more appropriate word to use. Decolonisation implies that particular mindsets are questioned and new ways of reading and analysing books and guidebooks are required. It is not just about prescribing new African literary texts but about using a new lens of analysis to make them speak to local and topical issues and concerns. For example, many of the guidebooks on texts such as *Things Fall Apart* by Chinua Achebe are produced in Britain or United States. I do not think that those who produce them have decolonisation in mind when they write those materials but simply want to help teachers and learners navigate the texts with more ease. However, as shown in chapter 5, a lot more South African-based study guides are becoming available; perhaps implying textual analysis that is more relevant to the context in which the literary texts originate from.

1.2 Definition of terms

This section presents the definition of technology-related terms which have been used in this thesis. The definitions are meant to avoid confusion about what some of the terms refer to in relation to technologies that may be used for research, teaching and learning. It must be noted however that many of the terms share a lot of commonalities in that some examples are applicable to different terms. The concluding paragraph of the section explains the rationale behind the terms that have been adopted for the title and body of the thesis.

- **Digital media**

Sometimes also referred to as electronic media, these are media which are programmed and coded in formats and they enable people to connect digitally. These include YouTube, Facebook, Twitter and they enable people to create online meeting places where they form and sustain relationships (Bennet, 2012). These media can be created, viewed, listened to, shared and adapted and preserved in digital devices.

- **Digital device**

It is an electronic or technological device which uses distinct data for all its processes (Grossman, 2006). Many digital devices use a computer (also a digital device) for their operations and examples include tablets, iPads, smartphones, data projectors and digital cameras. Digital devices may also be referred to as electronic devices.

- **Print media**

Print media involve the use of paper to convey information. This includes newspapers, magazines, books, catalogs, brochures, leaflets and business cards (Kipphan, 2001).

- **Analog technology**

Analog technology (even though is not key in this study) is defined because it is the predecessor of digital technology and reference to it is meant to show the technological transition from one stage to another. Analogue technology uses waves which are recorded and used in their original form (Hartwig, 1989). Examples include VCRs, tape players and record players.

- **Digital technology**

This is a technology which handles information in digital form; that is in the form of numbers or digits (Woodford, 2006) and is stored and displayed as numbers in a digital device such as a hard drive.

- **ICT(s)**

ICT is the shortened form for Information and Communication Technologies. This refers to unified communications and telecommunications and computers along with appropriate software which allows users to access, store, share and manipulate information. The 2004 Government White Paper on e-education defines ICTs as representing a

> convergence of information technology and technology information. ICTs are a combination of networks, hardware and software as well as the means of communication, collaboration and engagement that enable the processing, management and exchange of data, information and knowledge (p.15).

As used by the Department of Basic Education, ICTs include desktop computers, laptops, tablets, smartboards, internet connection, e-mail facilities and provision of computer laboratories. What is observable here is that ICTs are inclusive of digital devices and media and are often used generally to accommodate all digital devices and sources of digital information relevant for the classroom.

- **Social media**

These are web-based services and platforms which enable people to interact, collaborate or communicate and share information (Stewart, 2017). The ‘media’ in ‘social’ implies the information that people share through social networking sites while social refers to the interaction that takes between people through sharing and receiving information.

- **Web 1.0**

This refers to the stage of the World Wide Web (WWW) where users simply acted as consumers of content and were not able to interact (Cormode and Balachander, 2008).

- **Web 2.0**

It refers to the World Wide Web websites where emphasis is on content generated by users where they participate, interact, collaborate and share information, photos and videos (Solomon and Schrum, p.1). Examples include social networking sites and social media sites such as Facebook, blogs, wikis and YouTube.

- **Classroom technologies**

These are technologies which are commonly used in classrooms (where they may be available). These include, digital texts, digital videos and games, wikis, blogs, e-books, podcasts, tablets, smartphones and online resources (Thota and Negreiros, 2018; Howard, Ma and Yang, 2016). The type of classroom technologies used in different learning contexts may depend on affordability and availability Observable from the examples given is that classroom technologies are inclusive of all technologies likely to be used for teaching or learning (especially in the classroom though equally relevant even for learning that happens outside of the classroom). While some of the technologies are more useful in teaching (for example, data projector, wireless digital microphones and smart interactive boards) others (such as YouTube, websites and blogs) lend themselves better as means of learning.

The thesis title adopts the term ‘digital media’ for two reasons. Firstly, to be focused and clearly move away from any discussion relating to its binary of ‘print media.’ Secondly, the idea is to show that technology is increasingly dominated by digital resources and devices as opposed to analog media. The main focus is on digitised content where the Internet is the chief transmitter of information and digital devices are used to access, display and share the information. Within the thesis however, the term ‘technology’ is adopted for two main reasons. Firstly, the most common reference to digital media and devices is technology and the term can accommodate both digital media and devices. Secondly, during my interaction with the teachers and learners who participated in the study, I discovered that the term they use often is ‘technology’ and in line with this common reference, the thesis adopts the term that the research participants regularly use. In addition, some of the authors (William 2005; Newby,

Stepich, Lehman & Russel 2006; Kolb 2008; Thinyane 2010; Nielsen & Webb 2011 and Lawson 2014) cited in this thesis often use technology as a broad term to encompass both devices and media. Where reference is made in the thesis to digital media and devices – as opposed to the more general term 'technology' – it is because the context demands the use of both.

1.3 Implications for pedagogy

The decision by the DBE to select more local texts for study at schools could have wider implications for pedagogy and access by teachers and learners to digital media and devices. With the established literary texts – especially those considered part of the western canon – literature teachers may already have abundant resources since the texts have long been in the school and public domain and a lot has been written on them over the years. With the decision to select more local texts, what could be potential challenges or difficulties for both teachers and learners, especially with regard to access to digital media and devices? There is a perception that there are fewer online resources on African literary texts hence I set out to find out what the situation is like.

The aim of this research firstly therefore, is to explore access to and use of digital media and devices, where teachers are already using technology for research and teaching, in the teaching and learning of African literature in Gauteng schools. Secondly, it aims to look at the potential of different technologies in African literature classrooms, especially for schools where regular use of technology is not the norm yet. Essentially this study focuses on how technology is used and can be used in teaching and learning African literature and how it is experienced by the users in their contexts.

The rationale for this project is based on the understanding that African literature and literature in general usually rely on texts as a basis for learning but, like other school subjects, can also use technology to facilitate teaching and learning. The research paradigm used in this project is based on the hybridisation of constructivism and connectivism and is discussed towards the end of this chapter. It should be highlighted

that these two theories are the ones I consider relevant to this research and are also the key drivers that have shaped the direction of the study. In addition, the study is premised on the fact that through the use of technology, learners are able to connect as a community of learning, and discover and construct more knowledge both with the teachers and individually as they spend a lot more time navigating the highways of technology.

I must state from the onset that by local literature this study refers to African literature as a whole, not just South African literature. The list of texts alluded to at the beginning of this chapter is one of the guiding principles for the decision to widen the net of investigation to include texts from the rest of Africa. This is also evident from the title of this study which alludes to African literature more broadly. Despite regular debates with other literature practitioners about who is truly an African writer, White, Indian and Coloured writers are also included within the ambit of African literature for the purposes of this study. I considered citizenry and familiarity with the African context and issues important in determining who qualifies as an African writer.

The study examines the use of technology by teachers as being available to them as another means to teach not as the only means to teach. This is obviously with the understanding that teachers may view technology as additional to the other strategies they use to research about and to teach literature. The study is therefore not a proposition to exclusively use technology and sideline any other methods that teachers may prefer. It is rather a way to widen the scope of resources and strategies that may be available to literature teachers. The rapidly expanding digital landscape is the reason why I chose to explore how teachers interact with it in their classrooms and in their preparation for their lessons. The manner in which they interact with technology in their African literature lessons is reported in chapter 4. This study examines both how teachers use technology to access information and teaching materials about African texts and how some of these technologies are used in the classroom.

1.4 Technology use ‘inevitable’ and futuristic

Some writers (Newby, Stepich, Lehman and Russel, 2006; Solomon and Schrum, 2011, p.1) believe that using technology in the classroom is almost inevitable in view of the technologically-inspired changes happening around us and which eventually could affect the manner in which children learn. Solomon and Schrum have written an aptly titled book *Web 2.0 new tools, new schools* where they examine how schools should respond and take full advantage of the new tools available for teaching. In their opinion,

> these tools are changing how people, including our students, interact with the world. The changing nature of information and the new ways our students understand and make sense of the world signal that we need new strategies and new tools for teaching and learning. The challenges of the new millennium require that students be adaptable and analytical, and that they have the skills to identify and use the best tools in a rapidly changing environment.

Solomon and Schrum support the style of teaching and learning that deviates markedly from the traditional mode of teaching where the teacher is the key source of knowledge and determines the type of knowledge and information to be transferred to the learners. Web 2.0 tools enable more interaction among users as opposed to Web 1.0 where tools were chiefly for retrieval of information (Janks, Dixon, Ferreira, Granville and Newfield, 2014: 137).

In the context where technology’s influence is difficult to ignore, “young people need to be prepared for a successful adulthood in a world increasingly saturated with digital technologies” (Futurelab, p.16). Equally, “there is a growing recognition that teachers need to be well equipped to meet the challenges of the new online environment” (Son, 2004, p.108). Teachers cannot be expected to respond to the technological challenges and demands of the new classroom unless they fully embrace the fact that the classroom is finding it hard to escape the clutches of technology just like the rest of society and the business world. As Head (2009, p.15) observes, “the modern workplace demands employees with a high degree of technical comprehension” and teachers have a responsibility to prepare learners to enter the working world as technically capable employees. Teachers cannot leave this responsibility to the

employers to provide technical skills to their new employees; the potential employees must already possess technical skills as an essential selling point to enhance their marketability and to be relevant to the demands of the modern workplace.

The “new tools” that Solomon and Schrum refer to are not just tools to drive the teaching and learning process but they could also have wider implications even on teachers’ stress levels. Some studies have discovered that “coping with rapid changes in technology“ is one of the major causes of stress among teachers along with factors such as curriculum demands and higher standards expected to be attained by teachers (Thody, Gray and Bowden, 2004, p.121). These devices should therefore not only be viewed from the point of usability and convenience but also from the potential harm they may do on the health of teachers if they are not adequately supported to cope with these rapid changes in technology. Not everyone is adaptable to change at a similar pace hence the capacity to absorb change varies from person to person; everyone must be catered for.

With digital media and devices however, an opportunity presents itself for changes to occur in how teachers handle knowledge transfer. This study hopes to find out how these technologies are used in literature classrooms and if this could influence schools that still rely heavily on traditional teacher-centred methods of teaching and ignore the importance and usefulness of technology in guiding instruction and facilitating knowledge acquisition.

It must be noted that many of these digital devices and media are not new, especially the computer and the Internet. What may appear new is that some teachers have probably still not yet adopted them in their classrooms but have stuck to the traditional ways of knowledge transfer through the use of the chalkboard and paper-based resources. This may be due to lack of technological skills, difficulty to access technology or over-reliance on the comfort zones of unchanging methods of instruction. Traditional teaching – where learning is usually through lectures, note-taking and is largely teacher-controlled and examination-oriented – is often contrasted with modern teaching where discussions and learner-centredness are emphasised (Public agenda, 2005). The modern approach agrees more with the use of technology where learners (with the guidance of the teacher) take some control over their learning.

Additionally, and considering the speed at which technological advances happen, what is 'new' in digital terms soon becomes old and normal to regular users, even though it may appear new to slower consumers of technology. In the highly innovative world of technology, "new technology soon becomes old technology; one wave of innovation is succeeded by the next" (Shortis, 2001, p.3).

The use of technology has the possibility to impact the school as it was traditionally understood to function. In technology-rich contexts, it is possible to function in ways where the teacher is no longer viewed as the main source of knowledge. Through this possibility to have more pathways to access information, learners can do considerable online research as well and are able to do quite a lot on their own and can bring with them to class a wealth of knowledge from the resources they find online. Sandholtz, Ringstaff and Dwyer (1997, p.121) observe that "when technology is integrated into the curriculum…teaching and learning are enhanced." Also, Sutherland, Robertson and John (2009, p.4) refer to evidence from research which "suggests that young people exhibit a higher level of engagement and more positive attitudes to learning where technology is incorporated." The guidance provided by the teacher however, is important in assisting learners choose useful information and knowledge. It would be foolhardy to assume that learners' solo engagement with technology will always produce the desired outcome without the help of the teacher.

The key factor here is that technology provides considerable educational leverage for variation in learning and teaching while keeping the teacher integral in helping learners sift through volumes of information and make useful meaning out of it. In the words of Sutherland, Robertson and John (2009, p.6), "truckloads of hardware (however shiny) arriving in school will not necessarily change much for the better. Teachers are key and effective; professional development is the crucial element" to help them cope with instruction in an era where they may not avoid using technology in light of technology featuring prominently in many policy documents (p.3).

The decision to explore African literature in particular, and the use of digital media to prepare and teach African literature was intentional and emanated from my observation that many Western texts are well represented in digital media. It is not difficult to do online research on authors like William Shakespeare and Thomas Hardy

but is it easy to find information on some of the African writers? This question is posed with the understanding and awareness that there is more material on Shakespeare and Hardy because they have been around for much longer – and have been studied more widely – compared to many African literary works. Is there a gap that could be filled by more inquiry into the situation pertaining to technology and African literature? Are African texts adequately represented in online searches? It is the quest to establish representation of prescribed African texts in digital technology that set me on the path to undertaking this research with the hope to highlight a gap that African educators and scholars especially can help fill.

1.5 Research purpose and questions

The purpose of this study is to explore access to and use of digital media and devices in researching and teaching African literary novel and drama texts by literature teachers in nine Gauteng high school classrooms. As the Department of Basic Education in South Africa recommends a major shift from Western to African literature, do teachers have sufficient digital resources and media (both devices and information sites), as they navigate their way through the texts? This relates to research, planning and execution of the literature lesson. The study seeks answers to the following key questions:

- What is the state of access to digital media and devices in the selected schools?
- What is the potential for using these media and devices to teach African literary texts and literature in general?

It must be noted here that by African literary texts I refer to texts prescribed by the DBE (some of which are mentioned in section 1.1). These are texts by African authors and have their settings and contexts chiefly in Africa. Many of those prescribed by the DBE are by South African authors and are set in South Africa. This matter is highlighted because at times settings may be transcontinental. An African writer in the context of this study is a citizen of the African continent regardless of colour or race.

Under the principal questions there are subsidiary questions which the study seeks answers to. These are:

- To what extent do teachers in the selected schools use technology to teach African novel and drama literary texts?
- Is there resistance among teachers to use technology?
- What is the perceived effectiveness of technology (according to teachers) in aiding teaching and learning?
- What are the constraints of using technology for research and teaching/learning?
- Is there any relation between technology use and the teachers' ages?
- Is technology a stimulus to collaborative activities?
- How do teachers ensure online safety of learners?

These questions were built into the research tools to establish what the situation is regarding the use of technology to teach and learn African literature. The full report of my interaction with the participants is presented in chapter 4 and provides interesting perspectives from both the teachers and learners.

1.6 Significance of the study

This study hopes to contribute to the teaching and learning of African literature by highlighting what could be constraints or affordances based on the results that are presented in the subsequent sections of the thesis. How do teachers handle the teaching of African texts in relation to the technology at their disposal? Another reason for focusing on African texts is the recent inclusion of more African texts in the South African curriculum by the Department of Basic Education. The study investigates what the reality is in the schools for the teaching of African texts using technology. This shift in curriculum focus means teachers and learners will have contact with more African texts and require the resources to aid teaching and learning.

In the literature reviewed in chapter 2, it is observed that it is becoming increasingly difficult to ignore the widespread impact and influence of technology; not just in

education but in the general spheres of human existence and interaction such as businesses and homes. Even though this study leans heavily towards African literature and its relationship with technology, the underlying shades of the educational landscape reflect that the significance of digital media and devices in accessing information is probably unprecedented in sheer volume and scope. Therefore, the need to constantly search for deeper understanding of how teachers and learners interact with these classroom technologies is key to helping the teaching fraternity understand how teaching and learning paradigms could be shifting to accommodate new insights into how learners learn and teachers teach. This thesis therefore hopes to be just one of the contributions by which the educational community and other relevant stakeholders may appreciate the dynamics of technologically inspired instruction.

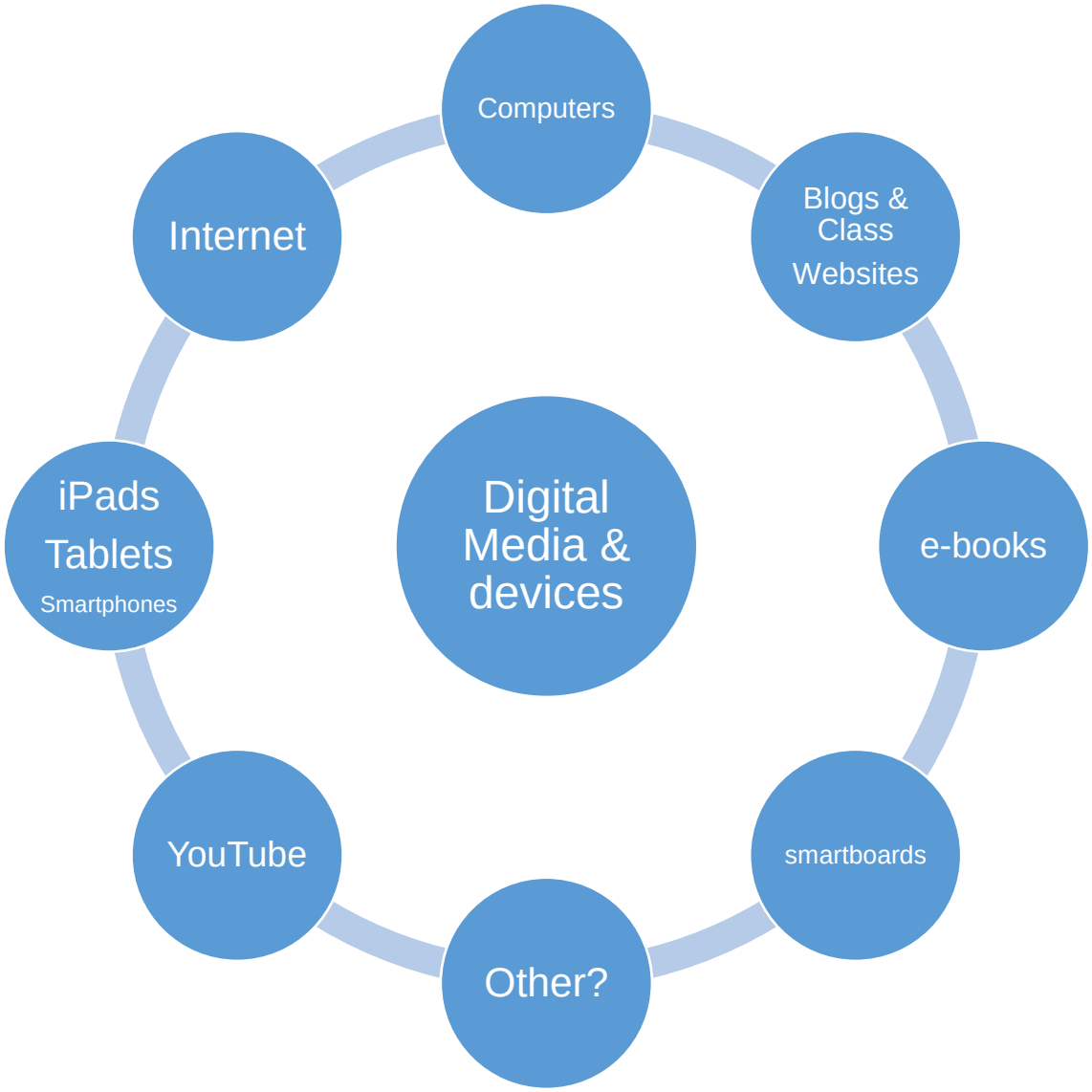
The key contribution of this thesis is twofold. Firstly, it identifies a gap to give African literary texts more online presence to ease access to information by teachers and learners. Secondly, it focuses exclusively on African literature and technology; something I have not observed any other study do. The exclusive focus on African literature however, brings the broader discipline of literature heavily into the discussion because African literature is part of literature as a whole and it is hard to isolate it completely from its parent discipline.

In the context of this study, digital media and devices are all the virtual and physical classroom technologies which are relevant to teaching and learning literature. These would include: 1. computers (desktop and laptop) with internet connection; 2. class websites and blogs; 3. mobile devices (such as smartphones, iPads and tablets with relevant educational mobile application (APP); 4. smart interactive boards; 5. online media such as YouTube (www.useoftechnology.com); 6. e-books and any other technologies the research participants have classified as useful in their context. It will be interesting later when findings are presented to compare the digital media and devices wheel shown in figure 1 below with a new wheel that reflects the technologies teachers use regularly in literature classrooms.

It is likely that at the completion phase of this study, other classroom technologies would have emerged in view of the rapid technological changes taking place around

us. Any new changes would add variety and impetus to conversations and discussions around technology and its role in the classroom. New research into the area can pick up the discussion and provide fresh insights into education and its relationship with technology. Knowledge generation is not meant to be static and keeps the research community engaged in helping shape our understanding of new phenomena.

Figure 1: Digital media and devices wheel



1.7 Theoretical framework

One of the key components which propelled the study forward and helped to place it within a conceptual orientation that gives it more shape and relevance to the body of knowledge is the theoretical framework. The theories that guide how we think and apply knowledge help us understand what makes the knowledge industry keep generating more from its unceasing conveyer-belt and how the production lines continue to evolve and address the varying needs of humanity and the unending quest to redefine our understanding of the world.

In this section therefore, emphasis is on the learning theories that seem to underpin the use of technology in the literature classroom. One of the main reasons why the significance of these theories is emphasised is because "learning theories are a *source* of verified instructional strategies, tactics, and techniques" (Ertmer and Newby 2013, p.44). The established theories that guide the framework of many studies have been tested over many years but the debates around their continued suitability in evolving environments help us determine whether they can still be relied upon. Whether or not those seeking answers to the key questions in education adhere to either empiricism or rationalism, learning theories are helpful in guiding our understanding of knowledge and information.

A number of theories were considered for this research and some time was spent looking at the suitability of each of them. Of the major learning theories that guide the teaching fraternity in decision-making and applying certain forms of knowledge and not others, I concluded that constructivism and connectivism would be the theories that should guide the examination of the key teaching and learning processes to be researched. The two theories, as will be reviewed in the following sections, were found to be able to accommodate teaching and learning where digital media and devices are used.

1.7.1 Constructivism

Especially considering the level which this research is targeting (Grades 10 to 12), constructivism seems most appropriate in ways that will later be revealed in this

section. Learners at this level are in a position to do quite a lot on their own and may have the ability to construct knowledge using the instruments at their disposal.

As Donald, Lazarus and Lolwana (2008, p.84) show, “an important part of constructivism is the idea that knowledge is not passively received. It is actively constructed” and “learning occurs through learners engaging in creative experimentation and activity” (Kop and Hill, 2008, p.6), which implies that the experimentation is an attempt at creating and constructing knowledge. Active participation by learners seems highly likely through the use of digital technologies where access to such makes it possible for learners to engage with their work both inside and outside of the school premises. Especially with urban youths who have access, using digital technologies and social media platforms is already culturally embedded in their everyday existence hence the transition to the classroom would not be too difficult to make. Using modern technologies requires active engagement hence one would imagine that learners would be active in receiving classroom knowledge and putting to use their devices to search for more knowledge and information.

Vygotsky was one of the key figures of the constructivist approach. Cited in Donald, Lazarus and Lolwana (2008, p.84) he points out that “knowledge itself is not absolute and unchanging. It is a social construction that is developed and learned through social interaction.” Modern technology already provides fertile ground for young people to interact on a regular basis. Pachler (2001, p.19) shows that “interactivity is seen by many commentators as a defining feature of new technologies in that users are no longer passive recipients….” Social networking in the form of WhatsApp, Facebook and other platforms can even allow for the creation of large interactive groups where information and knowledge can be shared constructively. Any new developments in knowledge, as Vygotsky implies, can be shared almost immediately through these social platforms because the learners and their teachers are connected. Even matters related to school subject material can be discussed almost instantly since advances in technology and connectedness make communication and interaction instantaneous (Martens, Martens, Doyle, Loomis, Fuhrman, Furnari, Soper and Stout, 2015, p.610). Because this study will be examining how teachers use technology for teaching and learning, it is also important to consider how learners could be involved and how far technology increases collaboration through connectedness.

Tam (2009, p.73) believes that the constructivist theory and the use of technology in classrooms work well together and the two can be useful in both individual and group learning among learners. Furthermore, she argues that technology has potential to influence how learning takes place. She observes that:

> Another important implication of constructivism for the construction of technology-supported learning environment is that learning is a personal, as well as a social activity. The penetration of technology into the learning process can have profound consequences for how learning takes place socially. On one side, one can see even more individual learning in a student sitting in front of his or her computer. But on the other hand, the technology allows for much more diversified and socially rich learning contexts; peer tutoring via computer; computer networks, email, tele-communications.

Tam says further that as a result of technology-assisted education, "more supportive, collaborative and social learning environments called for by the constructivist perspective" (p.73) have been built. And according to Larson and Marsh (2015, p.62), "collaboration has always been an important element in education and society more widely…." Going forward into the unknown future, as technology keeps evolving and perhaps presenting more collaborative opportunities and situations among learners and teachers, what will change will be how subsequent technologies are adopted into the teaching and learning environments to respond to the demands of the day and era. Despite new technologies constantly emerging, it is difficult to imagine that collaborative learning activities will not be further encouraged by educationists.

In this day and age however, it must not be taken for granted that humans are collaborative in nature and that it is natural that learners will collaborate easily. In noting the behaviour of the technology-era children, one has noticed many incidences where children's games are more individualistic than ever before. The games they play on computers, cellphones and other hand-held devices and the social networking they engage in with those physically removed from them, means it is no longer a given that children will play or communicate with those in their immediate vicinity. The collaboration they engage in at school may therefore not come as naturally as

expected due to the true nature of their characteristically solo engagement with their technological devices.

Still as further extension to the constructivist learning approach, both the learner and the environment in which learning takes place are important elements since interaction between the learner and the environment is what ultimately creates knowledge (Ertmer and Newby, 2013, p.55). In the context of this research, the environment within which learners interact can be one filled with a wide choice of technologies; some of which can be useful means of learning and interacting with literature more closely. According to Lever-Duffy and MacDonald (2011, p.25), technology is key in the process of knowledge transfer and fits well within some of the theories that guide teaching and learning. As suggested earlier in this section, constructivism is one such theory.

It must be noted also that saying learners actively interact with their environment is to suggest that they are active participants in learning and acquiring information and knowledge. Mention of environment implies a social space where interaction takes place between and among occupants of the space. Learning therefore "implies not only a relation to specific activities, but a relation to social communities – it implies becoming a full participant, a member…" (Wenger, 1999, p.146). Participants in a learning environment dominated by technology need a socially rich technological environment to function and participate in knowledge sharing with their peers and their instructors. The context in which learning takes place can therefore not be isolated from the actions of learners. Instruction cannot be divorced from the social environment in which it occurs (Anderson, Redder and Simon, 1996, p.8). Learning should not be decontextualized otherwise knowledge transfer will not take place (Ertmer and Newby, 2013, p.55). This therefore indicates that learning is very much part of the context in which it happens and if digital media and devices are available in that context and show potential to be of benefit in teaching and learning, then there is good reason to make them part of the teaching and learning environment.

Additional to the context in which learning occurs through technology, African literature provides a socially relevant environment where learners interact with content which has direct relation to their geographical context. This is not to suggest that the study of literature must be inward looking and sideline texts from other continents, but

African texts in an African setting are not too far removed from the everyday experiences of learners. Notwithstanding the fact that geographical boundaries within continents may also have their own unique complexities, partnering a relevant technology with a text dealing with a meaningfully social environment may promote knowledge acquisition.

Sometimes the constructivists' emphasis on learners being knowledge creators and active participants in a learning environment may be misunderstood to mean the teacher is no longer an important role player. The theory itself makes it clear that although the emphasis is on learner construction, the teachers' role is still critical (Reigeluth, cited in Ertmer and Newby, 1989, p.55). This role, in the era laden with a variety of interactive digital media, requires that teachers undergo some transformation and "will need to change their role. Rather than fact repeaters, they can become motivators and facilitators" (Tapscott, 1998:154).

Solomon and Schrum (2011) provide an insight into how technology can be used to advance the constructivist approach. Since this is a theory that acknowledges aspects such as prior knowledge and experience, searching for new knowledge and information and active participation and collaboration, using technology can facilitate this process. Solomon and Schrum (2011, p.39) believe that with the new technologies and applying the constructive approach,

> students are able to do more research, find information they would never encounter without Web access, and collaborate to create a product…. Using Web 2.0 tools such as wikis allows students to collaborate on creating a document that displays what they have learned. They can illustrate with photos and videos, use an interesting presentation format, and engage the audience to think about what they've seen.

Constructivism – through the use of modern digital media and devices – enables learners to explore, create, share and discuss whatever they produce. In the coming sections of this study it is alluded to that YouTube is one of the ways through which learners can share drama videos and edit them if they want to. The views of those watching the videos can then be shared through blogs and other platforms to make

the study of literature more participatory and collaborative. The wikis alluded to in the above quote enable learners to sharpen their academic skills by producing documents that can be useful for learning and transferring information to their peers. This format allows for a more interesting and aesthetically appealing form of presenting information in comparison to paper charts and coloured pencils. Those learners willing to join the drama and film industry at a later stage may acquire some very useful skills through this sharing of information and ideas on their projects. Part of this research will be to focus on the experience, exposure and skills that learners acquire and how this impacts on their learning.

As a form of web-based literacies which are essentially about awareness of technology and its role in connecting communities around the world, being connected is regarded as important in enabling learners to share, collaborate and participate in web communities exploiting the range of technologies and social practices available to them (Dalton, 2015, p.607). This speaks directly to constructivism and how sharing and collaborating afford those participating in knowledge creation and sharing a platform to engage in active participation in the knowledge industry.

Working together on tasks (collaboration) is seen as a way of fostering sharing of resources which makes learning a mutually beneficial enterprise between and among learners. Larson and Marsh (2015, p.65) view collaboration thus in relation to the digital age:

> When members of the community are mutually engaged in an activity, strong relationships among members of the group are formed. The members of the group are mutually engaged in a joint enterprise, which binds the group together. They draw on a shared repertoire of resources and understandings as they engage in this joint project. Learning in the digital age involves all three of these aspects and through activities that actively draw upon the skills required to engage in a successful collaboration, learners can develop important competences for future activities in both leisure and employment.

The understanding therefore is that collaboration in the digital age looks far beyond the classroom walls and further into the future that awaits users of technology in the

workplace. When collaborative ventures are called upon in the workplace, prior skills and experience of cooperative school projects and assignments will be tapped upon.

Some researchers are of the view that the constructivist approach suits the Information Age very well and that the two can create a teaching and learning environment where the school ceases to function like a factory where learning is more individualised but shifts towards a more collaborative space. Aslan, Reigeluth and Mete (2016, p.36) posit,

> From a factory-model-of-schools perspective, consider a teacher's role: a teacher in a classroom is assumed to be the major source of information, driver of teaching activities, and ultimate owner of student learning. The constructivist wave in education is recognition of the need to give more autonomy to students in the learning process for the Information Age. Thus there has been great emphasis on a shift from teacher-centered to student-centered approaches – teachers providing more personalized learning experiences.

The constructivist approach not only aims at unshackling the school from its long tradition of a top-down approach to learning but is also a highly versatile learning theory which accommodates the technologically driven space that the classroom has become, and still has further potential to become if more teachers and schools undertake to prepare learners for the age in which technology affects how we teach, learn, play and do business.

Applying constructivism in the use of digital media and devices implies not just knowledge to use technology but also some level of critical literacy to be able to choose what is useful knowledge from the vast array available. This is key for both teachers and learners but more so for teachers as the ones tasked with the responsibility to guide and supervise learning. With critical literacy skills, teachers and learners understand how texts of all types work and what they attempt to do (Luke, 2000). Critically literate people are able to get the most out of texts due to their ability to make appropriate choices of what is useful and what is not. The implication is that reading texts must always be accompanied by a critical and penetrative eye that can read between the lines and also be able to select useful and relevant reading material

from a large pool available. A section in chapter 2 deals more generally with the concept of literacy.

In dealing with texts, Luke (2000, p.454) suggests a theory based on four resources where readers are code breakers, participants, users and finally, analysts of texts. This suggests that when readers engage with texts, they formulate meaning, they are participants in meaning-making, they decide how to apply what they read and eventually, they ask what their benefit from the text is. These four resources further expand on the constructivist approach to learning. All four give us more insight into a learning approach where learners use texts to construct meaning, understanding and value.

Serafini (2012, p.155) took the four resources model a step further and applied it to visual and multi-modal texts, some of which are digital. He uses slightly different terms (yet still similar in meaning) to show how readers interact with multi-modal texts. He suggests that readers are

- navigators (interact with hypermedia texts);
- interpreters (make meaning);
- designers (construct meaning); and
- interrogators (analyse and interpret texts).

The four steps suggested by both Luke and Serafini aim to help teachers and learners to filter the knowledge they get from multi sources and decide whether it is good or bad knowledge. This is helpful to both parties to establish if the knowledge they are receiving or disseminating is valuable. This is important to this study since it helps place more emphasis on the choice and use of technologically-sourced knowledge and information; which must always be chosen with care. The internet more especially, is a multi-sources highway of information where learners must be taught to navigate with care to get what they need for learning purposes. The filtering process is even more vital in this case to support learners to make the right choices.

Constructivism is also viewed as a flexible theory which does not make prescriptions on how teaching and learning must happen. Especially with teaching, it “holds that, basically, there is never any one right way to teach” (Williams and Burden, 1997, p.51). Glasersfeld (cited in Williams and Burden, 1997, p.51) suggests that

> constructivism cannot tell teachers new things to do, but it may suggest why certain attitudes and procedures are counter-productive, and it may point out opportunities for teachers to use their own spontaneous imagination.

Therefore “teaching, like learning, must be concerned with teachers making sense of, or meaning from, the situations in which they find themselves” (Williams and Burden, 1997, p.51). This implies that constructivism is not a set of prescriptions but a theory that understands that there could be many paths that lead to the same destination. And perhaps this flexibility means there are ways of finding its relevance in a digital age.

In the context and situation where teachers and learners may want to use technology in the classroom, the flexibility allowed by a constructivist approach makes such a decision an easy one. If the context is abundant with technologies, the teachers should see this as an opportunity to use those that are relevant and may have appeal to young people. The power is therefore in the hands of the teacher to decide based on context, what is available and what the likely outcome may be.

In conclusion, and based on the constructivist literature just discussed, it must be understood that constructivism is a theory designed from the point of view of child learning as opposed to teaching. In any situation where it is viewed from the teaching point of view, it must be aligned to children’s learning. Some may opine that very little separates learning from teaching as both are closely linked. However, learner-centred learning would suggest that we view learning mostly through the lens of the learner and outcomes are designed to improve the learner’s learning experience. In the context where learning is technology-driven, what are the implications for knowledge acquisition, meaning making and opportunity for collaborative learning? This study aims to find out more.

1.7.2 Connectivism

Connectivism is another theory that is beginning to gain traction and through which the world has embraced the use of technology to enhance the teaching and learning experience. According to Dunaway (2011, p.676), connectivism

> emphasizes the importance of networked information resources throughout the process of learning. Connectivism acknowledges the role of information technology in the process of accessing information from multiple sources and the development of skills for evaluating connections between different information sources in a dynamic information network.

Connectivism is situated in the belief that the digital environment requires a new understanding in how learning takes place in view of the non-linear manner in which learning occurs. Learners' access to multiple sources of information means that they weave together bits and pieces from all accessible digital sources to make meaning. Although connectivism has not yet gained traction as a major learning theory, Siemens (2005, p.1) believes it is worth considering as a new theory that shows the relevance of technology in the classroom. In his criticism of the traditionally dominant theories, Siemens says:

> Behaviourism, cognitivism, and constructivism are the three broad learning theories most often utilized in the creation of instructional environments. These theories, however, were developed in a time when learning was not impacted through technology. Over the last twenty years, technology has reorganized how we live, how we communicate, and how we learn. Learning needs and theories that describe learning principles and processes, should be reflective of underlying social environments.

While Siemens is of the belief that learning theories should reflect the age in which they are being applied, some dispute his proposal that connectivism should take over in the age of widespread use of technology. Verhagen (cited in Kop and Hill, 2008, p.4) does not quite see connectivism as deserving to be called a theory. He

> criticises connectivism as a new theory, primarily because he can distil no new principles from connectivism that are not already present in other existing learning theories. Moreover, he is not convinced that learning can reside in non-human appliances.

One of the basic principles of connectivsm is that knowledge can be present in non-human appliances (implying digital devices and media that provide information). Additionally, Verhagen sees connectivism fitting at the level of pedagogy and curriculum since, in his opinion, people still learn in the same way even though they are beginning to adapt to the changing technological landscape.

In response to Verhagen it could be argued that the reason why a number of learning theories exist is probably because scholars are constantly searching for ways to explain how learning occurs inclusive of the non-static contexts in which it takes place. In addition, theories gain traction and refinement through persistent debates around them. While connectivism may be a relatively new theory that is yet to entrench itself in learning and teaching circles, it takes the efforts of critical scholars to see gaps in the existing knowledge and suggest ways in which the gaps may be addressed. I see connectivism as an attempt to explain how learning is influenced by digital contexts.

The issue of knowledge residing in non-human appliances – as suggested by Verhagen – is rather problematic in a number of ways. Firstly, the knowledge that resides in the Internet and other cloud-based environments is a result of human intelligence and sustained activity to want to know more and contribute to learning and new knowledge. It is a bit difficult to think of those appliances without giving them a human face. Secondly, these appliances, in my opinion are an extension of humans in terms of their ingenuity and thinking to avail information to the rest of humanity by faster means than the traditional paper and ink. Mass access has therefore been the result as information is no longer the preserve of only those who can afford expensive texts or manage to visit libraries where paper texts are housed. The human factor is therefore hard to remove from these appliances.

Although they do not refer directly to connectivism, Whitehead, Jensen and Boschee (2013, p.9) recognise the need to review the common theories in light of technology penetrating pedagogy like never before. They state that,

> One of the realities found in the literature – from a philosophical level – is how many educators continue to depend on the fundamental pedagogies of Piaget, Bruner and Vygotsky, for example. The struggle is that some pedagogies are based on a nontechnological education space. This creates a unique philosophical conflict between how learning is conceived and how learning happens when technology is added to the equation. What is required, perhaps, are modern technological pedagogies that are consistent with the technological space we now inhabit. A key for transformation is to research and discover how future educators will be able to learn and adapt to tomorrow's pedagogical challenges and opportunities.

Their stance agrees with what Siemens suggested earlier. The established learning theories do not speak to the modern technologically-assisted pedagogies hence the need to consider emerging theories which connect learning with the technologies that are becoming increasingly available in and outside of the classroom. While connectivism does not suggest that the older theories are obsolete, it appears to imply that a new angle to look at learning is required in light of current developments in education.

For purposes of this research, both connectivism and constructivism are used as theoretical basis. The theory of the research is significantly enriched when the two are hybridised. The chief advantage with connectivism is its ability to address the age of connectivity while constructivism still has a lot of currency attributes despite having been around for much longer. The two therefore could be useful in the implementation of a digitally-influenced literature syllabus. Constructivism, as has just been seen in the preceding section, has been around for much longer and discussions around it are broad. Connectivism, though still very young, on the other hand is vital in that it recognises the connectedness of learning communities that has resulted from environments where technology is becoming more and more dominant.

1.8 Delimitations of the research

This section highlights the features that delimited the scope of the research and defined its demarcations. The delimitations were my own control mechanisms to keep the study within doable parameters. The study is confined to nine schools in the Gauteng Province of South Africa and, more specifically, those in Johannesburg and the surrounding areas. The grades in focus are 10, 11 and 12. The schools were sampled as township and suburban schools to enable coverage of different contexts in which literature is taught. The key reason for choosing just nine schools is the qualitative nature of the research where the focus centres on the quality and richness of the responses as opposed to the quantity of participants (see methodology – chapter 3). The idea is for the study to be thorough in investigating the participants and their practices in the schools that have been chosen. Schools that are remote from Johannesburg were avoided due to the limited funding for the research. Both public and private schools were visited as part of the research because the intention was not to make comparisons per se, but to find out what the situation is regarding use of digital technology to teach African literature.

Another key question may be why Gauteng in particular. In this case the decision was easy to reach since my institution is based in Gauteng and it would have been costly for me to visit schools outside of the boundaries of the province. I used purposive sampling to identify the schools where data was collected. A particular setting is therefore significant in this regard. The intention was to select schools where one was most likely to find different technologies in use and Gauteng, being the economic hub of South Africa, probably provides many contexts where technology may be in use. The findings that have emerged may be generalisable to the Southern African region as a whole, or even to the entire continent because an attempt was made to vary the contexts and socio-economic status of the sampled schools. While context and resources may be important in the outcome, the main goal is to view the practices and experiences of using technology in the teaching of African literature, and extend this to other areas where teachers may be wondering if it is possible to use technology in African literature classrooms.

The Gauteng Province is part of Africa where urban and rural are still major variables. This study therefore has delimitations in that it was not extended to the most rural of

schools, considering also that most of Gauteng is urban and may not provide a more representative picture of the socio-economic landscape of South Africa. The reason for choosing Gauteng as the only research site has already been given in the preceding paragraphs.

The study was also delimited to both well-resourced and less-resourced schools since the ultimate goal was to demonstrate even to less-resourced schools that embracing technology may not only be the preserve of the rich. While the quality and nature of facilities and resources may obviously differ between the haves and have-nots, the idea was to make the findings attractive to everybody irrespective of status and setting. The focus is schools that make use of technology because the intention is to see how it is incorporated into the planning and execution of African literature lessons.

The study was undertaken in schools where English is studied as a home language and as a first additional language. The key focus is the use and effectiveness of technology, not where the schools are based, nor whether English is a first language or an additional language. This does not – in any way – presuppose that different contextual dynamics may influence the use or non-use of technology in the teaching of literature.

Another key delimitation of the study is its focus on novels and drama. Poetry – another key genre of literature – has been excluded for three main reasons. Firstly, I did not want to widen the scope of the study beyond manageability. I intended to keep its scope to a level where the genres do not appear overcrowded and competing for attention. The second reason is because novels and drama tend not to be too different in terms of analysis. For example – despite their obvious differences in form and structure – they both have the usual key elements of literary texts: setting, plot, characters and theme / issues / concerns. This is not to say poetry cannot have these elements but novels and drama seem to be much closer to each other than poetry is to the other two. Lastly, in my experience, teachers tend to avoid poetry and would rather opt for the novel and drama in their choice of literary texts.

1.9 Conclusion

This chapter has dealt with the background that gave conception to this research and proceeded to provide the aims of the study which situate it within the broader area of technology in education. The research purpose and the key questions investigated by the study were also discussed along with why the research is deemed significant and relevant. Additionally, two theories (constructivism and connectivism) on which the study is based have been presented and debated where particular attention is placed on their relevance to learning with technology.

Finally, the limitations of the study were discussed. Here the key discussion centred firstly on why nine schools were selected as research sites and why only Gauteng schools were chosen. Secondly, the reasons why the study focuses on the two genres – novel and drama – are provided. The chapter that follows reviews relevant literature from different contexts and starts with a review of a few documents where the Department of Basic Education takes a stance regarding the use of technology in schools.

CHAPTER 2

Literature review

2.1 Introduction

This chapter presents a discussion of literature from different perspectives but all with a purpose to gaining more insight into the place of literature within the school system and also understanding the relationship that already exists between literature and technology. The chapter considers literature (the subject and study) from a wider perspective since African literature falls within the broader subject of literature and should not be considered in isolation from literature as a whole. A holistic approach is therefore taken with the understanding that African literature exists as part of the broader literature discipline.

The first part of the chapter looks at the Department of Basic Education's vision with regard to technology in education. Some DBE documents are reviewed in order to have a view of some of the policies regarding the importance of technology in education. This section on the DBE in a way, is an extension to the background that was discussed in chapter 1 and helps contextualise the study within the wider realm of the DBE's vision on technology. The second part of the chapter will look at why literature should continue to be studied. Thirdly, text selection in literature will be considered since talking about African literature (and the rest of the prescribed literary texts) already implies that some selection criteria must be applied. The fourth part looks at technology and digital literacies in the classroom, in particular considering the general use of technology in the classroom and the constantly shifting understanding of the concept 'literacy.' The fifth section of the chapter will specifically look at how the power of cellphone technology can be incorporated into the literature classroom instead of being dismissed as distractive and damaging to learning. The last part of the chapter looks at how technology can be aligned with literature, more especially in the classroom to understand technology's role in literature.

2.2 The DBE's vision regarding technology in education

In one of its official documents, the Department of Basic Education (DBE) maps out a plan to incorporate technology in education. In a 2015 document titled 'Action plan to 2019: towards the realisation of schooling 2030' the DBE relates two of its 27 goals to technology. Goal 16 reads: "improve the professionalism, teaching skills, subject knowledge and computer literacy of teachers throughout their careers" (p.3). Goal 20 reads: "increase access amongst learners to a wide range of media, including computers, which enrich their education" (p.3).

As will be seen later in this chapter, computer literacy and digital literacy are not the same concepts. *Computer literacy* focuses on skills to use computers while *digital literacy* goes beyond and considers aspects such as the ability to select appropriate information and to use technology safely. Goal 16 stresses the concept of computer literacy and does not go beyond. In my opinion, the goal would have been stronger and more rigorous if it had suggested going beyond mere literacy in the use of computers and encouraging teachers to be digitally literate. An elaboration of Goal 16 in the DBE document states:

> …greater access to and educational use of digital resources by teachers must be accelerated. A priority programme in this regard continues to be the Teacher Laptop Initiative. The considerable teething problems in this initiative have largely been ironed out. In moving forward, not just the technologies themselves, but their use to promote better teaching practices must be emphasised (p.36).

Apart from the desire by the DBE to make more digital resources available to teachers, the document further has a section that talks about the importance of e-education as an area of "innovation" and "changing the way schooling occurs in rather fundamental ways." It elaborates that

> modern information and communication technologies (ICTs) have the potential to improve and diversify learning to a large degree and ICTs are becoming so widely used in society that an education without them is rapidly becoming an incomplete education (pp.15-16).

This shows intention by the DBE to educate learners for the present (and future) environment where the use of technology is becoming increasingly difficult to ignore.

In August 2004, the Department of Education (as it was called then) published the *White Paper on e-Education* with the title 'Transforming learning and teaching through information and communication technologies (ICTs).' In this document, a bold and ambitious statement of intent is made regarding the use of ICTs in teaching and learning:

> Every South African learner in the general and further education and training bands will be ICT capable (that is, use ICTs confidently and creatively to help develop the skills and knowledge they need to achieve personal goals and to be full participants in the global community by 2013 (p.17).

The year 2013 has already come and gone. Whether the DBE has seen its ambition turn to reality and fruition is another matter. However, judging by some of the preliminary visits I made to two schools (one in Soweto and another in Tsakane, East Rand) in 2016 as preparation for this study, this goal by the Department is still far from spreading to every school. In both schools, there was no sign yet that technology was making inroads. This may not rule out subsequent digital developments since my visit to the two schools. While this does not lessen the importance of the goal and its well-meaning intention, it shows that talk and action are usually two distinct realities. Despite the slow nature of developments regarding technology roll-out, the visits I have made to a number of schools in and around Johannesburg revealed to me that the Gauteng Department of Education (GDE) is making steady progress with availing smartboards to schools in the province. For three consecutive years (2016-2018), I have had the privilege of visiting a number of schools in and around Johannesburg to observe pre-service English teachers placed on Teaching Experience by the Wits School of Education. In quite a number of schools, smartboards are now used for teaching, such as the one on the picture below which I took at a school in Klipspruit, Soweto.

Picture 1: A GDE-supplied smartboard at a Soweto school



Date taken: 01-August-2018

Clearly visible on this screen saver – which is standard in all GDE-supplied smartboards – is the pride of the Gauteng Province that their classrooms are going digital and "switching on to a whole new world" to make teaching and learning a new experience in comparison with what it was previously. It is a message which promises the Gauteng classroom a modernistic and renewed feeling through the use of technology.

Back to the *White Paper*, the Department of Basic Education highlights six key factors as being instrumental in the decision to promote ICTs in teaching and learning. These are:

- creating access to learning opportunities;
- redressing inequalities;
- improving the quality of learning and teaching;

- delivering life-long learning;
- accommodating differences in learning styles; and
- removing barriers to learning (p.16).

I must hasten to add that creating access and redressing inequalities imply that everyone (teachers and learners) has access; even if it may not be equal access owing to different socio-economic backgrounds. This, as explained a bit earlier, cannot happen unless talk is matched with action. As further justification for promoting ICTs in teaching and learning, the DBE touches on yet another area that has earlier been discussed in this study: the need to move away from traditional teaching methods (where the teacher dominates discourse and ICTs are hardly ever used) to more learner-centred ones. The document reads:

> Experience worldwide suggests that ICTs play an important role in the transformation of education and training. ICTs can enhance educational reforms by enabling teachers and learners to move away from traditional approaches to teaching and learning. In a transformed teaching and learning environment, there is a shift from teacher-centred, task-oriented, memory-based education (with technology at the periphery), to an inclusive and integrated practice where learners work collaboratively, develop shared practices, engage in meaningful contexts and develop creative and problem-solving skills (p.16).

The concept of collaboration has already been alluded to in chapter one under the theoretical framework section where it was highlighted that technology gives learners the opportunity to work together and share knowledge and information derived from their use of technologies which offer a platform to share, discuss and comment on issues related to the subject content. Interactive platforms like WhatsApp, Facebook and blogging can promote this collaboration.

From what can be gleaned from these two documents (the *White Paper on E-education* and the *Action Plan to 2019*, published eleven years apart), it is apparent that South African education has a vision to technologise the classroom and turn it into a space where technology plays a significant role in teaching and learning. That technology is part of the long term goal of the DBE (and is also given prominence in

an earlier document by the DBE's predecessor department) shows that it is a matter they take seriously. The key challenge in this quest may be continued lack of access to the technologies by many teachers and learners. In other words, a wish alone may not be adequate. What is needed is a more elaborate goal on how the desire to technologise the classroom can be achievable. Nevertheless, a wish does show will and determination to transform the classroom through technology.

Furthermore, what the DBE wishes to achieve does not automatically transfer into readiness by teachers to use technology. Some teachers may be indifferent, disinterested or ignorant about how technology can be used in education. This poses a challenge that may not be solved simply by the desire to roll out technology to schools. The dynamics involving how teachers interact (if they do indeed) with technology are key in whether they end up implementing the vision of the DBE. This implies more emphasis on the professional development of teachers to implement the grand plans and polices of government regarding the use of ICTs in schools. For student teachers, who are still in pre-service, the Department of Basic Education must work together with teacher training institutions to ensure readiness of teachers to engage with some technologies as soon as they join the schools. Digital literacy would enable transition from teacher training to the classroom to be much more seamless in the context where digital technologies are predominant and hard to ignore.

2.3 Why study / teach literature?

One of the key questions as one embarks on this study is why literature should be studied or taught. A former colleague once suggested that teaching literature is like asking learners to go and participate in sporting activities over the weekend, then on the following Monday subject the learners to all sorts of analytic questions about everything that happened at the games. Despite its competitive nature, sport is meant to be enjoyed but once one knows questions about what was seen and observed as leisure would be forthcoming, learners may no longer find joy in it. The same thing (my colleague reasoned) applies to literature which is supposed to be fun and not even be subjected to the rigidity and formality of tests and examinations. Such opinions may be debated at more length in different fora and this study is not about the merits or

demerits of studying literature but rather pursues other interests related to its teaching in the era where teachers have more options to explore to enrich learners' classroom experience.

Even as South Africa's Department of Basic Education switches to a more Africanised literature syllabus, and access to different technologies and their potential is under scrutiny in this study, the question of why we study literature still remains central to the overall discussion. The decision means literature as a school subject, despite subject competition and jostling for space in the curriculum, persists as part of the national curriculum. One would therefore assume literature's continued presence in the English syllabus means there continues to be value attached to this aspect of the subject by the key decision makers. Why study or teach literature, and to extend this to African literature, is the lingering question therefore.

In a book chapter titled *Literature in the language classroom* Maley (2001, p.180) highlights the importance of literature in the language classroom and how the two can be integrated. He shows that literature is the chief vehicle through which language can be learned. This is especially relevant in contexts where English is a second or even third language of learners and the general public. He states that:

> Literature in language teaching has a long pedigree. It was a fundamental part of foreign language teaching in the 'classical humanistic' paradigm where an understanding of the high culture and thought expressed through literature took precedence over mere competence in using the language. Indeed, in the teaching of European classical languages, such as Greek and Latin, the literature was virtually all that remained of the language.

It can be concluded therefore, that there was a time when Greek and Latin were the elite languages of scholarship in Europe and that the literature of those languages was held in high esteem. This demonstrates the value, power and esteem that literature has continued to have over many years.

Especially in contexts where English is a second or even third language of learners, literature can be highly valuable in language learning and as a stimulus for language

learning and expanding learners' language awareness (Lazar, 1993, p.15). This is especially important due to the fact that literature is often seen as providing a model for good writing (Parkinson and Thomas, 2000, p.9). Lazar (1993) further believes that literature opens the window into understanding other cultures and can also develop learners' abilities to interpret texts and situations. Collie and Slater (1987, p.9) refer to literature's role of cultural enrichment. The exposure that learners have to texts from culturally different contexts implies that they educate and expand their understanding of cultures and traditions other than their own hence widening their global outlook.

It would certainly be interesting to ask each reader of literary texts why they are so pre-occupied with literature. Why do they teach or study literature? Larissa McLean Davies in a suitably titled book chapter "You are what you read" (coined from a website launch by publisher 'Scholastic' in 2010) shares some of Scholastic's views regarding the power of literature. The publisher believes that books leave a "bookprint" among readers (Davies, 2014, p.235). In other words books show the journey readers have traversed and can be considered part of their literary history.

Davies (2014, p.235) talks of "the role literary texts continue to have in mediating an individual's life experiences, and shaping and articulating their identity…." This point of view suggests that literary texts offer individuals an opportunity to think about their lives in relation to the stories and characters they read about. This reflects one of the most powerful contributions that literary texts make to humankind in making them reflect on the meaning of their lives in relation to the texts that provoke that meditation.

Anna Quindlen's experience with reading shows the value of reading (especially literary texts) as a journey that readers take to find a home elsewhere other than the physical address where they live. The covers of the books themselves provide a home where readers live (1998, p.4). Apart from that, the readers benefit in a number of ways according to Quindlen: they are not restricted by geographical boundaries and travel to other worlds and, in the process, learn more about who they really are and want to be; and books convey the truth that sets readers free because books are usually reference points for readers to help put certain things in their lives into perspective. Sometimes one may read about a character undergoing a similar experience to themselves as sheer coincidence. This could then be a catalyst to the

reader setting on a path of self-discovery where certain realities are revealed leading to individual growth and new understanding of a situation.

Reading is an unending journey of discovery which takes readers to different locations and contexts where they discover their relevance to the world and what it means to be part of the universe in which they live. Hooks (2010, p.133) says reading empowered her "to journey to places with the mind and imagination," expanded her "consciousness" and laid within her a strong foundation to love and value the power of words and ideas. Literature therefore provides fulfilment that goes right into what it means to be a part of the world that is portrayed by the literary world.

Hooks further takes the value of reading beyond mere pleasure and potential for discovery and elevates it to the level of teachers and the need to inculcate the love of reading among their learners. She thinks that

> Teachers in every educational setting are the individuals who bear the greatest ethical and political responsibility for promoting the power of reading. For unlike other citizens it is an aspect of our job to promote learning. And there can be no book learning without literacy. Students who lack basic reading skill cannot learn to their full capacity. Nor does it do a student who is a skillful reader much good if he or she is allowed to devalue reading (p.132).

The teacher's task to help promote reading appears to be even more crucial at a time when there is fear that books and reading are no longer central to human existence. This in an era when "economic depression is changing the fate of the book" (Hooks, 2010, p.131). The esteem of the library as a chief knowledge and information resource base may not bode well for the future considering also the fact that increasingly, easier accessibility to technology makes it possible to access knowledge and information in ways that view paper books as rather outdated and not responding to the immediate need for fresh information.

In the sections that follow in this chapter, the concept of literacy – where reading has been and continues to be one of its major pillars – is discussed. Literature is undoubtedly one of the key means by which literacy can be promoted. For this

promotion to succeed, access to books is paramount. The fact that paper books are no longer popular, and visits to a physical library not as frequent or mandatory as they used to be however, does not mean that people cannot continue to enjoy reading books via other devices; mainly smart cellphones with enough memory to accommodate a number of e-texts. A UNESCO study conducted in 2014 (in seven developing countries – five of them in Sub-Saharan Africa) shows that the chief reason people do not read is because they don't have books (p.13). They amplify this problem to the level of the classroom where "in Africa a majority of children have never owned a book of their own, and it is not uncommon for 10 to twenty students to share a single textbook in school…" (p.13). The UNESCO study – which was conducted in Ethiopia, Ghana, India, Kenya, Nigeria, Pakistan and Zimbabwe – shows that lack of access to paper books is no longer a barrier to reading due to the prevalence of digital devices. This despite the fact that many learners from poor urban and rural areas may not have the resources to buy smartphones. The study elaborates:

> Digital networks, computer processors and liquid crystal display (LCD) screens remove production constraints that have kept reading material prohibitively expensive for centuries. Increasingly, paper and ink are being replaced by bits and bytes, and physical distribution channels are being streamlined by cable that can carry electronic information to the furthest corners of the planet almost instantaneously. At the same time, ever-improving search tools are making the vast repositories of online text easy to use and navigate. Today a robust internet connection gives a person access to more text than in all of the physical libraries ever built (p.15).

Despite these advances in reading via technology, a number of gaps still exist; notably limited books to be read, connectivity problems and cost of airtime (p.37). Technology can still not be a panacea for all problems to do with lack of reading. However, it has the potential to reach places where paper books and mobile libraries cannot.

In South Africa, one of the organisations that promote reading in schools and communities is the FunDza Literacy Trust. This is a non-profit organisation dedicated to improving literacy among teens and young adults (http://www.fundza.co.za). It supports literacy within schools by creating reading groups with the actual hard copy books and also promoting its mobile site within schools. Technology-wise, FunDza

reaches learners who are not attached to schools by using social media as a platform to direct them to the mobile site and by having a presence at local community centres and learning centres: hosting workshops, putting up posters and handing out flyers for example. FunDza's drive to promote literacy is fueled by its belief that "education provides the foundation for a healthy, stable, growth-oriented society" and that literacy in the "corner-stone" of this bedrock (a FunDza statement in their webpage).

The literature reviewed in this section largely shows the value that literature continues to have and the efforts by some organisations to promote reading and literacy in communities and schools. While this research is not about the value of literature, the technologies that teachers and learners use in and outside of the classroom (despite the obvious challenges they pose to books and reading) can enhance the experience that readers have with literary texts. A video clip for example can sharpen skills such as articulation and pronunciation among readers. The learners who wish to pursue a career in drama may also draw inspiration from some of the actors and actresses and thus fuel their passion for drama and theatre. While using YouTube, some may even acquire some elementary skills in editing and writing videos. Also, for communities deprived of paper books, a tool they already possess (a cellphone) may be their key route to accessing texts and becoming participants in literacy activities.

Despite literature and reading being so rewarding, the key contextual problem emanates from affordability for some learners. In the developing world, many families often have a harsh socio-economic climate to contend with and may find expenditure on books (or airtime and data for those who access reading online) unreasonable while the stomach is rumbling and many other social needs require urgent attention. In some communities, book donations and mobile libraries often come to the rescue to ensure continued access for those who cannot afford books.

2.4 Text selection in literature

In the South African context of the *Sunday Times* article that was alluded to at the beginning of this thesis, the issue of text selection in the teaching and learning of literature is paramount. The shift to more local texts, which has been proposed by the Department of Basic Education, implies certain ideological considerations in the selection of literary texts. In this case the selection of literary texts goes far beyond some of the common general criteria such as language accessibility and suitability to the level for which the texts are prescribed. The choice indicates a new direction towards local values, beliefs and patriotism. Ideology becomes the guiding principle in this text selection.

This decision by the DBE would resonate well with the views of renowned African writer Ngugi wa Thiong'o whose "text selection criterion is more patriotic towards Africa and therefore supports his aims of more Africanised literature syllabi" (Mahao, 2002, p.42). Ngugi's hierarchy of choice of literary texts is clear: texts by African writers first. Then second and third would be literature from regions that "struggled against colonialism, racism, and imperialistic economic, political and cultural domination" and European literature that has relevance to Africans (Ngugi, 1997, p.32).

It must be noted however that the DBE's decision is based on literature texts published in English and not the indigenous languages of Africa, and this research is precisely on African literary tests published in English. Again, the notion of what should qualify as African literature was questioned by Ngugi himself when he considered situations where an African writer writes about a European setting or a European writer writes about an African setting (Ngugi, 2007). This is a question that has been ongoing and whether or not further debates are needed is a matter for academia to determine, especially in the era of multi-culturalism and diminishing borders as a result of advances in technology. For this study however, and as noted in chapter 1, the African writer is the citizen of Africa who writes about a context and concerns he/she is familiar with regardless of colour.

Perhaps also, to avoid creating rigid literary boundaries, it may be useful to speak in terms of global and multicultural literature which "encourages learners to respect and

accept people who are different than themselves…and break attitudes that are oppressive and prejudicial" (Martens, Martens, Doyle, Loomis, Fuhrman, Furnari, Soper and Stout, 2015, p.610). In my opinion, this could promote a different outlook towards African and world literature in that the literary works produced cease to be labelled as either western or eastern but as a body representing the wisdom of writers and literary scholars whose chief interest is sharing cultures, traditions and values as opposed to competing on which region produces the 'best' literature or is superior to others. I therefore endorse the view that, despite it being hard to think without territories and geographical boundaries, literature must be viewed for its own value and aestheticism as opposed to where it comes from.

Ngugi's concerns with text selection, however – apart from the accompanying debates about what or who is African – are steeped in the quest to promote African ideology and culture perhaps in view of the many years of European and American literature's dominance of African curricula. His quest is to promote that which he deems African despite the often niggling doubts about what constitutes literature; both in terms of quality and genre that 'fits' into the label.

Also related to text selection and preference, the field of literature has become familiar with the term 'canon' which usually describes the best (in the opinion of the readers) that represents the literary world. Eagleton (1983, p.11) however warns that this outlook may be flawed as the decision to elevate the status of a text is never permanent and may be affected by time and context. He says that:

> There is no such thing as a literary work or tradition which is valuable *in itself*, regardless of what anyone might have said or come to say about it. 'Value' is a transitive term: it means whatever is valued by certain people in specific situations, according to particular criteria and in the light of given purposes.

Eagleton makes an example that at some point, as society goes through transformation, it may happen that future societies and readers find absolutely nothing valuable about Shakespeare who is widely regarded as literature's most prominent name. This means Shakespeare would have probably ceased to be relevant in that society despite the high esteem in which he may have been once held by previous

societies. Therefore, literature (or ‘good’ literature) is what the society of a given time appreciates as qualifying depending on their own outlook and understanding. In Eagleton’s opinion, literature should not be subjected to strict definitions but should be what the society chooses it to be.

I agree with Eagleton’s opinion. Talk about ‘bad’ and ‘good’ literature is problematic as it places a blurred demarcation line where only the reader, or even society, should make a decision about what is good or bad for them. Fronting a certain canon of texts as the best has some element of cultural dominance as it is usually texts from more economically advanced nations that have reached this status. The belief in the canon tends to be an exclusive terrain where texts from ‘obscure’ backgrounds may find it hard to reach. This is despite such texts enjoying wide readership and respect in the contexts where they are created.

If for a moment the debates about what is of value are put aside, in the field of literature, the term ‘canon’ has come to embody the epitome of what is considered good literature. In the words of Ping and Ang (2014, p.93) “the canon comprises a body of works that is deemed valuable due to its aesthetic value and to its embodiment of cultural and political values of society by scholars.” Parkinson and Thomas (2000, p.24) argue that since the early times, “the notion of literature has been bound up with socially and culturally constituted notions of value.” It may be the case that due to the legacy of colonialism, many of these texts in former British colonies (South Africa included) were from Britain and promoted more British culture. Ping and Ang (2014, p.95) however argue that each country has its own educational canon and that “there appears to be increased emphasis on learning about one’s own heritage” (p.97). This is not far removed from what Eagleton above suggested.

With the passing of time however, some literary critics have warned about the general misunderstanding of what really constitutes a canon. This is tied to the argument that canon was (and probably still is) seen as “elitist and unrepresentative of the work and experience of subordinated and minority groups and of popular literature” (Parkinson and Thomas, 2000, p.25). As post-colonial literatures stake their claim in school syllabi and among the reading public, the understanding of a canon takes on a different meaning to what was common during colonially influenced curricula. It aims to

decolonise readership and give a voice to literature which was previously sidelined by virtue of its origin and perhaps also by virtue of being written in languages that the west could not comprehend.

Canon however is not about “replacing one set of texts with another” (Ashcroft, Griffiths and Tiffin, 1989, p.189). That would be a simplistic way of understanding it. As the three writers show, “a canon is not a body of texts *per se*, but rather a set of reading practices….These reading practices, in their turn, are resident in institutional structures, such as education curricular and publishing networks.” I would also add readers residing in a new socio-political landscape and who shape their understanding of texts according to their own context.

The move by South Africa to prescribe more African literary texts may therefore be viewed as a bold attempt to promote the local and place the heritage of South African children right at the forefront of their literary experience. In the quest to promote local literature, the concept of a universal canon may no longer hold sway over people based in different countries as each country builds its own educational or literary canon. This quest may also bear hallmarks of nationalistic patriotism as nations speed up the process of freeing themselves from the shackles of colonialism and its literature. It may be viewed as a conscious attempt to localise or Africanise the literature syllabus. This localisation drive has the potential to whet the appetite of local writers to write more in view of the wider recognition their texts could enjoy. They may be spurred on by the belief that recognition at home may also open doors to wider international readership; the type of exposure any ambitious writer may not want to miss out on.

2.5 Technology in the classroom

This section focuses on the use of technology in education, paying particular attention to general classroom technology use for teaching and learning. The section is cognizant of the fact that technology and, by extension, classroom technologies are forever altering the way in which teachers and learners engage with the subject content and that every new technological discovery has the potential to make

educationists consider whether the classroom can be influenced to adapt if the technology is relevant to educational needs.

To say that many young people today live in a world almost fully influenced by technology would probably be stating the obvious. This is especially true in more urbanised areas. The assumption about the wide prevalence of technology does not in any way consider everyone – irrespective of their location, setting or socio-economic status – to be having similar access to technology. As Janks, Dixon, Ferreira, Granville and Newfield (2014, p.131)) note, "people do not have equal access to technology" and this is the reality across the world (Waller, 2008, p.187). But on the whole, many young people and technology seem to have struck an amazing rapport; to the extent that they are often referred to as "digital natives" (Prensky, 2001) or "digital citizens" (Jukes, McCain and Crocket, 2010). On the opposite end of the spectrum, some adults who have migrated from traditional forms of literacies where paper books were central, to electronic forms are referred to as "digital immigrants" (Prensky, 2001). In the observation of Hutchison and Wang (2012, p.267), "today's generation of students has spent a majority of its lifetime using computers, playing video games, listening to digital music, and using video cameras, cell phones, and other entertainment devices." Almost all the listed items – inclusive of activities such as social networking and blogging – have become defining sources of entertainment and social inclusiveness for young people.

One of the biggest challenges posed by the divide between digital natives and digital immigrants is that the learners and their teachers are often at opposite ends of this divide. In the opinion of Prensky (2001, p.2) "our Digital Immigrant instructors, who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language." To some extent this digital divide, with all its underlying generational flaws, appears to be a dilemma that education must address and bring the two groups to some level where they can understand and accommodate each other to ensure instruction and learning sing a similar tune. It may be true that learners and many of their teachers were born in different eras and the level of technological understanding and sophistication between them could differ markedly. However, the two groups cannot escape working together in classrooms; some of which are equipped with the latest technological devices.

The binary oppositions of digital 'natives' and 'immigrants' have however not gone unchallenged in academia and seem to pose difficulties in our understanding of who has or does not have access to technology and who is skilled or unskilled in technology. Some writers opine that this juxtaposition of learners and their teachers – as far as technology is concerned – is extremely unfair as it assumes that teachers are "old, slow and backward-looking" and represent the past while their learners represent the future (Bayne and Ross, 2007, p.2). A document by Futurelab in the UK observes that "it is teachers who have experience in higher order critical thinking skills that can support young people's use of digital technology" (p.10). They further suggest that it is teachers who help learners to use digital technologies more profitably as they know best what type of material is useful for purposes of learning. To therefore suggest that teachers are digital immigrants puts them in a negative light despite the fact that it is adults who design the technologies that children use and they also provide academic guidance to the same youngsters who are projected to be more technologically savvy. This outlook makes teachers appear rather archaic in comparison to their supposedly more modern learners.

In the context of this study (South Africa), the technological divide among students in the same institutions is a reality. Thinyane (2010, p.412) conducted a study where she inquired if digital natives are a worldwide phenomenon and investigated first year students' use and experience with technology in South Africa. She found out that:

> …within developing countries such as South Africa, the spectrum of experiences is vast, with some students coming from privileged backgrounds who could form part of the global digital population, whilst other students are introduced to ICTs when they first enrol for their studies at a university…. Instead of assuming what students already know, an evidence-based understanding of students' access and use of technology is essential for educators and administrators when trying to navigate this complex field.

In this case therefore, it would appear that age is not a significant factor as Prensky implies in his concept of 'digital native' and 'digital immigrant.' Even a group made up entirely of learners (as opposed to learners and adults) can display different attributes

in their use and experience with technology. Brown and Czerniewicz (2010, p.357) find serious fault lines with Prensky's idea:

> A serious problem with the idea of the "digital native" is that it is an "othering" concept. It sets up a binary opposition between those who are "natives" and those who are not, the so called "digital immigrants". This polarisation makes the concept less flexible and more determinist in that it implies that if a person falls into one category they cannot exhibit characteristics of the other category.

The gap in the use of technologies does not only exist between teachers and their learners but may also exist among the learners themselves. Learners originate from dissimilar socio-economic backgrounds; even the home settings usually differ. As Williams (2005, p.702) shows, "…there is often a gap in how and for what ends technology is used – a gap between some students and their teachers and a gap between different groups of students." This implies that teachers must not be lulled into the false belief that all their learners are equally literate in digital technologies despite occupying the same academic space. As Futurelab indicates, "not all young people are equally equipped with the skills, knowledge and understanding that will allow them to critically engage with technology and to use it well" (p.17). It goes further to suggest that the confidence of young people's ability to use different technologies "is not evenly spread among all young people, however, but is instead affected by issues of class, race, gender and nationality" (p.9). In places where these inequalities abound, access to and use of digital technologies by some members of the public may be severely hampered.

The matter of learners coming to school and being expected to interact with technology despite being from different backgrounds can be problematic. It tends to assume that all of them are at ease with technology and places the same expectations on all of them despite the glaring disparities in their socio-economic backgrounds. How many teachers are often sensitive to the needs of those learners who display ignorance and slowness during lessons which require prior knowledge and, in the context of this research, exposure to some technology?

This binary of “natives” and “immigrants” is an interesting juxtaposition despite some of the flaws in the concept; notably that all learners are comfortable with technology while their teachers are not. Hopefully part of the fieldwork I have done provides some contribution towards this debate. What one can contribute here is that young people usually take to technology and any other new developments like a duckling does to swimming since they are usually more adept at using technology. The key point here is that technology has become much more popular during the generation of most of these young people. Many are already using a lot of outside-the-classroom technologies such as social net-working, computer games and other hand-held devices which play games.

While classroom technology and digital literacy require a lot more than just the skill to play computer games, the transition from home-based to classroom technologies cannot be very difficult for these youngsters. They just need proper guidance and could swim comfortably in the sea of technology. While the technology young people use is designed by adults, it is not their teachers but other commercially-driven adults who design it. It is therefore not to too far-fetched to assume that some teachers are not technologically savvy, especially if they have spent a huge part of their lifetime using traditional teaching methods and perhaps even underwent teacher training at a time when classroom and other digital technologies were not at the forefront of school instruction.

The digital native and immigrant debate aside for now, what is observable is that the traditional classroom, albeit at a differing pace of development in different parts of the world, has gone through some technologically-inspired changes. In some contexts, devices – especially computers – are almost indispensable in teaching and learning. No matter the subject and level of study, technology is increasingly becoming dominant in some classrooms. This is no longer surprising seeing that computers are now almost everywhere in the Unites States of America: homes, schools, offices and factories and digital technologies like cameras, video games and CD-ROMs have become common (Tapscott, 1998, p.1). Where these technologies and other interactive multi-media are available, Davis (1993, p.334) observes that they are increasingly being used to make teaching more efficient. In relation to advances made in technology, Tapscott’s input (in terms of publication date, some of the technologies

mentioned and the speed at which technology develops) is rather old though not completely irrelevant in terms of substance and contribution to our understanding of the significance of technology. While the technologies he alludes to may still be in use, more developments have occurred in the form of USBs, DVD-ROMs, podcasts, digital files and Wi-Fi hotspots where learners can use smartphones, iPads and tablets which are easier to carry and store.

What other experts believe, and which are similar to Tapscott's thinking – especially in light of the widespread use of technology among young people – is that teachers and the education landscape in general should find a way to make full use of these technologies to enhance classroom experience. Classrooms are further advised to "tap into the rich vein of enthusiasm which young people are hooked on: digital media" (Traynor, 2018, p.43). Buckingham (2007, p.178) observes that

> …digital media have come to occupy a central role in most young people's lives outside school. Children are no longer encountering these technologies for the first time in school, as was the case in the 1980s and much of the 1990s. On the contrary, digital media are now a central part of their popular culture.

The media that Buckingham refers to are shared by young people on social networking sites such as Facebook, WhatsApp and YouTube. How can these media be incorporated into the classroom to ensure they become more useful in classroom settings and are not just confined to building and maintaining friendships?

In a book where they attempt to help different educational stakeholders understand the digital generation, three co-writers – Jukes, McCain and Crockett (2010, p.9) – warn of the generation gap that exists between adults (especially teachers) and young people:

> The problem is the rapidly growing gap of understanding between the young people sitting in the classrooms and the adults who teach them and make decisions about what they will learn, where they will learn, and how they will learn. The problem is that this gap in understanding is causing a crisis of relevance in our schools. If it is not addressed, then we fear for the long-term

> viability of the public school system because many alternatives to traditional schooling are now appearing in the new digital world.

An important observation – in the form of a warning – comes from the same writers:

> If we continue to teach in the same old way, we will completely miss connecting with our students. This will not occur because we don't have good things to say, but because we don't know how to say them in a way that students can relate to (p.47).

They further warn of "an impending tragedy for education" (p.47) if teachers do not adapt their teaching methods to how the digital generation learns. This warning, stark as it may be, points to the fact that teachers who insist on traditional ways of knowledge transfer may discover that they no longer connect at the same level with their learners; especially those learners who constantly interact with technology. Even though methods of teaching have remained largely unchanged as high stakes examinations continue to influence teaching and learning, what remains a challenge for pedagogy today is the technologically savvy student who joins a still largely traditional school environment. It must be acknowledged however that in some parts of the world (my country Lesotho included) there are still many school settings that have remained almost untouched by these rapid digital developments. Still, children who learn in those contexts will one day be expected to get into higher education institutions and then later join the world of work where there is a high possibility that digital literacy and skills will be required. How does the education system prepare them for that reality?

As Sutherland, Robertson and John (2009, p.5) observe, the current learner, and future worker, has to undergo the type of education that prepares them for the world and workplace dominated by technology:

> The notional twenty-first century learner and worker, in 'the knowledge economy', is at the centre of much current educational discussion. The competencies, skills and attitudes required by this person are inextricably involved with new (and yet to be developed) technologies.

How do we then ensure, through relevant educational planning and policies that these learners and future workers are not left behind? Even as we correctly acknowledge that some learners have exposure to technology while others do not, this is a question that we should not lose sight of in view of a working environment that awaits both sets of children in adult life. The reality that awaits school leavers may require that they are ready to engage with the technologies they find in the workplace.

In relation to the earlier discussed matter of digital natives and digital immigrants, it may not always be easy to achieve proper synergy between these two different generations. Both first have to come to terms with the age gap that usually exists between teachers and their learners and some of the traditional attitudes that have formed over many years. Such attitudes and habits are usually hard to get rid of. However, humans are normally inquisitive by nature, which may help teachers who still feel inadequate to develop the hunger to discover what the world of technology entails, especially when the incentive to use it is made more alluring by schools and education departments.

The above advice given to teachers, parents and other stakeholders is, however, important in mapping the way forward for learning in digitised communities. Others however, depending on location and context may argue that the settings in which many teachers provide education are not quite as digitised as the three authors describe. Many parts of rural Africa – where even electricity, and its reliability where it is available, is a distant luxury – come to mind. Ndibalema (2014, p.4) cites Tanzania which often "faces unreliable power and physical data networks which make ICT policy to be poorly implemented." In South Africa, the reality of load shedding is known in both urban and rural areas.

Dakich (2008, p.5) observe that despite young people's social environments becoming increasingly dominated by technology, the classrooms they go into have not been responsive enough in digitising the school environment more. They say that:

> …ICT should be an integral part of learning in schools today. Technologies permeate the lives of the young people that attend our schools yet within school

> they tend to remain peripheral to the main work that is done and in many cases their use is tokenistic rather than essential…. In Australia, a considerable amount of funding has been provided to support the development and production of digital learning objects that were intended to promote new learning yet many of them support the traditional use of technology in mimicking existing activities electronically, rather than by thinking of new ways that the medium affords.

Perhaps one of the biggest influences in the reluctance by some schools to use technology (apart from barriers such as attitudes, unavailability of resources and lack of competence to use technology) could be the assessment mode that still largely relies heavily on pen and paper. My observation here is that schools tend to be short-sighted in eyeing assessment and examinations as the key focus instead of the long-term benefits of preparing learners for a world of work where technology is dominant. Still this is a problem that requires education departments in different countries to consider how technology can be incorporated into assessment methods; perhaps also as an incentive to make reluctant teachers to use it.

Dakich (2008, p.15) reflects on some of the reasons why in some places technology has not yet brought about considerable change and says

> It appears that one of the reasons for the failure of technology to bring about substantial change in education is that the infusion of ICT into schools has not been accompanied by a sustainable vision for cultural and pedagogical change that would support teacher adoption of new technologies.

It is not enough for departments of education to state in official policy documents that school instruction will be technology-driven yet there is no emphasis on how technology can fundamentally influence and alter the way in which teaching and learning have occurred over the years. Supplying technology to schools without this emphasis may not achieve the desired goals of achieving some significant shift from traditional modes of instruction.

Key among these digital technologies is the computer which – since the advent of the Internet and the World Wide Web – has become increasingly useful. According to

Crystal (2011, p.12), the Internet became a more effective tool with the arrival of the web in 1991 while the arrival of Google in 1999 made the internet searchable thus further enhancing its utility. Information – for some teachers and learners – is now just a click away and more importantly, it is no longer the preserve of those who can afford books and long trips to the library. The power of the Internet, according to Lever-Duffy and Macdonald (2011, p.xix) is that it "can put the world's body of knowledge quite literally at one's finger tips." Castells (2001, p.152) views the Internet as being "the epitome and the most powerful medium of" the technological revolution.

Lankshear and Knobel (2003) regard the technology era as "the information technology revolution" (p.155). Indeed one could argue that technology ranks among the main revolutions of humankind along with the Stone Age, the Iron Age and the Fourth Industrial Revolution. Barriers of time and geography are being dismantled albeit at different paces in different nations to create more access and wider participation in this revolution. Castells (2001, p.152) refers to the world "experiencing a major technological revolution centred around information and communication technologies…." These developments – socially and in the workplace – cannot escape scrutiny as potential game-changers and influencers in the school system as suggested by Solomon and Schrum (2011) earlier referred to in this study.

A study done in Niamey, Niger, by Karsenti and Kouawo (2015) on high school learners' social representations and uses of technology reveals that the learners "viewed ICT (Information and Communication Technology) as the most powerful tool of the century" and that "ICT are very important because everything is computerised today. Just to get a job, you have to know how to use technologies" (p.300). Karsenti and Kouawo also find that "in cybercafés, homes, and sometimes the schools of Niamey, Niger, more and more students are using computers to learn, communicate, and amuse themselves" (p.300). This further extends the view that in different contexts, technology is seen as very important in learning, both at home and in the workplace.

Newby, Stepich, Lehman and Russel (2006, p.12) show that the transformation of the classroom into a more learner-centred space (in direct contrast to the traditional

teacher-dominated setting) is almost inevitable in view of the fast pace of developments in the area of technology. They argue that:

> Today we live in an age of lightning-fast information transfer. Technology has allowed individuals to obtain, assemble, analyze, and communicate information in more detail and at a much faster pace than ever before possible. One consequence of this is the ever-increasing demand on education to help all learners acquire higher-level skills that allow them to solve complex "real world" problems.

This of course would be in an ideal world where everybody, irrespective of class and context, would have access to technology. Digital technologies enable learners to do a lot on their own as long as they have access to the devices they need to search, collect and analyse the information needed in the classroom. More importantly however, is learners' ability to navigate the many highways of the digital world. Mere access to the devices is not enough. In the words of Steward and Schiffer (2010, p.3), digitisation has enabled the subject matter to be presented more "vividly, seamlessly and interactively." This further emphasises the massive shift (in some contexts) from the teacher as the central figure in knowledge production and dissemination, although teachers remain key in helping learners choose worthwhile knowledge. The learners – with the assistance of their digital hardware and the teacher's supervision – are also fully engaged in classroom interactions.

Learners can also map their learning route and contribute meaningfully to making the classroom much livelier than it ever was before. Even without instruction from the teacher, those willing to take the initiative for their learning can set their own learning pace and later join classroom discussions armed with tons of information where the teacher now manages the discovered information in the right channels for the benefit of the entire class. The learners can, in a way, become masters of their own learning destiny with the teacher keeping a close watch on developments and offering guidance towards this goal. Achievement of this goal depends on whether the context is rich in technology and if and how technology is used. It would make no sense for schools to have abundant digital media and devices yet they are hardly ever used.

As a way to make the presence of technology influential in educational environments, huge resources are pumped into making technology one of the key ways of teaching in countries that can afford or have the political will to do so. In many parts of the world "…the governments of 'developed' and 'developing' countries…direct educational policies and huge amounts of funding at 'technologising' the school classroom" (Jewitt, 2006, p.1). Whether or not teachers are technologically savvy, they are under "increasing pressure to incorporate new technologies into teaching programmes" p.1).

It has already been highlighted that young people, especially those residing in urban and resource-rich environments are usually technologically savvy since technology is not alien to their world. The same however (as previously emphasised in the earlier sections) cannot be said about some teachers who not only need to display ability to use technology but also willingness to make it part of their lessons. The 'pressure' to use technology perhaps stems from the impact it has made in the world today where it may even be considered central to human existence.

Some may as well wonder (and rightly so to some extent) whether it is fair for governments of poor and developing nations to assign a good slice of their budgets to equipping schools with technology in the midst of numerous other socio-economic needs of their people. It may be a valid observation but in my opinion, it is not a question of one replacing the other but about doing what is adequate (depending on economic muscle) to be part of global developments seeing that education tends to encourage massive mobility among humankind. It would be encouraging for citizens – no matter their origin – to also feel part of the global educational setting and be able to fit into any teaching-learning environment. Without requisite skills in technology, it may be hard for some to be as mobile as they wish to. It could mean they then encounter difficulties becoming part of an environment driven by the use of certain digital technologies. Literature teachers, no matter their physical location, are also part of the global community and may at some point move from one setting to another. Their familiarity with some classroom technologies could ease their assimilation into new teaching environments and their learners could also become global citizens.

As has been implied in this section, technologising the classroom has huge implications on investment in infrastructure development in schools apart from the

expectation that users of the infrastructure must be able to operate it. Availability of technology in schools will always invariably depend on matters such as affordability, willingness, skill and readiness to use it, school context and availability of power sources. Even though in reality teachers can still – in many contexts – do without technology, a quick glance at today's workplace, businesses and homes shows that advances in technology cannot be wished away, especially in a context where children who have access to digital devices and media are already finding alternative sources of knowledge and information. The classroom would be foolhardy not to take advantage of these alternative means of teaching and learning to prepare learners for the workplace where the tools of work are going high tech and digital. As Aslan, Reigeluth and Mete (2016, p.40) show,

> The transition from the *Industrial Age* to the *Information Age* has resulted in the need for innovative approaches to teaching and learning. In the Information-Age paradigm of education, students should be at the center of the learning process, taking an active role, whereas the teachers take the role of a learning mentor. This transition has also created the need for innovative methods of instruction and assessment using technology as an enabler of such methods. Implementation of such innovative methods requires a different set of infrastructure needs.

This ties in with the constructivist and connectivist approaches which were discussed in chapter one where learners assume an active role in their learning via the connectivity enabled by digital devices, while the teacher provides the required guidance and mentorship. The importance of the teacher will always be key in assisting learners to navigate their way through the complex and sometimes confusing interchanges of technology.

Some scholars like Louw (2013, p.72) see educational media like technology creating classrooms where the learners' interest can be sustained as opposed to situations where they just passively listen to the teacher. Louw says these media provide "variation… motivation, involvement and participation" in classrooms. In contexts where the learners are turned into chief participants in their learning, the process of knowledge transfer could be richly rewarding. As discussed in chapter 1, active

participation and learning would relate to some of the tenets of the constructivist approach which has been adopted for this study.

Amidst the rapid developments in technology, one of the key questions has always been whether teachers are ready to embrace and use it in their classrooms or whether there is reluctance to make use of it. It is a question the response to which may rest on four key issues. The first is whether the schools do have the required technology that teachers could make use of. The second has to do with the teachers themselves: are they technologically savvy enough to make it part of their classroom environment? The third is whether teachers feel the need to use technology to prepare for and to teach their lessons. Even if their schools have the digital media and devices, is there any incentive to use them? Is there even time to frequently incorporate them into lessons? Do teachers consider their lessons to be just fine even without the use of technology? Lastly, do teacher training institutions prepare teachers for the world where technology abounds? Some of these questions feature in the general research questions that this study hopes to address and hopefully, some responses will be provided. While it is important to find out if literature teachers use technology in their teaching, it is equally vital to find out if they feel confident in the use of technology and also whether their schools have the required technology or at the least encourage its use to teach literature.

The literature reviewed in this section is – on the whole – positive about the use of technology in the classroom. This may give the impression that everybody is happy with the use of classroom technologies. Despite this largely favourable position in the use of technology, some dissenting voices can still be heard. For example some excuses for not using technology are: it does not seem to fit into the teacher's program; teachers are already juggling too much to incorporate technology and that they do not have time to learn or use it (http://askateacher.com). Perhaps these – and other excuses – will be raised by some of the teachers who will be participating in this study. It would be interesting to get even the views of those who are totally against technology.

2.6 From literacy to literacies

This section looks at the concept of literacy, especially in the technology era. It further deals with the shift in the usage and understanding of the term 'literacy' and links this shift to digital literacy. A distinction will also be made between computer literacy and digital literacy.

The widespread use of technology has meant a huge shift in how the world now understands the term 'literacy.' The traditional understanding of literacy: the ability to read and write (Janks, 2010, pp.1-2), has had to expand to accommodate new skills and abilities such as the ability to use a variety of information technologies. As a result, "…schools are expected to play an important role in preparing the next generation for a world in which ICTs are central to literate activity" (Hutchison and Wang, 2012, p.264). It is certainly no longer enough for teachers to claim to be ready for the classroom when they cannot use the most basic of the technologies predominant in the digital world. This may obviously have implications for teacher training and the ability for teacher training institutions to prepare teachers adequately for the workplace that demands a certain level of digital literacy to be able to cope with varying technological demands.

One may also add that apart from the ability to read and write, understanding what is written is fundamental to being literate. As Janks (2010, p.2) shows, the ability to read is not enough because literacy is also socially embedded in that there are "patterned and conventional ways of using written language that are defined by culture and regulated by social institutions." The implication, according to Janks, is that fluency in reading what is written is not enough but must be backed by the understanding of how language is used by different communities within certain fields. One may be able to read words but be unable to decipher meaning because they do not belong to the social group that uses and is familiar with the terminology of the text. To view reading as a mark of literacy is a simplistic approach towards a concept that has other complex layers to its meaning.

Literacy is a core component of access to educational opportunities. As seen in the previous section, these educational opportunities enable humankind mobility to travel,

settle and feel at home in new spaces and environments. This would otherwise be hard to imagine if one has had limited access to education and literacy. As Gennrich (2015, p.4) notes, “literacy is linked with many positive attributes such as self-esteem, empowerment, knowledge and self-reliance.” All of these qualities further enable one to extend their sphere of reach and influence. The opportunity and ability to move between places can be both local and global and is influenced by local and global literacies with a strong bearing on digital literacy. Local literacies are usually confined to boundaries such as the home, household, neighbourhood and the community in which one lives (Barton and Hamilton, 2000, p.11). Local literacies – such as acceptable forms of greeting, jokes and useful knowledge – make it possible for one to function and be accepted as a member of a community that practices and understands common behaviours. Local literacies are formed through many years of communal sharing and collaboration and are understood by participants in spite of lack of written rules of engagement in many cases.

On the other hand, global literacies imply communication that covers much bigger geographical and social boundaries. Here communication is at a global level, with a global community and through increased communication (Hawisher and Selfe, 2000, p.2). There are no barriers posed by geopolitical location, language, culture, everyday social practices and attitudes (p.2). Global literacies are made possible by the technologies that seamlessly break down the barriers posed by geography and distance and enable individuals to engage more often sometimes, than with their physical neighbours.

In relation to this research, both local and global literacies are important in that schools are situated in what may be regarded as local communities. Sometimes teachers are influenced by the technologies that exist and are useful among the local communities. They may therefore, invariably use digital devices and media that they have access to in their locality even though the global reach of the Internet extends this access far beyond their neighbourhood. Similarly, schools are part of the global community in that they offer education that transcends national boundaries hence teachers and learners need to use technologies that are common to global communities to ease assimilation and adaptation into other communities.

The literacies and technologies which exist among the local communities are however problematic in some respect. While it is understandable that teachers tap into the possibilities afforded by local literacies and technologies to offer classroom instruction, it is often the case that learners who lack exposure to popular literacies inspired by technology are at a disadvantage. Learners who come from backgrounds whose literacy practices are dominant in the discourse of the classroom may follow discussions much easier than those coming from areas whose literacy practices are dormant in classroom discourse. For example, if the topic of the day is '*writing an email*,' learners who are already familiar with email and the terminology used may follow discussions much faster than learners who lack exposure to email. Gee (1996) cited in Morrell (2004, p.4) shows how the two sets and social classes of learners are not at the same level in terms of literacy expectations. Even though his view is not specifically on digital literacy but general, it still relates to how learners from different literacy backgrounds fare in the classrooms:

> Too often, what happens in literacy classrooms is that the students whose experiences, practices, and preferences most closely resemble the demands of academic literacy are rewarded, while those whose experiences, practices, and preferences are less congruent, struggle with the development of academic literacy.

Digital literacy (which is discussed later in this section) would also form part of the disadvantage that learners who are lacking in technological exposure would face in classrooms where some or most of the learners are more digitally literate. The rewards for those who are more technologically savvy would be almost instant while their digitally deprived counterparts would probably be viewed as dragging the pace and progress of the lessons.

In continuing with the expanded notion of literacy, Carvin (2000, p.38) says that certain skills and literacies enable effective use of technology and information. These are:

- Basic literacy – the ability to read and write;
- Functional literacy – the ability to put reading and writing skills to daily use;

- Occupational literacy – knowledge of the basics of working in a business environment;
- Technological literacy – ability to use common IT tools effectively;
- Information literacy – ability to judge the quality of content;
- Adaptive literacy – ability to develop new skills, use new tools and adapt to new situations.

As explained earlier, literacy goes beyond what the above literacies express and each would need more detailed unpacking to understand what they entail. For example, as discussed before, the ability to read and write is at the very basic level and does not go far enough. Taking it further implies the ability to understand and even to analyse what is written and for the reader to get functional benefit out of what they read or write. Earlier in this section, Janks (2010) further extends reading literacy to the social environment where different communities' writing is intelligible to their own social group. Intrinsic to each of these literacies is the capacity to understand how and why such literacies are vital, and to develop a literacy which has the capacity to analyse and judge the efficacy of what is being learnt and studied. In the final analysis, each person can get benefit out of the literacy they are familiar with and need to use at a given moment. Those with multiple literacies stand to gain the most due to their varied competencies and versatility. Technological literacy and adaptive literacy are the ones closest to digital literacy as the regular unveiling of new technology requires one to quickly adapt and sharpen their competence to use the new devices while simultaneously acquiring fresh skills as necessitated by the new technologies.

In extending further the issue of reading and writing, Gee (2008, p.43) cautions against narrowing down the traditional meaning of literacy to reading and writing. He suggests that such a narrow definition confines literacy to the individual while it extends beyond - into society. He believes that we must define literacy "in social and cultural terms, not just in terms of an ability that resides in people's heads." It is a similar outlook to that of Janks (2010). This approach situates literacy in how it functions as a social tool among communal citizens who must communicate and understand not only their language but their norms, cultures and traditions as a community that follows common

patterns of behaviour. This extends the concept of local literacy that was discussed earlier. In relation to the teaching and learning of literature in the South African context, it follows therefore that the mostly local or African set books that the Department of Basic Education has proposed may be more meaningful to the majority of teachers and learners whose cultural and social background could be the setting of the texts. In analysing the texts, teachers and learners do not only apply their ability to read but also tap into their understanding of the socio-political, cultural, religious and economic context in which the texts are set. Their familiarity with the texts and understanding of their settings bring an essential input into the analysis of the texts. In spite of this, it must not be assumed that local content is necessarily familiar and contextualised. Some learners – despite being physically resident in Africa – may be more familiar with western, as opposed to African, practices due to the influence of media such as television and social media.

What we have seen so far regarding literacy is the fluidity and non-static nature of its meaning. As earlier discussed, the existence of the plural 'literacies' is justified considering the multiple applications of the term and the wide "range of literacy practices and communicative practices developed through" technology (Waller, 2008, p.184). And "today, technology is often a large part of the literacy practices of our youth outside of school and is considered one of the multiple literacies in today's society" (Kolb, 2008, p.4). Today's age, the digital age, has inevitably therefore further opened the way to new understanding and application of literacy. Widespread use of laptops, smartphones, tablets and iPads requires understanding of the dynamics of navigating the information pathways that are made possible by the network society. This implies not only the ability to use different technologies but also the ability to search for the most appropriate knowledge and information. Through the use of the devices mentioned, teachers and learners are able to communicate, search for information and make meaning of what they discover. Literature is a discipline where readers are in constant search of meaning to understand the message of the authors. Digital literacy therefore offers the opportunity to fill this gap provided such information is available, especially on the Internet and the different hypertexts the search may lead to.

To continue with the theme of digital literacy, the term may easily be confused with computer literacy which mainly refers to knowledge and skills to use computers; skills

such as the ability to use word processing and spreadsheet. It does not extend to networking, using and evaluating information from the Internet for example – which is where digital literacy comes in. Futurelab describes digital literacy as:

> …the skills, knowledge and understanding that enables critical, creative, discerning and safe practices when engaging with digital technologies in all areas of life…. Digital literacy is much more than having access to or being able to use a computer. It is about collaborating, staying safe and communicating effectively (p.19).

Martin (2006), quoted in Luzon, Ruiz-Madrid and Villanueva (2010) defines digital literacy as:

> …the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyze and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process.

Another definition links digital literacy with the Internet and ICTs but also importantly, emphasises the notion of careful and adaptable selection of information and staying safe in an era of information flux:

> The new literacies of the Internet and other information and communication technologies include the skills, strategies, and dispositions necessary to successfully use and adapt to the rapidly changing information and communication technologies and contexts that continuously emerge in our world and influence all areas of our personal and professional lives. These new literacies allow us to use the Internet and other ICTs to identify important questions, locate information, critically evaluate the usefulness of the information, synthesize information to answer those questions… (Leu et al. 2004, cited in Luzon, Ruiz-Madrid and Villanueva, 2010).

While information may be ideal and useful to have in abundance, the negative aspect of safety cannot be ignored just for the sake of limitless navigation of all pathways of information. But part of the educator's job in the 21st century is to help learners navigate and stay within safe boundaries in a world where information and technology

are overflowing (Kolb, 2008, p.1). Being safe means being able to choose useful information which is relevant to the classroom situation as opposed to accessing harmful content such as pornography or being exposed to cyberbullying.

It must be noted that digital literacy cannot be without the presence of digital technologies. But essentially, it is the knowledge and ability to use digital technologies safely and appropriately that qualifies users as being digitally literate. Digital literacy therefore goes right into the heart of what it means to select and apply relevant and appropriate knowledge and information. “Being digitally literate is about knowing when and why digital technologies are appropriate and helpful to the task at hand and when they are not” (Futurelab, p.19). This is where the guidance of teachers is most vital to help learners select the right information that is useful for their studies. Not everything that learners come across in the digital spaces they navigate will be helpful or appropriate. Some information may actually be outright dangerous and misleading due to the open nature of some of the digital sources. With the Internet being a space where all sorts of material is just a click away, teachers are instrumental in helping learners to safely manoeuvre the vast digital landscape for the benefit of the subject areas.

In relation to the discipline of literature, literacy and digital literacy are most relevant. The ability to read, comprehend and analyse literary texts is fundamental to the teaching and learning of literature. Additionally, digital literacy among teachers and learners implies the ability to use digital devices and media to search for, evaluate and select appropriate information to facilitate readership and analysis. Literacy and digital literacy therefore could be seen as the very essence of literature learning because both may enable learners to translate their comprehension of texts to producing good pieces of writing.

To expand upon the all-important theme of literacy, we have already seen that the term has evolved so much over the years that its plural form (literacies) fits today’s context even better because it can accommodate more varieties of literacy. As a result of this evolution of the notion of literacy, Warschauer (2006, p.10) notes that the literacy practices of today’s generation are very different from those of the 1940s for example which relied heavily on reading printed texts and writing by hand. Other

writers such as Carrington and Robinson (2009, p.1) – have also highlighted the evolution of literacy into literacies whereby “printed forms of text” are no longer as predominant as they used to be. They note that “in contemporary societies, we must now include texts created via digital technologies when we speak of the texts that cocoon us in our everyday lives….” Warlick (2004, p.14) notes that the world is moving towards less paper-based information and more towards electronically-stored information. This means an increase in sourcing information from digital databases as opposed to getting it from paper-made books. This move may also lesson the anxieties of those who worry that fewer paper books is a sign that readership is under threat. It may be that readers are resorting to electronic books and no longer confine their reading to paper and ink products.

The unravelling of new forms of literacy should be observable even to those without keen interest in literacy matters as it is a phenomenon that is right in our faces considering how often we come into contact with situations that require application of some form of literacy. Today’s literacy practices involve a lot more activities and are inclusive of gaming, online communication, social media, electronic books, internet news, instant messaging, podcasting, electronic banking and electronic transport bookings.

Kress (2003, p.22) says that literacy is not just about the means of representing communication such as speech, writing, images, gestures and others but is also about the manner in which those are disseminated. This is usually in the form of books, computers, videos, film, radio and so on. Some of those mentioned by Kress are already very much part of disseminating literature along with its meaning. Books (paper and e-books), videos, film and computers (especially the Internet) are the vehicles through which readers access literary texts and information.

2.7 Harnessing cellphone technology

I have decided to dedicate a separate section to cellphone technology in the classroom for two key reasons. Firstly, cellphones are perhaps the most ubiquitous and dominant technology today which has also firmly established itself as the principal technology

driving youth culture; especially since the emergence of the smart versions which are continuously becoming even smarter. Secondly, in comparison to the other technologies mentioned earlier in the context of this study (computers, tablets, iPads and smart interactive boards) cellphones are perhaps the most affordable, personal and individualised. They are easier to own and "are by far the most common and accessible" (Kolb, 2008, p.1) hence harnessing their power could be vital in the quest to improve access to other useful classroom technologies. This is despite the fears accompanying their use; some of which will be addressed later in this section.

In making a case for the use of cellphone technology in the classroom, Kolb (2008, p.4) says that "if educational technology, research, and pedagogy are reconceptualized to include the tools and knowledge that students already possess, then students will have better opportunities to connect learning inside and outside of school." The tools at the immediate disposal of learners should be turned into useful means to access knowledge and advance their studies. This may require a new outlook by all stakeholders to find more usefulness as opposed to harm and danger in the technologies. In further advocating for the case of cellphone usage in the classroom, Nielsen and Webb (2011, p.35) believe that:

> Today's teachers are lucky! Most of their students already own or have access to cell phones, so getting technology in the hands of students is less of an issue than in the past. More and more teachers have harnessed the power of technology in general and cell phones in particular for themselves, and many are eager to do so with their students.

A 2014 UNESCO study on *Reading in the mobile era* shows that cellphones can be far cheaper and more useful than paper texts in promoting literacy because "collectively, mobile devices are the most ubiquitous information and communication technology (ICT) in history. More to the point, they are plentiful in places where books are scarce" (p.16). This of course is not as straight-forward as the UNESCO study implies. This access would still depend on the ability for readers in those places to afford data and airtime in order to be online and for internet connectivity to be readily available and reliable. The study also deems that "mobile reading is not a future phenomenon but a right-here, right-now reality" (p.16). What readers need are the

devices to access reading materials, the means to buy data and reliable internet connectivity.

Back to classroom matters, Nielsen and Webb (2011, p.147) however warn that using cellphones must achieve the set goals and objectives of the planned instruction and should not be used because they are available and with no gain in sight:

> Although integrating cell phones into instruction can be a great way to engage learners and enrich instruction, it is important to ensure you are doing both. Just using a cell phone itself will lose its appeal and value quickly if it doesn't actually enable students to either do things better or do better things. When using cell phones in instruction educators should ask themselves if the use of technology will actually enhance the unit or lesson and how.

One would assume this applies to all other forms of technology used in the classroom that they must add value to the instruction and not be an excuse by teachers to just do something different to break the classroom monotony of routine teaching. It is about harnessing the value and power of cellphones to improve classroom instruction.

One of the ways through which literature teachers could harness this power is by using social networking which "involves the building of online communities by people who share interests and/or activities or who are interested in exploring the interests and activities of others" (Lawrence and Ndlovu, 2010, p.40). Literature being a discipline that often attracts different viewpoints, social networking could be useful in allowing learners to share their views and opinions on themes and character traits of characters in their literary texts. Blogs, for example, allow for learners who are members of the blog or the general public to comment and post messages on the site (Lawrence and Ndlovu, p.40). This could provide a rich platform for ideas exchange and sharing of information. One of the benefits of social networking is that it encourages creativity in using the Internet, "publishing content rather than being passive consumers" (Lawrence and Ndlovu, p.41). This ties with the notion of collaboration and interaction discussed earlier under constructivism in chapter one.

The FunDza Literacy Trust, a South African non-profit organisation dedicated to promoting and improving literacy among young South Africans, also harnesses the power of cellphones in its literacy activities. It distributes some of its reading content as widely as possible through a platform that is often accessible and familiar to the youth: the cellphone (http://www.fundza.co.za). FunDza also has a virtual 'library on the phone' that is accessible to feature phones, smart phones and any other device connected to the Internet.

Despite these benefits of using cellphone technology, there are pitfalls that teachers must be aware of. These fears about using cellphones in class are justified and concerns about them are quite legitimate in view of incidents that often happen (Kolb, 2008, 1). Kolb outlines "unfortunate" incidents such as "text messaging answers during tests, taking pictures of class activities and posting them without the subject's permission, and playing games" (p.2), thereby distracting learners' attention during the lesson. Fears about misuse or abuse of cellphones within the school compound can be addressed with clear school policies regarding when and how they should be used. Without clear regulations and consequences for disregarding them, learners will usually push the boundaries of their freedom to use (and misuse) cellphones at school.

2.8 The role of technology in teaching literature

Increasingly, almost all school subjects – though at different levels of degree – have been influenced by the prevalence of technology. Literature is no exception. Digital media and devices have added variety and scope in how we access and utilise resources. It is no longer just about the teacher and the text in front of the learners. Roblyer and Doering (2013, p.280) show the role of technology in different school subjects. With regard to literature, they discuss three main ways by which the subject can make use of technology. These are:

- accessing online copies of published works;
- accessing background information on authors; and
- support for literary analysis.

This study examines the use of some of these aspects to teach African novels and drama and whether or not teachers have this access.

Some researchers have also explored ways in which literature and technology can merge in the classroom, especially in contexts where English is a foreign or second language. Soliman (2012, p.27) contends that literature, technology and culture are inseparable and can add a beneficial factor in EFL (English as a Foreign Language) and ESL (English as a Second Language) classrooms. She opines that:

> One of the main benefits of including literature and technology in the EFL/ESL class is their cultural input, since literature and technology are a mirror of culture and can thus acquaint students with the aesthetic, moral and spiritual values of their culture and the global culture.

Technology – as it has evolved and continues to evolve over the years – is a good example of one of the predominant popular cultures of our times and is very much part of the civilization that drives the modern world. Literature as well provides a platform where authors lay in the open the cultures of their people and the different settings they observe to inspire their creativity. Using technology in a literature classroom can therefore be regarded as a merger of two cultures resulting in a learning context that is richer and culturally more fulfilling. It must be noted however that technology should not just be used because it is available but must be used with the aim to achieve effective teaching and learning. It would serve very little purpose, if any at all, to boast about the prevalence of technology in the classroom yet it does not positively advance the teaching and learning of literature. While it does provide variation, technology – in my opinion – has to go further and advance the teaching and learning of literature.

Soliman further considers the Internet to be “rich in… material that EFL educators can use in their classes to motivate and engage their students” (p.27), while also viewing literature and technology as “both fertile mediums for boosting critical thinking” (p.28). The two quotes from Soliman have two ideas that feed off each other very well: motivation and critical thinking. Critical thinking is probably one of the toughest yet most valuable skills that learners can acquire. It is one of the key skills in academia. It could therefore be argued that for motivated learners, critical thinking skills are easier

to cultivate than for unmotivated learners. In addition, a good analysis of literary texts usually requires acute critical thinking skills.

In continuing with the theme of technology in literature classrooms, Lawson's personal experience with teaching Shakespeare has taught her that it can be fused well with modern technology, especially YouTube. She has first-hand experience of learners publishing their own YouTube versions of some of Shakespeare's plays and finds that this works well where the teacher wants learners to "act out or produce their own versions of the play" (Lawson, 2014, p.251). In her experience, however she warns that some attempts to use technology may work well while others may fail but that it is important to keep trying "because technology is not going away" (p.252). For example, one of the negative aspects of YouTube may occur where learners capture their teachers without permission during the lesson and then post the video clips online (Rennie and Morrison, 2013, p.142).

Film may not be regarded as a new technology in the teaching of literary texts. Over the years film adaptations of many literary works have been present on the market. It is the digitisation of the films that may be regarded as a new phenomenon that shows the transition from reel films and later, video cassettes. Kajder and Young in Bull and Bell (2010) believe that "students can benefit from considering how film and digital video enhance the study of literature and vice versa…" (p.117). They further argue that "allowing your students to watch a film adaptation in class while reading the text can greatly enhance their understanding of the text, as well as heighten their emotional response to it" (p.117). They go on to suggest that "…the film versions allow students to fill gaps in their comprehension of the text and better understand the context, subtext, and atmosphere…" (pp.117-118). With some of the films now available on YouTube, learners have access anytime as long as they have internet connection.

Video or film is the closest readers can get to watching a live performance on stage. As Kajder and Young attest, film can greatly enhance understanding of the literary texts. Especially in the case where the texts are removed from the learners' context – both time-wise and geographically – film can fill that gap and assist learners to give more meaning to the events in the story.

Porter (2000, p.317) on the other hand warns that it is unwise to assume that technology can be used in all contexts and take the place of the usually rigorous preparation by teachers. She says that:

> Generally in the arts and humanities disciplines, there is little evidence of technology applied to teaching and learning saving academics preparation and teaching time, and in fact the adoption of new technology frequently makes additional demands on teaching staff. The most striking advantage is in offering benefits to learners beyond the quantity and quality of contact they are usually offered.

Porter's argument is that literature, for example will always make the same demands on teachers and learners that the texts to be studied in class be read thoroughly as all subsequent discussions depend on teachers and learners' familiarity with the text. However, when learners study beyond what is covered during the lesson, they have the liberty to tap on the benefits of technology to enhance their private study.

2.9 Conclusion

This chapter first looked at the Department of Basic Education's vision regarding technology in education. Then it reviewed literature from different perspectives and contexts and, more importantly, the South African and African contexts in the cases where the relevant literature could be located. The chapter sought answers to the key pedagogic question why literature continues to be studied in school curricular and the general value of reading literary texts. This seems to be a fundamental question to ask because improving access to technology in the literature classroom is dependent upon the continuing value attached to the study of literature and the subject's continued presence in the school curriculum. The discussion then moved to the dynamics involving the selection of literary texts; one of the key issues being who has the right to determine a canon.

The chapter then focused on the general understanding of the role of technology in the classroom and the constantly shifting meaning of literacy with emphasis also on computer literacy and digital literacy. Additionally, there was a discussion on the power

of cellphone technology and its use within the literature classroom. This is in view of the fact that the cellphone is the most prevalent and affordable device which, despite some negative perceptions, can be useful in accessing digital content. Finally, the debate centred on the role of technology in literature. The next chapter discusses the methods that have been used to collect data including how analysis has been conducted.

CHAPTER 3

Methodology

3.1 Introduction

This chapter presents the process I have gone through from collecting to eventual analysis of data. The research has tried to ensure that the usual qualities expected of a qualitative study (the design adopted) are adhered to. These are inclusive of ethical considerations and trustworthiness in the manner in which data was collected and the processes of analysis which have been used. The type of schools and participants who took part in the study will also be revealed. All the names used for the schools, teachers and learners who participated are fictitious.

The focus of this study is not on the quantity of schools that use technology but on what could be learned from those that have embraced it and how access, availability or non-availability of digital resources influences the teachers' research processes and experiences for African literature lessons and eventual teaching and learning in those lessons. Only schools that use some form of technology were selected for this study; the idea being that these are the schools that could help me to better understand the dynamics of teaching African literature through technology. It is assumed that the teachers in these schools have some experience of using technology to teach and can illuminate and express opinions on the pros and cons of engaging in technology-driven teaching and learning. My hope was to gain as much information as I could from teachers and learners from these schools about their interactions with technology in literature classrooms, and whether or not there are sufficient digital resources to teach and analyse African literary texts.

It is expected that the findings that are shared in this study will deliver the type of evidence, responses and practices that could help other literature teachers and even learners to make informed decisions regarding the efficacy of and processes involved in using technology. I subscribe to the notion that shared information and knowledge

will always find resonance within a community of scholars, learners, educators, administrators, curriculum developers and those within related fields.

3.2 Research design

This study is qualitative and follows an interpretivist paradigm which views education as "a process and school as a lived experience where multiple realities are constructed by individuals" (Merriam 2001, p.4). The paradigm views construction of meaning by individuals from their experiences and within a context as fundamental in understanding phenomena (Sefotho and du Plessis, 2018, p.26). Scott and Morrison (2007, p.182) draw the link between qualitative research and the interpretivist paradigm and state that qualitative research

> derives many of its basic tenets from the perspective that the science of the human world is fundamentally different from that of the natural world, and therefore needs to deploy distinctive (often interpretative) methods. Here, the focus is upon seeing the world through the eyes of those being studied….

The experiences of the participants are key in the final analysis of data in that their contexts will be instrumental in arriving at the interpretation of their use of digital media to teach and learn African literary texts. Thanh and Thanh (2015, p.24) further state that apart from the experiences of the participants, the interpretive paradigm allows the researcher to see "the world through their perceptions" and that the researcher constructs and interprets his understanding from the data he collects and analyses. Interpretation involves a set of processes which help researchers to arrive at conclusions. Hatch (2002, p.180) says that:

> Interpretation is about giving meaning to data. It's about making sense of social situations by generating explanations for what's going on within them. It's about making inferences, developing insights, attaching significance, refining understandings, drawing conclusions, and extrapolating lessons.

It is these exact processes that I use to present the data by extracting themes, sharing the stories of the participants and drawing conclusions from their social experiences

(Suter, 2006, p.328). This forms part of the analysis that will be undertaken and further details of how the data is analysed appear under section 3.10 in this chapter. Social contexts usually generate experiences and stories which help researchers understand situations from those who are exposed to them. It is the normal expectation that social contexts will often have a bearing on the actions of the individuals who straddle those settings.

By their nature, qualitative studies are not about generalisability of results as opposed to quantitative studies. Rather, they are about studying in some detail the practices, processes and experiences of those who are being studied. In the words of Hoepfl (1997, p.48) qualitative studies seek "illumination" and detailed understanding of a situation. She proceeds further to say qualitative studies can be used "to gain new perspectives on things about which much is already known, or to gain more in-depth information that may be difficult to convey qualitatively" (p.49.

The key factor is what the results could mean for other more or less similar situations and how they could inform practice and procedures in the contexts which are outside the scope of the study. This is how qualitative studies become generalisable to some extent; they may generate implications for other social contexts. It could be those where technology is already being used or where it is yet to be implemented. It must be added that even though the study adopts a qualitative approach, some of the findings will be presented quantitatively because they are easier to share through a numerical mode (see chapter 4 where focus is on the number of teachers who reported usage of digital devices and media for lesson planning and teaching).

The qualitative data which was collected in this study began with "face-to-face situations by interacting with selected persons in their settings" (McMillan and Schumacher, 2010, p.315). Hopefully the implications of this study can contribute to educational practice (p.315) in other contexts where African literature is taught through the use of technology. This research may broaden the understanding of what is happening in other classrooms in similar contexts. Not only that but also research and studies which emanate from similar contexts may further contribute to our understanding of the use of technology in African literature classrooms thus further broadening our outlook on the issues pertaining to the digitisation of the African

literature classroom. This study, as earlier pointed out, aims to focus on “discovery, insight, and understanding from the perspective of those being studied” (Merriam, 2009, p.1). Lichtman (2006, p.84) sums up the aims of a qualitative study in three key words: describing, understanding and interpreting. This is usually the hallmark of qualitative studies; to present detailed views and practices of the key informants and participants.

To achieve this understanding and interpretation, as has been highlighted earlier, the interpretivist paradigm will be used. This approach and the viewpoint that reality is socially constructed, tallies with the constructivist theoretical framework which was discussed in chapter 1. The two further consolidate the position that knowledge is socially constructed and that participants are not passive but actively involved in construction of knowledge. How then does the use of technology to teach and study African literary texts advance this understanding of knowledge construction in the context represented by the Gauteng schools that have participated in this study?

3.3 Timeline of data collection

Most of the data was collected over a six-month period (April to September 2017). This was from the beginning of the second quarter of the school calendar to the end of the third quarter. This timing was in avoidance of the first and last school terms when schools are either settling down or preparing for the end-of-year examinations respectively. I was pursuing my studies on a full-time basis hence I was able to pay day-to-day visits to schools. At a later stage, in March 2018, two more interview sessions were held at two different schools. The picture of the smartboard shown in chapter 2 was taken much later in August 2018. In October 2018 I contacted English HODs at two schools via email to provide more information on the data. Then in November 2018, I paid one more visit to one of the schools to fill a gap in the data.

3.4 Research sites

Initially ten schools were designated as research sites but eventually, nine participated and were identified in Johannesburg and its surrounds. The tenth was left out due to

non-cooperation on their part. Financial constraints prevented me from extending the study to further areas of the Gauteng Province and perhaps even beyond. In two of the schools (Brakfontein High School and Johnson High School) classroom observations were done following the administering of the questionnaire and interviews. In four of the schools (Brakfontein H. S., Johnson H. S., Lepae Secondary School and Redfield H. S.) two learners per school were interviewed about their experiences with the use of technology for learning (especially African literature) both inside and outside the classroom setting.

I decided randomly that in some schools I would follow up with interviews of learners to get views on their interaction with digital technology in the learning of African literature. The choice of learners included those from suburban and township schools. Furthermore, in some schools teachers displayed some reluctance to organise scheduled interviews with learners and I decided not to insist on the interviews where there was hesitancy on the part of the teachers. Most of the learners interviewed (6 out of 8) were from suburban schools owing to there being more suburban schools in the study and the fact that there was reluctance from the other township school to allow me to talk to learners.

The following table shows the number of schools and teachers who participated in the study. Seven of the schools were public while the other two were private. A total of 16 teachers participated in the study.

Table 1: Summary of the schools and teachers who participated

Type of school	**Number of schools**	**Number of teachers**
Public	7	13
Private	2	3
Total	**9**	**16**

In the table below is the environmental scan of each of the schools that participated. The scan provides a brief overview of the type of schools, the general environment

where they are including the estimated distance from Johannesburg and other information that may be helpful in understanding the nature of the schools. All the school names are fictitious. This was done to hide the identity of the schools and guard their confidentiality as declared in the ethics clearance application. The coding system used for naming was adopted in line with the schools' real names where the beginning letter of the alphabet (in some cases the two beginning letters) of the false name is similar to that of the school's real name. The reason for this was to make it easy for me to remember the actual identity and location of the schools as I analysed the data. Another more detailed environmental scan which includes the digital facilities each school has is presented in chapter 4. All the schools follow the Gauteng Department of Education (GDE) curriculum and matric examination.

Table 2: Brief environmental scan

School	**Type**	**General environment**	**Other information**
Academy College	Private	-suburban -brick structures -about 11km from Johannesburg	-fee paying school -big fenced yard -security checkpoint at main gate
Alleyvale H.S.	Public	-suburban -brick structures -about 12km from Johannesburg	-fee paying school -big fenced yard -security checkpoint at main gate
Brakfontein H.S.	Public	-suburban -brick structures -about 24km from Johannesburg	-fee paying school -big fenced yard -security checkpoint at main gate
Johnson H.S.	Public	-suburban -brick structures	-fee paying school -big fenced yard

		-About 10km from Johannesburg	-security checkpoint at main gate
Lepae Sec. Sch.	Public	-township -some brick structures -mostly containers - some movable -about 45km from Johannesburg	-non-fee school -small fenced yard -security checkpoint at main gate
Linville H.S.	Public	-suburban -brick structures -about 12km from Johannesburg	-fee paying school -big fenced yard -security checkpoint at main gate
Mamelani H.S.	Private (church owned)	-township -brick structures -about 44km from Johannesburg	-fee paying school but receives government subsidy -big fenced yard -security checkpoint at main gate
Northern H.S.	Public	-suburban -brick structures -about 12km from Johannesburg	-fee paying school -big fenced yard -security checkpoint at main gate
Redfield H.S.	Public	-suburban -brick structures -about 15km from Johannesburg	-fee paying school -big fenced yard -security checkpoint at main gate

The school fees paid at the nine schools ranged from zero to just over R77,000 per annum (2017 figures). Among the fee paying schools the lowest amount was R6,000 per annum. Whether or not this variable may have a bearing on digital resources at the schools will be discussed in the subsequent chapters.

3.4.1 Challenges and limitations

As highlighted earlier, the initial plan was to do the study in ten high schools in and around Johannesburg. One of these schools originally showed keenness to participate and I met the head of the English department and exchanged views with him regarding the study I was undertaking. I then left two questionnaires with him to be filled in by English teachers. But a few weeks later when I sent him an email to inquire if I could fetch the questionnaires and move to the next step with the school in the research, he did not reply to the email. I then paid the school a visit to talk to the HOD but he did not meet me despite having waited for him at the reception area for over an hour. I then decided not to pursue him any further and settled for the nine schools where I was receiving cooperation.

3.5 The participants

In order to obtain richer information from the teachers, I extracted data from both young and older (more experienced) literature teachers. When I delivered the two questionnaire instruments to the head of English at each school, I specifically asked that where possible, one be filled in by a younger teacher and the other by an older teacher without necessarily specifying particular age groups. I thought this was helpful in determining whether the different ages and experiences of the teachers play a role in their confidence and expertise in and approach towards the use of technology. If this variable is observable in the analysis of data, then it could bring up an important dimension in the study.

Learners were also regarded as key in this study because they are the recipients of instruction done via technology and it was equally deemed relevant to find out what their views are about the use of digital media and devices for learning and research. However, I thought their participation in the study had to be limited since I considered the chief participants to be the teachers. That explains the bias towards a bigger teacher sample as opposed to the student sample. The title of the research itself talks about “teaching African literature” despite the fact that in any teaching situation,

learning is also implied. Table 3 below presents a bio of the teachers showing their age, experience, qualifications and location of their schools. Table 4 then shows the learners who were interviewed and the location of their schools. In both tables, pseudonyms of the participants are used. These false names – for both teachers and learners – were codified in line with the beginning letter of the alphabet (in some cases the two beginning letters) of the real name of each school. This was done to help me to connect the participants' names to the real names of their schools.

Table 3: Bio of teachers who filled in the questionnaire

Teacher	Age	Years of *TE	Qualification (highest)	School
Anna	25	3	PGCE (FET-English)	Academy College
Anika*	33	11	PGCE	"
Amy	53	25	BA HDE	Alleyvale H.S.
Amber*	Over 50	30	BA.Ed	"
Bernice*	62	28	BA	Brakfontein H.S.
Justina*	29	6	BA Psychology	Johnson H.S.
Jemina	37	5	BA Marketing, PGCE	"
Lephuthi*	42	9	BA,PGCE, Public relations	Lepae Sec. Sch.
Lenea	44	16	BA, HED, LLB	"
Linah	28	5	BA Hons English Literature	Linville H.S.
Lizzy*	61	25	MA Linguistics	"
Masindi	38	17	MA	Mamelani H.S.
Naomi	24	1	PGCE	Northern H.S.
Nelly	51	29	BA HDE	"
Randy*	23	5months	B.Ed	Redfield H.S.
Ruth	48	26	Honours	"

*denotes that the teacher also did an oral interview

*TE: Teaching Experience

Table 4: Interviewed learners – detailed

Name	School	Grade	Gender
Belina	Brakfontein HS	11	Girl
Bonolo	Brakfontein HS	11	Boy
Lebona	Lepae Sec. School	12	Boy
Leisa	Lepae Sec. School	12	Boy
Raymond	Redfield HS	11	Boy
Ray	Redfield HS	10	Boy
Jane	Johnson HS	10	Girl
Johnny	Johnson HS	10	Boy

3.5.1 Challenges and limitations

It also proved a bit of a challenge to get teachers to commit to an oral interview. As table 2 shows, only one township-based teacher was interviewed orally despite my desire to extract more information from them. They either reported to be busy or promised to give me a day to interview them, but this day never came despite frequent reminders through email or WhatsApp. As a researcher, it is always difficult to be insistent when participants show reluctance to participate. Before they can partake in a study, they are always made aware of their rights and that their participation is voluntary and they may withdraw at any time from the study. It becomes difficult therefore to urge them to be involved when they appear to be unwilling to do so. It is the democracy of participation in research being exercised and it is important ethically to allow participants the option of non-participation or withdrawal from the study.

3.6 Sampling

The choice of schools was made through convenience sampling where distance and purposive limit of participating schools were considered to avoid engaging too many participants in a qualitative type of research where emphasis is not on large numbers of participants but on the content of the responses. The schools were purposively

sampled as the intention was for all of them to be using some form of technology to teach literature. Merriam (1998, p.61) says that in purposive sampling "the investigator wants to discover, understand and gain insight and therefore must select a sample from which the most can be learned." Shank and Brown (2007, p.127) state that purposive sampling selects participants who can provide the type of responses and insights that researchers are looking for. These are participants who can be of help and have the required information (Field 1998, p.47). This point is taken further by Etikan, Musa and Alkassim (2016, p.2) who state that purposive sampling "is the deliberate choice of a participant due to the qualities the participant possesses" and that researchers look for "information-rich cases for the most proper utilization of available resources" (p.2). All these factors were considered when I decided it would not have been helpful to carry out the research in schools where hardly any technology is used in the classroom. I had to choose schools where I was most likely to find some technology in use.

The chief objective with a sample of nine schools was "to increase the utility of information obtained from small samples" (Cohen and Manion 1980, p.319). This in the end could provide richer information from the chosen sample; allowing for deeper examination and insights into the practices of those being studied.

The sampled schools were a combination of suburban and township schools. While a preliminary list of convenient schools was initially made, in some cases, snowballing was used to determine the subsequent school that would be used as a research site. In some of the cases, a visit to one school led to a discovery of the next where data could be sourced. That, to some extent, may explain the slight bias towards more schools being located in suburban areas. The preliminary list was made up of schools which I had previously visited while observing and assessing Wits School of Education student teachers who were on Teaching Experience in 2016. During those visits I was already establishing contacts that would later prove valuable in this study. Also on the list were schools which had been suggested by my supervisors owing to their knowledge of the teachers' regular use of technology. The downside was that some of the schools which I had subsequently physically visited to initiate a discussion to conduct research on their premises did not respond to ensuing emails regarding my next step. This prompted me to find new schools that could participate in the study.

As a result of the initial visits to some schools, I was also able to get a few schools suggested through snowballing where the teachers named other teachers who could provide more information for the study or direct me “to other potential participants” (Scott and Morrison, 2007, p.221). McMillan and Schumacher (2010, p.327) refer to this as “participant referrals.” I deemed this to be a reliable way to get colleagues recommend other colleagues where I could get meaningful participation in the study. Furthermore, and personally important, was for the schools to be within a reasonable distance from my institution to minimise travel costs. The furthest school was about 47km away from Wits University in Johannesburg while the nearest was about 10km away.

The sampling also considered both private (2) and public schools (7). The bias towards a considerably higher number of public schools is due to two main factors. The first is that public schools in Gauteng are in the majority hence they are probably more representative of more teachers and learners. In some of the literature reviewed in chapter 2, a section is dedicated towards the Department of Basic Education’s position and policy on using technology in schools. It was imperative therefore to read the policy against what is observable in public schools as far as technology is concerned.

Secondly, the GDE (Gauteng Department of Education) had granted me permission to visit and conduct research in the public schools hence it was easier to gain access with my letter of permission from the Department. Regarding private schools on the other hand, permission had to be sought at each individual school hierarchy since they do not answer to the same authority. It therefore appeared to be convenient to use more public than private schools.

The sampling of private / public and suburban / township schools was not meant to show comparisons between different schools but rather to address the important factor of representation in the study and to give it more credibility and trustworthiness. I have refrained from classifying the schools as well-resourced and under-resourced as this would have required that I delve into their budgetary matters and how resources are allocated to individual departments. I thought it would be a simpler and more straight-forward approach to keep the classification of schools at the level of ownership and

location; notwithstanding the fact that location may also be a factor in whether or not a school uses technology.

3.6.1 Challenges and limitations

It would have been far more inclusive to cover a wider variety of schools in the study, especially township schools. While this diversity could further magnify the validity and trustworthiness of the findings, the nature of the research also determines the nature of schools that may be used as research sites. In this case it would not have been useful if they were not using any form of technology to teach African literature. Moreover, snowballing and other sources of information regarding research sites meant that it was harder to end up with more diversified sites of data collection. It was important to follow leads that could result in data that would be useful and relevant.

3.7 Data collection instruments

Data was collected using the following instruments:

- Questionnaires extracting qualitative data;
- Semi-structured interviews;
- Environmental assessment of the schools; and
- Selected observations.

The choice of these different data collection instruments was based on the triangulation approach where data is collected through various ways that complement one another and yield findings that can be trusted. Additionally, it is also about using “multiple sources of data” to confirm the findings that ultimately emerge (Merriam, 2001, p.204). One of the chief purposes of triangulation according to Thomas (2009, p.111) is that “viewing from several points is better than viewing from one.” Furthermore, using different strategies to collect data provides different insights into the topic and lends more credibility to the study (McMillan and Schumacher, 2010, p.331). The different angles provide more lenses through which to view, present and analyse data.

These data collection methods were also designed around some of the elements of the two theories used in the study: constructivism and connectivism. They may be able to help respond to questions such as the extent to which learners collaborate through technology and how far teachers encourage collaboration amongst learners if digital media and devices enable this to happen. In overlapping the two theories, does connectivity enable or encourage collaboration in learning African literature?

3.7.1 Questionnaires

As explained at the beginning of this chapter, this study is qualitative. The questionnaire was therefore designed to extract qualitative and descriptive data. The questions were detailed and required elaborate explanations from the teachers hence I decided to design a questionnaire to give them ample time to respond to the questions. I avoided long interviews that would have required the teachers to set aside extended time in their daily schedules and opted instead to allow them to respond to the questions at their most convenient times. McMillan and Schumacher (2010, p.212) believe that one of the chief strengths of the questionnaire is the provision of time for the participants to think about responses despite the danger that responses may be faked and it is hard to tell how genuine the responses are.

Before the questionnaire was administered, I first piloted it with three English teachers from three different schools in Maseru, Lesotho. The only downside was that it was impossible to find a school where technology is used more frequently among the Lesotho schools hence the chief emphasis of the piloting was on the clarity of the questions. All the suggestions for improvement were taken on board to develop the final questionnaire tool.

The questionnaire was administered through a physical visit to each of the nine schools that took part in the study. Upon arrival, I would introduce myself at the reception and then ask to see the principal whom I showed the letter of approval to do research from the Gauteng Department of Education. Through the principal I would

then ask to meet the head of the English department who then identified two English teachers to fill in the questionnaire.

Challenges and limitations

The questionnaires were filled in by 16 literature teachers in Grades 10-12 in the nine schools where data was collected. Two of the questionnaires were not returned but were reported as lost hence the return of 16 instead of the expected 18 questionnaires. One of the challenges with the questionnaire (especially with one filled in by a teacher at Lepae Secondary School) was that some responses seemed hurried and did not even directly address the question. I overcame this by following up with the teacher to clarify his responses. This factor does show that sometimes questionnaires may be disadvantageous in that they depend on the participants' "motivation, honesty, memory and ability to respond" (Menter, Elliot, Hulme, Lewin and Lowden, 2011, p.105). Participants may lack the drive and motivation that the researcher has in the study and merely fill in the questionnaire with the sole purpose of getting it done and out of the way.

Since the questionnaire was designed to extract qualitative data – which is elaborate and requires extended responses – I feared that the response rate would be low. I therefore followed up the questionnaires with emails or WhatsApp messages and sometimes just pitched up at a school to find out how far the teacher was with the questionnaire. The return rate, as a result, was high even though in some cases this necessitated several visits to one school thereby putting pressure on the limited resources I had.

3.7.2 Interviews

The interviews were semi-structured and done face-to-face with seven of the teachers who responded to the questionnaires to elicit further information from them. This type of interview enables the researcher "to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic" (Merriam, 2009, p.90). Semi-structured interviews also provide more flexibility and leeway to follow the flow of the conversation and solicit relevant information that seems to be triggered by

the questions and discussions between the interviewer and interviewee. In other words, semi-structured interviews provide “more opportunities for asking and probing” (Cohen and Manion, 1980, p.292).

The possible disadvantage of interviews is that they can be very time-consuming and lack anonymity (McMillan and Schumacher, 2010, p.212). The researcher does not only need time to travel to the site of research, but may also spend hours at the site and more sites would invariably mean more time at each of them. While questionnaires have some element of anonymity, interviews usually lack this and may deter participants from taking part.

All the interviews were recorded on a tablet after permission to record had been granted by the interviewees. In all the cases, the language used was English hence there was no need for a translation at a later stage. This factor is mentioned here as an assurance mechanism that meaning was not tampered with in the reporting of the data because a translation sometimes distorts the meaning that may have been intended by the respondent. All recorded interviews were fully transcribed afterwards.

Challenges and limitations

I conducted interviews with one teacher in each of the seven schools where interview sessions were held. I struggled to get beyond this number of interviews due to the reluctance of a number of participants to participate in an interview session. Some cited lack of time while others simply ignored my overtures once the questionnaire phase had been completed. However, from the planning stage I had designed the questionnaire as the major data collection instrument and used the interview as an additional tool for questions that needed further probing.

3.7.3 Selected observations

These selected classroom observations were done at two out of the nine schools where data was collected. The reasons why this was done in only two schools are explained shortly. The significance of observations is to highlight “detailed and specific information about educational activities and practice that would be difficult to ascertain

in other circumstances" (Scott and Morrison, 2007, p.168). Observations provide first hand experiences of processes that research participants engage in and may be useful in confirming the information provided in questionnaires and interviews.

One of the main disadvantages of observations is that their records depend on what the observer sees and are dependent on this outlook (Scott and Morrison, 2007, pp.168-169). Additionally, observations pose the challenge where observers may influence the behaviour of those being observed (McMillan and Schumacher, 2010, p.209). This could be especially problematic where studies are behaviourally oriented and those being observed do all they can to please the observer or panic due to the presence of a stranger in their midst. In the context of this study, the use of and access to digital media and devices was the key focus hence there was minimum attention on human subjects and their behaviour.

At the two schools where I did observations, I chose to sit right at the back of the classroom because in both schools a data projector with a sound accompaniment was used. The back seat gave me an opportunity to observe if the projected words and images could be seen even by learners at the back of the classroom and if the sound was audible enough. I mainly observed the following:

- the type of technology used during the lesson;
- ease of access to the technology by the learners;
- the user-friendliness of the technology, image and sound quality and the amount of time it took to get it ready for use.

Challenges and limitations

The main reason for conducting observations in just two of the schools despite this being one of the key instruments of qualitative research was a combination of several factors:

1 Observations were targeted for when teachers were teaching an African literary text and using some kind of technology. This proved extremely difficult as the

times to visit the schools were hard to match with the day an African literary text would be taught with technology.

2 Teachers had to alert me to the days on which they would be teaching an African text with technology and they just kept forgetting to remind me. I could not set my own dates as this depended on the syllabus demands and it would have been inappropriate for me to set observation dates.

3 It would be hard to gauge student behaviour and reaction during the time a technological device was used when I had not seen lessons when no technology was used. This would also have been highly subjective since student behaviour or reaction to the delivery of a lesson may depend on other factors such as teacher performance, lesson content or time of the lesson (for example, morning or afternoon).

As a result, I consider the observations to be additional to the other key primary data collection instruments used in the study: interviews and questionnaires. While observations are important qualitative instruments, in this case they serve merely to confirm the use of digital media and devices by English teachers.

3.7.4 Environmental assessment

The environmental assessment was done to provide concrete evidence of where the schools are located and to see for myself some of the digital facilities the schools have as proof of their existence. A brief scan is shown in table 2 earlier in the chapter. The key areas of focus for the assessment were:

- the type of structures (brick / container / permanence and the strength of the structures in relation to housing digital equipment);
- the nature of the location (urban / township);
- the digital facilities at the school;
- manner of entry at the school and the general orderliness and functionality during all my visits;
- fee paying or non-fee paying school.

The environmental assessment was used as a means to understand the schools beyond the teachers and learners who participated in the study. Research sites do have a life of their own independent of the humans who occupy them. Some of the features outlined above are significant in that they may have a bearing on use or non-use of technology in the schools. None of the schools were visited less than four times; some a maximum of eight visits. The regularity of the visits may therefore have given me some understanding of the schools particularly in terms of adherence to safety at entrances and the general orderliness and functionality of the schools. While safety at the entrance may not necessarily be indicative of safety to property at all times, it demonstrates the schools' attempts to keep the premises secure and also provides a calming assurance to visitors.

Challenges and limitations

At one of the schools (Lepae Secondary School) I did a physical tour of their digital facilities and saw for myself what digital devices they have. In the other schools I had to rely on what the teachers told me they have as it was not possible to take a tour due to tight teaching schedules. Additionally, some of the interview sessions were held inside classrooms which gave me a glimpse of some of the devices the schools have. I trust that the devices I may not have physically seen are captured in both the questionnaires and interviews as reported by the teachers.

3.8 Ethical considerations

The first step regarding ethics before field work could start was to apply to both the Wits Ethics Committee and the Gauteng Department of Education for ethical clearance and permission to carry out the study. The GDE granted the approval letter to do the research on 20th February 2017 under the reference number M2017/410. Then on 6th March 2017, the Ethics Committee in Education of the Faculty of Humanities, University of the Witwatersrand, Johannesburg granted me clearance to proceed with the research. The protocol number is 2017ECE008D. The two clearances are attached in the appendices section.

This study does not focus on sensitive human issues but rather on how teachers and learners use technology to achieve goals and perhaps even success in their everyday classroom teaching and learning of African literature. However some ethical issues still had to be assured by the study as a consequence of good research practice and because empirical research "involves collecting data from people, and about people" Punch (2009, p.49) and they must be accorded due respect. Thomas (2009, p.146) considers ethics to be essentially about attaching more thinking to the inquiry and respect for other people. Soltis' (1990, p.247) chapter on 'The Ethics of Qualitative Research' makes an observation that honesty and confidentiality are central to research quality. This had to be guaranteed to all the participants. Ethical considerations are meant to check "that research designs have been developed in line with good ethical practice" (Menter, Elliot, Hulme, Lewin & Lowden, 2011, p.53). The wider goal is to ensure that researchers act responsibly and respect the participants and their institutions.

As part of good ethical practice, data was collected and analysed maintaining confidentiality of the respondents and their schools. Secondly, all recorded interviews were password-secured in a device where only I had access. Thirdly, the research results are reported accurately in relation to the data collected. The conclusions are drawn only from existing data and the evidence is reported accurately to ensure research integrity as "researchers should practice research responsibly" (Steneck, 2006, p.53). Fourthly, conclusions are made in reporting on the findings of the research. The observation (where this happened) and environmental assessment done at the schools focus solely on digital media and devices, and all matters deemed useful in the study and not on any other issues unrelated to the topic. Lastly, informed consent to participate in the research was sought from the participants upon arrival at the school and the option to withdraw was clearly spelled out.

I must state at this juncture that my background is English teaching and teacher education in the field of English, especially Literature in English. As I carried out this research through all the processes undertaken, it was not easy to isolate myself completely from some of the values I hold about the use or non-use of technology in teaching African literature. As Basit (2010) shows, "…no research is totally value-free as all research is carried out by humans" (p.7) and "the investigator as human

instrument is limited by being human…personal biases interfere" (Merriam, 1998, p.20). Additionally, Malterud (2001) says that the background and position of a researcher will usually affect what they choose to investigate and their angle of investigation (p.485). Despite this, my aim is to report accurately what the research has uncovered because interpretivist research targets to understand the meanings that lie within the research participants. However, it may be hard to interpret the results without bringing in my own values about technology and its use in African literature lessons. A more detailed personal reflection is provided in the final chapter.

3.9 Validity and Trustworthiness

Any research done must have, as some of its key attributes, validity and trustworthiness. In the words of Suter (2006, p.328), "the most important criterion for judging a qualitative study is its credibility or trustworthiness." As a result, educational inquiry requires that researchers conduct investigations that others can have confidence in (Merriam, 2001, p.199). Merriam further suggests that the key ingredients of a valid research inquiry are the following in relation to data: collection, analysis, interpretation and presentation of findings (pp.199-200). In this study, methodological triangulation has been used where "two or more methods of data collection" (Basit, 2010, 67) are employed to investigate the use of technology to teach and learn African literature. These different data collection instruments are triangulated to yield findings that can be trusted. As discussed in earlier sections, these instruments are questionnaires, interviews, environmental assessment and selected observations.

In qualitative research, validity has to do with whether the findings of a study authentically reflect the situation, and are supported by evidence (Guion, Diehl and McDonald, 2011, p.1). Apart from validity, qualitative studies are also to be conducted in a manner that cannot put their trustworthiness in doubt. Essential to this are the following as proposed by Elo, Kaariainen, Kanste, Polkki, Utriainen and Kyngas (2014, p.2):

- trustworthiness in the methods used to collect data;
- sampling methods; and
- the choice of unit of analysis (discussed in detail in section 3.10).

This implies that the steps taken by researchers from choice of research sites through to the reporting of the findings should be those that readers of the final product find credible.

As part of ensuring validity and trustworthiness, the research has followed a number of stages and procedures to ensure that it conforms to these aspects. Most significantly, it has been triangulated by obtaining data from different sources (teachers and learners) and using different instruments of data collection (questionnaires, interviews, environmental assessment and observations). The sample was also taken from schools where more could be learned regarding the use of technology in the teaching of African literature.

I hope that the entire process that has been followed, and all the methods used to do this study, ensure that it can be trusted to provide a true picture of teachers and learners' experiences of using technology in African literature classrooms and whether or not the participants in the sampled schools have access to both virtual and physical devices.

3.10 Data analysis

The approach in analysing the data in the chapters that follow is to accurately describe what I learned from the research participants. This involves selection and interpretation of the data and understanding and interpreting their words, descriptions, and quotations into a narrative that is believable (Maykut and Morehouse, 1994, p.122). Some of the participants' quotes will be presented verbatim (Wellington, 2000, p.139) in the chapter where findings are presented to enliven the discussion and provide the participants' actual perspective.

To be able to emerge with a narrative, I have used thematic and content analysis which enables me to identify recurring themes (Menter, Elliot, Hulme, Lewin and Lowden, 2011, p.216; Patton, 2002, p.453 and Lichtman, 2006, p.164). These themes, along with a deeper analysis, are presented in chapter 5. Chapter 4 merely shares the

information and views that were derived from the participants on their interaction with digital technologies. This is inclusive of the observations and environmental assessment that were done.

Content analysis is sometimes used in cases where the analysis of the data relates to written text as opposed to words (Thomas, 2009, p.205). This is especially applicable to this study where the bulk of the data has been sourced through text in the form of questionnaires. The data presentation in chapter 4 is structured such that data from questionnaires is presented first, followed by interviews and observations and culminating with the environmental assessment.

Themes that provide a different perspective are also analysed to present counter-evidence from the participants. This is done to minimise bias from the study and make it describe more accurately what obtains with regards to technology and the teaching and learning of African literature. Analysis of these themes, content and narrative will then assist in understanding how teachers and learners interact with technology in African literature classrooms. The themes were identified by regularity of recurrence while even irregular yet interesting themes have been given attention. They were sorted by coding with highlighter markers of different colours. During transcription of the data, all responses to a similar question were clustered together so that recurring themes could be more visible. During the analysis, connections are made between the themes and content emerging from the various data instruments to observe similarities and differences that may exist in the responses.

Qualitative studies are usually undertaken “to understand more about a phenomenon of interest” (Maykut and Morehouse, 1994, p.121). It is also about uncovering and understanding the bigger picture by using data to describe this phenomenon and what it means (www.libweb.surrey.ac.uk). In my case it is chiefly to understand how teachers use technology to prepare and execute their African literature lessons.

3.11 Conclusion

This chapter has presented the methods by which data was collected inclusive of the qualitative and interpretivist paradigm that the research follows. The research sites and participants have also been shown along with the challenges and limitations that I experienced in my interactions with them. Furthermore, the sampling methods and all the data collection instruments have been discussed including the challenges at each stage of data collection. Lastly, ethical considerations, validity and trustworthiness and methods of data analysis were discussed. The next chapter presents the data and the findings that emerge.

CHAPTER 4

Findings

4.1 Introduction

This chapter presents the findings that emerged from the data collected in the nine schools that constituted the research sites. The participants' words, descriptions and quotations are presented in a believable narrative (Maykut and Morehouse, 1994, p.122) as the narrative captures the experiences, contexts and, in a number of cases, the exact words of the participants. A few pictures taken during my school visits are also shared. The participants were English teachers and learners in Grades 10 to 12. The learners were selected only from three of the nine schools. The data is derived from questionnaires, face-to-face interviews, selected observations and environmental assessment.

A deeper discussion and analysis of the findings will follow in the subsequent chapter where they will be thematised and interpreted. The first findings that are presented are from the teachers' questionnaires and the presentation format centres on the key questions that the teachers responded to, in line with the research aim and the purpose and questions on which the study is premised. Following the analysis of the teachers' questionnaire data will be findings from teachers' interviews, learners' interviews, classroom observations and environmental assessment, in that order.

The key aim of the research is to explore access to and use of digital media and devices in the teaching and learning of African literature in South African classrooms and the potential of such technologies in African literature and the broader literature discipline and in places where technology has not yet been fully adopted. As the Department of Basic Education in South Africa drives a major shift towards more African literature in the syllabus, what is the situation in schools regarding teachers' access to digital devices and online resources on African literary texts and availability of such resources to help teachers handle African texts? This access is related to

research, planning and eventual execution of literature lessons and the extent to which teachers and learners are using digital resources to teach and study African literature respectively.

What is observable in the data is that teachers have not limited themselves to how they use technology with novel and drama texts even though the questions were specific to only those two genres. Chapter 1, where the delimitation of the study is addressed, specifies that the focus is only on novels and drama and excludes poetry. However, some of the teachers have included poetry in their inputs on how they use technology to teach African literature. Furthermore, the teachers' responses have not been limited to the teaching of African literature totally excluding literature from other world regions. Perhaps teachers view literature as one entity and find it hard to isolate African literature from the rest of the subject content. As a result, I will be referring to both 'African literature' and 'literature' in the findings and analysis section as was the case in the introduction, literature review and other sections of the study.

Also evident in the data is the fact that the teachers have not limited themselves to technology and teaching of literature, but to its general usage and role in the classroom. This seems to have adopted the same procedure that has been followed by this thesis in the literature review chapter where section 2.5 deals generally with technology in the classroom, while section 2.8 looks specifically at the role of technology in teaching literature. The understanding is that literature may be an independent discipline but is part of the overall school curriculum hence it shares digital media with the rest of the school subjects.

4.2 Questionnaire for teachers

Below is a presentation of data from the teachers' questionnaire. This presentation is a result of the selection and filtering of units of data that could be used (Wellington, 2000, p.135). I have therefore selected the content that I wish to share in this research. Pseudonyms have been used to refer to the teachers and their schools. To make it easy for the teachers and learners to respond to the questionnaires and interviews, the term 'technology' was adopted as it appeared to be the common one that the

participants were used to. However, it must be noted that what was required of the participants was the use of both physical devices and virtual media. In the data presentation tables that follow, the two types are lumped together since they are closely related and the questions directed to the participants did not specify the type but simply referred to technology.

Do literature teachers ever use digital devices and media to teach African literature?

When the sample of schools was selected, it was based on a purposive selection where literature teachers were to be using some technology to teach African texts. This factor is proven by the fact that all the 16 teachers (from the nine schools) who responded to the questionnaire said they use technology to teach African literary texts.

The most common digital devices and media used for planning and teaching

The most common devices and media used by teachers for planning their literature lessons are presented in order of popularity in table 5 below. The list includes both the physical devices and virtual tools. The figure in the second column denotes the number of teachers who mentioned the technology out of the 16 teachers who filled in the questionnaire. Despite this being a qualitative study where focus is on the individuals who participated in the study, I decided to represent the teachers in numbers in the two tables below so that it can be immediately obvious how many teachers mention their use of the digital media and devices shown. As was said in the methodology chapter, some of the data is presented quantitatively for purposes of clarity. I felt that using the teachers' names as opposed to the numbers would cloud the actual number of teachers who use the technologies. I preferred the tables to look uncluttered.

Table 5: Digital devices and media for lesson planning

Digital device / media	**Number of teachers who use it**
Laptop	15
Internet	13

YouTube	11
Smart phone	9
iPad / Tablet	7
Electronic books	5
Overhead / Data projector	5
Wikipedia	5
Blogs	4
Class websites	2
Other (audio books)	1

With regard to the actual execution of lessons, the teachers said they used the technologies shown on table 6 below. For both lesson planning and teaching, the teachers were not asked about the frequency of use of the technologies they mentioned. My interest was on whether they do use them. Even in this case, the technologies are ranked in order of popularity of use.

Table 6: Digital devices and media for teaching

Digital device / media	**Number of teachers who use it**
Overhead / data projector	14
Laptop	13
YouTube	11
Internet	9
Smart phone	6
iPad / Tablet	4
Blogs	2
Class websites	2
Wikipedia	2
Electronic books	1
Smartboard	1

In the introductory chapter to this research, the study context was clarified where it was mentioned that digital media and devices are all the classroom technologies which are relevant to teaching and learning of literature inclusive of:

- computers (desktop and laptop) with internet connection;
- class websites and blogs;
- mobile devices such as smartphones, iPads and tablets;
- smart boards;
- YouTube;
- e-books and any other technologies that would be mentioned by the participants.

It appears therefore that the participating teachers have gone slightly beyond the initial list of digital media and devices that they use for planning and teaching by including Wikipedia and audio-books. Wikipedia can however still be considered as part of internet-based resources because it is accessed via computers, tablets and smartphones with internet connection.

How the technologies are used

The study is not just focused on the technologies teachers use but on how they actually make use of them to prepare and teach their literature lessons. As highlighted in chapter 1, the experiences that these teachers have with digital media and devices are meant to also spread consciousness and strategies about classroom technologies and their uses to schools where teachers are yet to make use of digital resources or are trying to widen their scope of usage. The following functions have emerged:

- **Blogs**: Amy at Alleyvale H. S. uses blogs to collect literary opinions on various works while Lephuthi and Lenea at Lepae Secondary use it to chat with the learners on various aspects of the texts. Naomi at Northern H. S. uses blogs "to gather personal insights in order to better understand the topic at hand."

All four of them use blogs to enhance their research and teaching capabilities for better textual understanding and analysis.

- **Class websites**: Anna and Anika at Academy College use class websites to communicate homework, provide extra notes, scope for tests and other additional resources to their learners. Justina at Johnson H. S. uses them to get questions and ideas on how to teach her literature material. Lephuthi at Lepae Secondary on the other hand professes ignorance and says he is not familiar with class websites. This may seem surprising in this day and age, but some of the literature reviewed has pointed out the reality of teachers and learners not having equal exposure to technology and all its technicalities.

- **Electronic books**: Linah at Linville H. S. says that "some learners make use of electronic books in the classroom if the prescribed book is available in this format." This therefore gives learners different alternatives to ensure they have access to the prescribed text. Lizzy, also at Linville, prefers instead to listen to the books because as she says, she travels "many hours a week" to and from work hence she favours the prescribed books in audio form.

- **Internet**: This is predominantly used as a research tool. Justina at Johnson H. S. says "to get notes on the analysis of the setwork, I read different variations in order to get the best analysis." Linah explains how she does her research:

> I find it useful doing research on aspects like the time period and author beforehand. Finding other summaries or analysis on the novel also sometimes proves to be useful. This information will then briefly be discussed in class so that learners will have an idea of the context and background of the text before the discussion.

Masindi at Mamelani H. S. extends the usability of the Internet further:

> I basically research using the Internet to close the gaps that the prescribed books have. For example, when teaching poetry, I get the background of the poets or authors if it is a novel because I believe writers' backgrounds have a bearing on what they write.

Randy at Redfield H. S. researches for visual aids (pictures, diagrams and videos) to explain concepts or provide examples to her learners. She finds that sometimes learners require a lot more information than that provided in the texts to understand a topic, words or images found in the stories. All the teachers find the Internet to be a very useful research tool which offers multiple opportunities to enrich their lessons. It must be noted that the teachers use the World Wide Web to find information and that the Internet is a tool that helps them to access the information.

- **Laptop**: The laptop is chiefly used for PowerPoint and slide show presentations via the data projector. Other uses are internet search, YouTube search for videos and storing e-books. Amy at Alleyvale H. S. says that the presentations she gives through the laptop or classroom PC are "either self-created, sourced from the Internet or procured from the Department of Basic Education" although some of these may be "of dubious quality." This is how Lenea at Lepae Secondary uses the laptop: "I do research and when valuable information is found it will be saved on the said device and the material is reflected when I used the overhead projector." The material he presents includes videos, images and PowerPoint presentations.

- **Data projector**: The data projector is sometimes referred to as the multi-media or overhead projector. During my observations at some of the schools, some of the projectors were fixed overhead while in other schools teachers carried the device to class. Its use – according to the teachers – is to display images and PowerPoint presentations and show film or video clips. Randy says that "it gives a more logical and organised routine to her lessons." Lephuthi says it helps him avoid handouts and regular use of the chalkboard.

- **Smartboard**: Only two schools (Lepae Secondary and Linville H. S.) make use of a smartboard. In both contexts, there is no direct link to literature and the smartboard. Lephuthi says he uses it "to avoid chalk and it is efficient" while at Lizzy's school, only the Maths department has access to smartboards.

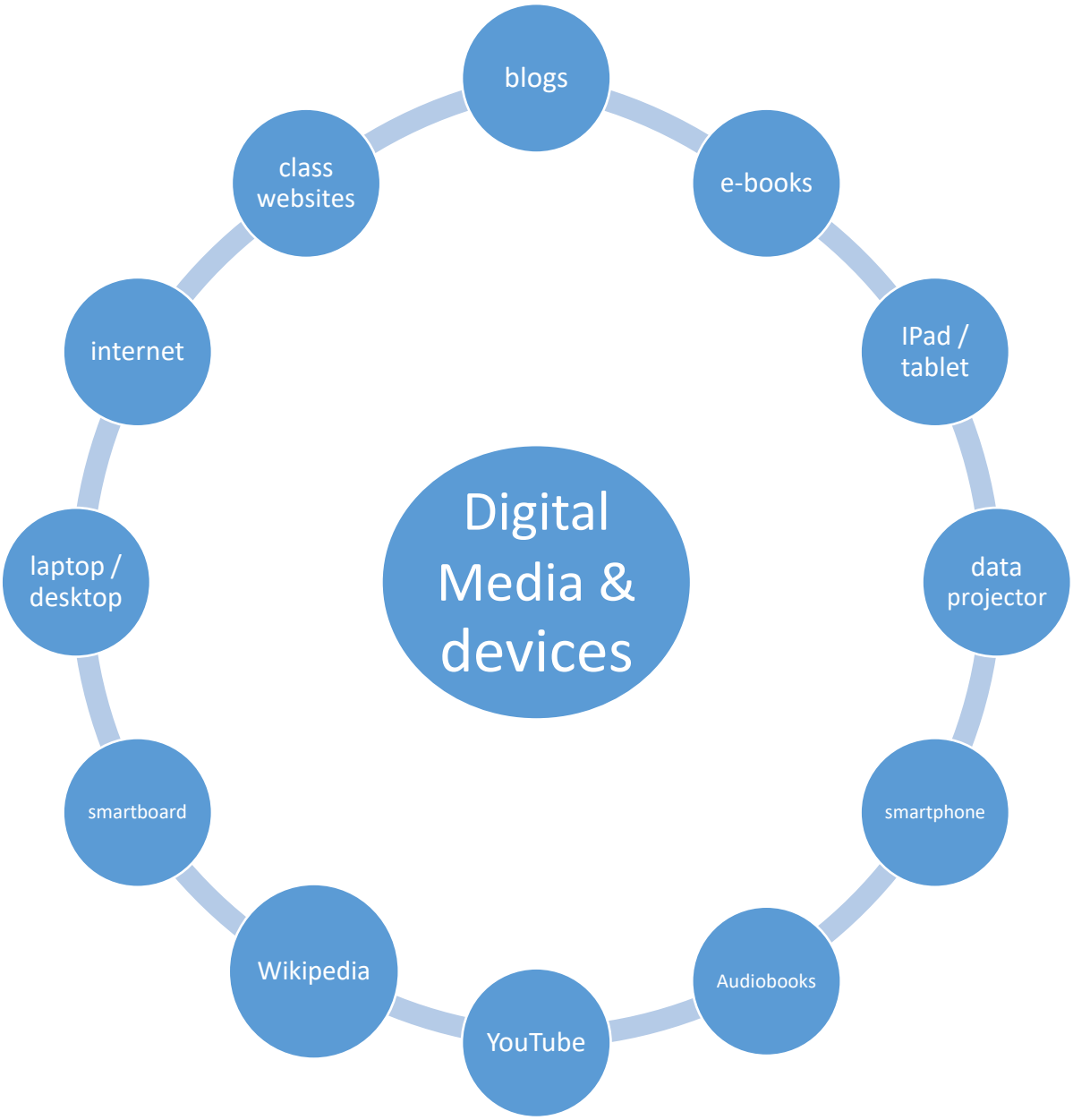
- **Smartphone**: The smartphone seems to be a very useful tool for quick research. Linah finds it to be “a quick link to useful research whenever a laptop isn’t available.” Lephuthi also extends its use to checking spelling of certain words while Lizzy finds the online dictionary on her smartphone handy.

- **Wikipedia**: This is regarded as a useful research site for some of the teachers although Anika and Jemina do not consider it to be a reliable source of information. Lizzy on the other hand says that “Wikipedia is an invaluable encyclopedia that I use frequently for research purposes.”

- **YouTube**: The primary use of YouTube by the teachers is as a resource for videos on the prescribed texts and also a platform where some of the authors read their works. Amy says when she and her learners view poets reading their work on YouTube, it “creates impact and grasp of personality insight.” Lizzy takes it further to say that “learners enjoy the visual and aural appeal of YouTube which makes it a valuable tool.” Linah affirms that visual stimuli is very useful in elevating the attention of learners in class.

In chapter 1, I displayed a diagram of a digital media and devices wheel as figure 1. This contains a list of classroom technologies as suggested by the reviewed literature. It is interesting to view the slightly more expanded wheel in figure 2 below which is a result of the research findings. In it, three additional technologies mentioned by the teachers have led to the expansion. These are audiobooks, data projector and Wikipedia.

Figure 2: Digital devices & media wheel – expanded version



Type of technologies accessed at school and at home

One of the key questions of the study is on access by English teachers to digital devices and media; both at school and at home. It would be futile to attempt to look at usage of digital devices without establishing whether or not teachers do have access to them as without access, there is no meaningful transition to usage accessing digital media. The teachers were asked to name the technologies which are available to them both at school and at home. The following tables show the situation and include both digital devices and virtual media. The headings however use the term 'technology' because it was the one the teachers were more familiar with and used often.

Table 7: Available technology at school

Teacher	Technology	School
Anna Anika	laptop, projector laptop, internet	Academy College
Amy Amber	laptop, internet, projector, PC laptop, internet, projector,	Alleyvale HS
Bernice	internet, projector	Brakfontein HS
Justina Jemina	laptop, Wi-Fi, projectors, desktop laptop, Wi-Fi, desktop	Johnson HS
Lephuthi Lenea	laptop, tablet, smartboard tablet, smartboard	Lepae Sec.
Linah Lizzy	laptop, internet, projector, smartphone laptop, Wi-Fi, projector, smartphone	Linville HS
Naomi Nelly	laptop, internet, iPad, smartphone laptop, internet, iPad, desktop	Northern HS
Masindi	projector, smartphone	Mamelani HS
Randy Ruth	desktop, internet, projector desktop, internet	Redfield HS

What is noticeable is the fact that teachers from the same school do not necessarily mention having access to exactly the same technologies. The questionnaire had not listed the technologies for the teachers where all they had to do was tick against the technology they have at school. Instead, they were required to mention the actual media and devices, hence the obvious mismatch of some of the items listed. This may have been a weakness on the part of the questionnaire tool. However, I thought I should give teachers the liberty to mention the technologies since those that are commonly used in the classroom had already been listed under question 4 of the questionnaire (see appendix A1) and I assumed (probably wrongly) that they would follow the cue from that list.

Secondly, the questionnaire had not specified whether all the technologies the teachers mentioned belonged to the school hence there is a high possibility that some of them (especially the laptops) are owned by the teachers themselves, but make regular use of them at school. This may also explain the mention of the smartphones by four of the teachers, which I would assume belong to the teachers and are not supplied by the schools.

Table 8: Available technology at home

Teacher	**Technology**
Anna	laptop, tablet
Anika	laptop, internet, projector
Amy	laptop, PC
Amber	laptop, internet, smartphone
Bernice	laptop, internet
Justina	laptop, internet
Jemina	laptop, Wi-Fi, tablet
Lephuthi	laptop, smartphone
Lenea	laptop, tablet
Linah	laptop, smartphone
Lizzy	laptop, smartphone, Wi-Fi
Naomi	computer, internet, iPad, smartphone, projector, printer

Nelly	laptop, internet, iPad, desktop
Masindi	Wi-Fi, smartphone, television, camera, play station, game consoles
Randy Ruth	laptop, internet, tablet, smartphone laptop, Wi-Fi

Four of the teachers (Anna, Amy, Justina and Jemina) had – in the earlier question – said that they use smartphones to plan their lessons. However, as table 8 shows, they have not listed a smartphone as one of the devices they have access to at home. Similarly, Lenea mentioned a smartphone as one of his devices for teaching yet he has not said he has access to it. This could be proof that sometimes participants do not respond to questions as genuinely as one may expect (McMillan and Schumacher 2010, p.212) as highlighted in the methodology (section 3.7.1) where advantages and disadvantages of questionnaires are discussed. However, it is possible that Lenea may have used a family member's smartphone.

Both at school and at home, it appears that teachers in the sampled schools have access to some technologies with the laptop emerging as the most dominant in both contexts.

The positive and negative aspects of using technology

Apart from mere usage of the above technologies, the teachers were also asked what positive and negative experiences they have had with them. The goal is still to understand how teachers interact with the different technologies that they use for both planning and eventual execution of African literature lessons.

The three positive experiences mentioned were:

- visual stimulus;
- lesson variation;
- creation of interesting lessons.

Linah says that the visual nature of the resources is very beneficial in aiding memory among her learners: “they find visual aids helpful and I have experienced that they remember the things that they see easily.” Masindi takes it further to express how children’s love for technology helps during lessons where it is used:

> Children love technology. They are immediately drawn to the lessons and my objectives for set lessons are easily achieved. Also because they love technology, the concentration span during these lessons is longer hence it helps with teaching effectively during longer lessons.

On the other hand, the teachers highlight some negative experiences that result from the use of technology. These can be summarised into four main categories:

- not enough (or non-existent) information on African texts;
- power failure;
- few resources making access difficult;
- learners become reliant or dependent on technology.

Amy says that in comparison to Western writers, very little is available on African writers and that it becomes time-consuming as teachers have to do “deep searching” to find information. This is corroborated by Justina and Jemina at Johnson H. S. Justina recounts her difficulty with teaching *Four Plays* compiled by Zakes Mda: “It is extremely frustrating to teach this because one is doing so blindly and there is no standardization.” Her colleague Jemina believes that African literature is largely ignored by scholars and universities hence the reason that there are fewer resources on it. She wishes that scholars could publish more research papers on African literary texts.

The difficulty of access to resources is a negative experience and a source of frustration for teachers as well since they either lack technological devices or have to share the few that are available. Masindi at Mamelani H. S. explains how this affects her lessons:

> There is only one working projector in the school and at times planned lessons and objectives are not achieved as one is forced to change plans if the projector is being used by another teacher at the same time.

Most digital technologies rely on power supply to function and absence of power could mean failure of planned lessons. Nelly at Northern H. S. links the negative experience of power failure to learners' dependence on technology:

> Learners become too dependent on having something on the screen. In the event of some power failure, they lack the skills simply to listen – they often allow the presentations to think for them and do not develop their own critical thinking skills.

Randy at Redfield H. S. supports Nelly's view: "learners can start to rely on these mediums and it may discourage them to learn on their own or from textbooks as they start to rely only on visual aids and information from the internet."

While the technologies are seen to bring some benefits to the classroom, the teachers do observe some accompanying binaries of negativity. Much deeper analysis of some of these comments by the teachers will be done in chapter 5 where the talking points of the data will be subjected to further scrutiny.

Effectiveness and advantages of technology in African literature lessons as reported by the teachers

From the point of view of the teachers sampled, how effective are the technologies that they use in the classroom? I relied on the teachers' viewpoints because they probably work with technology often enough to tell whether or not it improves classroom instruction. From the volume of responses received, the following key areas have emerged:

- Technology enables teachers to research for lessons and is helpful in lesson preparation and planning.

- It provides a different perspective from one's own and allows for comparison of different sources.
- Technology (through the Internet) provides instant information and enables teachers to expand their knowledge and seamlessly share it with their learners.
- Technology-sourced material is visually appealing.
- Using videos and other visual aids is interesting to learners and they pay more attention and remember more when technology is used.
- Digital resources (enables by the Internet especially) are a good supplement for textbook information.
- Learners are more familiar and comfortable with technology and show high levels of motivation during lessons where it is used.
- Technology-stored information is organised and up-to-date and searching is quick and saves time.

Justina explains how technology is useful in her lessons:

> These tools are extremely useful in lesson planning and delivery because they provide a perspective (at least some do) that is different to one's own and thus supplement what one already knows. This enables me to be fully prepared and to provide every opportunity for the learners to learn effectively.

Ruth shows the usefulness of technology in relation to generation of interest for learners:

> They are very effective. Learners today are visually inclined and want to see and are used to exposure to video clips. Therefore, if a lesson is presented using video clips, pictures etc., they are more inclined to pay attention, remember and learn.

Justina corroborates Ruth saying that learners show a lot of enjoyment when they see a film of a text they have read:

> It is rewarding when the words they have read come alive in the form of a film because you can judge from the sheer enjoyment and concentration on their

> faces that they understand the story better now that they have a visual representation of it.

Lephuthi (whose school, Lepae Secondary, is in a township) on the other hand feels that more still needs to be done to fully incorporate technology in literature lessons. In his opinion, technology can also be a source of frustration with certain challenges still to be overcome. He says that:

> Using digital tools has not been that effective up to now. I think a lot still needs to be done for literature to be on technology. There are challenges in our schools; things are not stable. Smartboards usually do not function and responsible people cannot fix them. We are not able to use them when we want to and theft is also a big challenge.

The constraints and disadvantages of using technology

While technology does seem to have a lot of advantages, there is a downside to using it as reported by the teachers. These are summarised below:

- Technology is not always reliable and some resources are usually inadequate;
- There is often very little information available on African authors and texts on the Internet;
- It can be time-consuming to set it up and even to find resources;
- Some sites are inaccessible without membership;
- It cannot work without power and lack of power often means the technology is no longer useful;
- Technological devices are a magnet for theft;
- Technology is unregulated hence anybody can post resources;
- It encourages plagiarism due to the high prevalence of information;
- Learners get used to technology-driven lessons and get bored if it is not used;
- Not everyone has access and poor learners are the most disadvantaged;
- Data is expensive.

Justina gives a warning before technological resources can be used: “You always have to check the resources carefully because some contain false and misleading information as nobody regulates what is posted.” This calls for concerted cross-checking and verification of the truthfulness of the information before it can be disseminated in class.

Lizzy laments the fact that by using technology, learners could fall victim to plagiarism since information is readily available and that the relative ease of finding information may lead to learners not sharpening their creative and critical skills and lose their own voice in the large sea of information. She also warns that technology may be distractive and that it is not always easy to tell if children are using technology to do school work or other things. She says:

> Pupils are easily distracted by access to social media and parents complain that it is difficult for them to monitor whether their children are in actual fact busy with school work when they are preoccupied with their tablets.

Anna fears that technology provides just too much information that the passion to teach is slowly being eroded. According to her, “teachers just go through the motions” during lessons because everything is made available to them. It would appear that even some learners may also switch off during lessons when technology is used. Justina has observed that “when some learners see the screen they switch off and no longer listen” because they are a generation used to technology and take it for granted. According to her, this switching off “takes away interaction from the lesson which is important.” This implies that technology can produce two opposite effects from the experience of the teachers; creating both interest and boredom in lessons.

School culture in investing in digital facilities

I found it worthwhile to also establish if there is a culture of investment in digital facilities among the sampled schools. It would be hard to talk of such facilities unless schools make them available to teachers, notwithstanding the fact that they may use their own where the situation calls for. Eight schools out of the nine are fee paying schools. Lepae Secondary School is non-fee paying and is fully funded by the Gauteng

Department of Education. Where some fee is paid, it is probably realistic to have some expectation that a bit of cash can be spent to improve school facilities. Is that the case at these schools?

The responses from the schools were mixed. At some, there is tangible investment in technology while others do not invest. Some have the willingness to invest but funds simply do not permit. Anna and Anika at Academy College say that funding limits their digital expansion. Anna says that they need Wi-Fi and there is willingness to roll it out but budget constraints make it impossible to achieve the goal. At Alleyvale H. S. where both Amy and Amber are based, data projectors have been purchased for all classrooms. Amy adds that the principal and School Governing Board are "investing on an ongoing basis" but Amber says the teachers use their own laptops; the school does not supply any. Also interesting – as Amber adds – is the fact that learners are not allowed to use cellphones in class due to widespread abuse where they engage in social media more than learning.

Justina and Jemina's school (Johnson H. S.) invests heavily in technology. Jemina says that their school has well-resourced computer laboratories with Wi-Fi connection. Justina elaborates:

> Our school management team works exceptionally hard to ensure that educators have all the electronic resources that they need. Whiteboards are available for installation should the educator need it. We have access to laptops and travelling projectors should our classrooms not have one installed.

Johnson is one of the schools where I did a classroom observation and indeed a data projector was installed in the classroom where I was observing. Full details will be shared when observation data is revealed later in this chapter.

Lepae Secondary (the only non-fee paying school) also has a supply of digital facilities in the form of smartboards, tablets and laptops. Linville H. S. also invests in digital facilities. Lizzy says their school is totally focused on their future: "we realise the importance of technology for a successful future for our learners and therefore it is priority to equip all learners in this regard." Linah elaborates further:

> Our school has recently invested in a project where all the learners have a chance to become tech savvy by using tablets / iPads. The learners then make use of e-books and teachers can upload files which reflect on their tablets. Most classes also have overhead projectors and one venue makes use of a smart whiteboard.

Naomi also says her school (Northern H. S.) has projectors in every classroom together with computers, printers and high speed internet. The situation at Redfield H. S. also shows that investment is being made to improve digital facilities. Randy, who is at the school, says that they have data projectors, internet and computers though she would be much happier if they "received guidance on how to use them effectively." It would appear that some of the teachers do not have the requisite skills to operate the media. Ruth (also at Redfield) adds that the school is currently installing Wi-Fi for the whole school but only for use in the classroom. She however has reservations regarding some of the devices: "We are not keen on using tablets in class as there are practical problems such as batteries running out of power, safety risk for the tablets and prevention of learners not to use them for other purposes in class."

Mamelani H. S., where Masindi is based, started on a high note regarding digital facilities when the school first started but things took a downward turn as she explains:

> The school first invested in a few projectors and laptop when it was a new school. Now it has grown from three to ten classes but there has been no increment in as far as technological tools are concerned. This is has resulted in the available tools being damaged.

This is the case of a school where physical and population growth was not matched by growth in equipment.

Teachers' age and attitude towards technology and its use

As was explained in the methodology chapter, the questionnaires were given to two teachers per school and they were to be of significantly different ages where this was possible. Table 3 (in Chapter 3, section 3.5) shows the teachers who participated including their ages at the time data was collected. My interest around age was ignited by whether it plays a role in the teachers' confidence in and attitude towards technology. The teachers were asked whether their age plays a role in their attitude towards technology and its use. From the responses, three groups emerge:

1. those who feel that age plays a role;
2. those who feel it does not and
3. those who feel that to some extent, it plays a role.

Anna (in her mid 20s) says that her age plays a role in that she feels "exposed to more different types of technology in comparison to older teachers." Lizzy (in her early 60s) concurs: "Yes, younger people are more in tune with and confident in terms of technology." Her views are supported by Nelly (early 50s) who says: "My age influences my use of technology as I am not as up-to-date on social media, blogging and twitter as my younger colleagues." Naomi who is much younger (mid 20s), also agrees that "as a younger teacher I have a good understanding of technology and I find it easier to use than some of my older colleagues." Randy (early 20s) adds that:

> As a young teacher I have been introduced to many different types of technology to help equip myself and my learners with new ways of teaching and learning. We familiarise ourselves much quicker with new ways and methods.

These teachers form part of the group that believes that age plays a role in as far as technology use is concerned. Another group believes in the opposite. To them age does not matter. Anika (early 30s) says that she is open to learning new concepts and expanding her knowledge while Amy (early 50s) says her age is a factor but that she is fully conversant and confident with technology and has made an effort to be so.

Bernice (early 60s) is much more philosophic in outlook: “The use of technology is tailored for the needs of the students, not the age of the teacher.” Justina (late 20s) offers a more elaborate view:

> I think that it is not age but proficiency that determines one’s attitude towards the use of technology. People who do not have adequate knowledge of how to use it will be less enthusiastic about using it regardless of age. If a person is exposed to something and the benefits of using it, they will develop the confidence to use it as often as they can.

At Ruth’s school, support is always at hand in case they need assistance with technology. She is in her late 40s and says that her age is insignificant and she is well adapted to the use of technology. She goes further to say that “if we feel we don’t know how to do certain things concerning technology, we have an excellent computer teacher who is always willing to help.”

The last group is that which feels that their age, to some extent, influences their attitude towards technology. Masindi (late 30s) has this to say: “To some extent it does. I am not very technologically savvy but with practice I am now ok but I have seen younger teachers willing to do without technology and wish to be like them.” In her observation, not every young teacher is keen to use technology to teach. Linah (who is relatively young in her late 20s) has a much more critical view on using technology:

> To a certain extent my age plays a role. I am used to working and living with technology so I don’t have difficulty incorporating it in my classroom. However, I still value the importance of personal interaction with students and don’t want to replace that interaction with technology which is more impersonal.

From these three groups of teachers, it would appear that different viewpoints are held regarding age, attitude and technology use. Could the influence also be a result of personal background and exposure to technology? More analysis on this will be done in chapter 5.

4.3 Interviews with teachers

Following the administering of the questionnaire in all the nine schools, follow-up interviews with seven teachers from seven schools were held to solicit further information on the use of technology to teach African literature. As was explained in the methodology chapter, the interviews (and the observations and environmental assessment that will follow) are additional to the questionnaire which is the main data collection tool in the study. The table below provides a summary of the interviewed teachers.

Table 9: Interviewed teachers

Teacher	Age	School
Anika	33	Academy College
Amber	Over 50	Alleyvale High School
Bernice	62	Brakfontein H. S.
Justina	29	Johnson H. S.
Lephuthi	42	Lepae Secondary School
Lizzy	61	Linville H. S.
Randy	23	Redfield H. S

The link between the literature syllabus and technology usage

Having looked at the Department of Basic Education's vision regarding technology in education in chapter 2, I deemed it vital to find out if the teachers see any link between literature and technology in the syllabus that they receive from the department. Surprisingly, despite there being a plan by the department to encourage the use of technology in the classroom, the teachers say this is not clearly spelled out anywhere in the syllabus but that they take the initiative themselves to use it. Bernice says the department is silent on using technology. She continues: "We are not advised to use

it by the department but by the school. The school has given us projectors, internet and Wi-Fi and they want us to start using technology."

Justina corroborates this although contrary to Bernice, she says the department does recommend the use of technology although she thinks it would make no sense for the department to ask teachers to use technology when they do not supply it:

> It depends on the teacher to make use of it. But I try to use it. It is recommended that we use it but it is not compulsory because there are schools that don't have technology and if you make it compulsory even though the schools do not have it, then it makes no sense (Interview, 19-March-2018).

Lephuthi agrees with the fact that the department is silent on the use of technology to teach literature:

> They have just prescribed their books – they are not really prescribing or showing that it must be done through technology. It's just that as a teacher you feel that this drama must be shown to the learners on smartboards.

It would appear that teachers have different interpretations of the same document that should guide how they proceed with their teaching subject. Could it be that the Department of Basic Education is not specific enough or that some of the teachers misread the document? Or perhaps also that the department expects teachers to reach their own conclusion regarding which technological strategies are suitable for use in their respective subjects?

Teachers' levels of confidence to use technology

This seems to be directly linked to the teachers' age and attitude towards technology since some of them believe their age has a bearing on their levels of confidence. On the whole though, the teachers have confidence, despite others still experiencing some inadequacies. Three factors are put forward as responsible for their technological deficiencies: age, lack of assistance and rapid advances in technology. Amber sometimes relies on her learners to help. She says: "Mostly I am self-taught so

there are things I cannot fix. I usually rely on the learners to help out – although they sometimes seem more clueless than me."

Lephuthi (in his early 40s) says he is not advanced enough:

> Since I am not very advanced, my confidence is still not very perfect. I do have a laptop and I use a smartboard but when you are using a smartboard you feel like maybe I am not sure of certain things.

I quizzed him further on whether they get assistance at his school (Lepae Secondary) and he added:

> We were given some lessons in the past so that we could learn the basics and how to use the smartboard going forward, but the people who are here are not helping us. They are just here to control or manage the use of the smartboards (Interview, 15-March-2018).

His tone and facial expression while speaking to me reflected frustration and helplessness at not being able to get immediate assistance with the smartboards whenever they need it.

Lizzy feels that at her age (early 60s), she cannot catch up with the rapid advances in technology but fortunately for her, Linville H. S. provides a lot of support to staff. When I asked her if she was confident in the use of technology she replied:

> Yeah, I would say relatively. Things are advancing so quickly at my age that it might be difficult to catch up. They give us training here; we have younger colleagues and a person who is specifically appointed to help us with technology (Interview, 26-May-2017).

Randy at Redfield says she is confident with most of the technology but is still learning. However, she can do basic things on a computer.

Any observable resistance among some teachers to use technology?

There appears to be both resistance and non-resistance in the use of technology among the teachers. Lizzy says at her school (Linville) teachers realise the value of technology and the need to move with the times and prepare learners for an environment where they will do everything electronically. Therefore, she and her colleagues have fully embraced technology.

At Amber's school (Alleyvale) the situation is different. She says:

> Yes, there is resistance because not everyone owns a laptop and not every classroom is furnished with a data projector. Not everyone has access to internet at their venues and also not everyone is adept at using technology (Interview, 12-April-2017).

Justina says the older teachers experience the most difficulties "because there is a lot that's involved, especially with PowerPoint; some teachers just don't understand how to use it."

According to Randy, high costs and skills deficiency are the big factors. She says:

> There is definite resistance especially when it comes to internet because it costs money obviously, therefore not everyone has access to it and not everyone has the skills to use it. Even for me as a young teacher, sometimes there are things I don't know how to do on a computer. But if we know how to use it then the resistance will go down. We have school internet but we do not have internet access in our classes so whenever we need to do something we share the computer lounge or use our own data. So that is sometimes the problem (Interview, 01-August-2017).

Lephuthi's views about reluctance to use technology touch on issues of procurement and allocation of tenders to purchase digital facilities but believes that teachers hide their ignorance behind it. On the unwillingness to use technology he says:

> Yes, I have seen it; it is there. The teachers try to criticise the government or department saying they are behind 'tenderpreneurship.' But as a teacher you can feel that this is not right. I may be behind with technology but I have to follow suit. When you want someone to help you and they don't know how to, then your confidence will be low. When they mention tenderpreneurship, it shows that they are refusing but usually it's about ignorance that they don't use technology (Interview, 15-March-2018).

Tenderpreneurship is a negative term that is normally used to refer to the type of business where certain people are favoured to supply government departments with goods or facilities. The belief is that they win the tender because they are close to influential people in government. Whether or not this is true is another matter but the fact that it is mentioned implies that the perception is held among some teachers and seems to affect their attitude towards openly embracing government's attempts to avail technological facilities to their schools.

Do teachers encourage their learners to use technology to study literature?

Responses to this question from the seven interviewed teachers are mixed. There are those who encourage their learners and those who don't. Justina does encourage her learners to use technology and she explains that "with the Grade 11s and 12s, there is a resource that we make available for them at the computer lab where they can go and get notes as well as some movies of the set books." However, they do not have the resources for all the prescribed texts due to financial constraints and difficulty of obtaining such. She specifically stated that they do not have such a resource on *Things Fall Apart* by Chinua Achebe (an African novel). Later in the analysis in chapter 5, I will revisit the issue of *Things Fall Apart* and the status of online resources in line with Justina's comment. My random online search on the text – which I will share in chapter 5 – revealed a lot more than what Justina implies with her comment.

Lizzy encourages technology-based research for her learners. With regard to the prescribed texts, their learners have a choice between e-books and hard copies and in her observation, they prefer hard copies over e-books because they are able to make notes in their texts. Anika on the other hand says they have not yet encouraged

their learners to use cellphones to study literature but feels that they should. Their learners use laptops though and are allowed to access the Internet.

Lephuthi has so far not encouraged his learners to use technology while Randy encourages only limited use of it. In her opinion, learners must first "learn to read and write before they go onto a computer that spell-checks everything for them." But they do allow learners to use cellphones to search for word definitions though she adds that they are not allowed to use cellphones in class unless they are told to do so in specific situations which are usually controlled and teachers closely monitor that the learners are indeed doing what they have been instructed to.

Bernice thinks that learners should rather focus their attention on reading books as opposed to using technology. She says she encourages it only if it is appropriate such as when doing research but appears reluctant to engage learners fully in technology-based learning. She elaborates:

> Literature is about reading and not about looking at pictures. They need to understand the written word, otherwise it's not literature. I don't want them to go and watch a movie so I insist that they read. As for poetry they must read the words because that's what poetry is about. You have to be able to read and understand. I don't allow research by technology all the time because they start to cheat and don't use their heads to analyse literature. The head is the first device for me (Interview, 11-September-2017).

While Bernice seems to think less of technology and suggests that the learners' heads are the most important devices in the classroom, her opinion is a bit problematic and contradictory. It could be argued that even the use of digital devices and media requires the learners to apply a lot of thinking in how to search, sort out and analyse the information and knowledge they find. In fact, every teaching and learning situation requires the use of the head to think through the lesson content and get maximum benefit out of the classroom.

Do learners collaborate more via technology?

In chapter one of this study, there is a discussion regarding the understanding that technology enables collaboration and sharing of information (Dalton, 2015, Larson and Marsh, 2015). How far does technology facilitate this and do teachers make use of this affordance? From the experience of the teachers, collaboration does not appear to have deepened its roots across the board despite regular use of technology. Anika does not think her learners work together more because of technology. There has not been any observable collaboration that she could share with me although the learners do engage with technology.

Amber says that her learners collaborate from the perspective that one learner may bring a flash disk and ask for her PowerPoint notes which would then be shared with whoever wants them. In the case of Justina, she and her Grade 12 learners have created a WhatsApp group where slides are shared and messages giving instructions (for example which book or section to read for the next lesson) are delivered. Lephuthi on the other hand says that learners must share whatever they have watched or seen but he has never promoted any collaboration among them. At his school, learners establish a WhatsApp group only when the teacher initiates the move. He has no knowledge of learners creating it through their own initiative. More on this issue will be discussed in chapter 5.

Evaluating digital resources for suitability and usefulness

As the fears abound regarding online safety in the vast sea of information available, I found it imperative to find out how the teachers evaluate digital resources to at least ensure that learners navigate safe spaces on the web and are able to detect useful information. Amber directs her learners towards specific sites that she knows are reliable. Bernice tells her learners what to research but she has no time to go to all their devices to see what they are doing because she does not have enough time in a lesson. She seems sceptical about the value of online resources and looks back to the time when the encyclopedia was the chief research and reference tool:

> When we used the encyclopedia in the past, we had to learn how to evaluate material from other sources. Now the computer does it for you, so I don't know if it's good or bad. We are going to see in the future what kind of lawyers, doctors or scientists we will have. I don't know (Interview, 11-September-2017).

She appears to doubt that the Internet has the potential to produce the type of professionals who can be trusted because it appears to be too easy to do research via technology.

Justina states that she and her colleagues give learners the websites that they use and trust themselves. On further probing if they ever worry about learners getting into harmful sites she responds: "Yes we worry all the time; unfortunately all you can do in that situation is to warn them against navigating harmful sites and hope for the best." She understands that the situation is, to some extent, beyond their control as they can never be sure what learners get up to on their own. This implies that the school has no mechanism to monitor learners' online movements.

Lephuthi and Randy think it is difficult to ensure maximum safety for learners once they are accessing digital resources. Randy suggests the best and safer sites to her learners and elaborates:

> It is difficult because we can't see exactly what they are accessing. But when we do use them, we do so in a controlled environment. We definitely need supervision or restrictions on certain websites. We do warn them against some sites and speak about which educational websites are the best to visit because once you go into a Google or something, that's where all the nonsense comes up (Interview, 01-August-2017).

Lephuthi's view is that learners are responsible and know technology better than teachers hence they should be able to tell where the dangers are. His assessment of the digital landscape is that of a teacher who seems to have abdicated responsibility onto the shoulders of learners who themselves still need guidance to ensure their online safety. Lizzy on the other hand says she has never graded any digital resources since at school they are not as critical as at tertiary level.

The state of resources on African literature compared to Western literature

In the questionnaire instrument, the teachers have already alluded to the scarcity of digital resources on African literature in comparison to Western literature. Right from the conception of this study, it was my aim to find out if prescribing more African literary texts by the Department of Basic Education would pose a challenge regarding availability of online resources on African literature. The interview therefore gave the teachers an opportunity to share their experiences in this regard.

Most of these interviewed teachers agree that there is not much, if anything, that they are able to access on African literature compared to European or American literature. Randy is not able to comment on this matter because she is only in her first year of teaching and is yet to find out what the situation is. Lephuthi's opinion is that African literature is closer to the context of the learners hence with or without technology, the learners should be able to relate to and understand the content.

Anika says they struggle to find resources on all genres of African literature including poetry. Bernice agrees that there is "absolutely nothing, especially on South African poets." Justina thinks the lack of resources on African literature actually works against it when it comes to selection of texts by the teachers:

> I think that's what really works against African literature because when teachers choose set books, they usually choose basing themselves on availability of resources because it's very difficult to teach when you don't have resources as that means you are relying on your own interpretation and there is no standardisation for learners. We used to teach *Four Plays* and *Cry Freedom* and it was so difficult to get resources for those texts and when we did moderation with other schools, the answers differed (Interview, 19-March-2018).

Despite this shortage of resources, Justina is happy that the DBE has chosen more African texts:

> Actually I like that the department is prescribing more African literature, but what I have a problem with is not availing resources because if you prescribe something, you need to make sure that resources are available for teachers to use in the classroom (Interview, 19-March-2018).

These responses show that teachers battle to find resources to assist them with African literary textual analysis.

The potential for using digital technologies to teach literature

I was interested in what the teachers perceive as the potential that digital technologies have in the teaching of African literature and literature in general. Amber thinks there is huge potential for their use if only the syllabus was not so packed because they are "constantly chasing content" and have insufficient time to fully incorporate digital technologies in their lessons. Justina is of the opinion that the technologies can work because they give learners a break from constantly listening to the teacher's voice:

> You know it gets boring to listen to the teacher go on and on for a double period. So it also gives them a break and also to interact with the content themselves and form their own opinion. When you use technology, learners are able to see themselves and are able to formulate an opinion and familiarity with the work (Interview, 19-March-2018).

Lizzy says that she cannot imagine teaching literature "responsibly" without any access to technology which is where she does her research before lessons. Randy's feeling is that technology excites learners far more than books will ever do hence it is important for teachers to make them central to their learning. She explains:

> The children that are coming into the school know technology more than they will ever know a textbook. And because they know how to use technology, I think it attracts them more than a textbook ever will to be very honest. So I think if we can find a way to incorporate lesson content with things that interest them like iPads, computers and internet, it will definitely help them, definitely (Interview, 01-August-2017).

Lephuthi thinks while technologies have great potential and should be encouraged because they aid learners' understanding, there is still a long way to go to get conditions right in the schools. His school, Lepae Secondary, is township-based and non-fee paying. He says: "We are just entering the digital world in our schools and there are still challenges like electricity cuts, theft and general lack of management of the resources we already have." His earlier explanation in the questionnaire was that those mandated to repair malfunctioning smartboards do not do so and it frustrates their teaching.

School policy regarding the use of technology

The policy issue is related to investment in technologies which the questionnaire instrument extracted from the teachers. An explicit policy on digital technology would ordinarily (at least that's the expectation) lead to some investment where funds permit. Of the teachers interviewed, only one said their school has a clear policy on digital technologies. Lizzy (at Linville H. S.) says they do have a policy on the use of technology including a list of sites that must be avoided. This policy is connected to their general school disciplinary code where learners are expected to observe the school guidelines which also prescribe the harmful websites they must avoid. Failure to observe the code triggers the school's disciplinary code. She explains: "As I said (in the questionnaire) we have a full-time person who assists us with technology."

In a visit I later paid to Linville High School on 02-November-2018, Lizzy arranged a meeting with me and the school's technology teacher. I had gone to the school to get more information on their internet and Wi-Fi which will be shared later in the section on environmental assessment. The technology teacher explained to me that the school's internet policy obliges parents to sign that they allow their children to use the Internet and they pledge on behalf of their children that there will be no visits to the bad sites. The teacher then constantly monitors where the learners get into either through their smartphones or the school computers. It appears that the school takes online safety seriously.

At Brakfontein H. S. (Bernice's school), use of technology remains optional to teachers although, as she explains, "the Headmaster and the governing body want us to start and make it compulsory in all areas." There is no provision of data at school and learners bear their own data costs which Bernice says poses a challenge due to the high costs involved. Johnson H. S. does not have a formal policy as Justina explains but their principal encourages them to use technology and has been instrumental in installing projectors in a number of classrooms. To prevent theft, the school has installed burglar gates and an alarm system in the classrooms that have projectors.

4.4 Interviews with learners

The table below shows a summary of the interviewed learners. Pseudonyms have been used to refer to them and their schools.

Table 10: Interviewed learners – summary

Name	School	Grade
Belina	Brakfontein High School	11
Bonolo	Brakfontein H.S.	11
Lebona	Lepae Secondary School	12
Leisa	Lepae Sec. School	12
Jane	Johnson H.S.	10
Johnny	Johnson H.S.	10
Raymond	Redfield H.S.	11
Ray	Redfield H.S.	10

Learner access to technology at school and at home

The first point of interest was to find out if learners have access to technology both at school and at home. What the teachers aspire to achieve with the learners in and out

of school may be difficult unless learners have access to some technologies. They mentioned having access to the following as portrayed in table 11:

Table 11: Digital devices and media accessed by learners

Learner	Available technology at school	Available technology at home
Belina	Data projector, laptop (teacher's)	Smartphone, Wi-Fi, internet, laptop
Bonolo	Data projector, laptop (teacher's)	Smartphone, Wi-Fi
Lebona	Tablet, data projector	Smartphone
Leisa	Tablet, data projector	Smartphone, tablet
Jane	Internet, Wi-Fi, computer	Desktop, laptop, Wi-Fi
Johnny	Internet, Wi-Fi, desktop	Laptop, cellphone, Wi-Fi
Raymond	Internet, computer	Smartphone
Ray	Internet, computer	Smartphone, computer

The above table shows that learners have access to some technologies both at home and at school. The key difference would be the type that is available to them (especially at home) should there be a need to do some online research for example. During the interview, I avoided mentioning the technologies that learners may have, especially at home as I wanted to also find out what – in their opinion – qualified as technology. This may explain why some did not mention a smartphone as one of the available technologies to them at home. While it may be possible that some learners in reality do not own smartphones, it may equally be probable that they have them but did not immediately think of them as significant tools of learning.

Learners' confidence in the use of technology for learning

All the eight learners say they are very confident in the use of technologies, especially those they use for school purposes. Two of the learners (Jane and Johnny) said that their school (Johnson H.S.) offers Computer Technology Application from Grade 8 where they learn how to operate computers. The other learners (Belina, Bonolo,

Lebona and Ray) are able to surf the Internet and get the information they want. Ray actually disclosed that he once lived in a children's home where any form of technology was banned but still he is confident to use his smartphone to search for information.

Do learners think technology helps them understand texts better?

All the eight learners agree that technology eases their understanding of literary texts. Belina uses it to research book summaries and character sketches while she is at home. For Bonolo and Raymond, the Internet is useful in providing them with answers if the teacher does not explain certain concepts properly. Jane says "you can read the words but not understand, but with technology your understanding is enhanced." Leisa watches movies of novels and this helps him to remember what he has learned. The devices that the learners prefer to use in their studies are the cellphone, laptop and computer and a tablet. They find that the cellphone is far more accessible, portable and convenient.

What excites learners most about learning literature with technology?

The factors that excite learners the most about studying literary texts with technology can be summarised as:

- Technology is fun, exciting and interesting;
- It provides motivation to learn;
- It provides ready-to-use summaries of the texts;
- It provides search opportunities for what they do not understand;
- Technology enhances the urge to study in a way books are not able to;
- It offers something different as opposed to reading books and listening to the teacher all the time.

Johnny sums up young people's deep affinity with technology in the following manner: "Using a mobile device is more exciting than using a book. As students, when we carry

books around we don't have the urge to study; as young people we prefer technology – it is far more exciting."

Learners' frustrations about using technology

While the learners love using technology as exemplified by the preceding question, they highlight certain frustrating factors about technology. The issues they mentioned more frequently are:

- power outage;
- high data expenses and not always having money to buy it;
- battery dying while using a device.

Belina's frustration is at times caused by the search engine 'Google' which sometimes directs her search to a movie instead of a novel and she ends up not knowing if she is getting the correct characters and information. Raymond worries about his computer being faulty and his work being corrupted. Ray worries more about unwanted distractions while surfing the net: "Sometimes when you are busy on the screen, other things just pop up onto the screen." Jane becomes frustrated if she does not find what she is looking for and thinks that technology is not always reliable.

Does technology promote collaboration among learners?

Technology-inspired collaboration is observable among learners at Johnson High School. Jane and Johnny from the school say they have WhatsApp groups for the different subjects where they engage in the following activities:

- sharing whatever they do not understand;
- capturing information via screenshots and sending it to one another;
- chatting regularly and sharing information on the subjects.

Johnny finds this collaboration helpful as the transfer of information happens much faster and it can be accessed by a lot of people all at once. Johnson H. S. is the only school where the learners themselves say they use social media to collaborate and share information on their subjects.

4.5 Selected classroom observations

As stated in chapter 3 (section 3.7.3), the observations were meant to furnish first-hand information on the research participants' experiences and the processes they go through in their use of technology in the classroom. The observation provides confirmation of some of the information given in the questionnaires and interviews. In this section I am going to share the following from the two schools where observations were conducted:

- the type of technology used during the lesson and the amount of time it took to set it up (that is, switching on the projector and connecting it to the laptop);
- the ease of access to the technology;
- the focus of the lesson.

These observations gave me a first-hand glimpse into the actual technologies used by English teachers and the processes they go through in their interactions with these technologies. As explained in the methodology chapter, I did not choose beforehand which lessons I would observe; I merely observed the lesson that was immediately available. It just had to be an English (specifically literature) lesson.

4.5.1 Observation one

School: Brakfontein High School

Date: 11-September-2017

Grade: 11

Class size: 22 learners

Lesson duration: 40 minutes

Teacher: Bernice

The technologies in use during this lesson were the laptop and data projector. My seating position during the observation was right at the back of the classroom so that I could view how well projected the images were.

It took around three minutes for the teacher to set up the technology and in my opinion this was a reasonable time. The data projector was already mounted overhead. On that day, the focus of the lesson was that four groups of learners shared the stage to present on the movie *The gods must be crazy.* One speaker provided the background to the story and summary of the movie while the second presenter described the characters in the movie and their traits. They presented still pictures onto the white board accompanied by sound and music. The entire presentation lasted about eight minutes.

In my observation, the pictures and sound were clear for all in the classroom irrespective of their seating position, especially as it was a relatively small class of 22 learners.

4.5.2 Observation two

School: Johnson High School

Date: 21-September-2017

Grade: 10

Class size: 24 learners

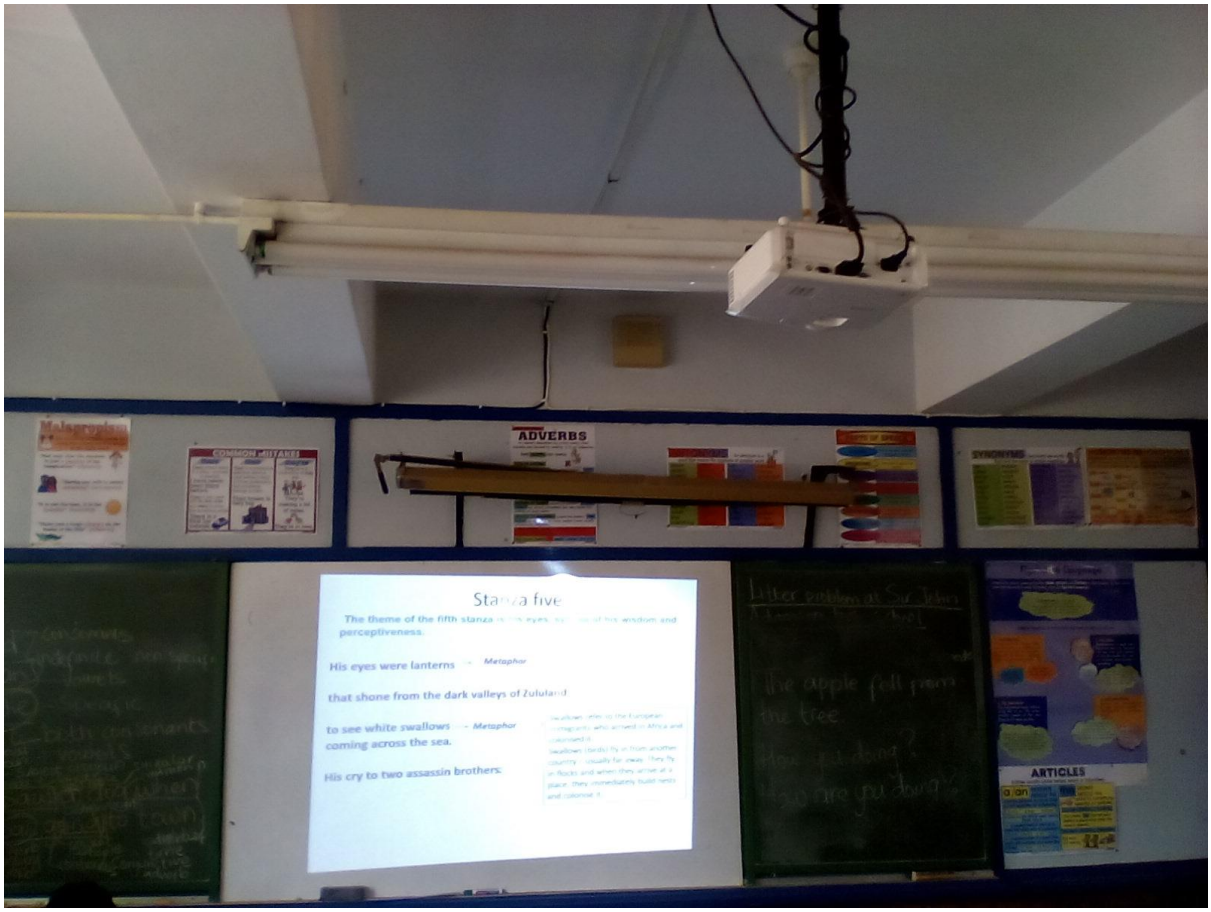
Lesson duration: 40 minutes

Teacher: Justina

During my observation at Johnson H. S., the technologies in use were the laptop and data projector. It took about three minutes for the teacher (Justina) to set up the technology. The data projector was already fixed overhead.

The focus of the lesson was poetry analysis where metaphors and other figures of speech were the focal areas. Justina had prepared PowerPoint slides on this. I was seated at the back and from my position I think all the learners could see the projected slides with ease. The picture quality was also good. Below are two pictures that I took while the lesson was in progress. One (if visible enough) shows the poetry analysis of the stanzas on the whiteboard while the other shows some of the learners paying attention during the lesson. The faces of the learners are not shown as was agreed prior to the picture being taken and as per the ethical clearance that I received before doing field work. In both pictures, the data projector is visible overhead.

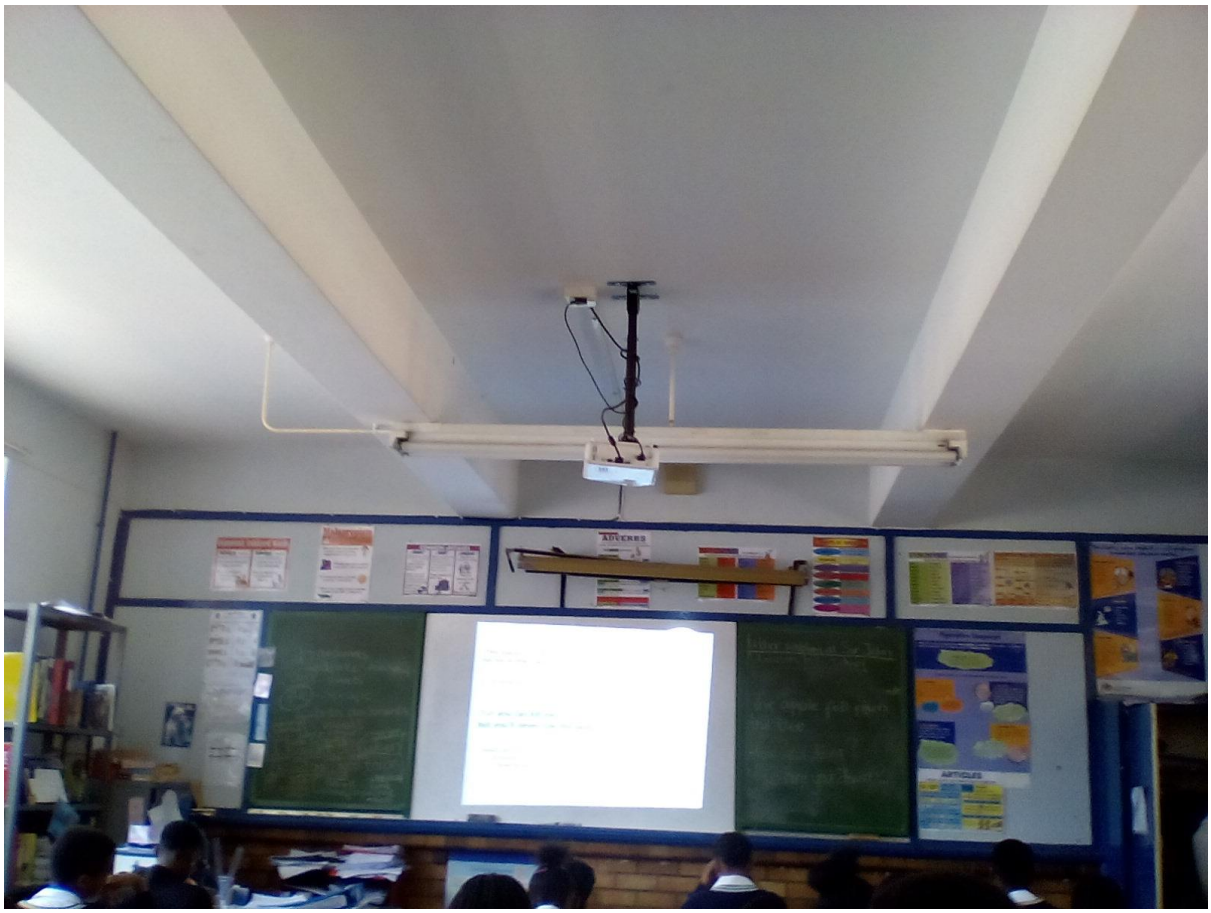
Picture 2: A data projector in use at Johnson High School



Date taken: 21-September-2017

The two pictures displayed above and below serve as confirmation of some of the devices that the teachers (Justina and Jemina) at Johnson High School said the school owns and makes use of during literature lessons. At a later stage (November, 2018) I sent an email to the head of the English department at Johnson to inquire how the school Wi-Fi was financed and she told me that it was subsidised by the Gauteng Department of Education. Johnson H.S and Linville H.S. were the only schools which mentioned Wi-Fi as one of the digital facilities they have. The follow-up I made to find out about the Wi-Fi at Linville is reported later after picture 6.

Picture 3: Some of the learners paying attention during the lesson at Johnson



Date taken: 21-September-2017

4.6 Environmental assessment

The chief purpose of the environmental assessment was to provide tangible evidence of where the schools are located and to personally view some of their digital facilities (where I was able to). The table below provides information on the schools and their locations along with the digital facilities they possess as either reported by the teachers or personally seen during my visits to the schools.

Table 12: School locations and digital facilities

School	Type & location	Digital facilities & evidence
Academy College	Private Suburban Johannesburg south	Laptops, projectors & internet **Evidence:** as reported by Anna and Anika. I also saw a laptop and projector used in 2016 while visiting the school as a sessional staff member to observe an English student teacher's lesson during the Wits University teaching experience.
Alleyvale H.S.	Public Suburban Johannesburg south	Laptops & desktops, projectors, internet **Evidence:** as reported by Amy and Amber. I did not have the opportunity to see the facilities.
Brakfontein H.S.	Public Suburban Johannesburg south	Laptops, projectors & internet **Evidence:** as reported by Bernice. I interviewed her in one of the classrooms where I saw the laptop and projector she used for teaching. Also, in 2016 I observed a student teacher from Wits University where there was usage of the said devices.
Johnson H.S.	Public Suburban	Laptop per department, projectors, Wi-Fi & broadband internet

	Johannesburg south	**Evidence:** as reported by Justina and Jemina. Also, one of the observations for this study was at Johnson hence I saw some of the devices.
Lepae Sec.	Public Township Orange Farm	Smartboards (in Grade 12 classrooms), media centre with 2 sections (a library and a room with an overhead projector where films are shown). **Evidence:** As reported by Lephuthi and Lenea. I also had the opportunity to take a tour with the English HOD where I saw the media centre and took a picture that will be shared shortly. I was not able to see the smartboards as lessons were still on.
Linville H.S.	Public Suburban Johannesburg north	Laptops, projectors, Wi-Fi & broadband internet **Evidence:** as reported by Linah and Lizzy. I interviewed Lizzy in a Grade 12 classroom where I saw the laptop and projector. At a later stage I visited the school again to talk to the technology teacher and I took a picture of one of their computer laboratories.
Mamelani H.S.	Private Township Orange Farm	Only one working projector - teachers normally use their own laptops and projectors **Evidence:** as reported by Masindi. Also, during the 2016 teaching experience, I observed a Wits University student teacher at the

		school. She used a laptop and projector but told me they were hers.
Northern H.S.	Public Suburban Johannesburg north-west	Laptops, desktops, iPads & internet **Evidence:** as reported by Naomi and Nelly. I never had the opportunity to see the facilities.
Redfield H.S.	Public Suburban Johannesburg north	Desktops, projectors & internet **Evidence:** as reported by Randy and Ruth. I did not get the opportunity to see the facilities.

As table 12 portrays, I relied mainly on the teachers' reports regarding the digital facilities owned by their schools. In some cases however, I was able to physically see some of those resources through either a tour or classroom observation. Below are two pictures (picture 4 and 5) showing the interior of the media centre at Lepae Secondary School. The head of the English department took me on a tour of the facility on 21 September 2017. He told me that this is the venue where films of the prescribed literary texts are shown to the learners. Immediately following picture 5 is picture 6 which shows the computer laboratory at Linville High School and clearly visible is the disparity in technology facilities between Lepae and Linville.

Picture 4: The interior of the media centre at Lepae Secondary School



Date taken: 24-October-2017

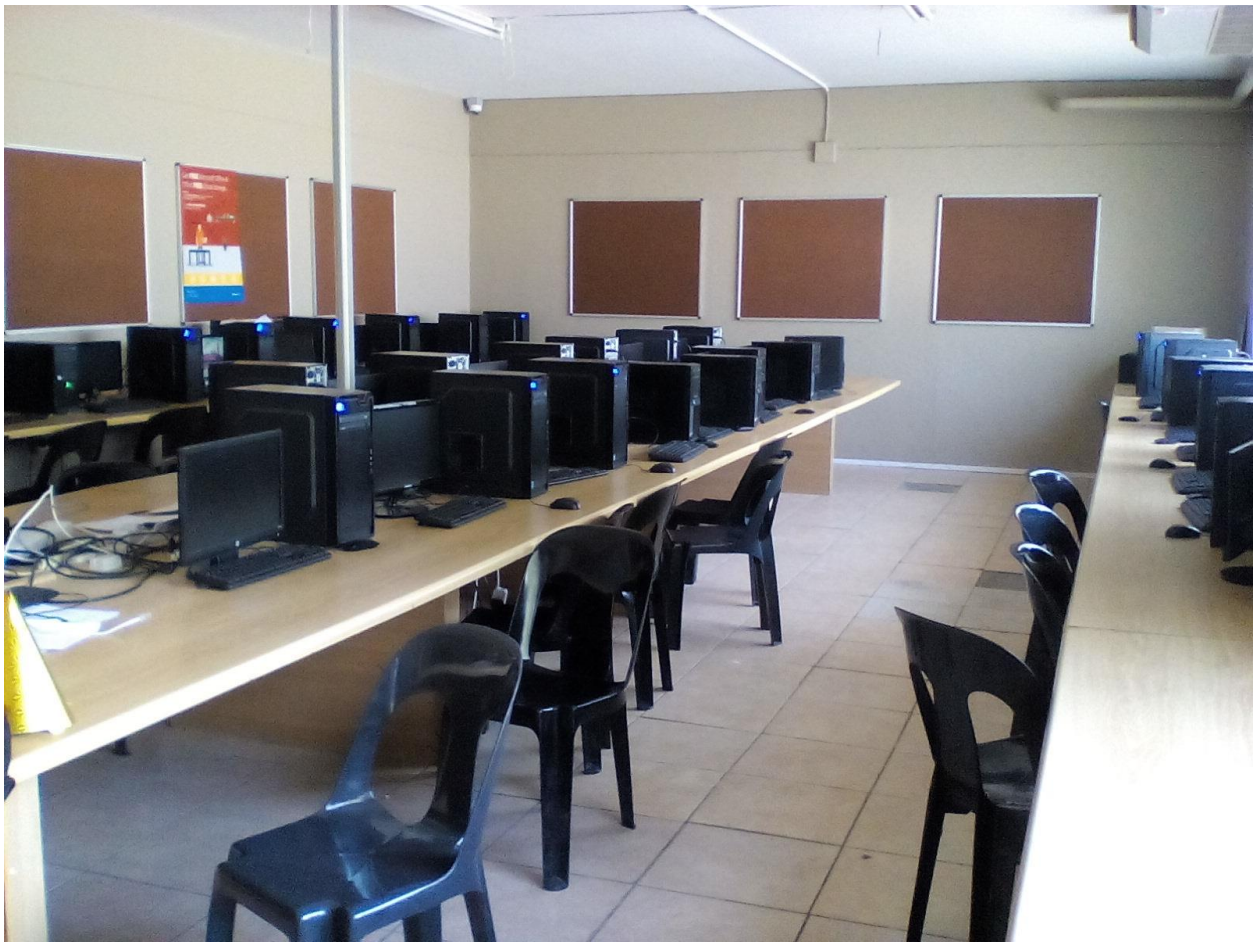
What was noticeable during my tour of the media centre was that the data projector (visible in both pictures) was the only digital device housed. There was no separate storage room where other devices could be located. From what the English HOD told me, the centre was mainly used to show films on some of the prescribed literary texts. A few chairs were piled next to the walls of the centre. My assumption is that learners bring extra chairs with them whenever the centre has to be used.

Picture 5: A different angle of the media centre



Date taken: 24-October-2017

Picture 6: A computer laboratory at Linville High School



Date taken: 02-November-2018

As the findings reveal in the preceding sections, Linville High School has full internet coverage, both broadband and Wi-Fi. In November 2018, Lizzy, one of the participating English teachers at the school, arranged a meeting for me with the school's technology teacher. I wanted to find out more about the school's internet and how it was financed. The technology teacher told me that Vumatel (an Open Access Fibre Provider in Johannesburg) had got permission from the school to install a Point of Presence (POP) hub within the school yard. This POP was meant to service the nearby residential households with internet coverage. The school then reached an agreement with Vumatel to receive free internet from the hub. Apart from the broadband, they used their own finances to purchase 25 Wi-Fi routers which are also connected to the POP and the entire school community (including learners) have unlimited Wi-Fi access.

4.7 Texts prescribed by the Department and those chosen in selected schools

The chapter concludes with two tables depicting the African novel and drama texts prescribed by the Department of Basic Education in Grades 10 to 12 and those that the interviewed teachers said were prescribed at their schools in 2017 when I did most of the field work for this study. This is meant to provide a picture of the titles that the DBE had chosen against those the schools were teaching at the time. For the sake of relevance, only African literary novel and drama texts are presented in both tables; non-African texts have been excluded. A full list of all prescribed English set books for 2017 is provided in the appendices. Apart from just the titles, table 13 also provides the year of first publication for each text. This is considered important because the older the text, the more there could be ample online information on it to assist teachers and learners with textual analysis. This is further discussed in the analysis chapter where a demonstration is made with Chinua Achebe's *Things Fall Apart* (1958). A random online search is also done on some of the more recent texts and this will also be shared.

Table 13: The Department's prescribed African novel and drama set books

ENGLISH GRADE 10 2017			
Text & year of publication	**Author**	**Genre**	**Level**
Finders Keepers (2015)	Rosamund Haden	Novel	First Additional Lang (FAL)
Mhudi (1930)	Sol Plaatjie	Novel	FAL
Mother to Mother (1998)	Sindiwe Magona	novel	Home Language (HL)
The Mark (2014)	Edyth Bulbring	Novel	HL
The African Dustbin (2007)	Victor Mtubani	Drama	HL
The Lighthouse Keeper's Wife (2015)	Charles J. Fourie	Drama	HL

ENGLISH GRADE 11 2017			
Hearing Helen (2013)	Carolyn Morton	Novel	Second Additional Language (SAL)
Things Fall Apart (1958)	Chinua Achebe	Novel	HL
Tsotsi (1980)	Athol Fugard	Novel	HL
Sophiatown (1988)	Malcolm Purkey	Drama	FAL
Itsoseng (2009)	Omphile Molosi	Drama	SAL
ENGLISH GRADE 12 2017			
Cry, the Beloved Country (1948)	Alan Paton	novel	FAL
The Mending Season (2005)	Kagiso Lesego Molope	novel	SAL
Dark Voices Ring (1979)	Zakes Mda	drama	SAL
My Children! My Africa! (1993)	Athol Fugard	drama	FAL

Source: https://www.parent24.com and *Sunday Times*, November 29, 2015

Table 14 below presents a list of the African texts the interviewed teachers said were prescribed at their schools in 2017. Only three titles do not appear in the DBE list above. These are *The Eighth Man* (novel) by Michael Williams, *Disgrace* (novel) by J. M Coetzee and *Nothing but the Truth* (drama) by John Kani. The two lists give us a glimpse into the African literary texts the DBE has prescribed and those the schools had chosen. My objective though remains that of looking at access to and use of digital media and devices to teach African novel and drama texts in general. While this study was, to a large extent, prompted by the DBE's decision to prescribe more African texts in Grades 10 to 12, the prime motivation behind the study applies to all African English literature beyond the list supplied by the department. The interviewed teachers were free to make reference to all African texts they were familiar with regarding the ease or difficulty of accessing online resources on them.

The question regarding which African literature texts were prescribed at the sampled schools was part of the interview sessions and not the questionnaire instrument hence the reason why only seven teachers (and not all the 16 who filled in the questionnaire) are the only ones who provided the information. The very first ice-breaking question during the interview sessions with the seven teachers who were selected was for them to share with me the African literature texts written in English which were prescribed at their schools in 2017 or those they were teaching at the time. The table below lists the texts.

Table 14: The prescribed African texts at the interview sites

Teacher	**School**	**Prescribed text(s)**
Anika	Academy College	*Tsotsi* by Athol Fugard *Mother to Mother* by Sindiwe Magona
Amber	Alleyvale H. S.	*Things Fall Apart* by Chinua Achebe
Bernice	Brakfontein H. S.	*Things Fall Apart* *The Eighth Man* by Michael Williams
Justina	Johnson H. S.	*Things Fall Apart* *Mother to Mother*
Lephuthi	Lepae Sec. School	At the time Lephuthi was teaching an anthology of poems from different places.
Lizzy	Linville H. S.	*Tsotsi* *Disgrace* by J. M. Coetzee *Nothing but the Truth* by John Kani *Cry, the Beloved Country* by Alan Paton
Randy	Redfield H. S.	Randy had not yet taught any African texts as she was a new teacher and had been with the school for only 5 months. The 2 texts she was teaching at the time were British.

From the list on table 14, it would appear that there is a fair representation of the texts prescribed by the DBE. While it was important to find out from the teachers if the texts prescribed by the department are researchable online, I thought it was equally

significant to establish what the situation is in relation to all African texts that teachers have had the experience of teaching so that the study can be extendable beyond the decision by the DBE to select more African texts.

4.8 Conclusion

This chapter has shared the five sets of findings from the English teachers' questionnaires and interviews, learners' interviews, selected observations and environmental assessment of the nine schools where data was collected. Some accompanying pictures depicting a few of the digital facilities were also illustrated. The chapter has merely shared the findings from the point of view of the research participants with supplementary verbatim quotations from them.

The final section of the chapter presented the list of African literary novel and drama texts prescribed by the Department of Basic Education and the list of texts that the interviewed teachers' schools had selected. The next chapter thematises the findings and presents a deeper analysis of the data in relation to the content the data seems to suggest, the reviewed literature, the theoretical framework and the contribution the study may have made to the teaching and learning of African literature (and literature in general) through the use of technology.

CHAPTER 5

Analysis and discussion

5.1 Introduction

This chapter attempts to synthesise the key findings and data which were shared in chapter 4 and present a deeper analysis and discussion. The content derived from the data is analysed in accordance with the themes that have emerged from the data presentation. The analysis of these themes – as stated in the methodology chapter – leads to an understanding of not only the state of access to digital media and devices, but also how English teachers and literature learners interact with these technologies both in and outside of the African literature (in general, literature) classrooms.

Recurring themes have been given preference in the analysis by virtue of their regular occurrence. However, irregular yet interesting themes are also given attention where they provide insights and divergence of opinion. The findings are interpreted using the interpretivist paradigm by which the lived experiences of the participants are constructed and shared through a narrative (Merriam, 2001, p.4). Among others, the analysis will draw from the purpose of this research including the research questions and the themes that seem to emerge (Menter, Elliot, Hulme, Lewin and Lowden, 2011, p.221), and from the theoretical framework to propel further the discussion on the findings that have emanated.

To people who have attained high levels of digital literacy and are familiar with the most complex navigation routes around the digital highway, some of the technological inadequacies shared by the teachers in the preceding chapter may appear frivolous and unbelievable in the era when technologies seem to be more common than ever. However, it must be borne in mind that not every teacher owns a laptop and has access to the Internet nor is every teacher adept at using technology, as Amber from Alleyvale High School has realised. To some teachers and learners, access is still a far-fetched dream that seems to be forever elusive. Additionally, the processes

teachers go through in their use of technology may seem obvious, ordinary and commonplace to those who are used to technology. But to teachers and learners who lack digital skills, literacy and resources and only dream of a school with at least one computer, one data projector and feeble Wi-Fi or broadband internet connection, nothing can ever be taken for granted. In such contexts, the digital world remains a distant horizon that only gives a glimpse of its presence but is hard to reach. Such contexts demonstrate the wide gap that still constitutes the digital divide among individuals, schools, districts, provinces and nations.

5.2 African literature and access to technology

5.2.1 Access to digital media and devices

From the data shared in chapter 4, it would appear that among the sampled teachers, access to digital resources is observable. For example, 13 out of the 16 teachers who responded to the questionnaire said they use the Internet to plan their lessons. In the same vein, 15 of the teachers use a laptop to plan their lessons while 13 use it for actual teaching. Again, 14 of the teachers have access to a data projector at their schools. In addition, the selected classroom observations and the environmental assessment I made at the schools gave me first-hand contact with some of the technology that they have. These examples do show that to a large extent, the teachers have access to some of the key technologies: the Internet, laptops and data projectors. The Internet is a catalyst for further access to platforms such as YouTube, Wikipedia, blogs and class websites for those who may want to use them.

Equally important is the fact that all of the eight learners who were interviewed have access to digital facilities both at school and at home. For example, at home they have access to: Wi-Fi, broadband internet, laptop, desktop, tablet and smartphone. Learners' access is significant in enabling technology-aided learning outside the confines of the classroom walls. This could even extend to sharing and collaborative learning among the learners.

Back to the teachers, another key tool for them appears to be the smartphone although its usage for planning and teaching lessons does not appear to have spread as widely

as one would expect. Among the teachers, nine use smartphones to plan their lessons while six use them in the classroom. Tables 7 and 8 in chapter 4 show that increasingly, teachers have access to digital technologies both at school and at home. A sizeable number of teachers mention having access to laptops, smartphones and the Internet. Similarly, all eight of the learners who were interviewed have access to either one technology or multiple technologies at home and at school (see table 11 in chapter 4).

Access to technologies at school may have a link to the 2004 White paper on e-Education where the Department of Education (as it was called then) made an undertaking that "every teacher and learner in General and Further Education and Training must have access to ICT infrastructure" (p.29) and all "must have access to an educational network and the internet" (p.31). In the same paper, the department makes the following commitment in relation to the prevailing socio-economic context:

> As in other spheres of social and economic development, ICTs have the potential to improve the quality of education and training. It is for these reasons that Government has been quick to seize the opportunity presented by the practical benefits of ICTs to support teaching and learning in the twenty-first century (p.8).

The documented commitment by the South African government (made over a decade ago) is however still far from seeing the light of day in some schools. Among the nine that I visited during data collection, some still do not have internet connection and these "practical benefits" of ICT are yet to be felt. Perhaps even more interesting is the fact that the only non-fee paying school (Lepae Secondary) is one of the two schools I visited which has no Wi-Fi or broadband internet. The other is Mamelani High School which charges the lowest fees but is subsidised by the government (see tables 7 and 12 in chapter 4 which display available technologies at all the nine schools). All facilities at Lepae Secondary School are supplied by the Gauteng Department of Education which, hierarchically, is answerable to the Department of Basic Education. The undertaking made in the 2004 White paper on e-Education would reasonably raise expectations that internet connection would be one of the key priorities by the DBE to enable more meaningful and functional access to technology by teachers and

learners. However, the strides that have been made to improve access in the schools I visited seems to suggest that the technology roll-out is well underway. What may be noticeable in the data however, is that Lepae and Mamelani – which respectively charge no fees and the lowest fees – probably find it hard to have internet access because they have a far smaller pool of resources, if any at all, to finance internet roll-out. Also, both schools are situated in a township where there may be lower income in the surrounding community; implying that the schools may be reflective of the general environment in which they are located.

The environmental assessment I took at Lepae Secondary seems to suggest that the school has less financial resources than the other fee paying schools. While my research did not delve into the bank balance of each school, a scan of the general environment and the available resources may be symbolic of a school's financial status. It has been observed that wealthy schools spend far more on technology than poorer schools (Zucker, 2008, p.191). This therefore may explain why Lepae may not be able to acquire much technology on its own without government assistance. In such situations where some schools have no self-generated funds to spend, the digital divide may continue to widen between the haves and have-nots with consequential realities of exposing learners to dissimilar technological contexts albeit within the same city or province. Some of the reasons why not everyone has access are socio-economic status and physical location resulting in unequal opportunities for both teachers and learners to access technology (Ribble and Bailey, 2007, p12). The situation at Lepae may also be symbolic of many developing nations where a number of barriers still hinder the adoption of technology. These are inclusive of insufficient IT infrastructure, lack of government support and absence of national policies regarding information technology (Baker, Al-Gahtani and Hubona, 2007, p.354). Other barriers may also be slow internet connection in comparison with the more developed world (Akman and Mishra, 2010, p.484).

To revisit the situation at Lepae Secondary School, I made a follow up inquiry with the head of the English department to find out why digital facilities at the school appeared to be lacking. As a non-fee paying school, the Gauteng Department of Education (GDE) is expected to provide more support to the school. The English HOD, who had

since left the school subsequent to my last visit, had this to say in an email conversation:

> The school is well looked after by the state. The only hiccup that I have noticed is the scourge of vandalism. During my tenure as a teacher, there were multiple incidents of vandalism at Lepae. In 2012 to be precise, a security guard was shot dead and sixty computers were looted. In 2016, fifty tablets were stolen. Basically that is the reason why the school appears not to be improving in terms of technology or rather IT. *(email received on 02-November-2018)*

During the environmental tour that I had taken with him in October 2017, he took me to one of the classrooms where some of the learners had no desks and chairs and he told me it was the result of vandalism by the community. During all my visits to the school, there was visible security at the main gate and all visitors had to fill in a visitor's book to identify themselves. It is obvious therefore that theft and vandalism still persist despite the security that I observed at the gate. At Lepae, government appears to be doing its part to provide facilities but the community should be at the forefront of securing the premises because the school should be seen as a community asset which serves their children.

Access to technology at school is considered very important in contexts where learners are unable to access any at home due to socio-economic realities. Warschauer and Matuchniak (2010) believe that:

> …access to new technologies, whether at home or at school, is critical…it is widely believed that effective deployment and use of technology in schools can help compensate for unequal access to technologies in the home environment and thus help bridge educational gaps and social gaps (p.180).

This suggests that schools have the potential to bridge the divide caused by the learners' socio-economic environments because the school context creates equal access and opportunity irrespective of where each learner retires to at the end of a school day. However, schools need to be adequately equipped to be able to offer learners this equal opportunity to access technology.

In relation to the chosen learning theories (constructivism and connectivism), access to technology implies there is some basis from which to translate learning to a situation where learners may be more actively involved. While this may largely depend on the initiative and guidance of the teacher, learners have the opportunity to use devices which are available within their social contexts to interact, share and collaborate if activities selected trigger those actions. Even though the digital devices would require internet connection or data for users to access information, access to the devices means the learners are able to search and "engage with myriad information sources" (Dunaway, 2011, p.676).

5.2.2 Access to digital media on African literature

What is the status of digital media access in relation to African literature? As has been mentioned in a number of preceding sections, one of the key motivations of the study was the decision by the Department of Basic Education to prescribe more African literary texts from Grade 10 to 12 (*Sunday Times*, November 29, 2015, p.5)). The focus of the study is exclusively on African literary texts published in the English language. The findings show that teachers lament the scarcity of online resources on African literature in comparison to Western literature. As Justina at Johnson High School says, she welcomes the DBE prescribing more African literary texts but she feels more needs to be done to make resources on African texts available to teachers. Justina further thinks that this lack of resources works against African texts as teachers tend to select texts that have a lot of online resources to ease their work.

Most of the teachers sampled are of the opinion that – based on their experience with teaching African literary texts – there are not enough online resources and information on African literature. Jemina at Johnson High School even believes that "African literature is largely ignored by scholars and universities." Perhaps her comment is premised on the fact that she looks up to scholars and universities to provide leadership in knowledge creation and sharing because universities are instrumental in taking the knowledge economy to new heights. An expanded observation (partly shared in chapter 4) by Bernice at Brakfontein High School is that:

> Some of the African writers have nothing on the internet; absolutely nothing, especially South African poets. You just can't find anything, you just have the poem in hand, a bit of background and you don't know if it's accurate because you can't check on it.

Some of the teachers however have observed that when new books are prescribed, initially there is hardly any information available online but as time goes by, some teachers begin to share their PowerPoint slides online for other teacher to access. Amber (Alleyvale H. S.) and Lizzy (Linville H. S.) make this observation. To some extent, this partly solves the problem of lack of online information on African literary texts. It does appear though, that the teachers would like to have access to more elaborate and researched textual analysis on African literature. For African books which have been around for a longer time – such as *Things Fall Apart* (1958) by Chinua Achebe, *Cry, the Beloved Country* (1948) by Alan Paton and *Disgrace* (1999) by J. M. Coetzee – there are plenty of digital resources. Such texts have been studied for a longer time and more extensively. I will shortly illustrate this with *Things Fall Apart*.

Perhaps the key question at this juncture would be, who should take the initiative to ensure online presence for African literary texts? Should the DBE engage personnel to develop material on African texts? Should African-based scholars step in and do more research and analysis on African literary texts and post this online for the benefit of teachers and learners? What about the role that could be played by teachers' professional organisations? They probably have a good idea of the struggles teachers go through in teaching African literature and could be in a better position to map the way forward in filling this gap. Technology, more especially the Internet, has already shown us that information sharing is no longer the preserve of a few individuals but almost everyone can share and have access as long as they have the right tools and adequate digital literacy. What may count in the end is who has shared the information and where they are based (including their background) for consumers of the information to have confidence and belief in them.

Whoever may end up taking the lead in this regard, it is observable – based on the sampled teachers' responses – that there is the general perception that there is a gap to fill to give African literary texts more online presence to help teachers and learners as they navigate their way through the texts. Justina's comment above, that teachers are usually inclined to select texts based on availability of online resources, shows that while government's decision to prescribe more African literary texts is a positive move towards affirming the significance of home-grown content, the snag could be that teachers may overlook some African texts to avoid the frustration of lack of online resources or the fact that these resources have to be paid for. It is human nature after all to choose a route that is easier to travel as opposed to one filled with uncertainly and doubts and equally, there would be a propensity to download something for free rather than pay for it.

In chapter 4, I promised to revisit the issue that was raised by Justina at Johnson High School regarding lack of an online resource to teach Chinua Achebe's *Things Fall Apart*. Amy as well, at Alleyvale High School, claims (in the questionnaire) that there is "no material for prose" citing *Things Fall Apart* as an example. It could well have been that Justina and her colleagues were looking for a specific resource which they could not access due to financial constraints as she said. However, a random online search I did on *Things Fall Apart* through Google Scholar revealed a wealth of information. The search led me to Don C. Ohadike's 17-page commentary and analysis on the novel, also providing information on Igbo culture and history. Other articles on the novel were not freely accessible and required purchasing while another was only available if one has access to the University of the Witwatersrand library.

Additionally, there is Chinua Achebe's *Things Fall Apart: A Casebook* edited by Isidore Okpewho and published by Oxford University Press (2003) where a 55-page introduction is shared. The rest of the book can be accessed via a subscription or direct purchase (https://books.google.co.za).

Some of the participating teachers had also revealed that they use Wikipedia as a resource. I therefore did a Wikipedia search on *Things Fall Apart* and came across substantial analytical information on the following aspects of the book:

- the novel's title;
- plot;
- characters;
- background;
- language choice;
- literary significance and reception;
- influence and legacy;
- film, television, music and theatrical adaptations;
- publication information; and
- references and further reading.

What is demonstrable here is that, contrary to the claims by two of the teachers, *Things Fall Apart* is substantially represented online; perhaps unsurprisingly so considering that it was published in 1958 and is widely regarded as one of the classics of African literature. The novel's long-time presence and status in African and world literature has prompted various commentaries on it as demonstrated by my online search. It is surprising therefore that some of the teachers claim difficulty to access any online resources on the text. Perhaps the teachers have not tried hard enough to search for relevant information or simply wanted to get through the interview process without reflecting on the accuracy of their information.

Apart from *Things Fall Apart*, I did a random online search on *Finders Keepers* (2015) by Rosamund Haden and found a Best Books Study Work Guide that can be freely downloaded. My internet search for information on *The Mark* (2014) by Edyth Bulbring and *The Lighthouse Keeper's Wife* (2016) by Charles J. Fourie revealed that there are study guides published by Best Books but are not freely available and have to be purchased. My online search proceeded to *Hearing Helen* (2013) by Carolyn Morton and *The Mending Season* (2005) by Kagiso Lesego Molope where in both cases there was only a brief paragraph which summarises each text and nothing more. A search for Alan Paton's *Cry, the Beloved Country* (first published in 1948) led me to two different study guides. The first (Sparknotes) provided a free detailed summary of all

the chapters and a plot overview (http://sparknotes.com/lit/cry). Sparknotes are produced by New York-based company called Barnes and Nobles which specialises in selling books (printed and e-versions), magazines, toys and games, music and DVDs (https://www.barnesandnobles.com). The second search on the Best Books website (http://www.bestbooks.co.za/Books/19799) provided a study guide that could be purchased at the price of R160 inclusive of VAT. The guide was released on 28 February 2017. There is no free online copy. Best Books is South African-based with offices in Pretoria and Cape Town (www.bestbooks.co.za).

I also visited the websites of three of the big publishers in South Africa (Van Schaik, Macmillan and Pearson) to find out what may be available on the prescribed African literary novel and drama texts. Starting with Van Schaik, there was no material specifically on the African literary texts but on English Language and on Shakespeare titles like *Hamlet, Othello, Twelfth Night* and *Romeo and Juliet*. All the guides are in book form and the English Language guide is priced at R131,95. No material is free (https://www.vanschaik.com/page/study-guides-gr-8-12). Macmillan also has none of the African literary texts available on their website and all the available resources are for sale (https://macmillan.co.za/digital/fet-phase/4).

The Pearson website provided slightly more in comparison with the other two. They have electronic PDF (ePDF) resources on prescribed poetry (First Additional Language and Home Language). The purchasing price ranges between R63,00 and R79,00. Of the prescribed African novel and drama literary texts, three are available on the website on ePDF format. These are:

- *Things Fall Apart* by Chinua Achebe – Home Language (price: R68,00) and the study guide notes were written by Gardyne, H. and Hendry, JO. The country of origin is South Africa.
- *Cry, the Beloved Country* by Alan Paton – First Additional Language (price: R68,00) and the study guide notes were written by Janisch, R. The country of origin is South Africa.

- *Sophiatown* by Malcolm Purkey – First Additional Language (price: R68,00) and the guide was written by Jackson, R. The country of origin is South Africa (https://pearson.co.za/secondary/study-guide?cat=18).

The publication dates of the Pearson study guides are not shown on the website hence one cannot tell when they were published. It would have been interesting to see when they were published to determine what the local environment at the time of publication would have been like. This is important because, since all the guides originate from South Africa, it is possible that they analyse the texts in relation to the local South African context considering the most recent and relevant events. This is also where it would be interesting to see how much of the content in the texts has been decolonised by the writers of the study guides. The issue of decolonisation and Africanisation of classroom content was alluded to right at the beginning of chapter 1 where it was shown that decolonisation is not just about changing content to suit the local context but about mindset change in relation to how texts are read and analysed. The assumption made therefore is that study guides which originate from South Africa are more likely to speak directly to the local context, events and experiences and provide analysis which demonstrates deep knowledge and awareness of local events. What is clearly observable however is that most of the study guides whose websites I visited are South African. This may imply that the analysis of literary texts in print or digital form (even though only a few of the prescribed texts appear on the websites) is done with a South African lens which is relevant to the context in which the texts are taught and learned.

All of the texts mentioned are part of those prescribed by the Department of Basic Education which I listed at the end of chapter 4. What these online searches demonstrate is that while there are free study guides to download for some texts, others are not freely available and have to be bought. This means that teachers may be inclined to use free material if it is available and only buy if the schools assist financially.

These random online searches were done to confirm if indeed there are no internet-based resources on African literary texts as reported by most of the sampled teachers.

While my search was random and did not cover all the prescribed texts, I discovered that there is a wealth of information on *Things Fall Apart* (Chinua Achebe) and *Cry, the Beloved Country* (Alan Paton) and a detailed study guide on *Finders Keepers* (Rosamund Haden), but hardly anything on *Hearing Helen* (Carolyn Morton) and *The Mending Season* (Kagiso Lesego Molope). The results are therefore mixed and provide reason to hope that it could be a matter of time before information on the other books becomes available online. The DBE's selection of the texts I have already alluded to may help generate more scholarly interest in them leading to an influx of commentary and analysis which teachers and learners could benefit from. Perhaps by the time this thesis is submitted, information on other texts may already be available! In this day and age when technology has significantly speeded up information sharing and exchange, a difference of even a few minutes after browsing a website could mean the most recent non-yielding search can be quickly invalidated by a sudden influx of new information. Also important – as said earlier – is the fact that some of the online resources are not free, meaning that the purchasing price may prevent teachers and learners from accessing the information.

To conclude this section, what then is the connection between technology, constructivism and connectivism? Access to useful digital media begins with digital literacy and access to digital devices such as smartphones and tablets. Blogging, for example, offers learners the chance to continue learning and engaging in discussions outside of the classroom (Rennie and Morrison, 2013, p.68, Guzzetti, Elliot and Welsch, 2010, p.16) and its immediacy inspires sharing of information (Rennie and Morrison, 2013, p.69). Blogging as a social platform encourages construction and sharing of knowledge among the learners in different social contexts other than the classroom. Their sharing generates a diversity of opinions which are a result of access to different information sources and the comments that the learners make while blogging.

5.3 The potential of technology

The potential of technology is one the research questions this study seeks answers to. What is its potential in teaching African literary texts and literature in general? It was noted in the first chapter that African literature is part of the general discipline of

literature hence it cannot be totally isolated from its mother discipline. In chapter 2, I ask some questions regarding the potential of technology to become central to classroom instruction. Three of these questions have to do firstly, with whether there is enough time available for teachers to use digital devices and media. Secondly, do schools have the required technology or the resources to make it available? Thirdly, how digitally savvy are the teachers to make use of the devices and media at their disposal? These questions are perhaps the starting point in determining the potential for making technology fundamental to teaching and learning especially in the context where literature is reliant on reading, understanding and analysis of texts. What could therefore be some of the obstacles standing in the way of literature teachers' optimisation of digital devices and media?

It must be noted, in addition, that the practice and culture of reading books takes place in a world where the prevalence and influence of technology is hard to ignore. When I interviewed Bernice at Brakfontein High School, she made it clear that she does not encourage her learners to use technology to study literature because, according to her, "literature is about reading" and not about looking at pictures, so she stresses the importance of the written word. It may be argued that this written word now (unlike in the past) shares space with technologies that could even enhance its comprehension to those who read it. How do we then reconcile the written word with technology to ensure they maintain the synergy that all teachers, irrespective of generational influences, find useful and attractive?

With regard to the potential for using digital technologies to teach African literature and literature in general, two responses from the teachers struck me. Lizzy at Linville H. S. says she "can hardly imagine teaching literature without any access to technology" while Randy at Redfield H. S. observes that "the children that are coming into the school know technology more than they will ever know a textbook." Lizzy portrays a picture of a teacher who operates in a context immersed in technology and would find it hard to function normally without access to it. This is not surprising considering that more and more research takes place online and for teachers with digital literacy and access to digital media and devices, it suggests that internet research prior to teaching their lessons has become the norm. This means such teachers require contexts that enable them to function optimally with almost unlimited access to technology.

Randy draws attention to the type of learner that is increasingly being enrolled at school. This learner (bearing in mind that not all learners have similar exposure and there are bound to be differences between and among them) comes to school already with some knowledge of how to operate technological devices. She goes on to say schools must be able to incorporate what learners seem to like and enjoy with their classroom experience. Beavis, Dezuanni and O'Mara (2017, p.1) describe the digital world of young people and how digital games have become central to their learning and entertainment with the potential to influence their future.

> Young people's social and cultural experiences are increasingly digital. Their everyday lives are characterized by digital play and online interaction, and their futures will involve work with digital texts, regardless of the career paths they follow. Digital games played on handheld devices, gaming consoles and computers have become a central part of young people's daily lives for play, entertainment and social interaction. Increasingly digital games are also being used in education, and the potential for digital games to transform learning has been the focus of increasing interest and research.

This observation about young people and the influence of digital technology supports Hutchison and Wang (2012, p.267) which I reviewed in chapter 2: that the generation of today spends a lot of their time using computers and playing video games and is more adept at technology. Nevertheless, the caution to assume that all learners have similar exposure to technology and are equally skilled in using technology must always be observed since various factors affecting access will continuously be relevant because social inequalities are still very much the norm in many communities, especially in the developing world. Some learners may still lack this access at their homes, schools and communities due to socio-economic barriers and lack of what others elsewhere probably take for granted: power and electricity.

While technology does appear to have the potential to offer more in terms of research and learners' increasing familiarity with it, caution regarding online safety has always been raised. This is because it is regarded "essential when integrating technology into the classroom" and community members from time to time express concern over

issues of security (Whitehead, Jensen and Boschee, 2013, p.7). Concerns about safety apply more especially to learners who still require guidance from parents and teachers to become responsible users of the Internet. As Whitehead, Jensen and Boschee continue, “the internet is an open unlimited international community in which millions of people have access. Thus, personal responsibility is a critical aspect of being safe…” (p.14) and “the need to safeguard and protect pupils from accessing unsuitable material” (Tyson and Pugh in Simpson and Toyn (2012, p.81) should reign supreme among teachers and school administrators. Apart from “the sleaze and porn” that run “down the gutters of the information highway” (Tapscott, 1998, p.6), issues such as cyberbullying are real and alive. Whitehead, Jensen and Boschee (2013) observe that with the developments in technology, the problem of harassment, that has always persisted, has adopted a new profile:

> …the age-old problem of bullying is taking on a whole new agenda that is hidden behind digital screens and cell phones…. Teasing, name calling, and threats thrive on social media networks as well as text messaging on cell phones and in e-mails (p.15).

While technology has opened almost unlimited frontiers for research and ensures access to information is readily available via computers and handheld devices, its potential to cause harm means teachers and parents must always raise their vigilance to protect children and learners.

During the interview sessions with some of the teachers, they did raise concerns regarding safety, despite their inability to police all aspects of learners’ online navigation. It would appear that the sampled schools have not yet raised the level of online security to a critical level where it is one of their schools’ number one priority. Some of their comments, as reported in the findings, include:

- “I can’t go to all their (students’) devices and see what they are doing; I don’t have enough time” (Bernice at Brakfontein H. S.).
- “I think it is very hard to ensure that students are safe once they are accessing their digital resources, but we also know that they are grown-up and are

responsible and can visit areas that even we teachers cannot access" (Lephuthi at Lepae Sec. School).

- Randy at Redfield H. S. says it is very difficult to ensure learners' online safety because "obviously we can't see exactly what they are busy accessing" but adds that "we definitely warn them against some sites."
- "Yes we do worry all the time that students could get into harmful sites but unfortunately all you can do in that situation is to give a warning and hope for the best" (Justina at Johnson H. S.).

The above comments by the teachers demonstrate that while they are aware of online dangers, there is not much that they can do beyond just warning the learners. Could it be due to lack of resources or perhaps cyber safety has not yet been given heightened priority? Could it be that respect for learners' human rights makes it hard for teachers to be stricter on such matters? It has become much easier to secure websites through systems such as Gaggle where learners use a common technology classroom because the system can monitor areas where learners go into and can give a signal to teachers and school administrators if they wander off into inappropriate sites (Whitehead, Jensen and Boschee, 2013, p.7). Gaggle is an online solution that "provides safety and well-being of students and schools" (https://www.gaggle.net). However, ensuring online safety where devices are more individualised may be difficult, especially when learners are outside the confines of the classroom or are at home with parents who are digitally illiterate and clueless about technology and cyber threats. This however, does not mean adults should disregard their role to guide learners "to be thoughtful and responsible digital citizens" (Sykora, 2017, p.5). Caution and raising awareness about online threats must always be observed in the digital era.

As far as online security is concerned, one gets the impression that it is an area that still has to be given the priority it deserves in the age where bullying has gone beyond physical harm to psychological, mental and emotional damage. Lack of physical contact between the bully and the bullied does not guarantee the safety of learners and schools could do with a lot more cyber security-related measures and policies. Being proactive (especially where danger is already known to lurk) would make more sense than being reactive.

Drawing from the constructivist approach to learning, the potential of technology in literature would depend on the willingness and initiative of teachers to create a context where learners understand what it means to construct, create and share knowledge and be involved in more collaborative activities. Collaboration in the digital age is equated to a joint enterprise where members of a group work together (Larson and Marsh, 2015, p.65). English teachers could channel learners' everyday activities of social networking towards classroom experiences such as sharing of stories and short plays which could be uploaded onto YouTube for example. The connectivist approach would increase further potential of digital media through ensuring that learners have digital literacy and are able to select appropriate information; and, equally important, that they have access to physical devices and virtual media. Additionally, the learners should be able to evaluate the information they get from multiple sources (Dunaway, 2011, p.676). Such evaluation demonstrates digital literacy and ability to use digital sources constructively and safely.

5.4 Visual stimulus, interest and variation

As the findings revealed in chapter 4, the most positive experiences that teachers have with using technology to teach literature can be summarised into three main categories: learners' visual stimulation, their heightened interest in lessons and variation "from the routine work of the classroom" as Bernice puts it. These findings are corroborated in three data sources: the teachers' questionnaires, interviews with the teachers and the learners' interviews. My own experience as a teacher at first, and then a teacher educator, acknowledges these three aspects as some of the key ingredients to a lively classroom atmosphere.

With regard to visual stimulation, five of the teachers (Anika, Linah, Nelly, Randy and Ruth) all agree that technology boosts learners' interest in lessons. Nelly has observed that "contemporary learners are visual by nature and enjoy the visual aspect of presentations." Linah adds that her learners remember much more easily what they have seen. As was shared in the findings chapter, Justina expresses the satisfaction she experiences as a teacher when she witnesses technology transform her learners' understanding through visual stimulation. In her words,

> It is rewarding when the words they have read come alive in the form of a film because you can judge from the sheer enjoyment and concentration on their faces that they understand the story better now that they have a visual representation of it.

One would assume that a teacher who spends many hours with learners is in the best position to read and understand their body language and draw a conclusion on whether the instruction they are receiving is bearing fruit. Justina is therefore better placed than anyone else to tell whether or not the technology she uses in her lessons achieves the desired effect.

Being visually stimulated would almost inevitably lead to enhanced interest in the lesson proceedings because technology provides variation in lesson delivery. The teacher for a while stops being the central focus and the technology in use provides what could be regarded as diversification from the norm that the teacher has become. As Justina said during my interview with her, technology "gives learners a break as it gets boring to listen to the teachers go on and on for a double period."

In the questionnaire instrument, Naomi says that technology is more interactive hence "offers more enjoyment and fosters interest" while Masindi notes the motivational power of technology in creating enjoyable lessons for learners. Lebona, a student at Lepae Sec. School corroborates this: "technology provides motivation to learn and know more." Johnny at Johnson H. S. uses the analogy between using mobile devices and carrying books around the school to emphasise his point: "using a mobile device is more exciting than using a book. As students, when we carry books around we don't have the urge to study. As young people we prefer technology – it is far more exciting." Ray at Redfield H. S. chips in: "we get so much fun from technology; we even view games that help us understand." The quoted examples exemplify the theme that technology creates interest and stimulation to learn among learners.

Some of the literature reviewed in both chapter 1 and 2 supports the findings of the study regarding the fact that there is more learner engagement when technology is used (Sutherland, Robertson and John, 2009, p.4) and that variation in the lesson

leads to enhanced motivation, involvement and participation (Louw, 2013, p.72). Carver (2016, p.110) states that there is research to prove that technology "can increase student motivation, attitude, engagement, and self-confidence while improving organizational and study skills." Furthermore, Hollingsworth and Lewis (2006, p.viii) suggest that "meaningful and lasting learning must engage the learner." Nevertheless, it is important to establish exactly what it means to say learners are engaged in lesson activities. Is there an instrument that can help teachers to test if their learners are really engaged in the lessons whether or not technology is used? Hollingsworth and Lewis talk about active learning "where learners are intensely engaged, mentally or physically" and display vigor, liveliness, energy, intensity, strength and effectiveness in lesson activities (p.viii). Sulla (2013, p.3) explains what it really means to say learners are engaged and provides advice on ascertaining how closely learners are engaged:

> Busy students are not necessarily engaged students, nor are seemingly happy students who are working in groups. Although "hands-on" activities are wonderful, what you truly want are "minds-on" activities. If you assume students are engaged in learning, take a closer look to see if what they are doing is directly related to academically rigorous content and if they are thinking deeply about the content.

While Sulla offers sound advice regarding how learners may or may not be engaged in lesson activities, I do think that despite "minds-on" being a pedagogically more superior activity than "hands-on," "hands-on" is the first step towards elevating learners' classroom participation to the level of the mind. Apart from that, Sulla's advice to look closely if learners are involved in "academically rigorous content" and "thinking deeply about the content" is useful although merely looking may not be adequate in my opinion. Teachers can truly find out how engaged learners were during the lesson through their lively subsequent participation if initially they were doing pair or group work or even focusing on a YouTube film on one of the prescribed texts. Even though extroverted learners usually tend to dominate discussions, the teacher may still find out how engaged the rest of the learners were by randomising participation and avoid a situation where only extroverts give responses. Looking at learners' faces

and body language may give a picture of learners who are fully engaged only to discover later that the mind is a difficult organ to look into.

5.5 Constraints and frustration of using technology

Apart from the already dealt with frustration of getting very little information, if any at all, on African literary texts, the findings highlight several factors which teachers find constraining and frustrating about technology. While technology appears to have great potential as a classroom teaching and learning tool (in both its physical and virtual form), its limitations and disadvantages may not be ignored. Schools which have not yet adopted the use of technology should not simply be given the rosy picture of all the 'wonders' that classroom technologies are able to do. It is imperative to present the other negative factors apart from inappropriate content that learners may access if schools lessen their vigilance. Sustained frustrations emanating from technology use may, to some extent, also affect access as teachers may avoid using it. This could further lessen the potential of technology to impact on teaching and learning.

The chapter on findings lists the constraints and disadvantages of using technology in the classroom at the participating schools. In this section I will deal with constraints and frustration specific to research and teaching and learning.

5.5.1 Constraints and frustration for research

From the initial conception of this study, the purpose was to explore not only access to technology but also its usage for research and for teaching and learning. The potential of technology, in particular the Internet, as a research tool, has already been alluded to in the previous sections. The key advantage of internet information in comparison with information from print media is that "information on the internet could be more up-to-date than in books because websites are likely to be updated more regularly than printed material" and users are always advised to find out when the information was last updated (Clowrey and Stobart, 2012, p.264).

The significance of the Internet as a research tool though can still present its binary of frustration as the teachers have shared. Starting with research constraining factors, the participating teachers have shared a few of them including one that has already been discussed at length: not enough material on African literary texts. I will present each followed by a brief commentary.

- Not enough resources or information available and searches can be time-consuming.

Time remains precious at school where teachers constantly chase deadlines and heavy syllabus demands. It can therefore be frustrating when a search does not yield much and often means teachers go to class with very little information to energise their lessons. Any search for information is bound to yield either tons of information or little to average. It may be necessary therefore for English teachers to have literature teachers' clubs or groups where information is shared or they direct one another to sites and places where information may be available.

- Some internet sites are inaccessible without membership.

If schools have some financial resources, they may consider assisting teachers with the funds to join such memberships. It does not have to be all the English teachers belonging to a membership that enables access to digital resources; perhaps even the head of the English department may take membership through which the other colleagues could benefit.

- Some information provided cannot be trusted.

The Internet being such an open platform – where even shady characters may have access – means that information must not be gobbled up without cross-checking its validity; which could become another time-consuming exercise. As Justina says, "you have to go through a number of resources to ensure that the notes are correct – this is time-consuming." Linah adds that "thorough research must be done in order to ensure that all facts are correct."

While the time-consuming factor is understandable considering the pressures of time teachers operate under, meticulous preparation for lessons means that corners cannot

be cut, especially in light of the detrimental effects of giving false or incorrect information during lessons.

- Data expenses and failure of internet connection.

During the time when I was conducting this research, right till the write-up stage, data expenses in South Africa was one of the major talking points among cellphone users particularly. Network companies were often portrayed as greedy and a parliamentary task team was even assembled to look into the matter and make recommendations. Where schools do not have Wi-Fi or broadband internet connection, teachers have to dip into their own pockets to finance data for research. The participating learners also lament not always having money to spend on data (Ray at Redfield H. S. and Leisa at Lepae Sec.).

Reliable internet connection is another frustration for teachers. As users have often experienced, “the internet may be working one day, and down the next…” Snyder in Baynham and Prinsloo (2009, p.155). Reliance on the Internet as a key source of information may therefore, understandably so, lead to frustration especially in contexts where the school library is poorly stocked or outright non-existent. As was shared in chapter 4, Wi-Fi at Johnson High School is subsidised by the Gauteng Department of Education. This implies that it is possible to roll it out to other schools which do not as yet have Wi-Fi because the costs are not solely borne by the schools.

5.5.2 Constraints and frustration for teaching and learning

This section will be an expanded version of the findings given in chapter 4 with additional analysis and commentary.

- Not all learners have access to technology.

Issues of access have already been dealt with previously. The participating teachers corroborate some of the literature regarding inequity and access to technology. Bernice says that “students do not all have devices and schools are not in a position to provide data and devices to all students” with Randy adding that “learners don’t all have internet, laptops or electricity.” It has earlier already been suggested that where learners do not have equal access to technology, schools are the best contexts to

equalise the inequalities provided they (schools) invest enough in facilities where all learners can have access and enjoy what they would otherwise find unattainable at home.

- Electricity is not always reliable and derails a lesson.

The term “load-shedding” has become very common in South African discourse since the time when power black-outs became common. During the time when I was writing this section (June 2018), ESKOM – the power supplying utility in South Africa – was warning of power black-outs blaming protests by workers and insufficient coal supply to power the national grid. The fact that this was right in the middle of the winter season when pressure mounts on power supply did not help matters.

The technologies used in classrooms, such as data projectors and desktops, are dependent on reliable power to work. Even those that are chargeable still need a power source. As Linah says, “technology relies on many external factors like electricity to function properly and these factors aren’t always reliable.” Indeed having undergone rigorous and time-consuming preparation for a lesson only to be derailed by power failure can be hugely frustrating. Not all schools can afford large industry-size generators to power them again in the event of electricity failure. All teachers can do is have a back-up plan to avoid a total lesson catastrophe if power fails. It is always a good sign of meticulous planning to be proactive rather than reactive. Three of the learners (Bonolo, Leisa and Raymond) also worry about power failure when they use technology.

- Learners become dependent on technology and it takes away the passion for teaching.

Ruth at Redfield has observed that learners can no longer “concentrate and listen” if technology is not used, while on the other hand Anna says it “takes away the passion for teaching as all the relevant information is already included on a slide and the teacher tends to simply go through the motions.” One of the overriding themes in the previous sections has been the fact that today’s learners love technology and usually grow up already using digital devices. This would possibly account for the boredom they experience when technology is not used during lessons because it has become part of their daily existence. Perhaps teachers simply have to accept that the type of

student who would sit and listen to their voice for extended periods is no longer part of the package of teaching in the 21st century.

In chapter 2, literature refers to the observation that teachers and schools risk disconnecting with learners if they continue to teach in the same old way and fail to embrace the tools that learners are familiar with (Jukes, McCain and Crockett (2010, p.47). Additionally, Yelland (2008) advises schools to digitise teaching and learning in line with the social environments where learners are increasingly coming from (p.5). None of the learners that I interviewed expressed displeasure about the use of technology. All of them love it and enjoy lessons more when it is used.

A study conducted in Tanzania however revealed that some teachers found the use of ICT to be a problem and complained that learners did not pay much attention as they seemed to be more fascinated by the computers (the hardware as opposed to the displayed information) being used in the lesson (Ndibalema, 2014, p.4). Different contexts may be expected to provide dissimilar challenges of using digital devices. It may well be that in some settings, learners are still getting used to technology-driven instruction while in others technology is so common that it has become part of the furniture.

5.6 Technology versus age

The influence to include the issue of age in the questionnaire instrument and subsequently develop it into one of my themes of analysis was triggered especially by Michael Prensky (2001) who has been reviewed in the literature as having coined the terms “digital natives” and “digital immigrants.” He draws a contrast between the older teachers (digital immigrants) who teach the young people (digital natives) in the schools and the two groups supposedly speak different languages of technology because the youngsters are far more advanced technologically in comparison with their teachers. My views on the matter and other challenges to the notion have already been expressed in chapter 2 hence I will move on to my present preoccupation.

While Prensky’s notion directly influenced my decision to look at technology and age, mine however was not to compare teachers and learners’ level of technological

competence but I was particularly interested in whether older and younger teachers have markedly different attitudes towards technology and its use. Does age play a role? Can it be a factor regarding which age group of teachers leverages its access to technology? Five of the teachers who filled in the questionnaire were between the ages of 50 and 62 during data collection. Starting the older age at 50 and not 40 for example, is my own choice and does not imply that I believe 50 is a perfect cut off point between young and old. I just chose to start at 50 because I think it qualifies far more than 40 as an older age. Below I present the teachers' responses to the question of age.

- Amy (53): "I am fully conversant and comfortable with technology and have made the effort to make myself so."
- Amber (over 50): "I am a keen internet researcher and I encourage my younger teachers as well as learners to make use of what is at their disposal."
- Bernice (62) is more philosophical in response: "the use of technology is tailored for the needs of the students, not the age of the teacher."
- Lizzy (61) says her age plays a role since "younger people are more in tune with and confident in terms of technology."
- Nelly (51): "my age influences my use of technology as I am not as up-to-date on social media, blogging and twitter as my younger colleagues."

These five responses are inconclusive on whether older teachers have a certain viewpoint regarding technology. In fact from these responses, only two of the teachers (Lizzy and Nelly) think younger people are more accustomed to using technology than their older counterparts. It could well be that based on their experience and observations the younger teachers tend to display better technological skills than the older teachers. Their view corroborates that of Czaja and Sharit (1998) who state that "it is commonly believed that older people are uncomfortable with new forms of technology and that they are more resistant to using technology than are younger people" (p.329). Tour (2015) also refers to the fact that teachers' ages may influence "their level of confidence with different aspects of digital literacies both in everyday life and teaching" (p.126). While this sample is too small to generate a wider claim, the five responses from the teachers can still provide us with something to work with. The

nature of this research is to pay attention to individual voices and opinions as opposed to drawing conclusions from mass responses. What the teachers share here points to the fact that age is a factor for some teachers, but a non-factor for others.

Of these five teachers, three were followed up with interview questions where I asked if they were confident in the use of technology for research and teaching and these are their responses:

- Amber: “mostly I am self-taught so there are certain things I cannot fix. I usually rely on the learners to help out although they sometimes seem more clueless than me.”
- Bernice: “yes with a lot of practice.”
- Lizzy: “yeah I would say relatively – things are advancing so quickly at my age that it might be difficult to keep up.”

Amber’s response in both the questionnaire and interview is consistent and shows her open-minded approach towards technology as she encourages colleagues and learners to use whatever could be helpful to them. The interview however reveals that she relies on her learners to get over certain technological challenges. Bernice’s response in the questionnaire had not revealed much about her technological competence but the interview shows that she uses it with confidence although requires a lot of practice which is not abnormal considering that technology keeps advancing and users need to keep sharpening their skills as new devices are developed. Lizzy’s response during the interview is consistent with the one she gave in the questionnaire. She lacks full confidence and thinks her age makes it hard to keep up with constant developments in technology.

When the same question regarding level of confidence in the use of different technologies was directed to the interviewed learners, all eight of them said they were “very confident.” None of them hinted at any inadequacy and my interest centred only on the technologies they use to learn African literature and other school subjects. This may suggest that despite some teachers expressing lack of confidence in technology

use, on the whole most of them including their learners are comfortable with using classroom-relevant technologies.

The interview sessions with the older teachers reveal that some of them think their learners are more conversant and comfortable with technology than they are. Perhaps the weakness in my questioning was the failure to ask them directly if they thought their learners were more skilled in technology than themselves. This may have revealed more but the fact that they sometimes rely on their learners to make things work shows that they regard their learners' technology skills as superior to theirs.

Apart from the five older teachers whose views on age have just been discussed, the 11 other younger teachers who filled in the questionnaire are between the ages of 23 and 48 as the bio in chapter 3 shows. As seen in the findings, their views on age and attitude towards technology are mixed. Selected responses include the following:

- Anna (25): "I feel exposed to more different types of technology in comparison to older teachers."
- Randy (23): "As young teachers we have been introduced to many different types of technology to help equip ourselves and our learners with new ways of teaching and learning. We familiarise ourselves much quicker with new ways and methods."
- Lephuthi (42): "What I don't know I learn and learners are willing to support us."
- Masindi (38): I am not very technologically savvy but with practice I am now ok."

These selected statements from teachers who are relatively young compared to the first group, are also inconclusive on whether age is a determining factor on technology use. While some of these younger teachers think they are more advantaged technologically, others feel they are still lagging behind but are willing to learn and practise because they probably see the value of doing so since technology has become pervasive and they cannot escape using it. This section will be concluded with reference to Tour (2015) who believes that teachers (especially those who lack confidence in technology use) need to develop a "digital mindset" to have the urge to

use technology for teaching (p.13). A digital mindset could enable them to break the barriers of fear to use technology. It could give them a bolder approach towards using different technologies.

5.7 The reluctant technology user

The ubiquitous presence of technology, fueled more especially by the prevalence and accessibility of smartphones, may give the impression that it has been embraced by every teacher. While the literature shows that technology is currently the key driver of the global economy and enhances opportunities for the disadvantaged (Banks and Chicasanda 2015 in Kelani and Gado, 2018, p.81), does this translate to the teachers who prepare learners for this global economy accepting the presence and use of technology in their classrooms? Based on the findings of this research, there are still teachers who display some resistance to its usage. Four central themes emerged to explain the reasons why some teachers may be reluctant to use technology with the fourth (mentioned by only one teacher) being included due to its uniqueness and sensitivity. These are the themes:

- Lack of time (time-consuming to use technology);
- Lack of availability (no resources, especially internet access);
- Lack of skills to use the technology; and
- The suspicion that ‘tenderpreneurship’ plays a role in awarding of tenders to supply schools with technology.

To demonstrate the time-consuming nature of technology, Justina explains the process that is usually involved to prepare for lessons with PowerPoint: “The preparation, as well as having to go through the PowerPoint to make sure it is correct, and editing and adding more content is really time-consuming.” As earlier discussed, teachers are always pressed for time with syllabus demands hence for them time is a precious commodity. They probably have to exercise added efficiency with their time-management to be able to cope with the demands.

Lack of availability of resources speaks to the fact that not everyone and (perhaps in many cases) not every school has access to technology. This has already been discussed at length under the potential of technology at the beginning of the chapter. Schools' budgetary constraints often intensify the problem of access, along with not being connected to the national power grid in some contexts. Theft and vandalism was also mentioned by Lephuthi and the former English HOD at Lepae Secondary School as another major problem which threatens resources which may already be inadequate. Nevertheless, even in schools where there are resources, teachers may be reluctant to use technology. A Botswana study which focused on pre-service teachers' use of technology during Teaching Experience found that many did not use it because the environment at the schools was not conducive as technology was not readily available for use. Instead, computers were housed in computer labs and not within easy access for immediate use (Batane and Ngwako, 2017, p.54). The pre-service teachers therefore found the process of gaining access to the technology rather tedious and discouraging. While it is not specific on the matter, the theory of connectivism implies that users of digital devices and media have access to both physical devices and virtual resources. In contexts where teachers and learners have no access to digital devices and media, the theory is not very useful in guiding our understanding of the relationship between technology, teaching and learning.

Another problem affecting reluctance to use technology is lack of skills to use it. Randy provides a suggestion that could be employed to address the matter. She says teachers "require a type of course to educate them in how they can effectively use technology in their classrooms." This suggests that continuing professional development of teachers is essential to equip them with skills to be able to use the digital devices and media available at their schools. It serves no purpose to have devices which teachers cannot use. Lai and Smith (2018) discovered that some teachers do not want to use mobile devices because of "lack of professional development on how they could be included" in their lessons (p.502). This also speaks to the lack of skills which some of the teachers have referred to. Also, if a school does not have Wi-Fi, the teachers must use their mobile devices at their own expense. As earlier mentioned, data is a very expensive undertaking in South Africa.

The last issue is slightly more controversial. Lephuthi at Lepae Secondary School suggests that some teachers are reluctant to use technology because they think government or the Department of Basic Education promotes ‘tenderpreneurship’ where tenders to supply schools with technology are allegedly given to friends or those who are close to government officials. This may require much deeper investigations to establish the truth. However, the fact that one teacher highlights it means such a perception exists; whether true or false. But perhaps the question is whether this allegation is enough to create resistance among some teachers to use technology in their classrooms. Conceivably, for some teachers this is a moral decision but should it stand in the way of using the technologies that learners are said to love and enjoy learning with? Maybe preparing learners for the world of work where technology is dominant should be the priority and the bigger picture that propels teachers’ decision-making process. With or without ‘tenderpreneurship,’ teaching and learning must take place even though it creates an unwanted negative perception among some teachers.

5.8 Collaboration through technology

Whether or not technology enables collaboration among learners in the sampled schools is one of the key questions that this study set out to establish. Specifically, my interest was to find out if teachers use the affordance provided by technology to foster a spirit of collaboration among their learners and also if the learners themselves are able to adapt technology collaboratively between and amongst themselves. The quest to determine how much collaboration happens as a result of technology was born out of concepts which have already been discussed in different sections of this study. These are: the constructivist and connectivist learning theories, technology as a catalyst for social interaction among learners and active learning. These will be expanded as the section develops.

Some of the authors (reviewed in chapter 1) who corroborate the connectedness between social interaction, collaboration and technology-supported learning include Martens, Martens, Doyle, Loomis, Fuhrman, Furnari, Soper and Stout (2015); Solomon and Schrum (2011); Dalton (2015) and Larson and Marsh (2015). This connectedness will be developed later in the section. At this juncture I want to discuss

the findings that emerged from the participants and then draw a connection between them and some of the literature.

During the interview sessions, I asked the teachers if their learners collaborate a lot more through the use of technology. Their responses are quoted below followed by a brief commentary.

- Anika: “I wouldn’t say that they work together more because of technology but it is easier for them to engage with the work with technology.”

From Anika I discovered a situation where the concept of collaboration through technology has not yet been adopted. Her response portrays that, while her learners work with technology, they have not yet formalised the arrangement for collaborative purposes.

- Amber: “In some ways they find it easier to share, but only from the perspective that one learner might bring a flash drive and ask for all the PowerPoint notes I have and then share with anyone who wants them.”

Amber’s learners do share some lesson content through technology but this seems to be confined to sharing of the teacher’s notes. There is no sign yet that other activities requiring learners to put their heads together, discuss and reach consensus are shared.

- Bernice: “It depends on the child, some children don’t like to work in groups. Other children like to work in groups and so I have to watch all those children.”

During the interview, Bernice actually understood collaboration from the point of view of group work, which in some way is the more traditional cousin of technology-aided collaboration. With her learners, there was no sign that technology was beginning to engender collaborative activities among them.

- Justina: “Yes, definitely. With some of my classes, especially Grade 12, we have a WhatsApp group and sometimes when they are unable to finish something, we just post a message on what book should be read for the next day or share slides on the group platform.”

Justina's learners are beginning to use their digital devices to share messages and lesson content. The fact that they have a WhatsApp group is a good start and signals that they could move to the next level where knowledge sharing can be more active and interactive. They are yet to use their digital devices to interact and hold active discussions on lesson topics or create collaborative projects.

- Lephuthi: "They must try to share things that they have watched or seen. They have a WhatsApp group only when the teacher has initiated it for the sake of the subject. But on their own I don't think they have it."

At Lephuthi's school it appears that individual teachers are making strides to initiate WhatsApp groups among learners. This is commendable and reflects potential for technology to do more to get learners to collaborate. However, laudable as it may be, having a WhatsApp group may have its own problems. The problem of safety and security comes into play again. To what extent is the WhatsApp group limited to learning or could it be used as another social platform for unrelated issues such as sharing unwanted material, bullying and discussing social as opposed to classroom issues? Lephuthi's comment though – that learners must develop the habit to share their experiences – augurs well for collaborative learning but the idea needs to be nurtured and developed as it may not happen without the initiative of the teacher.

The learners seem to corroborate the situation that has been depicted by the teachers. I interviewed learners only at the schools where I had orally interviewed teachers. I asked them if technology helps them to collaborate or work together more with other learners. Only the learners of Johnson High School (Justina's school) said they do share some information through digital devices. These are the responses from Jane and Johnny:

- Jane: "We have WhatsApp groups to share what we don't understand. We also screen shoot relevant information while surfing the net and send it to one another."
- Johnnny: "We have a class group chat and we share information and things we need. We have groups for all subjects."

Those at Johnson are able to harness the power of social media to share information and any other relevant subject matter. It does appear though that among the different groups of learners, interactive active learning is yet to take place through the use of technology. Perhaps it may be due to mistrust by some teachers that learners may not use the devices for purposes of learning as some explained in the earlier sections that they are never sure if learners are doing what they are supposed to do when they are looking at their devices.

Sulla (2013, p.141) explains why it is pedagogically sound for learners to collaborate and what the activity may achieve:

> Collaborate…intimates that some new knowledge is going to be developed on the "two-heads-are-better-than-one" principle. Collaboration results in an end product that is enhanced by the input of more than one person; thus collaborative activities are open-ended and focused on higher-order thinking.

In all learning contexts, open-ended questions are more valued than close-ended questions as they require elaboration and reasoning through high-order thinking. The fact that collaboration enables these high-order activities to occur in a learning environment suggests that learners gain advanced benefit from their learning experience. Sulla further expounds that learners can use internet-based tools to work collaboratively with learners in other classrooms and even geographically distant locations (p.143). The observation is that learners tend to produce good online work when they know that it will be seen by their peers and strangers from other schools (McKnight, O'Malley, Rusic, Horsley, Franey and Basset, 2016). Some scholars (Fu and Hwang, 2018, p.2)) are of the opinion that "mobile-based collaborative learning" has the potential to transcend classroom walls and involve wider communities in the form of instructors, learners and members of the immediate society. This speaks to the potential of technology to involve mass collaboration at a scale that is unprecedented. It implies that these tools must be harnessed and appropriated to achieve the goal of transforming learner discussions which previously used to be confined to the classroom.

What Sulla above does not consider however is the situation where some learners (who are probably below average) are not able to contribute their opinions during these online collaborative discussions. Rennie and Morrison (2013) observe for example that due to blogging being a public platform, it "may discourage less confident students from contributing to the blog" (p.70). Would such learners feel like they are equal members of the group? How should the learners be approached to ensure that they are not intimidated by their more academically gifted and vocal counterparts? Online collaboration will possibly usually be outside of the classroom walls where teachers are not present to guarantee that all learners participate and provide clarification where there is misunderstanding. How does online collaboration cater for learners who consider the discussion too fast-paced for their benefit? These are questions that teachers must not lose sight of because technology should not be seen to exclude certain learners.

With regard to technologies which enhance online collaboration, Tyson and Pugh in Simpson and Toyn (eds) (2012, p.78) state that if children have access to a computer and network or other wireless technologies, they can collaborate in learning activities through tools like blogs and wikis which enable them to exchange views on the lesson content. These collaborative activities and sharing of knowledge and information have a positive spin off and enhance learners' communicative skills (Baruah, 2012, p.1). In a way, the sharing and collaboration that the digital technologies bring about create "online communities of practice" (Tseng and Kuo, 2014, p.2) who engage in subject content. In this community, "trust, support, and reciprocity among the members" (Tseng and Kuo, p.2) are some of the key principles that keep the group together. It is human nature to share information and knowledge with people we trust and who in turn reciprocate when it is their turn to share valuable information. This however does not imply that all information shared will always be correct; especially among learners who usually need affirmation from mentors like teachers to ensure that the information is accurate and can be of benefit to the group.

The term 'community of practice' was coined by Jean Lave and Etienne Wenger (Wenger, 1998, p.xiii) and has now emerged as one of the key learning theories which views learning as a "social phenomenon" (Wenger, p.3) and the "social community as the primary unit of analysis" (Hughes, Jewson and Unwin, 2007, p.1). While a social

community is made of individuals, what they are able to do or learn together as a community in their context is the key emphasis. This to a large extent ties in with the constructivist approach where the social context and social interaction among learners are important components of how they may engage with knowledge. Wenger (1998, p.47) views communities of practice as “the prime context in which we can work out common sense through mutual engagement.” The enabling of this engagement through blogging, YouTube and other social platforms could mean learners are able to create a mini or even mega social community of their own where they share and collaborate on issues of mutual benefit regarding their literature subject content.

5.8.1 Constructivism in relation to the findings

Almost throughout my discussion on the constructivist learning theory, the key recurring concepts have been ‘active learning’, knowledge construction, creation and sharing’, ‘social context’, ‘social interaction’ and ‘collaboration.’ Without attempting to be repetitive and once again explaining what the major tenets of constructivism are, these key concepts provide useful insight into some of the basic canons of the theory. Constructivism acknowledges the social context and the influence it has on learning and that learners have the ability to collaborate and interact to create knowledge. In the context of this study, such a social context for example would be one where there is wide access to digital media and devices. How then, would this access influence the manner in which learners interact, collaborate, share and construct knowledge using the tools and resources at their disposal?

Considering constructivism in relation to some of the findings and themes that have just been analysed, what type of picture emerges? The following observations can be made:

- Blogging and class websites are some of the ways in which teachers and learners interact on subject content and other academic activities.
- The Internet is emerging as the principal research tool for both teachers and learners and a number of schools are connected by broadband and / or Wi-Fi. Some teachers and learners also have internet access at home.

- Teachers and learners have access to digital devices such as laptops, tablets and iPads and smartphones.
- Most teachers and learners have confidence in the use of technology.
- YouTube is used to watch videos on some of the prescribed texts but there is no sign yet that teachers and learners post and share their own videos on the platform.
- Some teachers do not as yet encourage their learners to use technology to study literature.
- Finally, there is very little evidence that collaboration through technology among learners is happening and most of the sampled teachers do not stimulate it.

I particularly selected to share these observations because they seem to have a closer relation to the basic tenets of constructivism. The social context in which learning occurs at the sampled schools is rich in digital facilities and in a number of those contexts, the technologies are used to interact and share knowledge (largely subject content). This is enabled by the confidence the teachers and learners have in using these facilities. Despite this, there is hardly any evidence that technology at the participating schools is used to foster creation of knowledge. I do not think this is due to it being unable to inspire knowledge creation but that the teachers and learners are not making use of the affordance technology provides. This therefore does not reflect the inadequacy of constructivist learning but rather shows that the full power and potential of technology is not harnessed to produce the type of learning suggested by the theory.

The absence of collaborative learning at these schools denies learners the opportunity to brainstorm and engage in high-order thinking which typically, are promoted through collaboration (Sulla, 2013, p.125). Collaborative activities get learners into rich discussions where learning is mutual. Technology – through its power to connect many people all at once – can make this happen and enable learners to raise their mental capabilities to another level.

5.8.2 Connectivism in relation to the findings

Turning our attention to connectivism, is there any trace that some of its basic tenets are relevant in contexts where technology is used? Firstly, I will highlight just a few principles of connectivism as suggested by Siemens (2005) – who is one of the chief originators of the theory – before making a connection to the findings. These are some of its codes:

- Learning and knowledge rests in diversity of opinions;
- Learning is a process of connecting specialized nodes or information sources;
- Learning may reside in non-human appliances;
- Nurturing and maintaining connections is needed to facilitate continual learning;
- Ability to see connections between fields, ideas, and concepts is a core skill;
- Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.

According to Siemens, the right answer today does not imply that it remains right even tomorrow because of constant alterations in information which may ultimately influence a change of outlook. The summary of these principles is that many views from various information sources are filtered to arrive at knowledge, and the connections humans have (through digital devices) enable steady continuation of learning. Additionally, learners must be able to connect multiple up-to-date sources of information.

Moving to the findings of the study, the following can be observed:

- All the 16 English teachers in the participating schools use technology to teach African literature and literature in general.
- The Internet connects most of the teachers and learners to rich sources of information and knowledge, both at school and at home even though there are teachers who do not exploit the potential of the Internet.

- Technology allows the teachers and learners to compare diverse sources of information.
- The interconnectedness of online sources ensures a rich variety of information.
- Technology provides teachers and learners with the most organised and up-to-date sources of information.
- Some of the schools invest in technology to improve access.

The observations highlighted above emerge from the findings of this study and I specifically selected those that bear resemblance to most of the principal tenets of connectivism. The implication therefore is that there is a close connection between what connectivism stands for and how teachers and learners in the nine Gauteng schools experience the use of technology. The conclusion is that the relevance of connectivism as a theory is noticeable in the manner in which the teachers and learners who participated in this study use digital media and devices.

5.9 Conclusion

This chapter has attempted to synthesise the major findings and data into an analysis and discussion that establishes the practices and gaps in how schools interact with technology. The findings were thematised in accordance with some of the principal questions in the research instruments along with the key questions that the study set out to address from its conception. Also, the findings have been placed in the context of relevant literature to thread the discussion into a narrative that allows scholars, researchers, teachers and learners to find commonalities and differences in how digital media and devices are accessed and used in varying educational contexts. A connection was also made between the constructivist and connectivist learning theories and the findings that emerge from the study. Some of the gaps that appear to exist have been highlighted and the concluding chapter will re-emphasise them and provide a way forward.

CHAPTER 6

Conclusion

6.1 Introduction

The aim of this research was to explore access to and use of digital media and devices in African literature classrooms in nine Gauteng high schools. It also sought to find out the potential for using these media to teach African novel and drama literary texts following the shift by the Department of Basic Education in South Africa to prescribe more African texts in the literature syllabus from Grade 10 to 12. By some very welcome default (perhaps not totally unexpected), the findings of the study are relevant not just in African literature, but the literature discipline as a whole. The potential of technology was deemed significant, especially in contexts where the digital divide means access to digital media and devices is still a distant dream for teachers and learners. As the thesis draws to a close, I will conclude with a brief personal reflection in relation to the overall study and then also reflect on the research questions, the aim of the study and the significance of the findings on technology-aided teaching and learning. More importantly, the gap identified, and the contribution the study makes to scholarship will be highlighted.

6.2 Personal reflection

Right up to the completion of this research (except during the years I took time off to study), I have spent all my professional life teaching; first at high school level teaching English (both language and literature) until my professional journey subsequently took me to college and university level where I became a teacher educator specifically training prospective teachers of Literature in English. I belong to the generation that experienced life without the now ubiquitous device called a cellphone. My first experience of banking was via a small passport-size bank book and not the ATM card or internet banking. Even so, I will not go to the extent of calling myself a ‘digital

immigrant' in light of how technology has penetrated many facets of my life and in the process turning me into a digital citizen who is ready to learn and refine at every available opportunity. The period between my first year of teaching and the writing of this thesis has seen remarkable transformation in how technology impacts everyday life. The BBC broadcasts a regular show called *Click* on technological advances, while e-TV's similar one is called *The Tech Report*. It is now common practice for broadcasters, newspapers and magazines to have a reporter or correspondent solely devoted to technology matters. This demonstrates the significance attached to technology and its influence and transformative power on humankind. In many contexts, the classroom has not been left untouched by this influence and transformation despite existence of many other settings where technology is yet to make inroads due to socio-economic and skills factors which affect access and use of digital media and devices. The digital divide still remains very much part of the broader definition of access to, and use of these technologies.

As one who has yet to experience a different profession to teaching, my bias towards technology-assisted teaching and learning throughout this study is probably obvious. It has been extremely difficult to remove myself from the study and become a neutral observer and interpreter of others' experiences due to the professional journey I have already alluded to. From the different voices in the literature review and the participants who kindly shared their digital experiences with me, I have learned a lot more than I knew or understood before the start of this project. The recommendations that will be made later in this chapter are a result of freshly-formed perspectives regarding the use of technology in the literature classroom. It is almost impossible to ignore the visible footprints of technology which, due to its prevalence and influence in many spheres of our lives, has given rise to realities such as Artificial Intelligence (where computer-controlled robots perform tasks usually associated with humans). Continued engagement with the digital revolution is a catalyst to improved understanding of digital settings and what technology users must do to positively channel it to fields that are meaningful to their existence.

The findings that have been shared in the previous chapters show that literature teachers and learners are also discovering useful ways to engage with digital devices and online resources despite the challenges of access and lack of technological

expertise that some continue to face. However, there are visible signs that technology roll-out – especially in Gauteng schools where the study was conducted – is on the rise and that engagement with technology (especially at school) is steadily addressing the digital divide among learners who come from different socio-economic backgrounds.

6.3 The responses to the research questions

The two key questions the study sought out to explore were:

- What is the state of access to digital media and devices on African literature in the selected schools?
- What is the potential for using these media and devices to teach African literary texts and literature in general?

6.3.1 Access to digital devices

To establish the prevailing situation among the participants regarding access, I relied on their responses in the questionnaire and interview instruments. These were also followed up by selected classroom observations and an environmental assessment of each school. With regard to access to digital media and devices in the nine Gauteng schools, the following key conclusions can be made based on the findings:

- In all the schools, wide access to technology is observable. Teachers have access to digital devices and media such as laptops, data projectors and the Internet. The teachers and the learners also have access to personal digital devices at home which makes them less reliant on only those provided by the schools.
- Teachers also have access to smartphones but they do not appear to be used as widely as one would expect considering their ease of access and lower purchasing expense in comparison with the other devices. It could further be concluded that wide use of smartphones is hamstrung by high data costs which some of the teachers complain about. Where schools lack Wi-Fi connection,

the cost of operating a smartphone to access online content is transferred directly to the user; in this case the teacher and the learner.

- Using the example of the one non-fee paying school that is wholly financially supported by the Gauteng Department of Education, the department shows a positive sign of continuing technology roll-out in the provincial schools. For example, smartboards and tablets are now available at the school. However, the lack of internet at the school means that teachers and learners cannot harness the full power and potential of their digital devices.

6.3.2 Access to digital media on African literature

The conclusions reached in this section are derived from the participating teachers' responses in both the questionnaire and interview instruments and some of the random online searches I did on a few of the prescribed African texts. The following key conclusions can be drawn from the findings:

- Internet resources on African literature are generally lacking compared to what is available on Western literature. This is concluded from what the teachers shared in the data.
- Since it appears that teachers do most of their research online, lack of resources frustrates their research experience while a reluctance to pay for an existing resource often hampers their lesson preparation.
- A gap exists to give African literary texts more online presence so that teachers and learners can find information to ease their study of the texts. This study therefore has identified an academic gap that must be addressed to give African literary texts more online presence to enable easy access to information by those who teach and study these texts.

At this moment I want to point out a major contribution that this study has made to scholarship. This is over and above the academic gap I have just alluded to above. Throughout the literature, read and reviewed, I have not come across studies that focus exclusively on African literature and the use of digital media. Even though focus

on African literature ended up being extended to literature in general, because African literature exists within the literature discipline, the findings on African literature bring a new perspective altogether. As a result, I consider this to be a major contribution to a gap that had always existed, and which has now received some attention through this research. In a way I consider this study as a pioneer by exclusively putting African literature and digital media on the spotlight and drawing attention onto an area that research and scholarship had not attended to before.

6.3.3 The potential of technology

The true potential of technology in African literature (including other literatures and genres) classrooms can be measured by a number of aspects relating especially to physical devices and online information sources. All of them have previously been discussed at different sections in this research. These are:

- access;
- skills and digital literacy;
- support, especially by the schools and the Department of Basic Education to ensure teachers and learners' access to technology;
- availability of time for teachers to use technology in light of packed syllabus content;
- teachers' willingness to use technology;
- users' mindset change in relation to technology and its usefulness;
- taking precautions against harmful aspects of technology such as inappropriate content and cyberbullying; and
- a vibrant community of practice where constant interaction, sharing and collaboration take place among users of technology.

Based on the findings, the following conclusions can be made on the potential for using technology to teach African and other literary texts:

- Technology provides a rich resource for research prior to teaching and even during lessons should it be needed. Although I have not made a comparison between internet and print media sources, most of the teachers' responses give me reason to believe that they find the Internet to be a useful resource for research before lessons.
- The learners in the sampled schools come to school with prior knowledge of how to use technology. They have access to personal smartphones and some also have access to laptops and Wi-Fi at home. This advantage can be channeled towards creating rich classroom contexts for teaching and learning.
- Some learners even assist the teachers to operate digital facilities (as some of the teachers admitted in the findings).
- Teachers reveal that online safety for their learners is a big concern but there is a sense of helplessness on what to do to protect learners. While teachers are conscious of the dangers that lurk on the Internet, all they can do in most cases is to warn learners and hope for the best.
- Only one school among those sampled has a policy on technology. This is a worrying situation in relation to learners' online safety.

6.4 The findings in relation to classroom practice

I undertook this study so that in the final analysis, it can make a contribution to classroom practice. Access to and use of digital media and devices is only truly effective if it positively affects classroom practice and leads to desired outcomes. As Snyder (2009, p.148) observes,

> real change requires far more than simply giving schools more technological tools. The whole ecology of schooling would need to be rethought if transformation was the objective; changes in how schools are organised and funded, in how teachers are prepared and valued…..

This has implications for those with authority to ensure that digital devices do not gather dust in school store rooms. Instead, the departments of education at basic level must ensure that supply of digital facilities to schools is accompanied by proper

synergy between government departments and teacher training institutions to prepare teachers who are ready to change this “ecology of schooling.”

Even though the context of this study is Johannesburg in the Gauteng Province, respectively the richest city and province in South Africa where digital facilities are more likely to be accessible, the findings can extend beyond Gauteng classrooms. If Gauteng is already more advanced digitally, compared to other provinces or other developing countries, it is not wrong to assume that such contexts – where digital devices and media are not as yet prevalent – also aspire to have digital access and skills. Therefore, classroom practice and ambition to harness the power of digital devices and media cut across provinces and countries irrespective of socio-economic context. Furthermore, these findings can still be relevant to different settings despite the qualitative nature of the study where only nine schools participated. In qualitative studies, even a lone voice is not negligible as it has potential to represent other voices in similar practice and settings.

The findings of the study illuminate the following in relation to classroom practice:

- In the participating schools, there is a vast array of digital media that teachers can use to prepare for and teach literature lessons. For example, blogs, class websites, the Internet and YouTube; all of which were mentioned by the teachers. How far is the power and potential of these resources fully utilised where there are skills and access? Apart from their communicative advantage, these resources can hone the creative skills and capabilities of learners to produce their own short drama videos and read their own stories on YouTube for example.
- Collaborative activities, active learning and interaction are some of the cornerstones of constructivist learning. Despite prevalence of digital devices and media in the participating schools, these technologies do not seem to be central to teaching and learning. Schools therefore need a new approach to ensure that technology engenders richer classroom activities and outcomes because it “is most powerful as a teaching tool when used for problem-solving, conceptual development and critical thinking. This involves students using

technology to gather, organize and analyze information, and using this information to solve problems" (Zandvliet, 2006, p.6). From the point of view of the findings, the teachers are not yet effectively using technology to advance higher-order thinking and problem-solving skills among learners.

For technology to become more effective, teachers have to raise their level of awareness for the various opportunities it presents for classroom practice. Learners can be challenged beyond just creating interesting and enjoyable lessons through digital devices and media. With a more open-minded and unrestricted approach to the true potential of technology, teachers can discover a wealth of opportunities to invigorate teaching and learning environments.

6.5 Limitations of the research

This research has gathered most of the data from the point of view of the teachers as opposed to the learners. This is a limitation because learners are the recipients of technology-aided instruction hence their views could have been more substantial. Secondly, the constructivist learning theory is regarded as a theory of learning as opposed to teaching hence learners should have had more say in how learning occurs to them in digital settings.

A sample of only eight learners was used because I decided that teachers would be more useful in sharing their experiences since they are decision makers in how learning generally occurs in the classroom. Teachers are the main drivers of the syllabus content and can often plan beforehand what type of technology will be needed for particular topics or sections and what they hope to achieve by the use of the technology. My decision to involve more teachers was also premised on the fact that I could get the most out of them compared to the learners. For example, during the learner interviews, some of my questions were directly steered towards getting information on their experiences with studying African literature with technology. None of the learners related African texts to technology but rather took an expanded view of technology in the classroom as opposed to narrowing it down to a particular discipline.

This shows that they are not yet conscious of the different areas of literature in relation to technology.

Future research on this and other related topics could focus more on the learners' interaction with technology and be more detailed on how they experience technology-aided instruction with a much larger sample. Some of these suggestions appear in the section immediately below.

6.6 Suggestions for further research

The constantly revolving door of technology where new devices continuously emerge, implies that there will always be fresh exposure to digital experiences for users. The literature classroom will also, from time to time, be exposed to the latest digital devices and media suggesting further research on technology and the classroom. The following could be some of the directions that research could take:

- How does technology promote creativity in new fiction and drama among learners?
- How do learners construct knowledge through the use of technology?
- What are the social practices of technology users as a community of practice?
- How do attitudes and mindset affect technology use among teachers?
- What is the role of professional development in teachers' interaction with technology?
- How do learners experience technology in relation to classroom activities such as collaboration and interaction with their classmates?
- What is the meaning of active learning as engendered by the use of technology?
- How does technology influence critical thinking skills and high-order thinking in learners?

6.7 Recommendations

The recommendations I am suggesting are derived from some of the themes discussed in chapter 5 and are also reflective of the general findings of the study. They are classified into thematic categories for better clarity. The categories are access, online safety and classroom instruction.

6.7.1 Access

With regard to access to digital media and devices, the following recommendations are made:

- Government should speed up the roll-out of technology, especially the Internet, to schools to enable meaningful access to digital resources. Research-enabling devices remain just devices unless there is internet connection.
- Financial resources permitting, schools should invest in digital facilities and resources to improve access and ensure that learners from disadvantaged backgrounds also experience access at school.
- Higher education institutions, as trusted repositories of knowledge and key drivers of the knowledge economy, must research and generate more digital content on African literary texts.
- Teachers should be advised and trained to harness the full potential of digital devices and media.

6.7.2 Online safety

As highlighted in many sections of this thesis, schools must ensure that learners' access to digital media does not lead to encounters with harmful and unsuitable content. The following recommendations are made with regard to online safety:

- Schools, in partnership with the Department of Basic Education, should design clear digital policies to address online dangers such as cyberbullying and inappropriate content.

- Where learners use a common computer laboratory, schools should install a system that prevents learners from wandering off to inappropriate websites.
- Schools, in partnership with parents, must constantly stress the importance of online safety among learners both at school and at home.

6.7.3 Classroom instruction

From the literature reviewed and the data from the sampled schools, the thesis has shown how digital technologies have become central to classroom instruction despite the digital divide that continues to exist between nations, schools and individuals. The following recommendations are therefore made with regard to classroom instruction:

- Schools should take full advantage of the technologies that learners have access to and are already familiar with to improve their digital learning experience both in and outside of the classroom.
- The Internet, being an open facility without restriction to access means teachers must habitually cross-check all information they obtain online to ensure its validity and accuracy.
- Funds permitting, schools should consider subscribing to certain internet sites to enable teachers to access information for research purposes.
- Teachers must regularly undergo professional development to sharpen their technological skills and digital literacy.
- Teachers should not just view digital media and devices as instruments to create enjoyable classrooms but should rather use them to encourage higher-order learning and achieve higher-order learning outcomes where learners are challenged to be creative and sharpen their critical thinking capabilities.
- Teachers – in small groupings, subject clubs or even unions – could develop stronger social capital or communities of practice where they draw from one another's experiences regarding the use of technology. Reliance on individual resources and private human capital alone cannot help spread valuable experiences and practices to the teaching and learning environments where more beneficiaries can emerge. Success in teaching and learning happens only when it is replicated in multiple contexts.

- While teachers may view their schools' digital stock (where it is abundant) with pride, they must remember that presence alone counts for nothing unless the ultimate goal is to use technology to make a positive difference in teaching and learning.

In closing, I firmly trust that through further engagement and research, the frontiers of knowledge can forever be expanded to challenge existing assumptions on teaching and learning. Continued interaction with how technology impacts the classroom is one way in which our understanding of teaching and learning will keep engendering fresh perspectives on what it means to teach for the future as yet unknown to humanity.

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APPENDICES

APPENDIX A – DATA INSTRUMENTS

Appendix A1 – Questionnaire instrument for teachers

Questionnaire information for teachers

My name is Mahao Mahao, a PhD student at the University of the Witwatersrand, Johannesburg. I am doing research on the teaching of African literature (especially novels and drama) and the use of, and access to technology by teachers in selected Gauteng schools. The following questionnaire is based on a number of aspects regarding the use of technology for lesson preparation and actual teaching of African literature lessons.

You are invited to participate by filling in this questionnaire. Please spare a few minutes of your valuable time by filling in the spaces provided with your own views and practices in your field of teaching. Please try and be as informative as possible. Should you require extra space, please write on an additional page and affix it to the back, ensuring that you have numbered the response.

You may withdraw from this research project at any time if you so wish and there will be no repercussions whatsoever if you decide to stop. Please do not write your name anywhere on the questionnaire as this information will be anonymous and your identity will always be protected throughout the research process. The name of your school is only needed for purposes of my records and will not be used anywhere in the reporting on this study.

Yours Sincerely

Mahao Mahao
University of the Witwatersrand
School of Education
Johannesburg

QUESTIONNAIRE FOR LITERATURE TEACHERS

You may fill in the questionnaire anonymously. Names of individuals and schools will not be used anywhere in the report. Codes and pseudonyms will be devised to refer to teachers and schools.

1. Biographical information:

   - Name of school_____
   - Age_____
   - Years of teaching experience_____
   - Professional qualification (provide the highest)_____

2. Do you ever use any form of technology / digital tools and resources to teach African literature?

   YES_____ NO_____

3. If not, please explain why.

4. Which digital tools among the following do you often use to **plan** and **teach** your African literature lessons? Please tick the box that represents the tool you often use and the corresponding activity.

Digital tools	**For planning of lessons**	**For teaching of lessons**
Blogs		
Class websites		
Electronic books (e-books)		
Internet		
Ipad / tablet		
Laptop		
Overhead projector		
Smart interactive whiteboard		
Smart phone		
Wikipedia		
YouTube		
Other (please specify)		

5. Please briefly explain how you use each of the tools you have chosen to teach African novels or drama texts.

Blogs

Class websites

Electronic books

Internet

Ipad/tablet

Laptop

Overhead projector

Smart interactive whiteboard

Smart phone

Wikipedia

YouTube

Other (please specify)

6. What are your experiences of using these tools and resources to plan for and teach African novels and drama texts? Please provide both **positive** and **negative** experiences if you have had any.

Positive experiences

Negative experiences

7. What type of technology (if any) do you have access to both at your school and at home?

At school

At home

8. Briefly explain whether or not the use of these digital tools has been effective in your opinion in aiding teaching and learning in your African literature lessons.

9. What are the **advantages** and **disadvantages** of using technology for both research and facilitating learning in your African literature classroom?

Advantages

Disadvantages

10. What are the constraints of both technology for **research** and for **learning/teaching**?

For research

For learning/teaching

11. What are your frustrations with using technology in your African literature lessons?

12. What are the enjoyment you and your learners have experienced using technology in your African literature lessons?

13. How does the current literature syllabus encourage the use of digital technologies to teach literature?

14. How does technology work with African **prose** and **drama**?

African prose

African drama

15. In your opinion, does your age play a role in your attitude towards technology and its use? Please explain your response in some detail.

16. Do you also use other resources (apart from the digital) to research and teach your African literature lessons? Please specify the type of resources.

17. How useful are the resources you have mentioned above?

18. How do your learners respond to the use of digital technologies in African literature lessons? For example, are they excited, bored, indifferent, baffled?

19. Do your learners collaborate (work together) more in their learning of African literature (and English in general) due to the use of technology? Please explain briefly.

20. Is it the culture of your school to invest in digital / technological facilities? Please briefly explain your response.

Appendix A2 – Interview instrument for teachers

This is the intended structure by which the questions will be asked. Further probing may expand the scope even more.

1. Which African literature written in English is currently prescribed at your school?

2. What do you understand by technology or what would you regard as technology?

3. Do you love and enjoy using technology in your African literature lessons? Why / why not?

4. Are you confident in the use of technology for research and teaching? Why / Why not?

5. What technological strategies do you use for both research and teaching?

For research

For teaching

6. How does technology support the existing literature syllabus (novels and drama in particular)?

Novels

Drama

7. Is there any resistance among some teachers to use technology? Why?

8. Do you encourage your learners to use technology to study literature? What type of technology in particular?

8.1 Do learners collaborate / share information more when they use technology?

9. How do you evaluate digital resources? (that they are suitable for use)

10. How do you ensure that your learners can detect useful information from the vast array available in the digital media?

11. What guides your choice of technological tools to use? For example: easy access, familiarity with the tool, the price of the tool etc.

12. Is there enough stuff / material you can access for African literature in comparison with Western (European, American) literature?

13. What, in your opinion, is the potential for using digital technologies to teach African literature and literature in general?

14. Why do you think some teachers are reluctant / hesitant to use technology? (technological incompetence, lack of time, some other reasoning perhaps?)

15. Do issues of assessment affect your use of technology? For example, the fact that examinations largely do not make use of technology?

16. Is there any school policy regarding the use of technology?

Appendix A3 – Interview instrument for learners

This is the intended structure by which the questions will be asked. Further probing may expand the scope even more.

1. What books (novels, short stories, drama, poetry) from Africa have you studied?

2. Do you have access to and use technology at school and at home?

At school: YES_____NO_____

At home: YES_____NO_____

3. How confident are you in the use of different technologies (especially those that help you learn African literature and other subjects)?

4. What do you think of the way your teachers use technology in the classroom?

5. What type of technology do you normally use to study literature and African texts in particular?

6. Do you think technology helps you understand African literary texts better?

YES_____

NO_____

If YES, how?

7. What are your thoughts about the digital tools you use for learning African literature?

8. Do you have electronic versions of some of your literary texts?

YES_____

NO_____

9. If you do, what do you think about the electronic version versus the normal text?

Electronic version

Normal text

10. Which digital tools do you most enjoy studying African literature with and why?

11. What excites you most about using technology to study African literature?

12. What are your main frustrations about using technology to study African literature?

13. Does technology help you to collaborate / work together more with other learners? How?

Appendix A4 – Observations

The following factors will be observed in some of the select schools participating in this study:

1. The type of technology used in the lesson.

2. The time it took to set it up.

3. The focus of the lesson.

4. Is the technology user-friendly in the view of the researcher? e.g. can all learners see clearly, do all learners have access, does the technology take too long to mount, image quality etc.

5. Any other useful / interesting observations

Appendix A5 – Environmental assessment

1. Brief description of the school – e.g. brick, container…

2. The general environment of the school and its location – suburban, township, rural….

3. What facilities are there? – smartboards, projectors, laptops….

4. Does the school appear to be functioning? – classes on, learners loitering….

5. Any other observations…

APPENDIX B – ETHICS CLEARANCES

Appendix B1 – Wits Ethics Clearance

Wits School of Education



27 St Andrews Road, Parktown, Johannesburg, 2193 Private Bag 3, Wits 2050, South Africa. Tel: +27 11717-3064 Fax: +27 11 717-3100 E-mail: enquiries@educ.wits.ac.za Website: www.wits.ac.za

6 March 2017

Student Number:

0003841T

Protocol Number:

2017ECE008D

Dear Mahao

Mahao

Application for ethics clearance: Doctor of Philosophy

Thank you very much for your ethics application. The Ethics Committee in Education of the Faculty of Humanities, acting on behalf of the Senate, has considered your application for ethics clearance for your proposal entitled:

Teaching African literature and access to digital technology in Gauteng schools.

The committee recently met and I am pleased to inform you that **clearance was granted**.

Please use the above protocol number in all correspondence to the relevant research parties (schools, parents, learners etc.) and include it in your research report or project on the title page.

The Protocol Number above should be submitted to the Graduate Studies in Education Committee upon submission of your final research report.

All the best with your

research project.

Yours sincerely,



Wits

School of

Education

011 717-

3416

cc Supervisors - Dr. Toni Gennrich and Prof. Elsie Cloete

Appendix B2 – GDE Ethics Clearance

GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

For administrative use:
Reference no. M2017/410

GDE RESEARCH APPROVAL LETTER

Date:	**15 February 2017**
Validity of Research Approval:	**06 February 2017 – 29 September 2017**
Name of Researcher:	**Mahao M.A**
Address of Researcher:	**P O Box 15000**
	Maseru
	Lesotho , 100
Telephone Number:	**+ 266 630 08452 +266 587 30927**
Email address:	**Mahaomahao05@gmail.com**
Research Topic:	**Teaching African Literature and access to digital technology in Gauteng Schools**
Number and type of schools:	**10 Secondary Schools**
District/s/HO	**Ekurhuleni South ,Gauteng West, Johannesburg Central, Johannesburg South and Johannesburg West**

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

20/02/2017

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

1

Making education a societal priority

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

1. *The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.*
2. *The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.*
3. *A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.*
4. *A letter / document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.*
5. *The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.*
6. *Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.*
7. *Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.*
8. *Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.*
9. *It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.*
10. *The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.*
11. *The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.*
12. *On completion of the study the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.*
13. *The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.*
14. *Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.*

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

.....

Ms Faith Tshabalala
CES: Education Research and Knowledge Management

DATE: 20/02/2017

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

APPENDIX C – LETTER AND INFORMATION SHEETS

Appendix C1 – Letter to the Principal / Chairperson of SGB

Dear Principal / Chairperson

My name is Mahao Mahao, a PhD student in the School of Education at the University of the Witwatersrand. I am doing research on the teaching of African literature and the use of digital technologies including issues of access especially by teachers. My research involves the use of questionnaires, interviews, observations and tour of digital facilities at your school as the chief instruments for data collection. I hope to administer the questionnaire to one (or two in some cases) literature teacher and then follow up with one-on-one interviews. I also wish to observe at least one lesson where some digital tools are used in the teaching process. I also intend to interview two learners on their use of digital tools to study literature. The interviews with learners may be held after school or during the time when their class attendance will not be interrupted. The final part of the visit will involve a brief tour of digital facilities for teaching African Literature.

The questionnaire will be given to the teachers and they will have about a week to complete them. The interview sessions are estimated to last for about 30 minutes while those with learners may take about 20 minutes. The tour of facilities may take between 10 and 30 minutes depending on the number and type of tools the school has. The reason why I have chosen your school is because my research sites are schools based in and around Johannesburg and are within reach from my institution. I am inviting your school to participate in this research with a view to understanding the dynamics of teaching African texts via digital media.

The research participants will not be advantaged or disadvantaged in anyway. They will be reassured that they can withdraw their permission at any time during this project without any penalty. There are no foreseeable risks in participating in this study. The participants will not be paid for this study.

The names of the research participants and identity of the school will be kept confidential at all times and in all academic writing about the study. Your individual privacy will be maintained in all published and written data resulting from the study. All research data will be destroyed between 3 – 5 years after completion of the project.

Please let me know if you require any further information. I look forward to your response as soon as is convenient.

Yours sincerely

_____

Mahao Mahao

Appendix C2 – Information sheet – learners

Dear Learner

My name is Mahao Mahao and I am a student in the School of Education at the University of the Witwatersrand.

I am doing research on teaching African literature with the use of technology in selected Gauteng schools.

My investigation involves finding out how learners learn African literature with technology. As part of my investigation, I would like to get some information from a few learners regarding how they learn with technology. My interview will not take more than 20 minutes and will take place when you are free from lessons or any other school work you might be pressured to do. Please feel free to suggest times when you can be available for the interview.

Would you mind if I invite you to be one the learners to assist me with this information I am kindly looking for? I need your help with interview which shall involve audiotaping.

Remember, this is not a test, it is not for marks and it is voluntary, which means that you don't have to do it. Also, if you decide halfway through that you prefer to stop, this is completely your choice and will not affect you negatively in any way.

I will not be using your own name but I will make one up so no one can identify you. All information about you will be kept confidential in all my writing about the study. Also, all collected information will be stored safely and destroyed between 3-5 years after I have completed my project.

Your parents have also been given an information sheet and consent form, but at the end of the day it is your decision to join us in the study.

I look forward to working with you!

Please feel free to contact me if you have any questions.

Thank you

_____

Mahao Mahao
School of Education
University of the Witwatersrand
Johannesburg

Appendix C3 – Information sheet - parents

Dear Parent

My name is Mahao Mahao and I am a student in the School of Education at the University of the Witwatersrand.

I am doing research on teaching African literature with the use of technology in selected Gauteng schools. My research involves interviewing a few learners regarding their use of technology to learn African texts. There will also be audiotaping of the interview for accuracy of information learners are going to give.

The reason why I have chosen your child's class is because my study focuses on learners who are in Grade 10 – 12 and study African literature as part of their curriculum. Would you mind if I invite your child to participate in this study through an interview session where an audiotape will also be used. I will also attend some lessons for observations where pictures may be taken. All visible faces of children in the photographs will be blocked if they are used in the study.

Your child will not be advantaged or disadvantaged in any way. S/he will be reassured that s/he can withdraw her/his permission at any time during this project without any penalty. There are no foreseeable risks in participating and your child will not be paid for this study.

Your child's name and identity will be kept confidential at all times and in all academic writing about the study. His/her individual privacy will be maintained in all published and written data resulting from the study.

All research data will be destroyed between 3-5 years after completion of the project.

Please let me know if you require any further information.

Thank you very much for your help.

Yours sincerely,

_____

Mahao Mahao
University of the Witwatersrand
School of Education

Appendix C4 – Information sheet - teachers

Dear Teacher

My name is Mahao Mahao, a PhD student in the School of Education at the University of the Witwatersrand. I am doing research on the teaching of African literature and the use of digital technologies including issues of access especially by teachers.

My research involves the use of questionnaires, interviews, observations and tour of digital facilities at your school as the chief instruments for data collection. I hope to administer the questionnaire to you and then follow up with a one-on-one interview session. I also wish to observe at least one lesson where some digital tools are used in the teaching process. I also intend to interview two of your learners on their use of digital tools to study literature. The interviews with learners may be held after school or during the time when their class attendance will not be interrupted. The final part of the visit will involve a brief tour of digital facilities for teaching African Literature. You will be given reasonable time (about a week) to fill the questionnaire. The interview sessions are estimated to take about 30 minutes while the tour of facilities may take between 10 – 30 minutes.

The reason why I have chosen your school is because my research sites are schools based in and around Johannesburg and are within reach from my institution. I am inviting you to participate in this research with a view to understanding the dynamics of teaching African texts via digital media.

Your name and identity will be kept confidential at all times and in all academic writing about the study. Your individual privacy will be maintained in all published and written data resulting from the study.

All research data will be destroyed between 3-5 years after completion of the project.

You will not be advantaged or disadvantaged in any way. Your participation is voluntary, so you can withdraw your permission at any time during this project without any penalty. There are no foreseeable risks in participating and you will not be paid for this study.

Please let me know if you require any further information.

Thank you very much for your help.

Yours sincerely,

_____

Mahao Mahao
University of the Witwatersrand
School of Education

APPENDIX D – SPECIMENS OF DATA

Appendix D1 – completed teacher's questionnaire

Lizel: Linville High School

QUESTIONNAIRE FOR LITERATURE TEACHERS

You may fill in the questionnaire anonymously. Names of individuals and schools will not be used anywhere in the report. Codes and pseudonyms will be devised to refer to teachers and schools.

1. Biographical information:

    - Name of school:

    - Your age (you may give an age bracket e.g 40---50, if you prefer) **61**

    - Years of teaching experience: **25**

    - Professional qualification (provide the highest) **MA Linguistics**

2. Do you ever use any form of technology / digital tools and resources to teach African literature?

    YES

3. If not, please explain why **N.A**

4. Which digital tools among the following do you often use to **plan** and **teach** your African literature lessons? Please tick the box that represents the tool you often use and the corresponding activity.

Digital tools	For planning of lessons	For teaching of lessons
Blogs		
Class websites		
Electronic books (e-books)	√ Audio Books	
Internet	√	√
Ipad / tablet		
Laptop	√	√
Overhead projector		
Smart interactive whiteboard		
Smart phone	√	√
Wikipedia	√	√
YouTube	√	√

Other (please specify)	Data Projector	√PowerPoint Presentations

5. Please briefly explain how you use each of the tools you have chosen to teach African novels or drama texts.

Blogs…

Class websites…

Electronic books: **I travel many hours a week, so use the audio books for the prescribed works.**

Internet: **Research**

Ipad/tablet…

Laptop: **Research and preparation for lessons, worksheets, assignments, tests, etc.**

Overhead projector: **A data projector is used to present lessons, PowerPoint presentations and You Tube clips.**

Smart interactive whiteboard: **Only the Maths Dept has access to interactive whiteboards.**

Smart phone: **Pupils are allowed to use smart phones to google information. I find the online dictionary on my smart phone handy.**

Wikipedia **is an invaluable encyclopedia that I use frequently for research purposes.**

YouTube: **Much information on novels such as *Tsotsi* and dramas such as *Nothing but the Truth* is available on YouTube. Learners enjoy die visual and aural appeal of YouTube which makes it a valuable tool.**

Other (please specify)…

6. What are your experiences of using these tools and resources to plan for and teach African novels and drama texts? Please provide both **positive** and **negative** experiences if you have had any.

Positive experiences: **Info easily accessible**

Negative experiences: **Not all learners have access.**

7. What type of technology (if any) do you have access to both at your school and at home?

At school: **Laptops, overhead projectors, Wi-Fi, smart phone**

At home: **Wi-Fi, Laptop, smart phone**

8. Briefly explain whether or not the use of these digital tools has been effective in your opinion in aiding teaching and learning in your African literature lessons.

   Yes, as they offer instant information on all the important aspects of literature such as themes, characterisation, style and context.

9. What are the **advantages** and **disadvantages** of using technology for both research and facilitating learning in your African literature classroom?

Advantages: **information is readily available.**

Disadvantages: **Pupils fall victim to plagiarism as information is so readily available. At times, it makes it too easy for pupils and could lead to them not honing their own creative and critical skills and not finding their own voice as it were.**

10. What are the constraints of both technology for **research** and for **learning/teaching**?

For research: **pupils are easily distracted by access to social madia. Parents complain that it is difficult for them to monitor whether their children are in actual fact busy with school work when they are busy with their tablets. Disadvantaged learners are once again disadvantaged by not having access to technology.**

For learning/teaching: **Much the same as for research.**

11. What are your frustrations with using technology in your African literature lessons?

    Not the same amount of info (as for English or American Literature) is available.
    Wi-Fi access not always assured.

12. What are the enjoyment you and your learners have experienced using technology in your African literature lessons?

    Technology has become the medium through which the youth communicates and has therefore become the medium to which they respond and that appeals to them. The use of technology therefore makes learners more responsive and willing to engage.

13. How does the current literature syllabus encourage the use of digital technologies to teach literature?

    Literature by its very nature poses controversial, philosophical questions that have been asked since the beginning of time. Literature is also embedded in a specific context, setting and historical time frame that isn't necessarily made clear in the work as such. Research is thus vital to fully understand and appreciate literature.

14. How does technology work with African **prose** and **drama**?

African prose…

African drama…

15. In your opinion, does your age play a role in your attitude towards technology and its use? Please explain your response in some detail.

    Yes, younger people are more in tune with and confident in terms of technology

16. Do you also use other resources (apart from the digital) to research and teach your African literature lessons? Please specify the type of resources.

    Hard copies/printed study guides

17. How useful are the resources you have mentioned above?

    Excellent hard copy study guides are available.

18. How do your learners respond to the use of digital technologies in African literature lessons? For example, are they excited, bored, indifferent, baffled?

    Our learners are taught the value of literature and once they have realised how significant it is in their live they engage eagerly.

19. Is it the culture of your school to invest in digital / technological facilities? Please briefly explain your response.

    Yes, we realise the importance of technology for a successful future for our learners and therefore it is a priority to equip all learners in this regard.

Appendix D2 – teacher's semi-structured interview

Bernice: Brakfontein High School

INTERVIEW QUESTIONS FOR LITERATURE TEACHERS

This is the intended structure by which the questions will be asked. Further probing may expand the scope even more.

1. Which African literature written in English is currently prescribed at your school?

Things Fall Apart, The Eighth Man, A mixture of poetry: European and African

2. What do you understand by technology or what would you regard as technology?

I use it for research and to produce things for the children that perhaps aren't in the books. For example, when they are doing Nigerian culture and some of the things that it's nice to see a picture like the Egu and some of the art and their compound. So it's nice for them to see a visual.

3. Do you love and enjoy using technology in your African literature lessons? Why / why not?

Very much! Very much! It makes it interesting and it brings a difference to just reading because our children are not interested in books anymore. They want to see something on a computer, on a screen. It enhances their whole learning experience.

4. Are you confident in the use of technology for research and teaching? Why / Why not?

Yes, with a lot of practice.

5. What technological strategies do you use for both research and teaching?

For research: *I look up anything different about the poet which I don't have in my books. I look for his background, why he thinks the way he does because sometimes it's interesting when you are studying his poetry. You need to see where he is coming from and the same with African literature.*

For teaching: *The same applies.*

6. How does technology support the existing literature syllabus (novels and drama in particular)?

Novels: *Not by the department. We are not advised to use it but by the school. They give us projectors, internet, Wi-Fi at the school and they want us to start using technology.*

Drama:

7. Is there any resistance among some teachers to use technology? Why?

I mean, perhaps people are a bit insecure. They do understand that it's very useful especially for research. I haven't noticed anyone going against it.

8. Do you encourage your learners to use technology to study literature? What type of technology in particular?

No. Only when it's appropriate because literature is about reading. Literature is not about looking at pictures. They need to understand the written word, otherwise it's not literature. So while I have things to back up for example, they have to be able to understand the way. I don't want them to go and watch a movie so I insist that they read. And the poetry they must read the words because that's what poetry is about. You have to be able to read and understand. I don't want them to go and look up all the answers.

a. Do your learners collaborate / work together more using technology?

Oh! They love to use it but I have to… I tell them when to use it when I want them to research something. I don't allow it here all the time because they just start to cheat. They cheat and don't use their heads. So analysing literature, the head is the first device for me. It depends on the child. Some children don't like to work in groups; other children like to work in groups. So I have to watch all the children, sometimes they go on and do something else.

9. How do you evaluate digital resources? (that they are suitable for use)

I tell them what to research and obviously by their feedback I know that they… I can't go to all their devices and see what they are doing. I don't have enough time in a lesson.

10. How do you ensure that your learners can detect useful information from the vast array available in the digital media?

I don't know if it's a good thing about technology that you can narrow your research to exactly what you want. When we use to use encyclopaedia, we had to learn how to evaluate material and take out this from other sources. Yeah, the device does it for you so I don't know if it's good or bad. We are going to see in the future what kind of lawyers we will have, doctors or scientists. I don't know.

11. What guides your choice of technological tools to use? For example: easy access, familiarity with the tool, the price of the tool etc.

I don't; it's their parents. I can't advise that they use it because some children don't have any devices because their parents won't allow them to. Others have top of the range. As long as they can access what they can't always find in books. So I don't especially say only from the devices.

12. Is there enough stuff / material you can access for African literature in comparison with Western (European, American) literature?

No. Some of the African writers have nothing on the Internet, absolutely nothing; especially South African poets. You just can't find anything. You just have the poem in hand, a bit of background and you don't know if it's accurate because you can't check on it.

13. What, in your opinion, is the potential for using digital technologies to teach African literature and literature in general?

I think just to give them background because they are also modern. They are also American because the poets write about hard stuff and our kids can't do that. They are so modern, so American. They don't come from South Africa so that's also… you need to come back here.

14. Why do you think some teachers are reluctant / hesitant to use technology? (technological incompetence, lack of time, some other reasoning perhaps?)

Here they aren't. Sometimes its subject specific. In language it's not something we use all the time because we need them to read and write language and so sometimes the device doesn't really help us. They got to be able to do the books.

15. Do issues of assessment affect your use of technology? For example, the fact that examinations largely do not make use of technology?

In language, English, they need only to read the paper and write. There is no other way to test it. So I don't need to worry that suddenly something is going to jump in and they are not ready.

16. Is there any school policy regarding the use of technology?

Well, at the moment it's optional but he headmaster and the governing body want to start and make it compulsory in all areas. He wants to get there. But for now the children have to use their own data because they can't get it at school.

On whether learners complain about data costs:
That's the thing. I say to them it's up to you, use your own data technology, otherwise books.

Appendix D3 – learner's semi-structured interview

Jane: Johnson High School

INTERVIEW QUESTIONS FOR LEARNERS

This is the intended structure by which the questions will be asked. Further probing may expand the scope even more.

1. What books (novels, short stories, drama, poetry) from Africa have you studied?

Cry Freedom and Four Plays by Mda

2. Do you have access to and use technology at school and at home?

At school: YES____√_____NO_____

At home: YES____√_____NO_____

I have access to Wi-Fi, desktop and laptop

3. How confident are you in the use of different technologies (especially those that help you learn African literature and other subjects)?

Very confident.
From Grade 8 we attend computer lessons and we are taught about computer components.

4. What do you think of the way your teachers use technology in the classroom?

It is good.
Instead of reading notes they show on the projector to the whole class. Everyone can see what is written.

5. What type of technology do you normally use to study literature and African texts in particular?

At home I surf the internet for better understanding.

6. Do you think technology helps you understand African literary texts better?

YES____√_____

NO_____

If YES, how?

You can read words but not understand.
With technology your understanding is enhanced and we understand better.

7. What are your thoughts about the digital tools you use for learning African literature?

(did not respond)

8. Do you have electronic versions of some of your literary texts?

YES___√_____

NO_____

9. If you do, what do you think about the electronic version versus the normal text?

Electronic version

The e-version is better – books age and pages tear. You can take your time and do what you want. It is also quick and effective and there is no need to turn the pages.

Normal text

10. Which digital tools do you most enjoy studying African literature with and why?

-The cellphone
I search the title and read summaries.
I also read the author's background knowledge and thoughts towards the books.
I do get information about African books.

11. What excites you most about using technology to study African literature?

The fact that you can search whatever you don't understand.
You can seek other people's opinions on what you read.

12. What are your main frustrations about using technology to study African literature?

It is not always reliable.
Sometimes you don't find what you are looking for.

13. Does technology help you collaborate / work together more with other learners? How?

Yes. We come back with the information and put it together and we collaborate. We have WhatsApp groups to share what we don't understand. You can screen-shoot the information while surfing and send it to another.

APPENDIX E – FULL LIST OF DBE PRESCRIBED SET BOOKS FOR 2017

English Grade 10

- *Fabulous: An Anthology of Short Stories*, Lucy Z. Dlamini (Ilima Publishers), short stories (FAL)
- *Finders Keepers*, Rosemund Haden (Cover2Cover Books), novel (FAL)
- *Landscapes of Short Stories*, Blanche Scheffler (NB Publishers), short stories (SAL)
- *Mhudi*, Sol Plaatjie (Marang Publishers), novel (FAL)
- *Mother to Mother* – Educational Edition, Sindiwe Magona (David Philip Publishers), novel (HL)
- *Romeo and Juliet*, William Shakespeare (Cambridge University Press), drama (HL)
- *Shuters HL Poetry Anthology* (School Edition), Bridget C. Krone (Shuter and Shooter Publishers), poetry (HL, FAL)
- *The African Dustbin*, Victor Mtubani (First League Trading), drama (FAL)
- *The Lighthouse Keeper's Wife*, Charles J. Fourie (NB Publishers), drama (HL)
- *The Mark*, Edyth Bulbring (Abantwana Publishing), novel (HL)

English Grade 11

- *Dreaming of Light*, Jayne Bauling (Tafelberg Publishers), novel (FAL)
- *Far from the Madding Crowd*, Thomas Hardy (Ilima Publishers), novel (FAL)
- *Hearing Helen*, Carolyn Morton (NB Publishers), novel (SAL)
- *Itsoseng*, Omphile Molusi (Oxford University Press Southern Africa), drama (SAL)
- *Macbeth*: Shakespeare for Southern Africa, W. Shakespeare, edited by Roma Gill (Oxford University Press Southern Africa), drama (HL)
- *Poems from all over*, Kozain, Monk & Monk (Oxford University Press Southern Africa), poetry (HL)
- *Shuters Short Story Anthology* (School Edition), Bridget C. Krone (Shuter and Shooter Publishers), short stories (FAL)
- *Sophiatown*, Malcolm Purkey (Macmillan South Africa), drama (FAL)
- *The Merchant of Venice* – Shakespeare 2000 series, ed Walter Saunders (Marumo Publishing), drama (FAL)
- *Things Fall Apart*, Chinua Achebe (Maskew Miller Longman), novel (HL)
- *Tsotsi*, Athol Fugard (Cover2Cover Books), novel (HL)
- *Vistas of Poems*, Blanche Scheffler (Lectio Publishers), poetry (FAL)

English Grade 12

- *Changes: An Anthology of Short Stories*, B Walter (Marang Publishers), short stories (FAL)
- *Cry, the Beloved Country*, Alan Paton (Maskew Miller Longman), novel (FAL)
- *Dark Voices Ring*, Zakes Mda (NB Publishers), drama (SAL)
- *Hamlet*, William Shakespeare (Maskew Miller Longman), drama (HL)

- *Imagined Worlds: An Anthology of Poetry*, Elise Varga and Clare McIntyre (Macmillan South Africa), poetry (HL)
- *Landscapes of Short Stories*, Blanche Scheffler (NB Publishers), poetry (SAL)
- *Life of Pi*: Novel and Study Notes, Yann Martel (Oxford University Press Southern Africa), novel (HL)
- *Macbeth*: Shakespeare 2000 series, Walter Saunders (Marumo Publishing), drama (FAL)
- *My Children! My Africa!,* Athol Fugard (Maskew Miller Longman), drama (FAL)
- *Strange Case of Dr Jekyll and Mr Hyde*, Robert Louis Stevenson (Macmillan South Africa), novel (FAL)
- *The Mending Season*: Novel and Study Notes, Kagiso Lesego Molope (Oxford University Press Southern Africa), novel (SAL)
- *The Picture of Dorian Gray*, Oscar Wilde (Macmillan South Africa), novel (HL)
- *Voice of the land*, B Walter (Ilima Publishers), poetry (FAL)

This list has been sourced from the South African National **Department of Basic Education**

Source: http://www.parent24.com/Learn/High-school/english-reading-set-lists-for-grade-10-12-20170407

Brief notes:

- The italicisation of the titles was my own variation to make them stand out and be clearer.
- Only the 2017 list is provided because this was the year in which the bulk of the fieldwork for the study was done.
- Key: HL = Home Language
  FAL = First Additional Language
  SAL = Second Additional Language