EXPLORING LECTURERS’ EXPERIENCES OF TEACHING LEVEL 2 LIFE ORIENTATION (COMPUTER SKILLS) IN NATIONAL CERTIFICATE VOCATIONAL AT A TECHNICAL VOCATIONAL EDUCATIONAL AND TRAINING (TVET) COLLEGE IN A TOWNSHIP

by

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Submitted in partial fulfilment of the academic requirements for the degree of Master of Education
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ABSTRACT

The focus and purpose of the study was to explore Life Orientation lecturers’ experiences in teaching Computer Skills at a township Technical Vocational Education and Training (TVET) College. The study explored the experiences of Life Orientation lecturers that taught Level 2 Computer Skills. The research employed the interpretivist paradigm. The qualitative approach was used which allowed for a greater knowledge and understanding of the lecturers’ experiences. Data was generated using semi-structured interviews with the four purposively selected Life Orientation lecturers who taught Level 2 Computer Skills. The study concluded that lecturers were struggling with Computer Skills from the outset of National Curriculum Vocational (NCV) implementation and numerous technology challenges persisted thereafter. Some lecturers believed that they had to migrate to a different world without the requisite support. The requisite support would allow them to learn and internalise aspects of Computer Skills which made them not confident in a higher education context. This study consequently recommended the training of lecturers by the Department of Higher Education and Training before they teach Computer Skills within the curriculum. The College should provide an on-going support structure as a higher education institution to ensure that the lecturers receive sufficient assistance to progress to teaching Levels 3 and 4.
DECLARATION

I, Amanda Paul, declare that the research reported in this dissertation for Master of Education, titled: Exploring lecturers’ experiences of teaching Level 2 Life Orientation (computer skills) in National Certificate Vocational at a Technical Vocational Educational and Training (TVET) college in a township, is my own work; and all sources used have been acknowledged in-text and in the reference list accordingly.

Signature: [Signature] Date: 26 April 2019

Amanda Paul
Student number: 875874211

As the candidate’s Supervisor I agree/do not agree to the submission of this dissertation.

Dr Nomkhosi Nzimande

Signature: [Signature] Date: 26 April 2019
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<th>Description</th>
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<td>CAPS:</td>
<td>Curriculum Assessment Policy Statement</td>
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<td>CK:</td>
<td>Content Knowledge</td>
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<tr>
<td>DHET:</td>
<td>Department of Higher Education and Training</td>
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<td>DOE:</td>
<td>Department of Education</td>
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<td>ECDL:</td>
<td>European Computer Driving License</td>
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<td>FET:</td>
<td>Further Education and Training</td>
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<td>HEI:</td>
<td>Higher Education Institutions</td>
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<td>HW:</td>
<td>Hardware</td>
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<td>ICT:</td>
<td>Information Communication Technology</td>
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<td>ICDL:</td>
<td>International Computer Drivers Licence</td>
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<td>IW:</td>
<td>Ideological-ware</td>
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<td>LMS:</td>
<td>Learning Management System</td>
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<td>NCV:</td>
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<td>OBE:</td>
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<td>SAGs:</td>
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<td>SGs:</td>
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<td>SW:</td>
<td>Software</td>
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<td>TK:</td>
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TPACK: Technological Pedagogical and Content Knowledge

TVET: Technical Vocational Education and Training

UNESCO: United Nations Educational, Scientific and Cultural Organisation

UK: United Kingdom
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To God almighty for giving me the strength, wisdom and endurance to complete my study.

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My husband, who is my mentor.
Dedication

This dissertation is dedicated to Kylie-Ann Paul
CHAPTER ONE
INTRODUCTION AND BACKGROUND TO
THE STUDY

1.1 INTRODUCTION

This chapter presents a background to the study which incorporates the educational changes that occurred in South Africa after 1994. These educational changes include the National Curriculum Vocational (NCV) curriculum as the new curriculum at Technical Vocational Education and Training (TVET) Colleges. The shift from Curriculum and Assessment Policy design in favour of a learner-centred approach is also emphasised. Focus is on Life Orientation (Computer Skills) lecturers and their experiences in teaching Computer Skills. What their experiences are in teaching using the subject and assessment guidelines in Level Two is also discussed. The background, purpose, research problem, objectives and research questions of the study are discussed. An organisation of subsequent chapters covered in the study is also provided.

1.2 BACKGROUND

In South Africa, the post-1994 dispensation ushered in several changes in the area of curriculum implementation. The National Department of Education was under pressure to provide a curriculum that would address the past imbalances in education (Makgato & Mbanguta, 2002). The Department of Education and the Department of Labour joined together to rectify the skills shortage and ‘brain drain’ that was evident (Gamble, 2003). In 1994, Outcomes-Based Education (OBE) was introduced as the curriculum for teaching and learning (Makgato & Mbanguta, 2002). The importance of providing education for all was also stressed (Makgato & Mbanguta, 2002). The implementation of the National Certificate Vocational (NCV) curriculum began in 2007. The implementation led to various disruptions, caused by, among other things, lecturers not having adequate training at Technical Vocational Educational and Training Colleges. NCV was ‘here to stay’ as DHET made clear in the Green Paper: The Department of Higher Education and Training is “committed to NCV” (DHET,
In the Green Paper for Higher Education and Training, the Department of Higher Education and Training laid out its aim for the TVET colleges to be “the key area of focus for expansion” of education and training in the country (DHET, 2012, p. 23).

One of the areas of focus of the Department of Higher Education and Training was to form a partnership between industry and TVET Colleges. In essence, this partnership implied bringing the world of work to students during their education (Keeting, 1995). Private sector involvement in teaching and learning provides an additional value for education (Kerre, 2010). This partnership was in alignment with the vision of enhancing South Africa’s economy with the skills development of its workforce as mentioned in the National Skills Development Strategy III (NSDSIII). NCV is an outcomes-based approach to education. Hence, it is suggested in the Subject Guidelines (SGs) document that the curriculum is learner-centred. According to the Subject Guidelines (SGs) document for Life Orientation, the lecturer must be suitably qualified in order to effectively teach Life Orientation that is learner-centred.

TVET Colleges serve a dual function of offering both post-matric vocational training (Report 191), as well as the National Certificate Vocational curriculum. The lecturers’ experiences are therefore, diverse in nature, depending on which curriculum is taught by the lecturer. NCV is equivalent to grades 10, 11 and 12 at schools (FET phase). These grades are given the designations National Qualifications Framework (NQF) Level 2, 3 and 4 respectively at Colleges. Moreover, this shift from lecturer (teaching post-matric) to ‘school teacher’ complicated lecturers’ everyday experiences as most were not prepared for these challenges (Wedekind, 2016). When teaching the curriculum (Report 191), a trade qualification and industry experience was required at inception. With the new role of ‘school teacher’, a teaching qualification was necessary. For this reason, many lecturers are now compelled to study towards a pedagogic qualification.
1.3 PURPOSE OF THE STUDY

The purpose of the study was to explore Level 2 Life Orientation lecturers’ experiences in teaching Computer Skills at a TVET College. Computer Skills is a component of the National Certificate Vocational (NCV) which was implemented in 2007, as mentioned earlier. This new curriculum was implemented to address the shortage of skills in the labour market and industry. The study explores lecturers’ experiences that resulted from the many changes brought about by the NCV curriculum. In addition, the study focuses on lecturers who taught Level 2 Computer Skills, as this is the first year of the three-year programme. Teachers’ experiences are very important when dealing with curriculum since creating professional teachers is likely to facilitate the implementation of the curriculum as planned. Teaching resources like the availability of trained or qualified educators are just some of the issues highlighted by Ndjabili (2008). In the teaching of the Computer Skills component of Life Orientation, a trained lecturer is essential.

1.4 RESEARCH PROBLEM

The NCV curriculum includes three mandatory subjects which are similar to the school curriculum, namely; Mathematical Literacy or Mathematics, English and Life Skills (Life Orientation). These fundamental courses are core to all specialisations and are “generic rather than specialised” (Wedekind & Watson, 2016, p. 78). An important issue in relation to lecturer identity is highlighted, as lecturers of Fundamental courses are likely to have a schooling qualification rather than subject specific knowledge. Furthermore, by schooling qualification, reference is made to a teaching qualification that would equip educators in their instruction of the learning area. This study revealed that lecturers of Life Orientation did not possess qualifications that equipped them to teach the subject of Computer Skills; yet according to the Subject Guidelines (SGs) document, the lecturers must be suitably qualified to teach Life Orientation (DoE, 2013b).
It is significant for this study to explore how a township college Computer Skills lecturers experience the teaching of the Computer Skills component of Life Orientation (LO). It is suggested that “ICT lecturer must be computer literate and have an advanced knowledge of the following programmes: Word processing, Spreadsheets, Presentation and knowledge of the Internet and e-mail” (DoE, 2013b, p.13). In numerous countries like Germany, the competence assessment or diagnostic testing is far ahead, and allows for comparison of lecturers’ competencies (SAQA, 2016). Tools that facilitate comparing strengths and weaknesses in lecturers’ content knowledge, are critical for South African (Rauner, 2005). Reviewed literature is silent on computer studies as a College-based practical component incorporating NCV. This study seeks to bridge that gap. It seeks to understand the teaching of Computer Skills at Level 2, as experienced by lecturers, as this is the first level at which all NCV students are required to take Life Orientation as a compulsory fundamental subject.

1.5 RESEARCH QUESTIONS

The study sought to answer three research questions:

1.5.1 What are lecturers’ experiences of teaching Level 2 LO Computer Skills in the NCV curriculum?
1.5.2 Why do lecturers have these experiences of teaching Level 2 LO Computer Skills in the NCV curriculum?
1.5.3 How do lecturers’ experiences of teaching Level 2 LO Computer Skills in NCV impact their teaching?

1.6 ORGANISATION OF CHAPTERS

The study is divided into five chapters as indicated below:

Chapter 1: Introduction and background to the study
Chapter one gave an introduction to the research that was conducted. A discussion on OBE, the TVET sector, the NCV programme and Life Orientation
was made. The background, purpose, research problem, and research questions of the study were also discussed.

Chapter 2: Review of related literature and theoretical framework
Chapter two discusses the relevant literature that was reviewed in relation to the study. The study explores lecturers’ experiences of teaching Level 2 Life Orientation Computer Skills at a TVET College. This chapter begins with a background of a literature review, followed by a discussion of the teaching of Computer Skills internationally and then nationally. A discussion is then made on TVET education under the heading; learner-centred, life-long learning and authentic learning. In conclusion the theoretical framework guiding this study, that is, the Technological, Pedagogical and Content Knowledge (TPACK), is also discussed.

Chapter 3: Research methodology and design
Chapter three discusses the interpretive paradigm around which the research is centred. The chapter then provides a description of the research design and approach that was used for the study. The case study research methodology is also described in this chapter. Following that is a discussion on the data generation using the semi-structured interviews. Selection of participants and the data analysis process are also described. Ethical considerations, trustworthiness and credibility, transferability and dependability as well as the limitations and delimitations of the study are also discussed.

Chapter 4: Data presentation and analysis
Chapter four gives a description of the data sources. The chapter also provides a detailed analysis of the data which is presented, in the form of themes as the study adopted a thematic analysis.

Chapter 5: Summary, findings and recommendations
Chapter five concludes the study by providing a summary of the study, a description of the findings, and recommendations to inform future research.
1.7 CONCLUSION

This chapter provided an introduction and background of the study. The purpose of the study was outlined. Following this, the research problem, objectives and research questions were discussed. The study attempted to answer three research questions, namely: What are lecturers’ experiences of teaching Level 2 LO Computer Skills in the NCV curriculum? Why do lecturers have these experiences of teaching Level 2 LO Computer Skills in the NCV curriculum? How do lecturers’ experiences of teaching Level 2 LO Computer Skills in NCV impact their teaching? Finally, the organisation of the chapters was discussed. The next chapter presents the related literature reviewed, and the theoretical framework for this study.
CHAPTER TWO

REVIEW OF RELATED LITERATURE AND THEORETICAL FRAMEWORK

2.1 INTRODUCTION

Technical Vocational Education and Training lecturers offer vocational and academic subjects to young and old people. This chapter discusses the related literature of the study under the following headings: Teaching of Computer Skills - international teaching, national teaching; and TVET education - learner-centred, life-long learning, authentic learning. The theoretical framework used in this study is also discussed. The Technological, Pedagogical and Content Knowledge (TPACK) is used as a framework for the study, encompassing technological knowledge (TK), pedagogical knowledge (PK) and content knowledge (CK). TPACK proved to be the most relevant framework as it presents the components of knowledge that are specific to lecturers of Computer Skills.

2.2 TEACHING OF COMPUTER SKILLS

2.2.1 International teaching of computer skills

The issue of teaching Computer Skills in TVET Colleges is a critical phenomenon for discussion. The literature in more developed countries like South Korea is reviewed as well as that in developing countries like Bangladesh. Other countries like Malaysia, United Kingdom, New Zealand, Australia and Germany’s literature is also reviewed in this study.

The computer is an imperative device for teaching and learning in Malaysia. The Minister of Education initiated a project to allow students to gain entry into the world of work (Saud, Rajuddin, Ismail, Nordin, Minghat, Subari, Amin, Hamid & Arsat, 2000). The use of computer technology in Computer Skills was the main reason for the project. Information processing devices became known devices used for teaching in skills based institution (Saud et al., 2000). Computer Skills and computer technology application are widely used in schools and tertiary education institutions in Malaysia. According to Fabry and
Higgs (1997), the major hindrance to implementing computers in teaching and learning consists of; aversion to change, educators’ negative attitudes and poor instructional training. In Malaysia, the country has experienced similar constraints as with other countries such as poor vision/rationale for computer use, barriers to training and insufficient support of educators (Saud et al., 2000).

In a study in Korea, Park and Sung (2013) highlight some of the barriers to implementing technology in teaching when they explored how educators handled curriculum change and the support that is needed to effect change. Their findings were that educators were resistant to change and that ultimately had adverse implications on the incorporation of the change in curriculum. The barriers highlighted by Park and Sung (2013) included: lack of mentoring programmes to support educator professional development, failure to work through challenges with colleagues, and cultural and contextual challenges.

A vast number of TVET educators in Bangladesh are motivated to use Computer Skills in education (Raihan & Shamin, 2013). As a developing country, Bangladesh has experienced many constraints in implementing Computer Skills in the education system. These constraints include: lack of computers for students, insufficient knowledge of Computer Skills by educators caused by the low incentive for educators to undertake Computer Skills training, and constant electricity load shedding.

A study in the UK showed that the main activities used in teaching and learning were e-mailing, word processing and searching the internet (Conole, de Laat, Dillon & Dary, 2006). The European Computer Driving License (ECDL) is one of the qualifications from the British Computer Society which is accepted internationally for its credibility. Hence, emphasis by Rickaby (2007, p. 10), that:

The European Computer Driver’s License is developed to facilitate a foundation of competence in the skill of information technology and managing of a personal computer. This incorporates the use of data bases, the use of the Internet, presentation and e-mail.
This would then imply that anyone completing the ECDL course would be equipped in all areas of Microsoft Office. Furthermore, it must be noted that the ECDL and the International Computer Drivers Licence (ICDL) are the same. The European Computer Driver’s License is simply the same ICDL which the British Computer Society have now laid claim to. According to Rickaby (2007), the ECDL course would represent a benchmark for equipping teachers with the necessary skills for teaching Microsoft Office. As ECDL is an internationally recognised qualification, it would provide a benchmark for skills measurement across the globe. This recognition, would further mean that educators across the globe can be assured that the standard of delivery is the same based on the above mentioned global benchmarking (ECDL Foundation, 2011).

Australia was always in the forefront regarding higher education specialising on the preparation and mentoring of educators. The consequence of not providing the required support would be lack of Computer Skills knowledge (Johnson, 2012). Institutions can learn from Australia for supporting educators in Higher Education in South Africa.

Tools that facilitate comparing strengths and weaknesses in lecturers’ content knowledge are critical for South African (Rauner, 2005). In countries such as Germany, a form of diagnostic testing of lecturers’ knowledge is way advanced compared to South Africa, and allows for comparison of lecturers’ competencies with regard to content knowledge.

2.2.2 National teaching of computer skills

Studies have noted that technologies, like computers, provide rich educational experiences (Zirkle, 2002). Hence, many scholars propose using computers in education (Day, Raven & Newman, 1998). These scholars discovered that students who were taught via computer technology performed better compared to students whose education experience was only based on the traditional method of teaching.
The literature reviewed echoes Brown and Czerniewicz’s (2008) report confirming the use of Computer Skills for teaching and learning in South African HEIs, with some institutions still lagging behind. Regarding HEIs in South Africa, the most frequently used Computer skill was finding information (Internet) and the use of word processing (Ms Word). The literature reviewed is consistent with other findings like those in the United Kingdom regarding the main activities undertaken in Computer Skills. The SAGs recommends that the “ICT lecturer must be computer literate and have an advanced knowledge of the following programmes: Word processing, Spreadsheets, Presentation and knowledge of the Internet and e-mail” (DoE, 2013, p.13).

In a study conducted by Ntshaba (2012) in King Williams Town, educators experienced a lack of confidence in teaching due to insufficient content knowledge. Jones and Moreland (2004) conclude that for educators to teach successfully, they should have technological, pedagogical and content knowledge of the subject taught. Hence, this would imply that the lack of content knowledge will result in educators only focusing on learning areas that are known to them, to the detriment of students (Pool, Reitsma and Mentz, 2013). The result of lecturers’ scarce technological, pedagogical and content knowledge would suggest that a benchmark system should be used whereby lecturers’ progression in Computer Skills is recorded. In South African literature, there is a gap concerning the competency assessment for lecturers. These tools to employing a benchmark system are evident and in use in countries like Germany. Hence, the strong recommendation by bench markers, for lecturers to complete the International Computer Drivers Licence (ICDL), as the ICDL will provide South Africans with a form of diagnostic testing of lecturers’ competencies in Computer Skills.

There are five components that make up the complete ICDL course. These components are word processing, presentations, spread sheets, internet and e-mail. The ICDL course would indicate that the lecturers of Computer Skills have an up-dated and relevant qualification (Sami, 2007). Furthermore, the qualification is internationally recognised and provides a good foundation for Computer Skills which assists lecturers to be confident and competent in their
computers content knowledge (CK) (Sami, 2007). This would help lecturers in delivering their instruction and pedagogical knowledge (PK) of the NCV curriculum competently.

Training lecturers to use computer aided devices in teaching delivery may assist students to embrace technology. Training is essential as it gives teachers the advantage to spearhead the curriculum (Hough & Neuland, 2014). Students enjoy the use of computers and therefore computers can be used as a successful teaching tool, for example Blogs (Majid, 2014). Studies have indicated that students are knowledgeable about the use of computers and also the dangers associated with the use of computers.

2.3 TVET EDUCATION (LEARNER-CENTRED)

Ngubane-Mokiwe (2014), suggested that TVET education need to respond to the labour market and centre on the student. The focus on the learner rather than the educator is in line with the suggestion for TVET Colleges to move away from an out-dated understanding of their purpose, to becoming more resilient and adaptable (Kraak & Hall, 1999). South Africa can be likened to Australia that there are hindrances to TVET Colleges’ success, such as, insufficient resources; lack of teaching approaches and inappropriate TVET skills of lecturers (Goldney, Murphy, Fien & Kent, 2007). The issues highlighted in Goldney et al. (2007) report are parallel to the South African landscape where educators are finding difficulty in moving from traditional teaching approaches to more contemporary approaches. The learner-centred approach is used in NCV because it incorporates the three important elements of learning outcomes (Khoza, 2013bQ). These three elements are made up of intended, implemented and attained outcomes. The intended outcomes constitute the Learning outcomes (LOs) in the Subject and Assessment Guidelines (SAGs) of Life Orientation. The SAGs is also a policy document for NCV. It is what is planned before learning begins. The implemented outcomes would be what occurs during learning. Lastly, the attained outcomes would be observed from students and assessed after learning has occurred. Hence, it suggests that learning outcomes are meant to be learner-centred rather than teacher-centred.
Although, it is suggested by Anderson and Elloumi (2004) that all three approaches namely; teacher-centred, content-centred and learner-centred approaches should be incorporated, none of them should be used in isolation. If the lecturer wants a suitable approach for presentation, then the teacher-centred approach would suffice. Alternatively, if the lecturer wants to grade content, then the content-centred approach would do. If the lecturer wants to contextualise learning then the learner-centred approach would be adequate.

2.4 TVET EDUCATION (LIFE-LONG LEARNING)

The then Minister of Education Naledi Pandor noted in the FET Colleges Bill (RSA, 2006 p.1) that:

_We have redesigned the College sector so that from next year they will be able to offer intermediate and high-level skills to students from the age of 16 to mature adults. They will be able to give effect to our long held ideal of providing lifelong learning. To fulfil this goal, Colleges have to be a different type of institution to the FET schools._

Lifelong learning also adds to sustainable living which is a SAGs requirement in the TVET institutions NCV curriculum. Vocational education and training must provide training to people to allow them to be self-sustaining (Powell, 2012b). Hence, TVET institutions, via LO Computer Skills, should be the training grounds that will ensure students employability in industry. Some researchers such as King (2012) and McGrath (2012) question the relevance in the workplace of TVET institutions considering that these institutions have a long existence, but very little success in skills training for student employability. A solution is offered by McGrath (2012) who recommends “reimagining the purpose” (p. 36) by TVET institutions for education that provides employability. Bonvin and Galster (2010) posit, that expanding employability for people, results in them being more sustained in the workplace. There is then need for lifelong learning to ensure sustainable employability, and training in practical skills is pivotal.
Training is essential because it helps educators to be ahead of the curriculum (Hough & Neuland, 2014). TVET institutions provide an education that caters for practical skills, and in this study it is Computer Skills (Finch & Crunkilton 1999). One of the key researchers who are instrumental in curriculum studies is Jeanne Gamble. She discusses the curriculum issues at a theoretical level to better understand knowledge in curriculum studies (Gamble, 2006). In addition, she explores the knowledge required via the curriculum for employment of students in the workplace and the tensions between theory and practice in the curriculum. Gamble argues for the curriculum’s need to focus on employability. In conclusion, she recommends that alternative forms of knowledge needed for employability help when rethinking the curriculum and for those who should be teaching the curriculum.

Most of these studies have sought to help TVET institutions to provide practical skills, like Computer Skills. What is clearly lacking in these studies are the voices of lecturers who teach practical skills, like Computer Skills. There, is therefore need for this present study, which explored lecturers’ experiences of teaching Computer Skills at a TVET College. The NCV focus is on lifelong learning that gives priority to the skills and demands of the South African economy with the goal to provide further education and training and to ensure employment and productivity (DoE, 2007).

2.5 TVET EDUCATION (AUTHENTIC LEARNING)

Learning with technology incorporates principles of authentic learning (Reeves, Herrington, & Oliver, 2004). There are two components in the incorporation of computer technology in learning. First, is the impact of technology to alter pedagogical practices. Second, is the incorporation of computers as facilitators of learning.

Technology should contribute to cultural and social interactions to allow for positive learning outcomes. The National Curriculum Vocational (NCV) education is characterised by a broad approach to education and training with a
change from a theoretical curriculum to a curriculum in which both theory and practice are combined. Authentic learning is stressed in the Subject Guideline which states that the student must encounter an authentic community (DoE, 2013). Authentic learning allows learners to connect their learning area with community issues, which also enhances the practicality of the curriculum. For Life Orientation to facilitate learning, it should use real activities as “Authentic activities have real-world relevance” (Herrington, Reeves, & Oliver, 2004, p. 3).

Theron’s (2008) study was based on students, especially those who lived in townships. The focus of his study was on the LO teachers’ knowledge of the students’ backgrounds and how that influenced the manner in which the teacher interacted with the students. The study’s findings were that the subject Life Orientation requires that students should be taught in a holistic way. This concurred with the Subject Guidelines (DoE, 2013b) which stated that students must be exposed to authentic issues that will create an authentic platform within which learning can take place.

Amory (2010) suggests that learning environments must provide collaborative opportunities that support teaching and learning. A shift needs to be made from behaviourist and instructionist approach, which perpetuate passive behaviour, but rather to a learner-centred approach which produces individuals and communities that are active participants.

2.6 THEORETICAL FRAMEWORK

2.6.1 TPACK framework (technological, pedagogical and content knowledge)

The TPACK framework is an extension of Shulman’s formulation of “pedagogical content knowledge” (PCK). Historically, teacher knowledge has focused on content knowledge of the educator (Shulman, 1986). With time, teaching knowledge has moved to pedagogical knowledge to the detriment of content knowledge (Ball & McDiarmid, 1990). Shulman treated pedagogical and content knowledge as two exclusively separate components (Shulman, 1987). The result of separating the two components was a focus on only one of the
components in teacher education. However, Shulman advocates for an approach that includes both pedagogical and content knowledge. This explains the introduction of the two knowledges based on their inseparable relationship. Although Shulman did not highlight technology as a component and its relationship to pedagogy and content, he did not deem it irrelevant. When he first introduced his notion of PCK, issues around technology had not gained momentum as they have today. Much has changed and new technologies have come to the front line of educational discourses. Technology has changed the arena of the classroom and continues to do so. The new technologies include both hardware and software (Mishra & Koehler, 2006).

In their five-year study, Mishra and Koehler (2006), focused on lecturer development and discipline development in higher education. Their study has enlightened theory and practice, with an added advantage of bringing together theory and practice. The target group consisted of educators and practitioners, as well as researchers and theoreticians. They debate, briefly, how thought, through pedagogy implementations, need a concise type of knowledge that they refer to as Technological Pedagogical and Content Knowledge (TPACK). Therefore, Mishra and Koehler (2006) highlight the relationship that exists between the three main parts of the learning environment namely; technology, pedagogy and content.

The lecturers’ experiences of teaching computer skills are displayed by using the Technological, Pedagogical and Content Knowledge (TPACK) framework. According to studies teaching Computer Skills requires appropriate theories (Khoza, 2013b). Hence, teaching is not centred on technology but around the teaching approaches used (Amory, 2010). These teaching approaches are used to combine the course content with suitable technology (Mishra & Koehler, 2006). For this study TPACK is the appropriate framework as it is relevant for teachers who teach Computer Skills. The teaching of Computer Skills (technology) needs relevant theory, hence the use of TPACK.

Frameworks and theories assist us in understanding the world. The frameworks provide us with theories with which to understand phenomena closely. The
TPACK framework allows the researcher to explore the teaching of Computer Skills, which includes technology, pedagogy and content knowledge. The TPACK framework helps to combine all three components. TPACK protects against the teaching of Computer Skills (technology) separately, combines all three areas of technology, pedagogy and content knowledge. Mishra and Koehler’s (2006) TPACK framework is not a new notion, as other scholars have also argued in favour of TPACK. Studies are in agreement that technology cannot be separate from pedagogy and content (Hughes, 2005; Keating & Evans, 2001; Lundeberg, Bergland, Klyczek, & Hoffman, 2003; Margerum-Leys & Marx, 2002; Neiss, 2005; Zhao, 2003). What is different about Mishra and Koehler’s (2006) approach is the precise nature of the link between technology, pedagogy and content.

2.6.1.1 Technological knowledge

Technological knowledge (TK) is about the use of overhead projectors, screens and any modern device (computers) used in the classroom. In addition, TK includes the implementation of electronic computers and computer hardware and software to manipulate, transmit, secure and restore data (Rickaby, 2007). Atkinson and Mckay (2007) also suggest that technology employs electronic technology that generates, stores and processes data.

A study by Khoza (2013a) identifies three types of resources (materials) used in the teaching and learning process, namely; hardware, software and ideological ware. Hardware would include any object, tool and machine used in teaching. Hardman (2008, p. 25) posits that “tools mediate thought during the interaction between the subject and the context within an activity”. Software incorporates any material used together with tools to display information. Ideological ware are “things that we cannot see and touch in education, such as theories and others” (Khoza, 2015a, p.1). These studies indicate that teachers use all three as a medium to disperse knowledge, but it is within the ideological-ware that learning takes place. Learning is not about teaching and learning resources where students learn from learning resources, but about ideology where learners learn with resources (Amory, 2010). Other resources as stipulated by
the Subject Guidelines document (SGs) are well-equipped classrooms, media centres, and a suitably equipped computer room. Under consumables are; files for projects, printing paper, cartridges for printers. These selected resources, as outlined by the Subject Guidelines document, are both relevant and practical to the teaching of Life Orientation in order to ensure the sustainability of the curriculum.

As technologies are constantly changing, the educator is required to keep abreast of these changes in Technological knowledge. This calls for educators to rethink their pedagogical knowledge (Peruski & Mishra, 2004; Wallace, 2004). In order for educators to teach, they must find ways to link educational instruction with sufficient computer technology, mainly the internet. Hence, technological and pedagogical knowledge are thus far inseparable in TPACK.

2.6.1.2 Pedagogical knowledge

Pedagogical knowledge (PK) incorporates the teaching method and practices of conveying the content knowledge to students. Hence, this will indicate the lecturers’ reasons for their teaching. (Why are lecturers teaching?) Berkvins et al. (2014) indicate that teaching reasons are categorised into pedagogical/personal reasons, societal/social skills development reasons, and content/metacognition development reasons. Personal reasons would encompass knowledge that is unique to each lecturer and which holds personal significance (Schiro, 2013). TVET College lecturers work with two curricula which in itself can be very confusing when trying to teach. As in any given working day, lecturers have to switch from teaching one curriculum NCV which is driven by learning outcomes to another curricula Report 191 which is driven by subject content.

Goals are made up of aims, objectives and outcomes. A clear distinction needs to be made between aims, objectives and outcomes. The aims, as suggested by the Subject Guidelines document, are drawn for all teaching intentions and are long-term goals (DoE, 2007). The teacher’s intentions in a learning area are referred to as the aims of a learning area (Kennedy, Hyland, & Ryan, 2006).
These are broad general statements which can be seen as desires for teaching. It is imperative that the aims be documented from the teacher’s perspective (Kennedy et al, 2006). Objectives are not as broad as aims, but rather, are specific intentions of the lecturer. These objectives are also precise statements of education, and can be noted as the action of educating. Outcomes are learner-centred and TVET education focus is around the learner-centred approach.

The National Certificate (Vocational) Life Orientation curriculum is an outcomes-based approach to education. A learning outcome (LO) is a statement of that which the student is expected to grasp at the end of learning. Every module has its separate LOs that are prescribed in the Subject and Assessment Guidelines (SAGs). Educators use learning outcomes to teach their modules (Moon, 2002). Moon (2002) also states that learning outcomes rather than objectives facilitate learning. Objectives gravitate around the lecturers’ intention rather than the students’ intentions. The consequence of lecturers using learning outcomes to teach their modules is that learning outcomes can be observable and assessed by lecturers.

In a study on outcomes of computer technology, Khoza (2001) suggests the need for linking learning outcomes to assessment methods. Assessments can never be over-emphasised in the learning and teaching process. As far as the learner is concerned, “the assessment is the curriculum” (Ramsden, 2003). The tools for assessing students as outlined in the Assessment Guidelines document of Life Orientation are rubric, checklists, task lists and rating scales (DoE, 2013a).

Assessing whether lecturers have the required pedagogical knowledge will depend on their qualifications. The focus should be on lecturers’ pedagogic qualifications. Literature suggests that there is a lack of pedagogy on how to teach Computer Skills and for creating lifelong learning. The literature reviewed shows a gap in understanding the pedagogy that is applied in the technical and vocational institutions. The pedagogy is referred by Shulman (2005) as the...
“signature pedagogies”. Shulman (2005) refers to the common pedagogy of technical and vocational institutions.

2.6.1.3 Content knowledge of curriculum

The content to be taught is covered in content knowledge (CK). This would include theories, facts and concepts concerning their learning area. Educators who do not have the required CK can erroneously misguide students in their teaching (Ball & McDiarmid, 1990). In view of the fact that lecturers mainly work with knowledge, one of the main areas that needs to be researched would be the nature of content knowledge.

Taylor (2010) reports that some teachers would not pass the assessment for which they are supposed to be assessing students on. It would then suggest that teachers’ content knowledge is limited. Teaching Computer Skills requires a competent lecturer in the computer field, and in possession of an updated computer qualification such as in the ICDL certificate (DoE, 2013b). If adequate training is not received in Computer Skills by educators, Life Orientation may not reach its goal of equipping students with Computer Skills. In LO, the assessment guideline makes use of formative assessment and summative assessments. Kennedy et al. (2006) sees continuous assessment as inclusive of both formative and summative assessment. Learning outcomes should be drawn up to include both summative and formative assessment methods. A study is needed to ascertain precisely what lecturers’ experiences in teaching Computer Skills are.

2.7 CONCLUSION

This chapter provided an overview of the related literature of the study. This chapter began with a background of a literature review, followed by a discussion of the teaching of Computer Skills internationally and then nationally. A discussion was then presented on TVET education under the following headings; learner-centred, life-long learning and authentic learning. In
conclusion the theoretical framework of the research study; the Technological, Pedagogical and Content Knowledge (TPACK) was discussed. The above review demonstrates clearly the need for the study. The need for the study is the paucity of research on experiences of Level 2 Life Orientation Computer Skills lecturers. The following chapter presents the research and methodology design for the study.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 INTRODUCTION

In the previous chapter, a review of both international and national literature on teaching of Computer Skills was presented. This chapter provides an in-depth description of the methodology which was incorporated in the study. It includes a description of the research paradigm, design and research approach that were adopted in this study. A detailed view of methods employed to generate data is also discussed. In conclusion, a discussion on the analysis procedures and methods used is included. The ethical considerations of this research are also included in the conclusion of this chapter.

3.2 RESEARCH DESIGN

Research design is the precise and on-target employment of research methods where various tools and procedures are incorporated to execute different tasks (Mouton, 2001). The section begins by discussing the paradigm used in this study which is the interpretivist paradigm. This study also employed a qualitative research approach, within this paradigm. This section also discusses how I conducted the research and how the various stages of the research were approached and completed.

3.2.1 Interpretive paradigm

The way we view the world is explored by a paradigm. Punch (2013) observes that paradigms employ various models, ideals and values that researchers have in agreed on concerning research. A paradigm gives the impression that there is a chain of thoughts or images one uses to see the world through (Guba & Lincoln, 1994). The interpretive paradigm was used to underpin this research. In using this paradigm, the researcher’s purpose was to understand and describe meaningful social action about how people comprehend their circumstances
and experiences (Christian, Bertram, & Land, 2010). In using the interpretive paradigm, I wanted to understand experiences of Level 2 lecturers in teaching the Computer Skills component in Life Orientation. The paradigm sees truth as multiple and allows no room for generalisation of findings as the truth “recognises multiple interpretations as equally valid” (Christian et al., 2010, p. 23). I therefore, used this paradigm to give a voice to lecturers of Life Orientation on the experiences that they have in the classroom. The purpose of the study was to explore Level 2 Life Orientation lecturers’ experiences in teaching Computer Skills at a TVET College.

3.2.2 Qualitative approach

This research study is qualitative in design. Qualitative research takes place in the normal settings of the participants, to ensure that the data generated would be as authentic as possible (Merriam, 1998). McMillan and Schumacher (2010) assert that in the qualitative approach, data is generated on naturally occurring issues. I chose lecturers as participants in order to ascertain their perspectives and experiences because qualitative studies are about understanding the reality from the views of those living in it (Patton, 2005). In this study, I made use of interviews to understand the participants’ experiences which varied from one lecturer to another. These experiences were based on their naturally occurring context, which is the classroom within the college, so as to construct meaning from the lived experiences of lecturers.

The advantage of qualitative research is that the participants are able to bring various life experiences and conceptions into the study (Newby, 2010). Evidence in the form of data generated from interviews of the participants’ realities can be obtained. The conception of the participants’ nature of reality cannot be generated through quantitative research, as it lacks the personal aspect (Essack, 2011). In the study, the personal nature of qualitative research allowed the participants to provide thick descriptions of the phenomena when interviewed. Another advantage of using the qualitative approach was that it enabled me to get a deeper meaning of what experiences lecturers had in the
classroom, providing rich quality data. Hence, the qualitative nature of the study provided a deeper insight, as it explored how Life Orientation lecturers taught in the classroom. In a qualitative approach, the researcher aims to interpret the data by using evidence from the data and literature (Henning et al., 2005).

3.3 RESEARCH METHODOLOGY

This section describes the methodology used in this study. A case study was the chosen methodology for this study. This section provides an outline on the chosen methodology.

3.3.1 Case study

In this study, I wanted to understand why LO lecturers have the experiences that they do in teaching Computer Skills, hence a case study was the appropriate methodology. A case study can be defined as a wide expedition of a certain case in order to obtain data (Rule & John, 2011). The case study is defined by the researcher’s fascination in a particular case and not by a methodological choice. Yin (2014) asserts that case studies are used to study the ‘case’ in its real world context. In incorporating a case study, it was interesting for me as the researcher to ascertain how lecturers’ experiences influence their teaching of LO Computer Skills in NCV, as my chosen case. The ‘case’ was the experiences of four LO Computer Skills lecturers at a TVET College in a township. It was not this study’s intention to generalise about the findings, but to obtain in-depth understanding of the LO Computer Skills lecturers’ experiences of teaching LO Computer Skills.

According to Cohen, Manion and Morrison (2011), a qualitative case study can be defined as an in-depth, wide description of a case. The case study focuses on experiences rather than results, on exploration as opposed to confirmation. Hence, emphasis is placed on interpretation, meaning and understanding, rather than experimentation and deduction (Cohen, Manion and Morrison, 2011). I chose a case study in order to gain an in-depth understanding of
experiences of LO lecturers who taught Computer Skills. Cohen et al. (2011) highlight some of the disadvantages of case studies, such as case studies not being open to cross checking and being subjective, personal and selective. This study had a small sample and hence the data generated and findings were personal, contextual and subjective, and could not be generalised.

3.4. Data generation

This study made use of semi-structured interviews as a method of data generation to answer the following questions:

3.4.1. What are lecturers’ experiences of teaching Level 2 LO Computer Skills in the NCV curriculum?
3.4.2. Why do lecturers have these experiences of teaching Level 2 LO Computer Skills in the NCV curriculum?
3.4.3. How do lecturers’ experiences of teaching Level 2 LO Computer Skills in NCV impact their teaching?

The semi-structured interview method allowed me to obtain data on how lecturers experienced teaching Computer Skills at a TVET college. The data was generated from the interviews which occurred at the college where the lecturers were at ease, as it was a familiar environment for them.

A voice recorder was used to record interviews with participants. Since the participants were informed about confidentiality and anonymity of the study, the recording did not produce any mistrust.

3.4.1 Semi-structured interviews

An interview is a flexible tool of data generation which employs verbal and non-verbal channels of communication to be used (Cohen et al. 2011). I made use of interviews in my research as it is suggested that interviews are one-to-one direct conversations with participants, making use of questions, which are designed to extract detailed responses (Kvale, 1996). Semi-structured
interviews allow the researcher to list categories and questions with opportunities for open-ended discussion of items.

Semi-structured interviews are those centered around a specific area, while still allowing flexibility, in depth and scope (Dicicco-Bloom & Crabtree, 2006). The use of open-ended questions allowed me the opportunity to probe ideas and views from my participants (see Appendix D Semi-structured interview schedule). Probing is a skill used by the researcher to discover alternative avenues that were not first thought of by the interviewer or interviewee (Gray, 2004).

One advantage of semi-structured interviews is that they allow for open-ended questions as opposed to structured interviews which incorporate mainly closed questions (Saunders, 2000). Another advantage is that they allow the researcher to probe and explore items to get above the normal responses of structured interviews. As an interviewer, I was able to obtain additional data, through probing. Furthermore, probing was not the same for all participants since every participant had a different experience.

When conducting the semi-structured interviews, I had much more liberty than that of a researcher conducting a structured interview in that I did not have to follow a detailed research guide (Kanjornboon, 2004). Due to the liberty that I had during the interviews, I was able to get different perspectives from participants on the experiences they have in teaching Level 2 LO Computer Skills. These perspectives gave me deeper insight into participants’ experiences. This study concurs with Polzer’s (2007) idea, he terms concerning research ‘from below’, meaning getting knowledge on the experiences occurred from the participants’ points of view. The interviews were face-to-face and therefore, non-verbal communication by the participants was easily identifiable. Furthermore, I was able to understand the lecturers’ views about their teaching experiences at a TVET College. The evidence was provided while communicating with participants and from facial expressions by participants. Since some views were not clearly put across by participants, the non-verbal gestures, which helped in making sense of the data. Creswell (2012) states
that interview data may be deceptive and provide viewpoints anticipated by the researcher.

Critical conversations on lecturers’ teaching experiences provided important information for my study as they expressed important issues they experienced. Emphasis was placed on the conversations rather than the questions. Moreover, questions unfolded in a conversational manner resulting in participants expressing important issues they experienced (Longhurst, 2003). The critical conversations, achieved through open-ended questions and through probing, allowed me to establish good relationships with my participants. Burdick and Sandlin (2010) state that the use of critical conversations create inter-personal relationships. These inter-personal relationships are a result of the in-depth information provided by participants.

Disadvantages of semi-structured interviews are that they are commonly seen as ‘easier’ (Wengraf, 2000, p.1). Novice researchers, like me are of the view that there is not much planning required for semi-structured interviews. This could not be further from the truth, as I spent much time planning my interviews. Although they are semi-structured, they must be prepared and planned. In comparison to structured interviews, semi-structured interviews need much work to be done in order to be successful. Firstly, they are much longer to complete compared to structured interviews which are fairly quick to complete. Secondly, more creativity and perseverance is needed by the interviewer during the interview session as semi-structured interviews allow for several themes and questions with opportunities for open-ended discussion of items (Saunders, 2000). Hence, the valuable themes I derived from discussions, compensated for the time needed for creativity and perseverance. Lastly, much more time for transcription is needed after the interview session (Johnson & Onwugbuzie, 2007) as semi-structured interviews are able to generate more data than a structured interview can (Maree, 2007). Moreover, I was able to endure the tediousness of semi-structured interviews as I obtained information rich data that would not have been possible with structured interviews. Also, the researcher needs to guard against obtaining information that is not relevant to the topic researched. The ability to distinguish what is relevant and irrelevant is
of vital importance. I was able to successfully sift through data and find relevant information for the study. Hence, the challenges encountered had little impact on the study.

3.5 SELECTION OF PARTICIPANTS

3.5.1 Sampling

Sampling is the procedure of selecting a manageable number of participants to be part of the study (Dawson 2006). The number of participants chosen for this study was based on the rationale that in the qualitative approach, researchers are concerned with quality and not quantity. It is not the number of participants that is important, but rather the rich information that can be obtained from participants.

The four most accessible Level 2 Computer Skills Life Orientation lecturers were conveniently selected for this study. It is suggested by Bauer and Gaskell (2003) that qualitative research steers clear of large numbers but rather utilises small numbers that produce data of quality. My participants were given pseudonyms. Cohen, Manion and Morrison (2011) note that purposeful sampling is a method of choosing participants that are deemed to be similar to the sample researched. McMillan and Schumacher (2010) concur when they state that ‘knowledgeable’ participants about the phenomena must be selected. Therefore, for this study, I selected four lecturers who were familiar with phenomenon researched and were from the same environment. Furthermore, convenient sampling allowed me to receive the required data and participants were willing to participate as they were experts in their field.


3.5.2 Participants’ profiles

TABLE 3.1 Illustration of participants’ profiles

<table>
<thead>
<tr>
<th>PSEUDONYMS</th>
<th>QUALIFICATION</th>
<th>SUBJECTS TAUGHT</th>
<th>EXPERIENCE</th>
<th>GENDER</th>
<th>AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs Sithole</td>
<td>B.ED. HONS</td>
<td>-LO LEVEL2 (NCV)</td>
<td>21 years</td>
<td>FEMALE</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Public Finance (Nated)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs Mpisi</td>
<td>NPDE</td>
<td>-LO LEVEL2 (NCV)</td>
<td>7 years</td>
<td>FEMALE</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Mathematics (Nated)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms Khan</td>
<td>ACE</td>
<td>-LO LEVEL2 (NCV)</td>
<td>16 years</td>
<td>FEMALE</td>
<td>36</td>
</tr>
<tr>
<td>Mr Guy</td>
<td>PGCE</td>
<td>-LO LEVEL2 (NCV)</td>
<td>12 years</td>
<td>MALE</td>
<td>42</td>
</tr>
</tbody>
</table>

TABLE 3.1. All four participants taught Life Orientation (Computer Skills) Level 2. Three of the participants were females and one was male. The table shows the varied levels of qualifications that the participants had. At the time of the study, Mrs Sithole had a Bachelor of Education Honours (B.Ed. Hons.), Ms Khan an advanced Certificate in Education (ACE), Mrs Mpisi a National Professional Diploma in Education (NPDE), and Mr Guy a Post Graduate Certificate in Education (PGCE). The youngest lecturer was 30 years old and the oldest was 44 years old.

3.6 DATA ANALYSIS PROCESS

The study used a qualitative method and the data from semi-structured interviews were analysed using themes. Identifying themes has its place in qualitative research. Themes are a starting point in a report of findings from a study (Bazeley, 2009). Any processes that are used to analyse data should be described at length, so as not to leave out any important data (Creswell, 2012).
My data analysis included; reading and rereading of data, coding and identification of themes, and also naming of themes.

To begin with, I had to make sure that all transcripts of interviews were available. The transcription process was very time consuming, evident in the many hours I spent getting the process complete. Following which, I had to carefully read all transcripts and make sense of them. Not all participants were clear as some of their views could not be clearly interpreted. I had to return to participants at a later stage and get them to check their data, so as to see if the data captured their true meaning, in the form of “member-check” (McMillan & Schumacher, 2010, p.3). Going further, I had to reread the data to attach meaning to it in order to distinguish what was relevant and irrelevant. For the purpose of the study, I used thematic analysis to analyse data. According to Rubin and Rubin (2011), analysing data involves identifying themes and patterns in the data. Rubin and Rubin (2011) also argue that data can be analysed in various ways leading to different findings. Guest, MacQueen and Namey (2011) suggest that in thematic analysis one has to go beyond measuring exact statements and words and choose both explicit and implicit views from the data. It occurs when themes are chosen from the data generated. The next step was to code the data and place them into categories. The chosen recurring themes obtained from the data were used to understand the lecturers’ experiences in teaching Level 2 Life Orientation Computer Skills. The identified themes were; familiarity and non-familiarity with approaches, availability and unavailability of adequate resources, lecturer training and professional development supported by DHET, teaching experiences, time allocation for teaching and learning, lecturer communication and collaboration, computer skills as a vocational subject, subject specialisation and status of computer skills in comparison to gateway subjects in NCV.

3.7 ETHICAL CONSIDERATIONS

Ethics ensure moral guidelines for researchers providing a method to conduct research in a morally acceptable manner (Struwig, Struwig, & Stead, 2001). In addition, Christian et al. (2010) observe how pivotal ethics is in research as it
assures the protection from any damage that could be incurred by the research. To ensure the participants were protected, I had the participants to sign a consent letter; this ensured that participants were in agreement to take part in my research (see Appendix B). Moreover, I got participants to make an informed decision regarding them wanting to take part in my study or not. I provided an explanation of the purpose of my study which was to explore lecturers’ experiences on the teaching of Level 2 Computer Skills at a township TVET college. Providing a purposes for the study was consistent with literature which recommend that the purpose of the study must be fully disclosed to the participants to allow for informed consent (McMillan & Schumacher, 2010). Furthermore, McMillan and Schumacher (2010) suggest that ethics from a moral stance, concerns what is right or wrong. A written and verbal notification (informed consent) was issued to participants ensuring them of anonymity and confidentiality concerning their voluntary participation in the study. To ensure anonymity, as stated above, I used pseudonyms to replace the participants’ actual names. According to Creswell (2014), the participants’ real names should not be used due to ethical considerations. In addition, participants were informed that they could withdraw at any stage of the study. Confidentiality was assured as all notes, transcripts and audio recordings and any other data was stored in a safe place.

Moreover, permission was also obtained from the principal of the college where the research was done (see Appendix C). The use of the voice recorder as a data generation tool and the purpose of the study were explained to the participants. This resulted in participants agreeing to be recorded. In addition, participants indicated their approval to take part in the study before the research commenced. Approval was also obtained from the university to conduct this study.

3.8 TRUSTWORTHINESS AND CREDIBILITY

Validity can be described as the measures at which the researcher describes the aims of the research (Wilig, 2001). These measures often include numbers which are often not ‘validated’, in qualitative research. However, in qualitative research, instead of validity; trustworthiness in relation to credibility,
transferability and dependability is often used (Punch, 2013). “Trustworthiness is the awareness of the researchers’ assumptions, pre-dispositions and influence on the social situation” (McMillan & Schumacher, 2010, p. 374). To ensure trustworthiness of the data, all conversations were audio recorded. I made every attempt not to allow my own “bias” ideas to influence the study. Christian (2010) suggests that trustworthiness also confirms the interpretation of the findings to “reflect the reality and lived experiences of the participant” (p. 49). The aim of a sound research design is to ensure results that are judged to be credible. Credibility deals with the question ‘How congruent are the findings with reality?’ Therefore, the researcher must promote confidence that accurately records the phenomena under scrutiny. Hence, credibility refers to the extent to which results are similar to reality and are measured to be reasonable and trustworthy (Fortune, Reid & Miller, 2013). To ensure credibility, I returned the transcripts to participants to confirm that it was each participant intended views and voice that was interpreted as a result of being interviewed. This was in line with Conrad and Serlin (2011), who suggest that credibility is observed when the participants confirm the interpretation and construction of the data presented by the researcher.

3.9 TRANSFERABILITY AND DEPENDABILITY

Transferability is the degree to which data can be generalised (Thomas, 2013). “The aim of any study is not to attain generalizability but to understand the phenomenon under investigation though of course the work may perhaps be transferred to similar contexts as the work undertaken” (Thomas, 2013, p. 32). Transferability allowed the readers of a study to relate to other similar studies (Shenton, 2004). I provided information on the number of participants in this study, as this is imperative to ensure transferability. Other information such as the data generation method of semi-structured interviews was also provided and discussed. Furthermore, I provided background data to establish the context of this study. A detailed description of this study was provided to enable readers to have an accurate understanding of information when comparing to other similar studies, so as to promote transferability of my study. I was consistent with the data generation method of semi-structured interviews as the
interview transcripts were typed verbatim, thus establishing dependability. More so dependability requires accurate and direct information of the study as derived from the semi-structured interviews. Hence, I generated evidence of data in this study by enclosing direct quotations received from the interviewing sessions to enable readers to assess findings. Struwig, Struwig and Stead (2001, p.169) state that “if raw data are summarised they no longer become original data”. Going further, the use of a voice recorder during interviews ensured dependability of the findings by providing evidence in the form of interview transcripts, which could be stored up to a period of five years in a safe place.

3.10 LIMITATIONS OF THE STUDY

I expected that some participants might not be willing to participate in this study as they were my colleagues and perhaps could be afraid to disclose certain information. I assured my participants of the confidentiality in data generation by getting them to sign confidentiality forms (informed consent, see Appendix B). Participants appeared to be at ease and communicated openly with me during interview sessions, hence this fear of disclosing information to a fellow colleague was reduced. The study was also done at the college, where I am presently a lecturer. This could have hindered my research in that I am also teaching at the same college. I had to remind myself to be impartial and not get personally involved in the research. Delimitation is the choices made by myself and the boundaries that I have set for the study. I chose lecturers as participants, as they also are the ideal participants. They teach at the college and hence have firsthand experience of the topic researched.

3.11 CONCLUSION

In this chapter, an exploration of the research design, research paradigm and research methodology used was provided. The study was conducted within the interpretive paradigm that followed a qualitative approach. Semi-structured interviews were the method used for data generation. Confidentiality and anonymity were guaranteed to participants as they were fully informed of the
research prior to commencement of the study. The limitations of the study were highlighted in this chapter to confirm the issues that could impact the credibility of study. Furthermore, the strengths of this study far out weighted the weakness, allowing for the purpose of the study to unfold. The implication for analysis of my study is that I need to collate the huge potentially interesting information and detect meaning of it in the form of themes. Thus, in the next chapter a data analysis and discussion is presented.
CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

In the previous chapter a discussion on the methodology adopted in this study was presented. This chapter is a presentation of data and an analysis thereof. The aim of the study was to explore the lecturers’ experiences of teaching Level 2 LO (Computer Skills) at a TVET College. The data generated was categorised to answer the following questions:

4.1.1 What are lecturers’ experiences of teaching Level 2 LO Computer Skills in the NCV curriculum?
4.1.2 Why do lecturers have these experiences of teaching Level 2 LO Computer Skills in the NCV curriculum?
4.1.3 How do lecturers’ experiences of teaching Level 2 LO Computer Skills in NCV impact their teaching?

4.2 THEMATIC ANALYSIS OF DATA

I made use of thematic analysis in analysing the research data. The Technological, Pedagogical and Content Knowledge (TPACK) framework was used as a guide to analyse data.

The findings are presented thematically, by means of direct quotations, giving meaning to the voices of lecturers and the subsequent discussions to provide ‘thick description’ (Creswell, 2014, p 41). “There is no single or correct way to analyse and present qualitative data; how one does it should abide by the issue of fitness for purpose” (Cohen, Manion, Morrison, 2007, p. 461). For this reason, the researcher must be aware of what the data analysis should accomplish so as to employ the correct method of analysis. The presentation and analysis concerns the data that were generated through the semi-
structured interviews with the participants (see Appendix D). Their responses are categorised so as to determine common patterns (Strauss & Corbin, 1998).

### TABLE 4.1 List of themes

<table>
<thead>
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<th>THEME NUMBER</th>
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#### 4.2.1 Theme One: Familiarity and Non-familiarity with Teaching Approaches

The learner-centred approach is used in NCV because it incorporates the three important elements of learning outcomes (Khoza, 2013). The approaches are; teacher-centred, learner-centred or content-centred. These approaches should not be used in isolation. If the lecturer wants a suitable approach for presentation, then the teacher-centred approach would suffice. Alternatively, if the lecturer wants to grade content, then the content-centred approach would do. If the lecturer wants to contextualize learning, then the learner-centred
approach would be adequate. However, the lecturer can incorporate all three approaches when teaching, for maximum effect.

When asked the following questions: Do you know that the NCV LO Computer Skills curriculum demands a learner-centred approach to teaching? Would you say that in your teaching you follow these demands? To what extent? The participants responded as follows:

Mrs Sithole: *So teacher-centred I would say, I teach and then students complete their tasks. Specific approaches are incorporated by those who were trained to teach Computer Skills.*

Mrs Mpisi: *Teacher-centred, as the teacher is in charge of the lesson.*

Ms Khan: *As I teach a practical subject – Computer Skills, I first lecture, then demonstrate using the data-projector. So I would say I use the teacher-centred approach i.e. behaviourism. I use the telling method and drilling to some extent to make sure the learner is being taught.*

Mr Guy: *The curriculum is centred on the teacher. I am not familiar with the learner-centred approach to teaching, as I have always taught this way.*

The data revealed that participants were not familiar with the different teaching approaches used in teaching students Computer Skills in NCV. The basis for non-familiarity with other approaches could be that participants are only familiar with the traditional teacher-centred method. The traditional teacher-centred method revolves around the teacher telling the students what to do. This is evident in Ms Khan’s response when she indicated that she uses the ‘telling method’. All participants indicated that they used the teacher-centred approach and did not indicate using the learner-centred approach, nor the content-centred approach. Mr Guy’s response that ‘I have always taught this way’ shows that he has not familiarised himself with the requirements of NCV, which is based on a
learner-centred approach. As was indicated in the discussion of the participants’ profiles, Mr Guy had been long teaching prior to the introduction of the NCV in the year 2007. It seemed that he had no intention of moving away from his comfort zone. Mrs Mpisi is the only lecturer who began teaching after the inception of NCV, but she too also stated that she follows a teacher-centred approach only.

Another point of concern regarding the content-centred approach was that none of the participants mentioned the approach. Weimer (2007) argues that understanding and knowing content and being able to teach it are two different things. This implies that, over and above their content knowledge, Computer Skills lecturers need to have approaches to effectively impart knowledge to the students i.e. pedagogical knowledge. Pedagogical knowledge (PK) incorporates the teaching approaches and practices of conveying the content knowledge to students. TPACK as the framework for this study suggests that pedagogical knowledge in the form of teaching approaches is paramount for successful teaching and learning. It is suggested by Anderson and Elloumi (2004) that all three approaches of teacher-centred, content-centred and learner-centred should be incorporated according to their advantages and used together for effective teaching. None of the approaches should be used in isolation but together they can enhance teaching. Figgs’ (2009) case studies on lecturers’ excellence in teaching, revealed that lecturers’ excellence was achieved by using learner-centred approaches.

4.2.2 Theme Two: Availability and unavailability of Adequate Resources

A resource by definition is anything that facilitates learning. The resources that are used for the effective teaching of Life Orientation Computer Skills include data projectors, overhead projectors, chalkboard, whiteboard, textbooks, computers, computer software, internet, Microsoft Powerpoint, Microsoft Access, Microsoft Word and the internet (DoE, 2007). When asked about the experiences in teaching LO Computer Skills with regard to resources available, Ms Khan responded by saying:
When it comes to the practical component, the resources are scarce and out-dated. The textbooks are not enough; students do not get enough exercises to practice on and have to share computers. With Computer Skills, you need to practice, practice and practice to develop the skill of typing, you cannot just theorise Computer Skills.

Ms Khan noted that resources were not enough and had to be shared amongst students. This would then suggest the resources are not readily available. Computers have to be shared by students. When probed further, Ms Khan also mentioned that the lack of resources during teaching did not allow students the opportunity to learn practical skills. This suggests that students were not active participants during practical lessons if they are sharing computers. Students become mere spectators and this is against the curriculum requirement which states that students must have access to all the necessary resources required (DoE, 2007). When students are involved in lessons, they take ownership of their own learning, unlike when the lecturer tells them what to do all the time and they remain passive (teacher-centred). Life Orientation Computer Skills is mainly practical in nature and the College has the task of supplying students with the resources as stated in the NCV curriculum. There is evidence in the data generated from one participant (Ms Khan) that the colleges' textbooks were not enough.

Mrs Mpisi indicated that the few resources that are available are often out-dated, when she stated that

“We mainly use old software and hardware. The computers are old and students complain that they take a long time to boot up. The programmes we use are Ms Office 2007. This is out-dated as Ms Office 2010 is the latest version. This places students at a disadvantage as when they go out into the work place they are not familiar with the latest version of Ms Office 2010. This is the major problem with resources; the fact that they are old.”
Using out-dated computer programmes such as Microsoft Office as stated by Mrs Mpisi may result in lecturers imparting incorrect, non-relevant and out-dated content knowledge to students. Ms Khan did not explicitly identify the resources that she considered as out-dated. However, Mrs Mpisi identified not only the computers, but also the programmes as well to be old and out-dated. This would imply that the knowledge students obtained at College will also be out-dated and this could result in students needing to be retrained when they go out to industry, at the expense of the employer.

Furthermore, Mr Guy mentioned that those available resources usually malfunctioned.

“The printer does not function adequately as it freezes when receiving too many instructions to print, as in examination sessions.”

All printers should be in good working condition, as all students need to print their work in the computer rooms. Furthermore, the use of different textbooks as a result of not subscribing to the same publisher could present a challenge of availability of adequate resources. There is evidence in the data generated as stated by Mr Guy:

“Resources, such as textbooks do provide a challenge, as different Colleges use different textbooks e.g. some use Macmillan, some use Pearsons and other publishers.”

According to the NCV curriculum, textbook publishers are non-specific and each college is at liberty to choose any publisher that they deem appropriate. The ideal situation would be for all colleges to use the same textbook as examiners set from a specific textbook when setting papers. Hence, if the college is using a textbook that is not used by the examiner, this places the students at a huge disadvantage when being assessed.
Computer Skills students have to work and do practical tasks/projects using their computer skills. To facilitate teaching, the lecturer requires a wide range of resources, since Computer Skills as a learning area, is practical in nature. According to the SAGs, it is the responsibility of the College to provide the student with the necessary tools to meet the National Certificate Vocational (NCV) demands (DOE, 2007). The participants shared the same view that resources had a pivotal role to play in the teaching of LO Computer Skills. Ornstein and Hunkins (2012) note that curricula can fail because of inadequate support in the form of materials and adequate equipment available. A similar case was stated by participants in this study. Jones and Moreland (2004) assert that the use of available adequate resources is one of the critical aspects that enhance the technological knowledge which is crucial for effective teaching and learning. A qualitative study conducted by Makole (2015) on implementation of the National Certificate Vocation Programme at Tshwane North FET College revealed lack of resources in the form of small classrooms, computer rooms having no internet access, under-resourced libraries and simulation rooms, shortage of lecturers and textbooks. Ali (2006) states that technical resources such as overhead projects, screens and any modern device (computers/printers) are important and contribute to proper teaching and learning. Lecturers in this study indicated that the inadequate resources impacted adversely on teaching and learning in the classroom level.

4.2.3 Theme Three: Lecturer Training and Professional Development Support

By Department of Higher Education and Training

Teaching Computer Skills requires the expertise of a competent educator in the computer field and one in possession of a computer qualification (DoE, 2013b, p. 13). The participants noted the following with regard to training:

*We have received no formal training in Life Orientation, since it was introduced in 2007* (Mrs Sithole).

*Lecturers need to receive training on an on-going basis in Computer Skills. How will our students fare in the workplace*
when we as lecturers are teaching them out-dated programmes? (Mrs Mpisi)

*Training is essential as it would keep me up-to-date with the latest programmes used in industry.* (Mrs Mpisi)

*Training is essential in teaching and learning.* (Mr Guy)

It seems that guidance by the Department of Higher Education with regards to training would positively contribute to how lecturers teach. The lecturers in this study felt that the training offered by the Department would be of a great help especially if the training was practically based as computers is a practical subject. Keeping abreast of changes in the field of Computer Skills is a necessity for lecturers since computer technologies are constantly changing. This is acknowledged in the ‘up-to-date’ training (Ms Khan) and ‘on-going’ training (Mrs Mpisi) as indicated by these two participants. The data showed that lecturers would benefit from on-going training that is work-based and up-to-date, as stated by Mrs Mpisi. ‘Work-readiness’ of students is the focus of Life Orientation (DoE, 2007). In all countries, teacher training and professional development is the cornerstone in teaching and learning (Jones et al., 2013).

To the question: In your opinion, does Department of Higher Education and Training provide any support for the training of lecturers in the teaching of the NCV in general or Computer Skills specifically? The following responses emerged:

Mrs Sithole: *No. DHET officials only arrive at the end of the year to monitor the exam process. We have no communication with DHET with regards to training sessions. I do not know of any training, if any, that is provided by DHET.*

Ms Khan: *It would be nice if DHET provided training on the actual content of instruction delivery.*
Mr Guy: *During the course of the year when teaching and learning takes place, they are not visible at all.*

Mrs Sithole revealed that DHET officials arrive at year-end. The pivotal question would be why they would arrive at this time of the college calendar? Could this mean that they value examinations more than the actual process of teaching and learning? Also are they merely concerned with the outcomes and learner performance? Lecturers, like Mrs Sithole would rightfully feel neglected by the same officials who only arrived at year-end. The lack of training was an area of concern for all the lecturers in this study. It appeared from the interviews that lecturers would be appreciative of any training provided by the Department of Higher Education officials, but such was non-existent. Instead, the lecturers, as indicated by Ms Khan, expressed their need for practical training workshops that would equip them with practical skills so that they could effectively deliver the curriculum at their college.

The findings suggested that the factors that negatively impacted or hindered the teaching of Computer Skills could be overcome if a concerted effort with regard to training by the Department officials was made throughout the year. Findings showed that DHET officials do not play a visible role with regard to LO Computer Skills instruction which concurred with a study conducted by Davis (2011), which found that the lack of support by administrators or managers was a hindrance to teaching and learning of subjects.

To the question: Are there support structures that have been implemented by the College in assisting lecturers with regard to Computer Skills? Probe - What kind of structures? the following responses emerged;

Mrs Mpisi: *We have subject committee meetings with a subject head*¹ *who will try to assist lecturers in Computer Skills.*

Mr Guy: *There are no support structures in place. The college mainly concentrates on the core subjects² of NCV and not on fundamental³ subjects which are not taken seriously at all.*

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¹ subject head—person in charge of subject

² core subjects

³ fundamental subjects
There are contradicting views in Mrs Mpisi and Mr Guy’s comments about support structures. Whilst Mrs Mpisi’s comment highlighted that lecturers supported one another, Mr Guy’s comment seemed to be positioned on a blame mode, where the College gets blamed for lack of support. Mrs Mpisi stated that support is provided by a subject head who initiates meetings in order to offer assistance to lecturers. Mr Guy has stated that the subject was not given the importance that is needed to get the required assistance.

One of the reasons for the lack of support was evident when interviewing Ms Khan when she said:

*Filler* subjects are not taken “serious” by management… (Ms Khan)

Ms Khan noted that that filler subjects were not given the required level of importance and that was confirmed when management did not take the subject Life Orientation ‘serious’: Hence, it would then suggest that officials were not focusing on the ‘serious’ nature of Computer Skills. The information gathered by the study revealed how DHET officials did not acknowledge the ‘serious’ aspect of Life Orientation. The lack of responsibility by DHET officials regarding Life Orientation as important would then filter down to lecturers and ultimately students. According to a study conducted by Jacobs (2011), Life Orientation lecturers need to take responsibility for Life Orientation, by taking the subject seriously, thereby instilling in the students an appreciation for the subject. TPACK focuses on the combination of combining all three components of technology, pedagogy and content knowledge in teaching and learning. Hence, Life Orientation must be given a ‘serious’ platform by DHET officials to facilitate training and professional development that must be supported by the Department of Higher Education and Training.

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2 core subject-main subject to learning programme  
3 fundamental subject-generic subject to learning programme  
4 filler subject- a subject used to fill-up your timetable
4.2.4 Theme Four: Experiences of Teaching

While interviewing the participants it became clear how lecturers’ experiences assist in teaching. The lecturers admitted that they relied on their experience to teach Computer Skills in the classroom. Lecturers’ experiences are based on their content knowledge and rationale (reasons) for teaching as revealed by the study.

To the question: How would you describe your role as a lecturer teaching Computer Skills to students? (Rationale-teaching reasons), the below responses were received:

Mrs Sithole: I basically rely on my own experience and knowledge when teaching.

Mr Guy: I would like to think that I am contributing to my students’ knowledge by using the practical work-based knowledge I obtained in my many years of experience in industry and teaching.

Mrs Sithole and Mr Guy relied on their teaching experience in teaching and learning of Computer Skills. Mrs Sithole relied on her 21 years teaching experience and Mr Guy on his experience from teaching in industry to facilitate teaching. Mrs Sithole was never trained to teach Computer Skills, but her 21 years teaching experience assisted her with teaching with regard to perseverance. Mr Guy’s industry experience gave him the confidence in the teaching and learning process. The data has revealed that lecturers such as Mr Guy and Mrs Sithole had their understanding of Computer Skills based on their own experiences. However, the content knowledge of the subject needed to be further elaborated. The focus of TPACK requires the successful implementation of content knowledge (CK).

Ms Khan responded with the following regarding her content knowledge:
The most obvious digital technology is difficult for me, as I am from the old school and find it hard to learn new things (Ms Khan).

Mrs Sithole responded with the following:

I did not feel confident to teach Computer Skills as I felt I will not do justice…

Both Ms Khan and Mrs Sithole’s responses indicated that they did not feel confident teaching the content of Computer Skills. These responses suggest that the participants who received no Life Orientation training were less keen to teach Life Orientation. Although Ms Khan had also not received any formal LO training, she at least covered the basics of computer practice in her ACE studies:

Many years ago during my ACE training, I received a basic computer skill certificate… (Ms Khan).

In addition, Mrs Mpisi was self-taught with regards to Computer Skills:

I have taught myself the Computer Skills component. (Mrs Mpisi)

The responses concurred with the existing knowledge proposed by Rooth (2005), who indicated that lecturers would feel bitter about having to teach Life Orientation if they did not have the adequate content knowledge. Therefore, specialists in Life Orientation were needed (Rooth, 2005; Van Deventer, 2007; Van Deventer & Van Meeker, 2008). The study further revealed that lecturers’ experiences were based on their rationale (reasons) for teaching. As suggested by Berkvens et al. (2014), the rationale for teaching should consist of personal reasons, content reasons, and societal reasons. In this study, participants’ responses only included personal and societal reasons. Not one of them responded with content reasons, as shown below:
Mrs Sithole: *They allocate you a subject just to fill up your teaching load.*

Mrs Mpisi: *I am teaching so that my students are in line with industry and am able to use the correct software when they go out to the workplace.*

Ms Khan: *Many years ago during my ACE training, I received a basic computer skill certificate… this could be the only reason I can think of for the rationale for teaching…*

Mr Guy: *I worked in industry prior to coming to the college…maybe based on my work based experience…*

Mrs Mpisi and Mr Guy both used societal reasons to explain their rationale for teaching. Both based their rationale for teaching on other sources like industry. Mrs Sithole, however, was aware that she was only given Computer Skills to fill up her time table. Ms Khan only assumed she was allocated to teach Computer Skills based on her basic Computer Skills certificate. Both Mrs Sithole and Ms Khan used personal reasons as their rationale for teaching. Personal reasons would encompass knowledge that is unique to each lecturer and hold personal significance (Schiro, 2013). Societal reasons are mostly based on general knowledge, people’s own views and verbal discussions. The reason that participants responded to only personal and societal reasons could be that NCV is a competence based curriculum where skills and higher-order knowledge is assessed. Life Orientation in the NCV programme “is underpinned by the following principles: an outcomes-based approach to education; high knowledge and skills emphasis; integrated and applied competence” (DoE, 2007, p. 2). Rodrigues and McKay (2010), however, argue that teaching experience does not guarantee that the educator will be an expert in a particular learning area. While lecturers’ experiences facilitated teaching and learning in this study, it was also apparent that these lecturers needed to develop extensive knowledge related to the nature of Computer Skills (content knowledge), technological knowledge and pedagogical knowledge (Jones, 2002).
4.2.5 Theme Five: Time Allocation for Teaching and Learning

The NCV curriculum stipulates two periods a week for the teaching of LO Computer Skills. In this study, the time stipulated for teaching the subject and learning outcomes is insufficient with no room for any deviations, in Life Orientation as per Subject Guidelines document. This is evident in the following response by Mrs Mpisi:

*Another challenge is the time allocation for teaching Computer Skills. We only have two periods a week for teaching Computer Skills, which is never enough time. In two periods, by the time the student sits down and puts on the computer and most computers are slow, about a quarter of the time is gone.*

Computer Skills is practical and students need more than two periods a week to grasp the skill. It would seem that resources like hardware and software that are old, place additional time constraints in the way of logging on and starting up, to the already limited time available for teaching and learning. Also indicated by Ms Khan and Mr Guy:

*Ms Khan: We are all so busy conducting assessments. After the assessments, we have to mark and this takes up so much of our time. As you have just completed one assessment and marked it, the next assessment is scheduled to be done.*

*Mr Guy: A lot of time is spent on setting assessments…*

When probed further, Mrs Mpisi also confirmed that assessments consume much of teaching time.
There are seven assessments for the year in fundamental subjects like Life Orientation.

The data revealed that lecturers spend a lot of time on other activities, such as conducting assessments, and the time they have for teaching is reduced. These activities would also include marking and setting of the assessment tasks as stated by Ms Khan, Mrs Mpisi and Mr Guy. Participants indicated that the time allocated for teaching was insufficient.

When Mr Guy was further probed on whether there were any challenges that he experienced in the teaching of Level 2 Computer Skills and if he could please elaborate on how he dealt with these challenges, the following was his response.

Furthermore, the students do not have a background knowledge of computers which makes it very difficult for them to understand and flow in the subject. It would be better if students came with a fundamental knowledge of Computer Skills, so as to save time for teaching.

From the data generated, it would appear that students, who do not have a basic knowledge of computers, would consume much of the lecturers' time when teaching. Lecturers have to spend more time explaining and demonstrating basic computer literacy skills. Mr Guy suggested that the basic Computer Skills knowledge by students would be a help in saving teaching time. Mrs Mpisi shared the same view that other matters that are College related consume much of the time allocated for teaching and learning. She claimed:

We have subject committee meetings with a subject head who will try to assist lecturers' in Computer Skills. The subject meetings are scheduled for once a month. Other activities on the college programme include; sports, exam sessions, assessment week. These are all time consuming.
The data revealed that non-academic activities such as meetings and sports events take up much time on the College programme, as stated by Mr Guy and Mrs Mpisi. Studies have revealed that, “such strict guidance to times stipulated for teaching and learning, tends to raise learning outcomes in the short term, but demotivates teachers and does not allow for individualised learning” (Berkvens & Van den Akker, 2014, p 18). Berkvens (2014) further states that, “formal time for learning is often still spent at school. Timetables are rather conservative, while many opportunities are ignored” (p. 18). The participants in this study indicated that the Subject Guidelines document allocated too little time for lecturers of Computer Skills to complete the content of the NCV curriculum. Furthermore, having to conduct seven assessments (formal and informal) for the year was time-consuming, so the time especially for the Computer Skills component is way too short. The pedagogical aspect of TPACK is unfavourably impacted as the lecturers do not have adequate time to implement the technological and content knowledge which are inseparable.

4.2.6 Theme Six: Lecturer Communication and Collaboration

According to the Subject Guidelines, Computer Skills can be successfully taught if all those involved in lecturing are able to partner with other colleagues as part of a team (DoE, 2007). For this reason, more can be achieved through team interaction and team work amongst the Life Orientation team rather than each lecturer working in isolation.

When participants were asked the question: Do experienced/expert Computer Skills lecturers assist their fellow lecturers in the teaching of Computer Skills?, they responded thus,

Mrs Sithole responded: Yes, every one helps wherever they can. Sometimes it is difficult to leave the computer venue and go and find another lecturer to ask to assist you. . .
Mrs Mpisi response: Yes. There is help from other lecturers if you need it. You can ask your colleagues for help with the content that you are not familiar with.

Ms Khan answered: Yes. I get assistance from whoever will assist me...’

Mr Guy indicated: Yes. I believe in ‘ubuntu’, mentoring of one another. This is used at our college, as my colleagues are always ready to help me if need be. In our African culture, we believe in lifting each other up and helping our community in assisting all who are in need of help. This principle is also applied at our place of work, where we see if someone is in need of assistance, we are committed to give support wherever it is needed.

It was evident in interviews that lecturers were also open to working with other lecturers. This was revealed when Mrs Mpisi indicated that there was help available if needed. Lecturers said that they wanted to work jointly with others to improve teaching and learning. The data generated suggested that participants were open to assist each other by communicating. During the interviews the participants revealed that they were also open to communication with other lecturers, as noted by Ms Khan who says she gets assistance from whoever is willing to assist her. Hall and Hord (1987) suggest that all must be interested in working together to improve teaching and benefit learners. Participants adhered to the Subject Guidelines by working together, to facilitate the teaching of the curriculum as they could share ideas, effective teaching methods and therefore benefit from each other. In the chosen framework of this study (TPACK), technological, pedagogical and content knowledge are inseparable. Lecturers benefited from each other by using team work as indicated by Mr Guy’s response about using his colleagues to assist him by grouping students together indicates team work. Team work helps lecturers who are struggling with Computer Skills to cope with the subject content knowledge (CK in TPACK) as indicated by Mr Guy. Lecturers who are knowledgeable
about the subject content can teach the struggling lecturers’ students together with his/her students.

Students are grouped together and the more knowledgeable lecturer of the subject content will then assist and teach the students. (Mr Guy)

Mr Guy indicated that the knowledge of subject content would determine the lecturers who are more ‘knowledgeable’. Mrs Mpisi also indicated that communication was essential amongst lecturers, when she said; We have subject committee meetings with a subject head who will try to assist lecturers in Computer Skills. This agrees with Ornstein and Hunkins’ (2012) suggestion that communication among colleagues needs to be promoted for successful teaching. All four participants expressed the need for collaboration during the individual interviews. The learning environments must also provide collaborative opportunities that support teaching and learning (Amory, 2010). This view is supported by Pillay (2012) who states that nobody should claim to have all the answers but lecturers should depend on the knowledge and insight of their colleagues in order to best support students.

4.2.7 Theme Seven: Computer Skills as a Vocational Subject

It is clear that the participants wanted to give their students hands-on skills in a specific field. Participants viewed Computer Skills as a vocational subject as they all placed emphasis on preparing students for a specific skill.

Mrs Sithole and two other participants had similar views when interviewed about preparing students for Computer Skills:

Mrs Sithole: My role is to teach a practical skill to students in LO L2. I am responsible for getting students to learn Ms Word, Ms Excel and Ms PowerPoint. Hence, I prepare students for life in the technological world. Students will also be taught how to be able to use the internet, and understand the role that it plays,
find relevant information, process it, make decisions and learn how to use computers responsibly. A high level of competence is expected of students.

Mrs Mpisi: I am teaching so that my students are in line with industry and am able to use the correct software when they go out into the workplace. I am a practical person; hence I enjoy the practical component of Computer Skills. Computer Skills are essential to students as they help students with the basic issues of computer literacy.

Mrs Sithole and Mrs Mpisi also expressed their views on the fact that students need to acquire basic skills in the form of Computer Skills. In the data generated, Mrs Sithole wants to find better ways to reach and teach the students like giving them vocational skills like Ms Word, Ms Excel and Ms PowerPoint. Furthermore, Mrs Sithole stressed the importance of acquiring extra skills like knowledge of the internet as a search engine which will assist students immensely in researching information. She says students will benefit from the knowledge of the internet as they can research information for their college projects. Mrs Mpisi expressed the view that she was teaching so that students would be familiar with the correct programmes when they entered the workplace. She also said that Computer Skills were a basic vocational skill that students needed when they went out into industry. Ms Khan also expressed the need for skills training to assist students in the work place as indicated by her response to the following question: How would you describe your role as a lecturer teaching Computer Skills to students? (Rationale-teaching reasons):

*Hence, the rationale for teaching Computer Skills is that it is a very practical skills-based subject which can help students in the work place.*

Ms Khan indicated that by her teaching Computer Skills, she would assist students to obtain skills in computers which would help in the work place. Her
emphasis was on the practical nature of Computer Skills. Vocational skills will give more students a chance for employability as students will have a hands-on skill. Jones et al. (2013) assert that in some countries, the vocational emphasis is politically driven, like when there is a strong demand for skilled labour. Likewise, it is important to note that in the South African context, regarding TVET colleges, vocational emphasis is also politically driven. The New South Africa, after 1994, prompted the new curriculum programme of National Certificate Vocational (NCV) to be implemented in 2007. The new curriculum of NCV was implemented to address the shortage of skills in the labour market and industry. This is in accordance with the department statement, “A view to strengthening it as the main route for general vocational education. The Department of Higher Education and Training is committed to the NCV” (DHET, 2012, p. 22).

4.2.8 Theme Eight: Subject Specialisation

The issue of Subject specialisations came up when lecturers were interviewed. There is evidence from the data that educator subject specialisation has an impact on the teaching of Computer Skills at college. To the question: How would you describe your role as a lecturer teaching Computer Skills to students? (Rationale-teaching reasons), Ms Khan responded with the following:

*Many years ago during my ACE training, I received a basic computer skill certificate, this could be the only reason I can think of for the rationale for teaching. I have also taught CAT at a high school. At schools the subject that is linked to Computer Skills is Computer Applications Technology (CAT). However, this is not a designated subject, meaning it cannot be used to gain access to university. Students also complete the ICDL (International Computers Drivers Licence) course during Grade 10 and 11 at basic education level. Hence, the rationale for teaching Computer Skills is that it is a very practical skills-based subject which can help students in the work place.*
Ms Khan noted that her ACE training has assisted her in teaching Computer Skills. *My Adult Certificate in Education (ACE) has greatly helped me in teaching Computer Skills. I was taught the basics of computer literacy when I enrolled for this certificate at Unisa.* Going further, Ms Khans’ experience, obtained in the subject CAT from her school teaching, assisted her in specialising in Computer Skills. The data suggests that a lecturers’ subject specialisation assists them in understanding some concepts in Computer Skills. The issue of the subject specialisations came up even when lecturers were asked questions unrelated to it. When Mrs Sithole was asked: Are there any challenges that you experience in the teaching of Level 2 Computer Skills? Please elaborate. How do you deal with these challenges? She responded;

*We have received no formal training in Life Orientation, since it was introduced in 2007, they allocate you a subject just to fill up your load. I did not feel confident to teach Computer Skills as I felt I will not do justice as the subject requires specialised knowledge which requires specialised training which I do not have.*

Mrs Sitholes’ response indicates that she sees the need for specialisation, which would help her feel confident to teach Computer Skills. Mrs Sitholes’ response was similar to Ms Khans’ response in that another subject, in Ms Khans’ case CAT influenced how she taught Computer Skills to her students. The data generated suggests, as indicated by Mrs Sithole, that the subject specialisation was beneficial as it assisted them to comprehend some Computer Skills content and be in a position to deliver this content in a Computer Skills classroom. Subject specialisation is imperative in the NCV curriculum as SAGs suggest that “Computer Skills lecturer must be computer literate and have an advanced knowledge of the following programmes: Word processing, Spreadsheets, Presentation and knowledge of the Internet and e-mail” (DoE, 2013b, p. 13). The focus of TPACK is on, amongst other aspects, the successful implementation of the content knowledge.
4.2.9 Theme Nine: Status of Computer Skills in comparison to gateway subjects in NCV

The status of the Computer Skills as a subject in the college seems to concern lecturers in various ways. There is evidence in the data generated to support the status of Computer Skills as indicated by the following responses:

Mrs Mpisi said: *Computer Skills are essential to students as it helps students with the basic issues of computer literacy. These basic Computer Skills should start early at school level so by the time they come to College they familiar with the relevant technology.* (Mrs Mpisi)

Mr Guy: *Furthermore, the students do not have a background knowledge of computers which makes it very difficult for them to understand and flow in the subject.*

Mrs Mpisi and Mr Guy recommended that students receive basic training in schools. Hence, Mrs Mpisi recommends basic Computer Skills as a prerequisite for entry into TVET colleges. From the data generated, it would appear that students who have not had any basic knowledge of computers, would consume much of the lecturers’ effort when teaching. At TVET Colleges, the policy is that students who have completed grade nine can gain entry into the NCV programme (DoE, 2007). Hence, students might not have had any basic Computer Skills training when they enrol at TVET Colleges. Furthermore, learners who are not successful at school are all encouraged by the Department of Education to go to TVET Colleges. This poses a concern in that if students did not pass Grade 10, 11 or 12 it is assumed that they are not academic and are informed to go to TVET Colleges so as to do skills training. Hence, TVET Colleges’ have an assortment of students ranging from grade 10 upwards. This would imply that the students who come to TVET Colleges without the basic Computer Skills knowledge affects the status of the subject Computer Skills. Siksin (2001) contends that school subjects like Maths, English, and Science are regarded as basic in the curriculum. These high status subjects may receive
more resources and power within the school and community than lower status subjects like Computer Applications Technology (CAT). The same argument is applicable at TVET level, as expressed by Mr Guy remark:

\[\text{Likewise with basic education, life orientation is marginalised and not given preferential treatment like subject of maths and science at TVET College.}\]

The participant, Mr Guy, revealed that the low status had far-reaching effects for their college. The Management at the college did not prioritise Computer Skills in giving the subject preferential status. Lecturers are negatively affected by the lower status of Computer Skills. Participants expressed that this could be the result of stakeholders who are not taking Computer Skills seriously at TVET level. It has filtered down to colleges as a result of Life Orientation not having the grading status to obtain points at basic education level to progress to tertiary education, as indicated by Ms Khan:

\[\text{Ms Khan: At schools, the subject that is linked to Computer Skills is Computer Applications Technology (CAT). However this is not a designated subject, meaning it cannot be used to gain access to university. Students also complete the ICDL (International Computers Drivers Licence) course during Grade 10 and 11 at basic education level.}\]

Life Orientation in the FET phase at schools does not allow learners to gain entry into University, as observed by Ms Khan. Ms Khan suggested that the status of Computer Skills is affected by the non-progression into universities. Hence, more should be done to get Computer Skills the necessary grading. Researchers like Christiaans (2006) and Rooth (2005) agree that knowledge and skills of the students determine the status of the subject. De Klerk and Van der Walt (2006) concur with the above mentioned researchers that the status of the learning area/subject depends on the priority placed on the subject.
4.3 CONCLUSION

This chapter outlines the analysis of the data generated from participants in the form of semi-structured interviews. These were analysed using the literature reviewed and the theoretical framework. This chapter also presented and analysed findings by focusing on the themes that were generated from data. Use was made of thematic analysis during the analysis of data, and numerous themes were found which are discussed in detail in the chapter. These themes were: familiarity and non-familiarity of teaching approaches, availability and unavailability of resources, lecturer training and professional development supported by Department of Higher Education and Training, lecturer experiences, time allocation for teaching and learning, lecturer communication and collaboration, Computer Skills as a vocational subject, subject specialisation and status of Computer Skills in comparison to gateway subjects in NCV. Chapter five provides a summary, conclusion and recommendations that have been made from the findings of the study.
CHAPTER FIVE
SUMMARY, FINDINGS AND RECOMMENDATIONS

5.1 INTRODUCTION

In chapter 4, the data is presented and analysed. In this chapter, a summary of the study, the findings and recommendations will be discussed. In view of this study, focus is on the lecturers’ experiences of teaching Computer Skills at a TVET College in a township. The study was situated in the province of KwaZulu-Natal. The research questions were as follows:

5.1.1. What are lecturers’ experiences of teaching Level 2 LO Computer Skills in the NCV curriculum?
5.1.2. Why do lecturers have these experiences of teaching Level 2 LO Computer Skills in the NCV curriculum?
5.1.3. How do lecturers’ experiences of teaching Level 2 LO Computer Skills in NCV impact their teaching?

5.2 SUMMARY OF THE STUDY

Chapter one provided an outline of the study. This was done by highlighting the many post-1994 changes that occurred in the political, educational and social landscape of South Africa. With these educational changes came many changes taking place affecting teaching experiences of lecturers in South Africa. The National Department of Education experienced pressure in providing a curriculum that would address the past imbalances in education. A background, research problem and purpose of the study were provided.

Chapter two presented the literature review on the study. The theoretical framework of TPACK was also discussed. TPACK was the most suitable framework for this study as it provided the components of knowledge which are specific to lecturers’ experiences in teaching Computer Skills. It became apparent that lecturers who teach Life Orientation were not trained to teach the subject but use their knowledge and experience, that is, the ideological-ware
(IW) to teach the subject. It was discovered that the software (SW) resources, particularly the Internet, are enjoyed by most lecturers and students and are being used pedagogically to promote teaching and learning.

Chapter three gave the research design and methods used. Chapter four outlined the analysis and interpretation of data that was generated through interviews.

5.3 FINDINGS

In this section, I elaborate how the findings connect to the three critical questions of this study. Two of the questions are addressed together, namely; what are lecturers’ experiences of teaching Level 2 LO Computer Skills in the NCV curriculum and how do lecturers’ experiences of teaching Level 2 LO Computer Skills in NCV impact their teaching? These findings show a compelling picture of lecturers’ experiences in teaching and how these experiences impact their teaching.

As addressed in chapter four, lecturers encountered numerous hindrances when teaching LO Computer Skills. One of the hindrances was the lack of resources. Ornstein and Hunkins (2012) note that curricula can fail because of inadequate support in the form of materials and adequate equipment available. The findings revealed that because of the lower status of Computer Skills at the College where the research was done, the subject did not get the necessary resources needed to teach the subject effectively. De Klerk and Van der Walt (2006) concur that the status of the learning area/subject depends on the priority placed on the subject. Participants indicated that Computer Skills was regarded as a filler subject at the College and given to any lecturer who was short of teaching time on their timetable to meet the minimum teaching hours required. The College did not prioritise LO Computer Skills and failed to allocate adequate funds for effective teaching. Through the interviews, it emerged that lecturers were handling a subject that was practical in nature with very few necessary resources to support the teaching and learning processes. Jones and Moreland (2004) assert that the use of available adequate resources is one
of the critical aspects that enhance the technological knowledge which is crucial for effective teaching and learning. Over-enrolment of students resulted in students sharing computers. Furthermore, not all students would get the required practice needed for the Computer Skills component as a result of the shortage of computers. The available resources were also out-dated according to participants. TVET education focuses on an authentic learning experience, the use of out-dated resources does not adhere to the requirements of the NCV curriculum (DoE, 2013b).

The progression of LO from TVET College level into tertiary level was not clear for the lecturers. All LO components are insufficient for students to gain entry at a University as indicated by the findings of this study. The lack of progression undermines LO as a subject. The lack of career progression of LO was also highlighted by one of the participants who noted that as a result of Life Orientation not being weighted at a basic education level, students cannot gain entry into universities. Furthermore, the progression challenge had an influence on how Life Orientation was perceived at Colleges.

Participants agreed that the time stipulated for teaching the subject is insufficient with no room for any deviations, in Life Orientation as per Subject Guidelines document. It is suggested that, “such strict guidance tends to raise learning outcomes in the short term, but demotivates teachers and does not allow for individualised learning” (Berkvens & Van den Akker, 2014, p 18). The Subject Guidelines document allocates very little time for lecturers to complete the content of Computer Skills in the NCV curriculum.

The findings on the technological knowledge of lecturers suggest that there is a paucity of technological knowledge on the part of lecturers. The main contributing factor to the above is their lack of knowledge of teaching approaches. Lecturers are unable to implement the three main approaches in their teaching be it teacher-centred, learner-centred or content centred. None of the teaching approaches should be used in isolation but each should be used according to their strength. Knowing whether the curriculum is steered by the teacher-centred, content-centred or learner-centred approach enhances the
opportunity of achieving the attained curriculum due to the positive correlation between the implemented and intended curriculum (Hoadley & Jansen, 2014). Hence, due to lecturers’ scarcity of knowledge in teaching approaches, students of Computer Skills are technologically disadvantaged in their learning. Similar disadvantages are apparent in the findings of pedagogical knowledge (PK). Weimer (2007) argues that understanding and knowing content and being able to teach it are two different things. Khoza (2001) suggests the need for linking learning outcomes to assessment methods.

Why do lecturers have these experiences of teaching Level 2 LO Computer Skills in the NCV curriculum?

The findings on lecturers’ reasons for teaching suggest that lecturers were not knowledgeable on whether their reasons for teaching were personal, content or societal. Personal reasons are when lecturers teach to incorporate environments that assist students in learning (Khoza, 2015b). Students are then able to create their own unique knowledge that is personal to them and has private significance to each of them (Schiro, 2013). Hence, knowledge is seen as the basis of learning which is not separate from the student. Societal reasons are influenced by personal reasons. Societal reasons are a result of attaining noticeable and measurable results which is the essence of the NCV curriculum.

Other findings also suggest that for the participants in this study, teaching experience and self-taught skills can be used to teach students effectively and promote learning. Teaching should incorporate authentic teaching resources, as teaching is not about resources where students learn from resources, but it is about ideology where they learn with resources (Amory, 2010).

Inadequate support by authorities was also a concern expressed by participants. Participants indicated that management did not prioritise LO Computer Skills, hence they did not receive the necessary support. This was evident in the lack of resources available when teaching. In order to enhance teaching and learning in Computer Skills at Colleges, lecturers need to be supported. The lack of teacher training and professional development was also
evident as a result of lack of support by DHET. Lecturers indicated that they would immensely appreciate hands-on training, as Computer Skills are a practical subject that required many practical skills. They lacked the practical skills and were unable to assist students in the learning area. Insufficient training and support for lecturers would lead to them becoming frustrated with teaching and learning (Fullan, 1992).

All participants expressed the need for collaboration during the individual interviews. This would mean that Computer Skills can be effectively taught if all those involved in lecturing are able to collaborate and communicate with each other. Pillay (2012) states that nobody should claim to have all the answers but educators should depend on the knowledge and insight of their colleagues in order to best support students. The learning environments must also provide collaborative opportunities that support teaching and learning (Amory, 2010).

The findings on content knowledge showed that lecturers had not acquired adequate content knowledge. This is evident in lecturers not being able to implement or even differentiate most teaching approaches. The NCV curriculum is mainly concerned with local and verbal views of everyday conversations. Alternatively, the Nated curriculum is performance based and tests that which is cognitively absent in a student. In the Nated curriculum, students are expected to learn from the bottom order knowledge to the top order knowledge. The problem is exacerbated when lecturers have to teach across both NCV and Nated curricular simultaneously.

Another essential finding was that the lecturers were allocated Life Orientation as a ‘filler’ subject in order for them to meet the minimum number of lecturing hours. The allocation of ‘filler’ subjects has a serious impact on the lecturer concerned and their teaching since the lecturers are usually not passionate about the subject and appear to be more disinterested than their colleagues.

It will always be a challenge for TVET college lecturers to assist learners in Computer Skills if they do not have technological, pedagogical and content
knowledge (TPACK), as both the NCV and the NATED curriculum employ these three types of knowledge (Khoza, 2015c).

5.4 RECOMMENDATIONS

On the basis of the study findings, the study proffers the following recommendations:

As the findings indicate that students are technologically disadvantaged due to lecturers’ dearth of knowledge concerning teaching approaches, it is recommended that lecturers form teams where they can assist each other and contribute to the ‘best practice’ of teaching Computer Skills. Lecturers should also meet often at subject meetings so as to brainstorm on how to implement the three approaches: teacher-centred, learner-centred and content-centred. The use of team work employing ideas, suggestions and practical ways on teaching across these three approaches can be utilised. As a result of the lecturer gaining practical experience, they will be able to employ the importance of teaching and learning and they will work towards implementing the learner-centred approach. Students will be active participants in the lesson with the lecturer just acting as a ‘facilitator’ to promote learning. Knowledge of the three approaches will increase the link between the implemented, intended and students achieving the attained curriculum (Hoadley & Jansen, 2014).

It is also recommended that lecturers plan ahead for teaching. Planning ahead will reduce the dilemma of teaching the two curricula simultaneously and also ensure that learning focuses on the student. Keeping abreast on the latest hardware and software versions is pivotal for lecturers to ensuring that students get relevant hands-on training that they can apply in the workplace.

The Department of Higher Education and Training should embark on frequent training workshops for lecturers in the TVET sector to provide the needed support and mentorship.
Lecturers should be given adequate teaching and learning resources by the College to ensure that students are prepared for learning.

Teaching should become more learner-centred, as the NCV curriculum is more learner-centred in nature. The intention is to transform curricula to meet the needs of commerce and industry. Lecturers who revert to the lecture method undermine the purpose of the NCV curriculum which is learner-centred and are not preparing students for the workplace environment.

The College needs to invest in a heavy duty printer to cope with the overload of printing during examinations.

Furthermore, TVET Colleges must also take responsibility for developing lecturers’ knowledge and skills in the learning area of Computer Skills by hosting workshops.

It can be suggested that all non-teaching activities could be scheduled after College hours so as not to deplete on teaching and learning time.

5.5 IMPLICATIONS FOR FUTURE RESEARCH

The study was small in nature focusing on lecturers’ experiences at a TVET College. Only four lecturers at the College were used for this study. Like other qualitative studies, it cannot be generalised to other contexts. However, this did not affect the quality of the findings. I suggest that in future, a similar study can be conducted on more than one TVET colleges. Further research should lead to a more pro-active approach in developing better teaching practices for TVET colleges based on lecturers’ experiences.

5.6 LESSONS LEARNT FROM THIS STUDY

I had mixed feelings about approaching lecturers to participate in this study as they are my colleagues. I was surprised by them agreeing to take part in this research. I learnt that this could be the result of me informing them of the
confidentiality part of the study and that they would not be targeted based on the views they expressed. By communicating with fellow colleagues, I was cognisant of the fact, that this was not personal, it was just the nature of research.

My lack of knowledge on interviewing skills was tested and I now feel much more confident with regard to this research method. Conducting semi-structured interviews proved to be much longer and tedious than I first thought it would be. Also, transcribing of data collected from participants when interviewed was a never ending task for me. Hence, I learnt patience which I did not know I possessed and perseverance essential in conducting research in general. Again, seeking consent from the relevant parties to conduct my research also proved to be more difficult than I anticipated. I had to exercise much patience until I was eventually able to proceed.

Conducting this study allowed me the opportunity to become more informed about my topic; lecturers’ experiences in teaching of LO Computer Skills. Understanding different experiences from lecturers was very rewarding, as it gave me insight as to how they viewed teaching Computer Skills. My knowledge of Computer Skills was vastly improved due to the numerous articles and scholarly works that I had to engage with for this study. It all proved to be very rewarding and informative.

5.7 CONCLUSION

In this study, I sought to explore lecturers’ experiences of teaching Life Orientation at a TVET College. The study revealed lecturers’ unfamiliarity with teaching approaches; unavailability of resources; lecturer content gaps; insufficient time to teach content; lack of continuation of Life Orientation to tertiary education; and the lower status of Computer Skills compared to other subjects. The following findings revealed why lecturers had the experiences they do: lack of training and professional development; lack of support at College level; and the need for communication and collaboration.
The study also revealed how lecturers’ experiences impacted their teaching of LO Computer Skills. The main thing that impacted their teaching experience was their lack of knowledge on teaching approaches. Lecturers were unable to implement the three approaches in their teaching. Students were negatively impacted in learning with regards to lecturers’ paucity of knowledge of teaching approaches. Understanding these experiences can help the College to assist lecturers in teaching and learning. Although lecturers were doing the best they possibly can, they were overwhelmed by a large number of negative factors that impacted their teaching experiences. Also, the best teaching approaches for lecturers were showcased in this study to help lecturers with the teaching of LO Computer Skills in the NCV curriculum.
REFERENCES:


Davis, E. (2011). *Teachers’ experiences in the implementation of Technology Education curriculum in one secondary school in the St George East District in Trinidad*. Masters dissertation, University of the West Indies.


APPENDIX A ETHICAL CLEARANCE

21 August 2016

Mrs Amanda Paul nee' Niemack (8758/4211)
School of Education
Edgewood Campus

Dear Mrs Paul nee' Niemack,

Protocol reference number: HSS/117Q/016M
Project title: Exploring lecturers’ experiences of teaching Level 2 Life Orientation (Computer Skills) in National Certificate Vocational at a Technical Vocational Education and Training College

Full Approval – Expedited Application

In response to your application received on 29 July 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully,

Dr Shenika Singh (Chair)

S

Cc Supervisor: Mrs N Neimansie
Cc Academic Leader Research: Dr JB Kroza
Cc School Administrator: Ms Tyzer Khumalo
APPENDIX B

INFORMED CONSENT OF RESEARCH PARTICIPANTS

Dear Sir/Madam

I, Amanda Paul, am currently a registered Masters student at the University of KwaZulu-Natal. As part of fulfilling my degree requirements, I am required to conduct a research project in my field of interest. The following topic is the focus of my research: Exploring lecturers’ experiences of teaching Level 2 Life Orientation (Computer Skills) in National Certificate Vocational at a Technical Vocational Education and Training College. Through the use of lecturers, this study aims to answer the following critical questions:

1. What are lecturers’ experiences of teaching Level 2 Life Orientation (Computer Skills) in the NVC curriculum?
2. Why do lecturers have these experiences of teaching Level 2 Life Orientation (Computer Skills) in the NCV curriculum?
3. How do lecturers’ experiences of teaching Level 2 Life Orientation (Computer Skills) in NCV impact their teaching?

Participation in this study requires you to
- Be interviewed on a one-on-one basis
With your permission, both these interviews will be audio-taped.

As a participant
- Your involvement in the study is voluntary
- Your confidentiality will be maintained (all participants will use pseudonyms)
- You will not be exposed to any risk and you may choose not to answer questions should wish to do so
- You may withdraw at any time during the research process
- You will have access to your data with the rights to review, retract, revise your opinions
- You will have an opportunity to verify transcript/s of the one-on-one interview in order to confirm that it is your opinion and has been captured accurately
- You will receive a copy of all research reports and publications should you wish to

Permission to conduct this research study has been obtained from the University of KwaZulu-Natal. Should you have any questions about your participation and your rights in the study you may contact Ms Phume Ximba of UKZN Humanities and Social Sciences Research Ethics Committee at ximbap@ukzn.ac.za or call her at 27 31 2603587.
Thank you for your co-operation.

Amanda Paul

Contact Details:
Researcher: Amanda Paul  Supervisor: Nomkhosi Nzimande
Email address: amandapaul269@yahoo.com  Nzimandem2@ukzn.ac.za
0828853199  031-2603357

Informed consent of participant

I have read the information sheet and understand my participation in the study.

I understand that my real name will be not be used in all write-ups of this study and that the information that I will provide will be used for this research project and other appropriate research presentations. I am aware that:

- Participation is voluntary
- The interviews will be audio-taped
- I am not forced to answer any questions that make me uncomfortable and
- I am free to withdraw from the project at any point
- There is no payment for participation

I hereby consent / do not consent to have this interview recorded.

I hereby give consent to participate in this research project.

Signature: ________________________ Date: ________________
Informed permission for the research from authorities

19 Fowey Avenue
Bluff
DURBAN

4052

The Principal

4000

Dear Sir/Madam

I am Amanda Paul, currently a registered Masters student at the University of KwaZulu-Natal (Edgewood campus) in South Africa. A part of my development, I am undertaking a research study entitled ‘Exploring lecturers’ experiences of teaching Level 2 Life Orientation (Computer Skills) in National Certificate Vocational at a Technical Vocational Education and Training College’. I am seeking permission to interview five teachers from your College. Interviews will be conducted after College hours or during vacation at a venue convenient for the lecturers. Therefore, the college will not be affected in anyway and the lecturer will not be detracted from doing their duties at college.

The study does not seek any information about the College or about specific individuals, i.e. either colleagues or students. Its focus is on the lecturers’ experiences at College. The study is important as it will reveal why lecturer have these experiences and how these experiences influence their teaching.

Permission to conduct this research study has been obtained from the University of KwaZulu-Natal. Should you have any questions about its legitimacy, you can contact Ms Phume Ximba of JKZN Humanities and Social Sciences Research Ethics Committee (HSSREC) at ximba@ukzn.ac.za or call her at +27(0) 31 2603587.

Should you need further explanations or clarifications about the study, feel free to contact me or my supervisor, Ms Nzimande. Our contact details are provided below.

Your understanding and co-operation in this regard will be highly appreciated.

Amanda Paul
Student number: 875874211
Researcher: Amanda Paul
email address: amandapaul269@yahoo.com
Cell: 0828853199

Supervisor: Melamkhosi Nzimande
Nzimandem2@ukzn.ac.za
031-260 3357
Informed permission from Principal
I have read and understood all the terms stipulated for the conduction of this study. I do not
grant the researcher permission to conduct the study using lecturers from the College.

Name: [Signature]
Date: 20/07/2011

College stamp

DEPARTMENT OF HIGHER EDUCATION & TRAINING
20 JUL 2011
APPENDIX D  SEMI-STRUCTURED INTERVIEW SCHEDULE

I am Amanda Paul, currently a registered Masters student at the University of KwaZulu-Natal (Edgewood campus) in South Africa. As part of my development, I am undertaking a research study entitled ‘Exploring lecturers’ experiences of teaching Level 2 Life Orientation (Computer Skills) in National Certificate Vocational at a Technical Vocational Education and Training College’. The following questions will serve as a guide to our conversation.

Background information

When were you appointed to this College? Apart from Computer Skills, which other subjects are you teaching at present?
In which levels?
How long have you been teaching Computer Skills?

1. What are your experiences in teaching LO Computer Skills? (Resources available i.e. hardware and software)
2. What are your feelings towards training provided for Computer Skills lecturers’ in order to achieve their goals? (Goals i.e. aims, objectives and outcomes)
3. What is your opinion about the benefits of training for Computer Skills lecturers’?
4. How would you describe your role as a lecturer teaching Computer Skills to students? (rationale-teaching reasons)
5. How would you rate lecturers’ efforts in teaching Computer Skills? Explain your rating?
6. Would you say that lecturers have a responsibility in taking measures to improve their Computer Skills training? Why?
7. What do you think are the reasons for lecturers to have these teaching challenging experiences in Computer Skills? (If any)
8. In your opinion, does Department of Higher Education and Training provide any support for the training of lecturers in the teaching of the NCV in general or Computer Skills specifically?
9. Do experienced Computer Skills lecturers assist their fellow lecturers’ in the teaching of Computer Skills? (With regard to content)

10. How does DHET monitor lecturers’ performance in teaching of Computer Skills – component of LO? (Do they use the assessment marks as a benchmark?) (Are you aware of the purpose of assessments for students i.e. formative and summative?)

11. What support do you give to your Computer Skills Colleagues in order to assist them?

12. Are there support structures that have been implemented by the College in assisting lecturers with regard to Computer Skills? What kind of structures?

13. How would you rate your content knowledge used in Computer Skills? (Ms Word, Ms Excel, PowerPoint, Ms Access) Explain your rating?

14. Regarding the NCV LO Computer Skills curriculum…Is it teacher-centred, content-centred or learner-centred? Explain?

15. Do you know that the NCV LO Computer Skills curriculum demands a learner-centred approach to teaching? Would you say that in your teaching you follow these demands? To what extent?
The NCV curriculum includes three mandatory subjects which are similar to the school curriculum, namely: Mathematical Literacy or Mathematics, English and Life Skills (Life Orientation). These fundamental courses are core to all specialisations and are "generic rather than specialised" (Wredekind & Watson, 2016, p. 78). An important issue in relation to lecturer identity is highlighted, as...