

**EXPLORING THE ROLE OF THE SUNSHINE DISTRICT TEACHER  
DEVELOPMENT CENTRE IN KWAZULU-NATAL IN SUPPORTING  
TEACHERS' PROFESSIONAL LEARNING**

BY

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## DECLARATION

I, Ntombeziningi Olgar Shange, declare that

I hereby declare that the work on “Exploring the role of Sunshine DTDC in supporting teachers’ professional development” is my own work. The research reported in this thesis, except where otherwise indicated, is my original research from when it started until when it finished.

This dissertation has not been submitted for any degree or examination in any other university.

All the sources that I have used or quoted have been adequately indicated and acknowledged by means of a complete APA reference.

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## **ABSTRACT**

In KwaZulu-Natal, District Teachers' Development Centres have been established to support teachers' professional development. The report by the DBE (2015) indicates that inspections were conducted to determine the practicality of Teachers' Centres. Out of 147 Centres established, only 74 were completely practical (DBE, 2015). This study provides insight into how Sunshine DTDC supports teachers' learning. It intends to discover what is happening in the Centre. The focus is on activities and the resources that are there and how these activities and resources enhance teachers' learning. The conceptual framework by Harland and Kinder (1997) is used to outline the lens of this study. The study was located within an interpretive paradigm. Data was collected using qualitative face-to-face interviews, observations, documents, transect walk, audio and visual materials. I interviewed ten participants including eight teachers, the Centre Manager and the ICT Specialist. The findings show that Sunshine DTDC is used as a venue for a whole range of activities including out of school youth who come for computer lessons, Department workshops, meetings, computer literacy training, cluster activities, teachers' networking and teachers' NGO activities. The main resources for use by teachers are the computer Centre, the hall and the classrooms. Teachers do not seem to see the Centre as a place where they can learn professionally on their own initiative, but they see it as a place where they go to workshops when the Department calls them to workshops or meetings. Though teachers do not come to the Centre on their own accord, they seemed to be very active and enthusiastic in all the activities that they engaged in at the Centre.

**Key Words:** District Teachers' Development Centre(s), teacher learning, teacher professional development, resources, collaboration, teachers' networking, computer literacy, transmission of knowledge, transformative, Non-Governmental Organization.

## **DEDICATION**

I dedicate this to the loving memory of my beloved parents Mr Alfred Makhosini Shange and my mother Dombi Beslina Shange for giving me a sense of direction to value the importance of school from a young age.

My late brothers, Sienfred Fana Shange and Jotham Ponono Shange, for being there for me – especially Ponono who believed in me and sent me to College.

Today, I am who I am because of these people.

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My neighbors at home Mrs Mangcobo Xulu and Mum Madlokovu who kept me updated with issues pertaining to home and always covered up for me in the community matters that needed cash in my absentia.

## **LIST OF ACRONYMS**

ACE	Advanced Certificate in Education
CPD	Continuing Professional Development
CPTD	Continuous Professional Teachers' Development
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
DTDC	District Teacher Development Centre
ICT	Information and Communication Technology
UKZN	University of KwaZulu-Natal
NGO	Non-Governmental Organization
NICPD	National Institute for Curriculum and Professional Development
TIMSS	Trends in International Curriculum Mathematics and Science Study
PLCs	Professional Learning Communities

## Table of Contents:

DECLARATION .....	i
ABSTRACT .....	ii
DEDICATION .....	iii
ACKNOWLEDGEMENTS .....	iv
LIST OF ACRONYMS .....	v
Table of Contents:.....	vi
CHAPTER ONE .....	1
ORIENTATION OF THE STUDY .....	1
1.1 Introduction .....	1
1.2 Focus and Purpose of the study.....	1
1.3 Rationale.....	2
1.4 Background Information .....	3
1.5 Research Questions .....	4
Key research question:.....	4
Sub-questions: .....	4
1.6 Brief Review of Related Literature and Conceptual Framework.....	5
1.7 Methodological Approach.....	7
1.8 Overview of the Dissertation.....	8
1.9 Conclusion.....	9
CHAPTER TWO .....	10
LITERATURE REVIEW .....	10
2.1 Introduction .....	10
2.2 The role of District Teacher Development Centres (DTDCs) in supporting Teacher Professional Learning.....	11

2.3 Teacher learning.....	12
2.3.1 What is teacher learning? .....	12
2.3.2 Formal teacher learning .....	12
2.3.3 Informal teacher learning.....	13
2.3.4 Teachers’ lifelong learning.....	13
2.4 Theories of teacher learning .....	14
2.4.1 Cognitive theory of learning.....	14
2.4.2 The socio-cultural theory of learning .....	15
2.5 Teacher Professional Development.....	18
2.6 Models of teacher professional development.....	20
2.7 What studies reveal as challenges when using the centralized model .....	22
2.8 Comparison of teacher professional development in an international context and a South African context.....	23
2.9 Conceptual and theoretical framework .....	25
2.10 Conclusion.....	27
<b>CHAPTER THREE .....</b>	<b>28</b>
<b>METHODOLOGY .....</b>	<b>28</b>
3.1 Introduction .....	28
3.2 Research paradigm and approach.....	28
3.3 Research style.....	30
3.4 Methods of data generation .....	31
3.4.1 Documents .....	31
3.4.2 Transect walk.....	32
3.4.3 Interviews .....	32
3.4.4 Visual material.....	34



3.4.5 Observation.....	34
3.5 Table 2 Research Participants .....	36
3.6 Sampling.....	38
3.7 Data analysis .....	39
3.8 Ethical issues .....	41
3.9 Trustworthiness .....	43
3.9.1 Credibility.....	43
3.9.2 Dependability.....	43
3.9.3 Transferability .....	43
3.10 Limitations .....	43
3.11 Conclusion.....	44
CHAPTER FOUR.....	45
DATA PRESENTATION.....	45
4.1 Introduction .....	45
4.2 The setting – Sunshine DTDC .....	46
4.2.1 The history and the purpose of the Centre.....	46
4.2.2 Accessibility .....	46
4.2.3 Staffing .....	49
4.2.4 Safety .....	51
4.3 Sunshine DTDC as a venue for a whole range of activities.....	51
4.4 Managerial understanding of professional development .....	54
4.5 Clusters help teachers monitor curriculum coverage .....	56
4.6 Teacher frustrations about the lack of resources .....	59
4.6.1 The lack of physical resources.....	59
4.6.2 The lack of Human resources .....	62

4.7 Learning from activities at the Centre.....	63
4.8 Teachers taking initiative for their own learning .....	64
4.9 Conclusion.....	65
CHAPTER FIVE .....	66
DISCUSSION AND CONCLUSION .....	66
5.1 Introduction.....	66
5.2 Research Question 1: What are the activities offered to support teacher development at Sunshine DTDC?.....	67
5.2.1 Computer literacy training.....	68
5.2.2 The cluster activities.....	69
5.2.3 Teacher networking .....	71
5.2.4 Teachers' NGO activities .....	73
5.3 Research question 2: What resources are offered to support teacher development in Sunshine DTDC?.....	74
5.3.1 The computer Centre .....	75
5.3.2 The hall.....	75
5.3.3 The classrooms .....	75
5.3.4 Offices .....	76
5.3.5 Dormitories.....	76
5.3.6 The library .....	76
5.4 Research question 3: To what extent do teachers say these activities and resources enhance their learning?.....	77
5.5 Recommendations .....	79
5.6 Limitations of the study.....	80
5.7 Conclusion.....	80

REFERENCES .....	82
APPENDIX 1: UKZN Ethical Clearance letter .....	87
APPENDIX 2: DoE permission letter.....	88
APPENDIX 3: INTERVIEW GUIDE FOR LIBRARIAN/ CENTRE MANAGER COMPUTER/LAB MANAGER .....	89
APPENDIX 4: INTERVIEW SCHEDULE FOR TEACHERS USING THE DISTRICT TEACHER DEVELOPMENT CENTRE .....	91
APPENDIX 5: Observation schedule of the Centre .....	93
APPENDIX 6: OBSERVATION CHECKLIST – TEACHERS’ ACTIVITIES .....	94
APPENDIX 7: ATTENDANCE REGISTER: BUSINESS STUDIES – 24/04/2018 .....	99
APPENDIX 8: Teachers’ NGO workshop: UShaka Marine Sea World Durban – 07/05/2018.	100
APPENDIX 9: The Mission Statement of Sunshine DTDC.....	101
APPENDIX 10: Question paper for teachers’ development activities – 02/08/2018.....	102

# **CHAPTER ONE**

## **ORIENTATION OF THE STUDY**

### **1.1 Introduction**

The study focuses on the role of Sunshine (pseudonym) District Teachers' Development Centre (DTDC) in KwaZulu-Natal (KZN) in supporting teachers' professional learning. This chapter gives a framework of the focus and purpose of the study, the rationale, background information, research questions, brief review of related literature and the conceptual framework, the methodological approach and an overview of the dissertation.

### **1.2 Focus and Purpose of the study**

The study intends to discover what is happening in the Centres to what extent teachers make use of available resources to improve their professional learning and in what ways the DTDC plays its part in assisting teachers to access suitable development opportunities (DBE & DHET, 2011). I chose to conduct this study at Sunshine DTDC which is located outside my school context in another district. In my view, due to my positionality as the principal in my school, I felt that I would explore more in a different site where the participants would be more comfortable to talk and contribute freely on their own experiences, views and behaviors when answering the semi-structured interview questions.

There is not much information on prior studies about what and how teachers learn at DTDCs in South Africa. There is still a gap. Therefore, the study will investigate how the Sunshine DTDC, which serves the rural community, supports teacher learning to enhance teachers' professional development. In addition, the participants in the Centre will tell what more they would like to see happening in the Centre.

Interviewing teachers, the Centre Manager and Administration staff and observing their activities and resources in the Centre will generate data. The study will enable the Centre staff and the

Department of Education to understand how the Centre supports professional learning and what more is required to support teacher learning.

### **1.3 Rationale**

The Trends in International Curriculum Mathematics and Science Study (TIMSS) - 2015 indicates that most South African learners' achievements are low (DBE & DHET, 2015; Venkat & Spaul, 2015). As a result, Bantwini (2018) asserts that there has been increasing alarm about the small number of students who select science and mathematics at secondary level and then follow science degrees at university level. Furthermore, the poor results in Grade 12 examinations and low achievement as indicated in Trends in International Mathematics and Science Studies (TIMSS) at primary school level confirm that there is a challenge (Bantwini, 2018). Therefore, Zuma and Dempster (2008) claim that poor attainment in the language of teaching and valuation certainly adds to the poor attainment of the African children in worldwide assessments of Mathematics and Science literacy. In accord, the lower standard of teaching and the lack of subject matter information of our teachers, hinder enhancement of delivery of quality education in the system (DBE & DHET, 2011) which impact negatively on quality teaching and learning and on learner attainment. The DBE hopes that the DTDCs will empower teachers to recognize their own learning and professional development requirements and to access chances to address these requirements (DBE & DHET, 2011).

Amongst various reasons for the poor performance in South African schools, some studies suggest that "the material and social conditions in which teachers work simply do not support quality learning" (Bertram, 2011, p. 5). Another factor is poor levels of teacher knowledge in subjects like mathematics (Venkat & Spaul, 2015). These issues influence the value of the education system (DBE & DHET, 2011). For that reason, teachers' engagement in a more effective teachers' advancement program and developing teachers' skills is the Department's planned attention area (DBE, 2015). This study is an investigation into what and how teachers learn at Sunshine DTDC and the impact that their learning has on enhancing their professional learning.

Teachers should be given “adequate tools, space, opportunities and other mechanisms to construct the knowledge and meaning of the new reforms in a supportive atmosphere” (Bantwini, 2010, p. 90). In the same way, there is a demand in our societies for people who pursue learning and who are aware of just how to learn (Kwakman, 2003). Often, in a supportive environment, “teachers’ knowledge and classroom practice change for the better” (Jita & Mokhele, 2014, p. 2). Although teaching material and learner support needs are of value, teachers also require information and skills to understand and use them efficiently or South Africa will never be able to provide excellence in education (DBE & DHET, 2011).

The KwaZulu-Natal Provincial Department, in realization of the National Development Plan, has a program of action, inter-alia, the re-alignment of Education Centre to Teacher Development Directorate as DTDCs (KZN Circular no. 58 of 2017). In fact, it is these sites from which curriculum delivery staff can work (DBE, 2015). Also, it is here that teachers can use shared resources (DBE & DHET, 2011). Above all, it is where Continuous Professional Teachers’ Development (CPTD) courses are delivered, as well as where teachers’ professional learning communities can meet (DBE, 2015).

#### **1.4 Background Information**

The DTDCs serve as convenient sites for teachers to meet and they are entirely resourced to support teachers’ professional development (DBE & DHET, 2011). In addition, they are all mandated to offer services for expanded learning opportunities. According to the report by the DBE (2015), inspections were conducted to determine the practicality of teacher Centres. This report indicated that out of 147 Centres established, only 74 were completely practical (DBE, 2015). So, this study provides insight into how Sunshine DTDC supports teacher learning. It explores how teachers learn in the Centre, which professional development activities are offered and what resources are available to benefit them.

Due to the Teachers’ Development Summit held in July 2009, the Integrated Strategic Planning Framework for Teachers’ Education and development in South Africa, 2011-2025 (DBE & DHET, 2011) was designed to enhance teachers’ instruction and growth over time to improve student achievement (DBE & DHET, 2011). Furthermore, the Planning Framework envisages

that the KwaZulu-Natal Provincial Teacher Development Institutes (PTDI) have been established to support teachers, subject teachers, subject advisors and mentor teachers (DBE & DHET, 2011). In this regard, the KwaZulu-Natal Department of Education has aligned the Education Centres to the Teacher Development Directorate as DTDCs for effective co-ordination and accountability of DTDCs (Department of Education, 2017).

The vision is that DTDCs are appropriate places for teachers' meetings and they are fully resourced to support teacher professional development (DBE & DHET, 2011). Often, teaching resources and learner support material make meaning only if teachers are knowledgeable and competent to use them effectively (DBE & DHET, 2011). In this respect, the Norms and Standards aim to improve the functionality of DTDCs and provision is made that area teacher development officers situated at DTDCs help the teachers to connect to suitable development opportunities, including teachers' gaining access to Information and Communication Technology (ICT) to advance the content of their teaching and their method to teaching (Desimone, 2011).

## **1.5 Research Questions**

### **Key research question:**

What is the role of Sunshine DTDC in supporting teacher professional learning?

### **Sub-questions:**

- 1. What activities are offered to support teacher learning at Sunshine DTDC?*

All DTDCs are mandated to offer services for extended learning opportunities (DBE & DHE, 2011). This question will help me to explore which activities are offered and to describe to what extent teachers say that these activities achieve the outcomes of professional development as described by Harland and Kinder (1997).

- 2. What resources are offered to support teacher learning at Sunshine DTDC?*

The DTDCs are regarded as fundamental to teacher development and being subsidized (DBE, 2015), they should be sufficiently resourced to support teachers' learning activities

(DBE & DHE, 2011). I will observe what resources are available for use by teachers who come to use the Centre.

3. *To what extent do teachers say these activities and resources enhance their learning?*

The DTDCs serve as local support sites for teachers working in nearby schools whereby, they can attend development programs, courses and access shared resources (DBE & DHE, 2011). Using an open-ended interview schedule, this research question will investigate teachers' perceptions about the extent to which these activities and resources enhance their learning.

## **1.6 Brief Review of Related Literature and Conceptual Framework**

The review of related literature will first cover an outline of the role of DTDCs as established in the norms and standards (DBE & DHET, 2015). Secondly, teacher learning, theories of learning which are the cognitive theory of learning and the socio-cultural theory of learning will be discussed drawing on various authors like Kelly (2006), Sfard (1998), Opfer and Pedder (2011), Putman and Borko (2000) and Day and Sachs (2004). A discussion will expand to teacher professional development drawing on the readings by Kwakman (2003), Geldenhuys and Oosthuisen (2015) and Luneta (2012) to mention a few.

Thirdly, the models of teacher professional development are discussed. Briefly, the centralized model and decentralized model will be explained to determine the real setting of the study. In the decentralized model development activities are school based and they are facilitated by teachers who are developing their colleagues at school. However, in the centralized model teachers meet in a central site where activities are facilitated by the training personnel who are skilled. Sunshine DTDC is a centralized venue for teachers in the surrounding schools. Thereafter, Kennedy's (2005) models of teacher learning will be described. Then, the challenges that come with the centralized model will be briefly explained to enlighten that not all teacher learning activities are run successfully off-site: there are always possible shortfalls. Then, a comparison of teacher professional development in an international context and South African context will be conferred to influence instructional changes and growth. Finally, a conceptual framework by



Harland and Kinder (1997) will be briefly explained. In the end, a methodological approach and overview of the dissertation will be outlined.

I will provide a brief overview of literature in this chapter on each topic and a detailed discussion of relevant literature will be dealt with in Chapter Two.

The DTDCs, as established in the Norms and Standards, are fundamental to teacher development and should to be funded as such (DBE, 2015). Therefore, DTDCs should have fully equipped educational spaces like discussion halls to support teacher learning (DBE & DHET, 2011). In addition, the site should be safe and within reach for all who use it, including people with disabilities and people on wheel chairs (DBE, 2015). Above all, it must be in a crime free neighborhood (DBE, 2015).

Teacher learning is “the movement of a teacher from being a beginner teacher to a fully expert teacher” (Kelly, 2006, p. 506). There are two theories of learning which are the cognitive theory of learning and the socio-cultural theory of learning as explained in Kelly’s (2006) description of teacher learning theories.

The theories of teacher learning aim to explain how teachers learn. In the cognitive theory of learning, teachers learn in one setting and can transfer the learning to their classrooms. It ignores context and collaboration. In the socio-cultural approach, practical knowledge is important. The learning is linked to context. Knowledge in practice is shared with others. In teacher learning the teacher is driven by his or her quest for new knowledge, skills and values necessary for his or her professional development, a prerequisite to rendering quality in service.

Teacher Professional development is intentional, ongoing, with significance in learning whereby teachers try to develop their personal and professional abilities (DBE, 2015). Consequently, “professional development activities should focus on subject matter content and how students learn that content” (Desimone, 2011, p. 69). Furthermore, “professional development should relate to teachers’ pedagogical content knowledge requirements and enhance both teaching and learning outcomes” (Luneta, 2012, p. 362). In addition, the “development of creativity and innovation” (Engelbrecht & Ankiewicz, 2015) has become the focus in developing societies.

There are several CPTD models. There is the centralized model which is off-site and the decentralized model which is school based (Engelbrecht & Ankiewicz, 2015; Luneta, 2012). Kennedy (2005) also provides a set of models, namely, the training model, the award bearing model, the cascade model, the standard based model, the coaching model, the community of practice model and the action research model.

To analyze the data, I used the conceptual framework focusing on planned change by Harland and Kinder (1997). Harland and Kinder propose that there are three ‘levels’ of possible outcomes following the ‘input’ of a professional development activity. I adapted this conceptual framework to suit the lens of the study and to match the research questions. Of the nine outcomes, the motivation outcome and affective outcome were combined to emotional outcome and the institutional outcome was modified to collective outcome. The 3<sup>rd</sup> order outcomes include material, information and new awareness. The 2<sup>nd</sup> order outcomes include emotional outcomes and the 1<sup>st</sup> order outcomes include value congruence and knowledge and skills (Harland & Kinder, 1997). The conceptual outcomes will be discussed in detail in Chapter Two.

## **1.7 Methodological Approach**

The research design that was adopted in this study is the case study which “fit-for-purpose” in guiding me on the question of which method of research style to implement (Rule & John, 2011, p. 61). A case study provided systematic and in-depth investigation on how the Sunshine DTDC supports teachers in their professional development in their context to generate knowledge (Rule & John, 2011). It is important “to set a case within its context” (Cohen, Manion & Morrison, 2011, p. 289) because a social phenomenon cannot be understood outside its context. The study investigates the real-life teacher activities that are offered at Sunshine DTDC to support teacher learning. As a researcher, I used the case study to define, recognize and interpret Sunshine DTDC which is situated in an isolated deep rural area with no community living near it.

The process of conducting a case study often involves interacting closely with other people and developing a relationship with them (Rule & John, 2011). Furthermore, what creates the case should be clear from the research questions that are asked as these should stipulate the components of analysis (Cohen, Manion & Morrison, 2011). This study is a single case focusing

on what activities and resources are offered at Sunshine DTDC and how these activities and resources support teacher learning.

A case study is “a design that is appropriate for examination of a case over time which employs multiple sources of data found in setting” (Jita & Mokhele, 2014, p. 4). Using transect walk, observations, document analysis and semi-structured interviews helped me to collect data from the participants who were the Centre Manager, eight teachers and an IT specialist. They were selected based on convenience and their willingness to take part in this study, as well as their involvement in the Centre. The transect walk gave me the background about Sunshine DTDC. Observations helped me to study the behavior of the participants. The information was captured using field notes. Collecting documents helped me to understand the case to study which was Sunshine DTDC.

## **1.8 Overview of the Dissertation**

This chapter explains the focus and purpose of the study, rationale that indicates why the research is important to me, background information which explains which policy prescriptions relate to the study, a brief review of related literature, a conceptual framework and a research style which is a case study.

Chapter Two discusses a detailed literature review relevant to the study using the key concepts: the role of DTDCs as established in the norms and standards (DBE, 2015), teacher learning, teachers’ professional development, models of teacher professional development, challenges that come with the centralized model, a comparison of teacher professional development in an international context and a South African context. Finally, the professional development output outcomes of a conceptual framework by Harland and Kinder (1997) are discussed to suit and match the study and the research questions.

Chapter Three discusses the methodology: the research paradigm chosen, which is interpretive; the research approach, which is the qualitative approach; the methods of data generation, which are documents analysis; the transect walk, interviews, audio and visual materials and observations. The suitability to the study of the research interview is explained, as well as its

advantages and disadvantages. Observation of lessons is explained indicating how data was captured. The sampling used which is purposive sampling is discussed indicating the number of participants. Ethical issues are explained highlighting the signing of informed consent and respecting principles of anonymity, confidentiality and trustworthiness.

Chapter Four discusses the presentation and analysis of data. As explained in Chapter Three of this study, the methods used to collect data are documents, the transect walk, interviews, audio and visual material and observations. I collected documents, copied and filed them in a case file. The transect walk through the Centre gave me a picture of what resources are there and not there and I kept a record in my note book. An observation was led by a set of field questions to establish what resources there are for use by teachers.

The semi-structured interview schedule guided all my conversations with applicants. They were audio recorded to allow me to collect and to save raw data for analysis later. Before data analysis, interviews were transcribed and given back to each participant to check for authenticity of content.

Chapter Five discusses the drawing of my conclusion from the commencement of data and taking action in the form of recommendations. In other words, it describes the purpose of the study which is to find out the role of Sunshine DTDC in supporting teacher professional development by looking at the activities that are offered and resources that are there and how these activities and resources enhance teacher learning.

## **1.9 Conclusion**

Chapter One has provided an overview of the study and how it is going to be conducted. It builds the foundation for the next chapter which is the literature review. It creates a link to all three chapters, making clear to the reader the sequential steps to follow. Understanding the focus and purpose of the study and creating a link to the research questions, explains the purpose of the study. Reading the relevant literature helped to explain the meaning of data that was collected using the chosen data collection methods.

# CHAPTER TWO

## LITERATURE REVIEW

### 2.1 Introduction

The literature review in this chapter discusses the core concepts of the study and how they relate to each other. These concepts are teacher learning and teacher professional development. The literature review placed my study into the context of prior research (Bertram & Christiansen, 2014) in the field. The literature review described and reviewed the studies about my theme (Creswell, 2013).

First, I briefly explain the role of District Teacher Development Centres (DTDCs) in supporting teacher professional development. Secondly, I discuss teacher learning, drawing on the writing of Kelly (2006), Bantwini (2018), Brodie (2013), Opfer and Pedder (2011), Putman and Borko (2000), Sfard (1998), Day and Sachs (2004), Desimone (2011), Kwakman (2002), Jita and Mokhele (2014), to mention a few. The principles of formal learning, informal learning and lifelong learning will be outlined to explain the ways in which teacher learning happens.

There are two theories of teacher learning which are the cognitive theory approach and the socio-cultural approach (Kelly, 2006). I will discuss what kind of professional learning activities would be supported by each theory.

Thirdly, I will explain and discuss “teacher professional development” (Kelly, 2006, p. 506) In addition, the focus will be on “learning models of teacher learning” (Kennedy, 2005, p. 237). Then, an overview on what studies reveal as challenges when using the centralized model is discussed. In my discussion, I explain how these key concepts relate to the focus and purpose of my study with clarity on what my study aims to build on the findings. Lastly, a comparison is made on what international studies and South African studies say about teachers’ professional learning.

## **2.2 The role of District Teacher Development Centres (DTDCs) in supporting Teacher Professional Learning**

According to Horn et al. (2016) site-based teachers' support teams strengthen teachers' involvement with new instructional practice. However, "lack of attention to education quality and failure to reach the marginalized have contributed to a learning crisis that necessitates urgent attention" (Bantwini, 2018, p. 2).

Kwakman (2002) suggests that teacher learning needs to be enabled by generating a satisfactory learning atmosphere whereby teachers take a lead in their own learning. Bantwini (2018) claims that district officials are tasked to offer a permitting environment and specific support for their schools, in accordance with education regulation and practice. Accordingly, the Department of Basic Education regards the DTDCs as fundamental to teacher development and ought to be subsidized as such (DBE, 2015). In addition, all DTDCs are mandated to offer services for expanded learning opportunities (DBE & DHET, 2011). Therefore, DTDCs should have a fully equipped educational space, e.g., conference rooms to support teacher learning, thus, bringing about distribution of teacher development programs at the local level (DBE & DHET, 2011). The Norms and Standards of education (DBE, 2015) requires DTDCs to have the required computers, kits and consumables to make it possible to conduct experiments and hands-on work activities.

The DTDCs are appropriate venues where teachers engage in formal and informal programs and learning with colleagues and peers in professional learning communities (PLCs) (DBE, 2011). Brodie (2013) asserts that PLCs make available space for teacher learning and development where teachers reflect collaboratively to improve their students' learning. In the same way, Bantwini (2018) claims that teacher collaboration affords teachers an opportunity to identify the focus of their CPD and concentrate on the programs that are significant to them.

At Sunshine DTDC I explored which activities are offered and what resources are available. As well, I observed to what extent these activities achieve the outcomes of professional development as described by Harland and Kinder (1997).

## **2.3 Teacher learning**

### **2.3.1 What is teacher learning?**

Teacher learning is about the progress made by beginner teachers on their way towards proficiency (Kelly, 2006). It is perceived as a dynamic and productive activity by a group of teachers together in their real-life context (Kwakman, 2003). Therefore, activities to support teacher learning need to be continuous and focused rather than short-term and irregular (Opfer & Pedder, 2011).

According to Opfer and Pedder (2011) “the complexity theory of teacher learning outlines the interaction of the three subsystems: the individual teacher, the school complex and the learning activity to influence teacher professional learning” (2011, p. 376). Complexity theory explains learning as a process, where “teachers need time to develop, absorb, discuss and practice new knowledge” (Opfer & Pedder, 2011, p. 384).

According to Kwakman (2002) schools must develop into places for teachers to learn; however, most schools are hindered by challenges in this regard. Moreover, teachers find it difficult to reach and obtain necessary support, provisions and chances for ongoing professional development nearer to their homes and work places (DBE & DHET, 2011).

Teacher learning can take place through a range of different activities, both formal, informal, intended and unintended (Bertram, 2011; Lohman, 2001; Jita & Mokhele, 2014) and continuing (Brodie, 2013; Riveros & Viczko, 2012).

### **2.3.2 Formal teacher learning**

The main approach to teacher learning has been formal workshops which require the teachers to attend and come back to transfer information to their practices (Bertram, 2011). To allow growth, formal learning targets areas like curriculum related courses, instructional practice, university courses, seminars and conferences (Engelbrecht & Ankiewicz, 2015; Desimone, 2011).

Teacher networks can be designed formally by establishing the relations, the communication and discourse through regular meetings between teachers (Jita & Mokhele, 2014). As a result, teachers “promote their own CPD as individuals and as groups” (Jita & Mokhele, 2014, p. 3). They commit themselves to adjust to change (Engelbrecht & Ankiewicz, 2015; Geldenhuys & Oosthuisen, 2015). This allows teachers to work collectively and willingly on difficulties that they come across in teaching (Jita & Mokhele, 2014), therefore, creating practice whereby “teachers share, communicate, address issues, observe one another’s work and develop expertise in various aspects of their teaching practice” (Jita & Mokhele, 2014, p. 3).

### **2.3.3 Informal teacher learning**

Informal teacher learning may include teachers chatting in the staff room or passages (Lohman & Woolf, 2001). It may include standing outside doors of good teachers during free periods (Lohman & Woolf, 2001) to informally observe them teaching or finding out what methods or resources they use to teach certain topics (Bertram, 2011; Viscio, Ross & Adams, 2008; Jita & Mokhele, 2014). Furthermore, teachers may engage in group discussions in the staff room on learners’ work or networking which increase “teachers’ knowledge, skills, attitudes and beliefs to improve the content of their instruction” and their method of teaching (Desimone, 2011, p. 70).

### **2.3.4 Teachers’ lifelong learning**

Day and Sachs (2004) contend that teachers are expected to engage in lifelong professional learning. In this regard, teachers keep questioning their practice continuously. As the teacher engages in the learning activity, he or she develops positive attitudes and his or her character evolves. In the same way, Bantwini (2018) suggests the necessity for quality education which inspires critical thinking and raises the motivation and capacity for lifelong learning.

As mentioned in Chapter One, in the Teacher Development Summit held in July 2009, the integrated Strategic Planning Framework for Teacher Education and Development in South Africa (2011-2025) came into recognition by the schooling system to improve teacher instruction and development over time (DBE & DHET, 2011). This plan places teachers determinedly at the



centre of all hard work to advance teacher development and empowers teachers to take significant accountability for their own development (DBE & DHET, 2011).

Putman and Borko (2000) claim that learning is entwined with teachers' continuous practice ensuring that the new knowledge gained inspires and has influence on their ongoing teaching. This compares to Kelly's (2006) claim that for a novice to become proficient they need to gain clear and specific knowledge on their subject matter. Also, experts are accurate in viewing problems within their scope of practice to enable them to resolve problem situations, be able to plan and embark in the work situation.

## **2.4 Theories of teacher learning**

There are two theories of learning which are the cognitive theory of learning and the socio-cultural theory of learning (Kelly, 2006).

### **2.4.1 Cognitive theory of learning**

A cognitive approach to learning emphasizes the understanding of information and thoughts and it remains with the individual (knowledge-of-practice) who learns and transfers this knowledge to his or her own practice (Kelly, 2006). Likewise, teachers acquire new concepts in the subject and instruction and transform their teaching (Kwakman, 2003). Teachers acquire skills, knowledge and understanding in one context and then apply this learning in the classroom context (Kelly, 2006). According to Kelly's (2006) perspective on the cognitive theory of learning, learning is not easily shifted to a different site.

Sfard (1998) explains the two metaphors, acquisition and participation metaphors, that explain different perspectives on learning. In her acquisition metaphor, she notes teachers acquiring skills, knowledge and understanding and applying this learning in the classroom. In this regard, she regards learning as the acquisition of concepts which are basic units of knowledge and which are passed on to the learner. In the same way, Kelly maintains that "teachers learn in one setting and can transfer the learning to his or her classroom" (2006, p. 506) which shows that the acquisition metaphor underpins the cognitive theory of learning. However, the "cognitive

psychological perspective favours learning settings outside classrooms because the workplace is not regarded as suitable to reach all learning goals” (Kwakman, 2003, p. 150).

#### **2.4.2 The socio-cultural theory of learning**

In contrast to the cognitive approach, the socio-cultural approach suggests that learning is social in nature and it is culturally destined (Kelly, 2006; Kwakman, 2003). From this perspective, learning is situated in the environment within a socio-cultural context and it is distributed across individuals, the group and tools (Putman & Borko, 2000; Kelly, 2006). Furthermore, it is strongly connected to the setting where it happens, meaning that it is collective in nature (Kwakman, 2003).

Sfard (1998) in her participative metaphor regards learning as participative where teachers share and engage in dialogue which makes it like the socio-cultural learning theory. There is participation in activities and not in acquiring of concepts. Learning does not objectify knowledge, but it moves to a joint activity, more democratic and in action (Sfard, 1998). In other words, “learning may be conceptualized as participation in activities at an individual and at a collaborative level in interaction with other people” (Kwakman, 2002, p. 153). For example, teachers prepare the lessons together and they meet to discuss the challenging sections together (Jita & Mokhele, 2014).

The socio-cultural approach contends that context is significant – activities connect to context which makes learning become practical in the workplace (Kelly, 2006). Context describes the circumstances in which the new ideas and content are practiced (Engelbrecht & Ankiewicz, 2015). For teachers to be effective, they must be grounded in and have a profound consideration of the context in which they teach. Learning cannot be considered separate from context (Sfard, 1998; Putman & Borko, 2000). Moreover, teachers obtain mentoring from “the more knowledgeable teachers and educators and experienced teachers they work with” (Putman & Borko, 2000, p. 8). Therefore, for teachers to develop “their professional development should be set within the context of institutional development” (Engelbrecht & Ankiewicz, 2015, p. 265).

Collaboration involves teachers working together with “experienced teachers who taught in the same grade levels or subject areas” (Lohman & Woolf, 2001, p. 66). It generates “a learning culture and helps to build a community in which further learning is supported” (Kwakman, 2003, p. 152).

The collaborative approach takes teachers in new teaching practices such as “inquiry teaching, high order questioning, group work or the problem-based learning approach which use complex real-world problems as the stimulus and framework for learning” (Luneta, 2012, p. 370). Moreover, “teacher networks, communities of practice and clusters make teachers learn together, share, exchange expertise and solve problems” (Jita and Mokhele, 2014, p. 1). In addition, teacher networks are teacher learning communities where teachers gather willingly to discuss matters relating to their teaching (Jita & Mokhele, 2014). In addition, the subject advisors are in authority for backup formation and effectiveness of the cluster (Jita & Mokhele, 2014). In this regard, there is “a growing call for collaborative learning to stimulate teacher learning” (Kwakman, 2002, p. 152).

DBE and DHET (2011) affirm that clusters and communities of practice in the DTDCs will help teachers come up with activities that will determine their development. In collaboration, individual teachers bring different understandings and skills to group discussions for collective gains (Putman & Borko, 2000). These teachers “improve confidence, create greater enthusiasm for co-operation and greater commitment to changing practice” (Geldenhuys & Oosthuizen, 2015, p. 209). Similarly, “new ideas or information do not only shoot from individual learning but, to a large extent, also from dialogue and interaction with other people” (Kwakman, 2003, p. 152). Therefore, knowledge creation is improved significantly if contributors participate in “collaborative problem solving, enquiries and dialogues” (Kelly, 2006, p. 509).

According to Jita and Mokhele (2014), collaboration structures are reasonably acknowledged in many developed countries yet there is no finding about their effectiveness. Therefore, this study explores participants’ existing understandings of their views around and feelings for collaborative activities in Sunshine DTDC.

Brodie (2013) and Putman and Borko (2000) claim that teachers in collaboration should use actual classroom data to identify their development needs and learner needs.

Schools in underprivileged societies get more help when teachers are swapped, and resources and leadership shared (Jita & Mokhele, 2014). These groups of teachers will develop proficiency in the analysis of learner results, involvement in curriculum orientation activities and learn how to read, understand and utilize curriculum provision resources (DBE & DHET, 2011).

Cognition is situated, “social in nature and distributed to individuals, other people and tools” (Putman & Borko, 2000, p. 4). Situated cognition entails that physical and social context becomes an essential part of activity (Putman & Borko, 2000) meaning that “learning has both individual and socio-cultural features” (Bertram, 2011, p. 12). Situated perspective assists us to realize that much of what we think and do is tied with the specific activity that we perform (Putman & Borko, 2000). To explain, it is good if a teacher performs as part of a group and not as an individual working by himself or herself (Engelbrecht & Ankiewicz, 2015). Luneta (2012) claims that development programs that are separated from teachers’ real practice and context are less effective and are disliked by teachers.

Cognition as social entails that interaction is the vital key. Kelly (2006) affirms that learning is with the community. It matches with the ways of thinking of the community. To explain, how we learn is important: it turns into reliable activity and it guarantees thinking and problem resolving skills (Putman & Borko, 2000). Teachers learn to think in new ways and can integrate each other’s skills (Putman & Borko, 2000). In this regard they “impart knowledge to others” (Kelly, 2006, p. 510) and “create new insights into teaching and learning” (Putman & Borko, 2000, p. 8).

Influential learning involvements are expanded beyond the normal classroom (Kwakman, 2003). Furthermore, suitable “staff development sites depend on the specific goals for teachers’ learning” (Kwakman, 2003, p. 150). Accordingly, Sunshine District Teachers Development Centre (DTDC) is viewed as a local support place where teachers can attend development programs, courses and utilize shared resources (DBE & DHET, 2011). “Teacher learning is regarded as necessary for teachers to develop professionally” (Kwakman, 2003, p. 152).

## **2.5 Teacher Professional Development**

Teacher “professional development can be defined as the process by which teachers acquire the new knowledge, skills and values which will improve the service they provide to clients” (Kwakman, 2002, p.152). Likewise, it is a process whereby a teacher engages himself or herself in activities to attain or improve his or her skills, knowledge and positive attitude towards refining his or her skills to “enable [him] to teach at [his] best” (Day & Gu, 2011, p. 437). In the same way, teacher professional development extends the job performance of an individual teacher for career development or promotion (Luneta, 2012). In this notion, the Strategic Plan 2011-2025 put teachers at the centre of all means towards their progress (DBE & DHET, 2011).

The “School Management Team (SMT) and the Department of Education (DoE) have a duty to create opportunities for teachers to participate in CPD activities” (Geldenhuys & Oosthuizen, 2015, p. 209). Similarly, the CPD developments will be offered as open source material to be used by the South African Council for Educators (SACE) approved providers across the schooling system (DBE & DHET, 2011).

Consistent with the above ideas, Continuous Professional Development (CPD) is critical for progression and bringing teachers up-to-date because educational transformation makes prior training an insufficient root for long term professional capability (Luneta, 2012). The proposal of CPD programs must be informed by the expectations and the actual needs recognized by teachers themselves (Luneta, 2012; Engelbrecht & Ankiewicz, 2015; Geldenhuys & Oosthuizen, 2015). Furthermore, these programs must intend to improve “the content knowledge (CK), pedagogical content knowledge (PCK)”, skills and attitudes of teachers so that they can educate learners effectively (Luneta, 2012, p. 361).

Teacher professional development aims at promoting individual and joint capacity to expand teachers’ performance and student learning (Jita & Mokhele, 2014). However, whilst professional development programs are established to expand the experiences of teachers, there is slight indication that shows that it leads to improved classroom practice (Luneta, 2012).

Desimone suggests that professional development is effective if it focuses “mainly on teacher satisfaction, attitude change and commitment to motivation” (2011, p. 68). Therefore, “professional development activities should be made accessible for teachers” (Borko, 2004). The DBE and DHET (2011) agree with Desimone (2011) and Borko (2004) in that teacher progress events should be of high value, relevant and within reach to all. In this regard, DBE (2015) declare DTDCs as sites which are easily accessible to teachers from schools around them to access teachers’ professional development.

Teacher professional development entails that teachers are critically questioning their practice in “on-going, reflective and collaborative ways” (Brodie, 2013, p. 6). It is a lifetime process where teachers try to advance their individual and specific qualities (DBE, 2015). It is important for upgrading and updating teachers (Luneta, 2012).

“Once-off” workshops are not likely to lead to teacher transformation and improvement in learner performance (Bertram, 2011, p. 13). In addition, they are too short to have an impact (Desimone, 2011).

Changes in the classroom “will require a great deal of learning on the part of teachers and will be difficult to make without support and guidance” (Borko, 2004, p. 3). Teachers engaging in professional development programs receive stimulation and support from others in the group (Opfer & Pedder, 2011).

What teachers acquire “in professional development activities should be consistent with their professional development needs, with their knowledge and beliefs and with the school goals, district, province and the national system” (Desimone, 2011, p. 69). Consistent with the above thoughts, teacher development should at the same time achieve individual teacher’s professional determinations, justify the requirements of the schools and assist to bring about the change of the entire schooling system (DBE & DHET, 2011).

Effective professional development encourages teachers to get engaged in observing and obtaining feedback, evaluating student work, demonstrating, as opposed to inactively sitting in lectures (Desimone, 2011).

Darling-Hammond et al. (2009) maintain that professional development activities should build strong relations amongst teachers. Moreover, clusters of “teachers from the similar grade, subject or school should partake in professional development events collectively to build a collaborative learning community” (Lohman & Woolf, 2001, p. 66). In the same way, “professional development has been revealed to be more effective in affecting teacher learning and teacher practice if teachers from the same school, department or year level participate” (Opfer & Pedder, 2011, p. 385). Brodie (2013) and Putman and Borko (2000) claim that teachers should use actual classroom data to identify their development needs and learner needs in collaboration.

Professional learning activities should be “sustained and intensive” (Darling Hammond et al., 2009, p. 9) to yield good results. They should run over a semester and should not take less than 20 hours (Desimone, 2011). Similarly, Roberts (2008) and Borko (2004) claim that ongoing support and collective learning opportunities help enhance improved practice and learner performance.

## **2.6 Models of teacher professional development**

There are numerous CPD models. To mention two, there is the centralized model which is off-site and the decentralized model which is school based (Engelbrecht & Ankiewicz, 2015; Luneta, 2012).

In the centralized model, CPD is facilitated away from school. It should focus “on the needs of the school including the needs and expectations of everyone” (Engelbrecht & Ankiewicz, 2015, p. 265). It benefits the individual, group or school. The centralized model is where teachers from different schools go for training that takes place at a central site (Engelbrecht & Ankiewicz, 2015). Teachers gather at a central site for courses or workshops that take a day or an extended period (Luneta, 2012; Engelbrecht & Ankiewicz, 2015). Activities that take place in the DTDC would fall in this centralized model.

In the decentralized model the professional development takes place in the teachers’ own school (Engelbrecht & Ankiewicz, 2015). The teacher activities include “classroom observations,

mentoring programs, workshops, seminars, action research, case studies, skills development models, project-based models and coaching” (Luneta, 2012, p. 368).

Kennedy (2005) also provides a set of models. Accordingly, “the training model is an effective means of introducing new knowledge” to improve teaching, learning and pupil attainment (Kwakman, 2003, p. 238). The award bearing model emphasizes completion of award bearing programs validated by the university as a mark to ensure quality. The cascade model involves individual teachers that go to workshops, come back and impact change on others. The standard based model focuses on teacher programs to demonstrate ability in professional performance of individual teachers. The “coaching model is one-to-one relationship between two teachers aiming to support each other in coaching skills, counselling and professional development” (Kennedy, 2005, p. 242). The “community of practice model involves more than two passionate teachers in a formal clear relationship in the community of practice” (Kennedy, 2005, p. 244). The action research model is a research-based study of a social situation. In this study of Sunshine DTDC the focus is on the training model.

The training model (Kennedy, 2005) which informs the centralized model allows teachers a chance to bring up-to-date their skills to advance their competence within their organizations (Kennedy, 2005; Engelbrecht & Ankiewicz, 2015; Luneta, 2012). The training model selects skills and knowledge that teachers need to grow (Kennedy, 2005; Desimone, 2011). It is mostly once-off and carried outside institution by a skilled person, for example, a formal structured seminar (Kennedy, 2005; Desimone, 2011). Consequently, the expert personnel can ensure that the planning, presentation and training material are of high quality (Engelbrecht & Ankiewicz, 2015). However, it lacks a link to the classroom situation in which participants work (Kennedy, 2005). The hope is that the teacher comes back to school and transfers his or her learning to his or her classroom and to others (Desimone, 2011). This is the model that is used at the DTDCs.

Engelbrecht and Ankiewicz (2015) claim that a well-planned long term CPD is significant for the effective application of technology education. Therefore, it is essential for CPD that they carry over a lengthy period (Engelbrecht & Ankiewicz, 2015). As a result, teachers experiment to try out new teaching methods (Putman & Borko, 2000). Because of this, database computers and



emailing help access distributed knowledge and improve teaching and learning in schools (Putman & Borko, 2000).

According to Lohman and Woolf (2001) teachers in experimenting, for example, learn new computer skills as they occupy themselves with computers in their non-teaching environments. Also, they use the internet for instructional purposes and resources. As a result, email and the internet can assist teachers access distributed skills (Putman & Borko, 2000). As well, the DTDCs aim to assist teachers gain access to and become skilled in using laptops and internet to identify and address development needs of individual teachers (DBE & DHET, 2011). This study explores to what extent teachers make use of the computer resources available at the DTDC.

Consistent with the above ideas, DBE and DHE (2011) affirm that teachers find it hard to access and obtain support, resources and CPD opportunities near where they live and work. Therefore, DTDCs serve as the local central venues to teachers and, adequately resourced, aim at accommodating teachers and professional learning activities (PLCs) (DBE & DHE, 2011). My study explores the role of the Sunshine DTDC in supporting teachers' learning. Sunshine DTDC represents the centralized model, where workshops are held away from teachers' schools. The focus is on the activities that are offered and the resources that are there and how these activities and resources enhance teachers' professional learning.

## **2.7 What studies reveal as challenges when using the centralized model**

Although teachers find centralized courses stimulating, there are sometimes disadvantages, such as gaps between theory and practice (Engelbrecht & Ankiewicz, 2015).

First, the programs in which large numbers of teachers are trained during centralized CPD, sometimes fail to prepare teachers due to the complication of implementation (Luneta, 2012; Engelbrecht & Ankiewicz, 2015). Secondly, the programs may deliver inactive practices that are uneven and offer slight chance for teachers to interrelate, exchange thoughts and experiences (Luneta, 2012). Thirdly, when teachers go back to their schools after a training course, teachers do not always get the provision and resources they need from their schools for effective teaching

(Engelbrecht & Ankiewicz, 2015). Fourthly, lack of planning by management hampers their active participation in CPTD activities (Geldenhuys & Oosthuizen, 2015).

Consistent with the above ideas, Engelbrecht and Ankiewicz (2015) claim that this is as a result of trainers of CPD who lack confidence, information and understanding to carry out the training procedure. Additionally, they suggest that centralized training should be managed by competent personnel from the higher education institutions. Similarly, according to policy the results of the national curriculum statement (NCS) emphasized the necessity for subject advisors to be proficient in supporting teachers in their subject specialization (DBE & DHET, 2011).

In addition to the above, all subject advisors working with selected schools will be recognized and be allocated academically comprehensive content rich developments to empower them to support teachers better in their subject specialization (DBE & DHET, 2011). In the same way, according to policy, designated extremely skilled teachers and subject advisors should be recognized to advance the capacity to initiate new teachers in the teaching field and to catalyze the development of professional learning communities at the school and local cluster levels in their specializations through the specialized focused Advanced Certificate in Education (ACE) or Bed (Hons) programs (DBE & DHET, 2011).

## **2.8 Comparison of teacher professional development in an international context and a South African context**

In Finland, schools within the area are stimulated to work together and share resources (Darling-Hammond et al., 2009). Similarly, the KZN Department of Education has strengthened DTDCs with resources for sharing by teachers who use the Centre (DBE & DHE, 2011). Moreover, DTDCs in KZN and national DoE have Information and Communication Technology (ICT) based solutions that teachers increasingly gain access to computers, internet facilities (DBE & DHE, 2011).

In China, novice and veteran teachers participate in peer observation, lesson preparation and teaching research groups (Darling-Hammond et al., 2009). Norwegian principals allocate a veteran highly qualified mentor to each new teacher (Darling-Hammond et al., 2009).

Correspondingly, DBE (2011) in South Africa has assigned the National Institute for Curriculum and Professional Development (NICPD) to offer development opportunities to mentor teachers and main professional teachers – subject advisors to become mentors to new teachers and lead teachers (DBE & DHE, 2011).

In the United States of America, the teaching profession has not so far recognized a solid practice of professional relations: teachers are barely given time collectively to “design lessons, share instructional practices, evaluate students or draw-up curriculum” (Darling-Hammond et al., 2009, p. 15). Therefore, teachers do not have ample time to plan and learn collectively and to advance high excellence curriculum and instruction. In the USA, “90% of the teachers participate in workshops or conferences only two days in the academic year and less than half get mentoring and opportunities to observe other classrooms” (Geldenhuys & Oosthuizen, 2015, p. 205).

According to Bantwini (2018) many countries have of late ordered policies and improvements that emphasize certifying excellence and justice in education. The quality of basic education has been a focus of the South African government since the accomplishment of democracy in 1994. Therefore, South African teachers are “required to earn Professional Development (PD) points by choosing and taking part in suitable development activities that meet their professional development needs” (Geldenhuys & Oosthuizen, 2015, p. 205). PD activities in SA comprise of “workshops, conferences and coaching” (Geldenhuys & Oosthuizen, 2015, p. 204).

According to Bantwini (2018) the best professional development activity is continuous, investigational, joint and linked to and resulting from working with students. Similarly, Bodie (2013) claims that learning is constructed from evidence which may include teachers’ own tests, national and international test results, learners’ interviews, learners’ own work and classroom observations. As well, knowledge of how well to teach the subject may stem from conversing with other teachers who have experience teaching the subject or observing a colleague teaching (Bantwini, 2018).

## 2.9 Conceptual and theoretical framework

This research is informed by Harland and Kinder (1997), the conceptual framework focusing on planned change. This conceptual framework is going to help me to analyze data and to answer my research questions.

Harland and Kinder propose that there are three ‘levels’ of possible outcomes following the ‘input’ of a professional development activity:

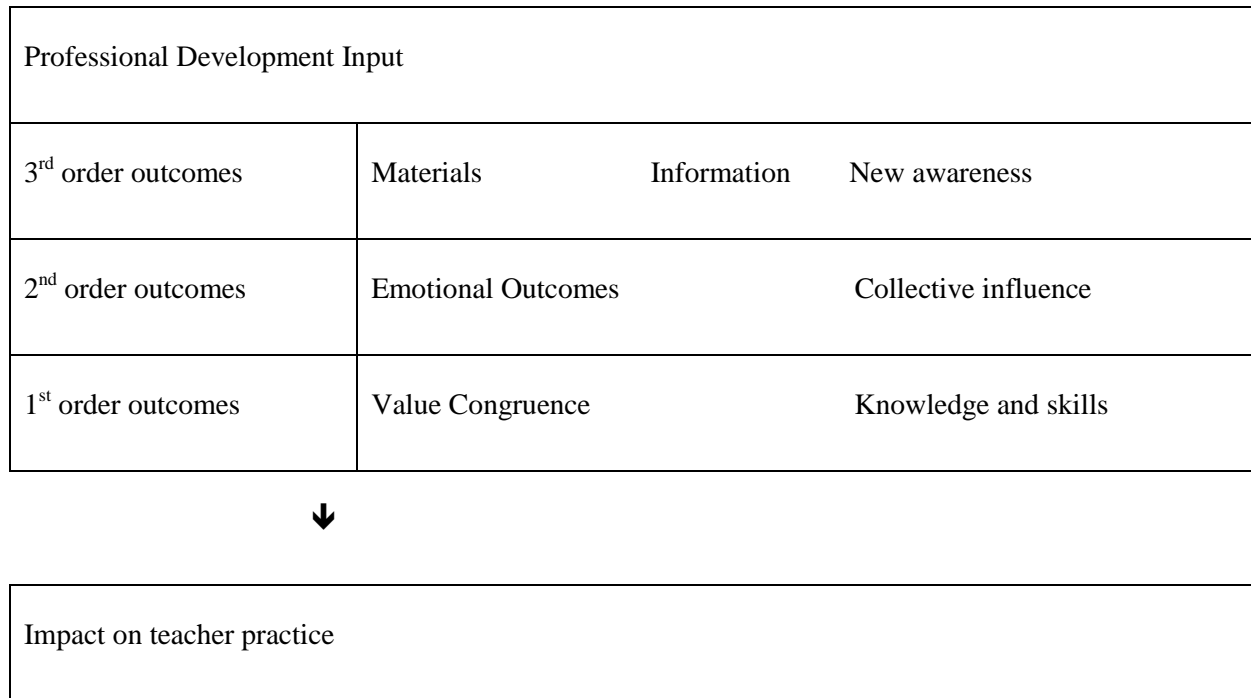


Figure 1. An ordering of professional development outcomes (Adapted from Harland and Kinder, 1997, p. 76-77)

I adapted the conceptual framework by Harland and Kinder (1997). Of the nine outcomes, motivation outcome and affective outcome are combined to emotional outcome and institutional outcome is modified to collective outcome to suit the lens of the conceptual framework to the study and to match the research questions.

The 3<sup>rd</sup> order outcomes include material, information and new awareness. Materials are physical resources that teachers gain access to in professional development activities, such as learner

worksheets, textbooks, curriculum guidelines etc. I will be guided by my semi-structured interview schedule to ask participants about what resources are offered at the Centre to answer my second sub-question and I will rely on their information to collect and record data. I will also observe in the Centre to ascertain what resources are available and how teachers use these.

Information outcomes result when teachers are made aware of circumstantial truths and updated about curriculum and management substances as well as implications for their practice (Harland & Kinder, 1997). The interviews and observation will help in giving me information on what teachers know or do not know about the curriculum implications.

New awareness outcomes mean that teachers become aware of the need to make a shift from old ways to new demands, e.g., “they acquire knowledge of and ability to use innovative teaching strategies and techniques to achieve required standards” (Heystek & Terhoven, 2014, p. 73). The interviews will help me get teachers to tell if they are becoming aware of the need to change practice which forms part of their moral responsibility to their teaching.

The 2<sup>nd</sup> order outcomes, which include emotional outcomes, indicate that after teachers attend a development activity, their reactions may differ: some come back demotivated and depressed, whilst others come with more enthusiasm to implement new strategies and are willing to adjust their attitudes to change (Harland & Kinder, 1997). Interviews will help teachers share their emotions about the learning activity. Effectiveness increases confidence and competence collectively and there is “opportunity for understanding oneself” (Opfer & Pedder, 2011, p. 390).

The 1<sup>st</sup> order outcomes include value congruence and knowledge and skills. Value congruence refers to an individual’s forms about curriculum and classroom management which appraises teacher practice. To adjust to change teachers need to be positive about adjusting to change and see it as important to change. They should be self-motivated and show their own will to learn when they see it is essential or when they long for the instant submission of new skills (Bantwini, 2018).

In this study value congruence was recognized because I did not have data to show how teachers’ practice changes since I did not observe them in their classrooms. Transect walk, observing

teacher activities and interviewing them in the Centre helped me know the extent to which the activities and resources enhance their learning.

Knowledge and skills outcomes show when teachers have mastered deep knowledge of pedagogy and curriculum content, for example, where sharing is confirmed, e.g., where learning is “situated, social and distributed” (Putman & Borko, 2000, p. 5), “propositional knowledge and practical knowledge” (Bertram, 2011, p. 9) and becoming “professional in practice” (Harland & Kinder, 1997, p. 75).

Impact on practice outcomes makes a teacher recognize his or her goals to bring about change in his or her practice. He or she focusses on cascading new skills to others (Harland & Kinder, 1997). Interviews enabled teachers to talk about their new knowledge and skills and how it is benefitting learners.

## **2.10 Conclusion**

To sum up, this chapter clearly indicates the interrelatedness of the two concepts: teacher learning and teacher professional development. “Teacher learning is the process by which teachers move towards expertise” (Kelly, 2006, p. 506). In other words, teacher learning determines teacher professional development. Teacher “professional development is the procedure by which teachers attain new information, skills and values which will improve their service” (Kwakman, 2003, p. 150). However, there is no assurance that the teachers’ activities in the Sunshine DTDC enhance teacher professional learning. The two theories of learning which are the cognitive theory and the socio-cultural learning are explained to understand the two concepts of learning. To be more precise, the two theories give an indication on how teachers, being the recipients of new knowledge and skills, react to receiving the new knowledge and how they make use of it in their context. Yet, I do not have information to show how teachers’ practices change because I did not observe them in their own classrooms. The next chapter discusses the methodology that has been determined by and employed in the study.

# CHAPTER THREE

## METHODOLOGY

### 3.1 Introduction

This study explores how the Sunshine DTDC supports teacher learning. The aim of the study is to discover how teachers learn in the Centre, which activities are offered, what resources are there and how these activities and resources support teacher learning. In this chapter I explain the plan and methodology of how I gathered and analyzed data to answer the research questions. These comprise of a research paradigm and approach that the study falls into, research style that is appropriate to the study and the methods of data generation that were used to gather data. I explain the sampling that has been selected about which people to include in the research study. Then, the steps that will be used in data analysis are summarized. I further explain the ethical issues with reference to consent, anonymity and confidentiality. Also, I elaborate on how trustworthiness of my study is strengthened. Lastly, the limitations to my study are explained.

The study aimed to answer the following research questions:

#### **Key research question:**

What is the role of Sunshine DTDC in supporting teacher professional learning?

#### **Sub-questions:**

1. What activities are offered to support teacher learning at Sunshine DTDC?
2. What resources are there to support teachers' learning in Sunshine DTDC?
3. To what extent do teachers say these activities and resources enhance their learning?

### 3.2 Research paradigm and approach

The interpretive paradigm is used to understand and describe meaningful social action (Mckenzie & Knipe, 2006). The focus of research in social science disciplines are people rather than objects

that can be measured (Bertram & Christiansen, 2014). In this study, I relied upon teachers' views of the situation on how Sunshine DTDC supports their learning. The focus of research was teachers. The Interpretive paradigm identifies influence on research of participants' background and experience (Krauss, 2005) as described by the teachers who have used Sunshine DTDC. The way in which teachers responded in the study rested mostly on their past involvements and circumstances of using the Centre. This provided me with access to a massive range of information. As a result, this was helpful in better understanding their insights and experiences of using the Centre (Cross, Hong & Williams, 2011). Therefore, the interpretive paradigm will suit my study because, being guided by research instruments like the open-ended interview schedules, I relied on teachers' views to describe how Sunshine DTDC supports their learning.

Ontology refers to different ways of understanding the nature of reality (Mckenzie & Knipe, 2006). According to interpretivism there is no sole truth about social action but many truths that are socially raised because every being has unique experiences from his or her point of view which makes him or her experience a different reality (Bertram & Christiansen, 2014; Krauss, 2005; Mckenzie & Knipe, 2006). In this research study, I expected many understandings of events and circumstances by the teachers who often use the Centre. The outcome of the research was formed through analysis of data.

Epistemology refers to the ways in which we believe that we can grasp reality. From an interpretivist perspective, knowledge is created in interaction between researcher and respondent on what they can understand (Mckenzie & Knipe, 2006). It is how I came to understand each teacher's perceptions about the role of the Centre in supporting their learning. The Interpretive paradigm is most suited for this study because it will describe and interpret teachers' lived experience in using the Centre. The data in this research study is reliable and mirrors the experiences of participants who are teachers, the Centre Manager and administration. I drew conclusions only from the participants that are part of the study.

In this study, the "qualitative approach is used because it seeks to explore the experiences of the people" (Creswell, 2013, p. 32) who use the District Centre. Qualitative research is expressive, spoken and usually connected with the interpretive paradigm. It means "the kind of research that produces findings arrived at from real world settings where the phenomenon of interest unfolds



naturally” (Golafshani, 2003, p. 600). Therefore, in this study, the qualitative approach is most suited to understanding teachers’ experiences in using Sunshine DTDC.

To explain the above: “many qualitative researchers believe that the best way to understand any phenomenon is to view it in its context” (Krauss, 2005, p. 759). In this study, I aimed to create the meaning of phenomenon from the interpretations of the participants who are teachers (Creswell, 2013). Furthermore, qualitative researchers “allow the questions to merge and change as one becomes familiar with the study content” (Krauss, 2005 p. 760). “In any qualitative approach, the aim is to engage in research that probes for deeper understanding rather than examining surface features” (Golafshani, 2003, p. 603). This allows the researcher to go deeper in getting more data and explains that according to the individual’s viewpoints.

The qualitative approach searches for a group under investigation (Cohen, Manion & Morrison, 2013). In other words, it is a small sample size. It is subjective, drawing on people’s views. It allowed me to interpret the meanings that teachers bring to me on what activities are offered at Sunshine DTDC, what resources are there and how they support their learning. The qualitative approach means the kind of research that produces findings not arrived at by means of statistical procedure. It is the kind of research that “produces findings arrived from real world settings where the phenomenon of interest unfolds naturally” (Golafshani, 2003, p. 600).

The researcher collaborates with participants’ meanings, “focuses on a single concept, studies the context or settings of the participants, validates the accuracy of the findings and interprets data” (Creswell, 2013, p. 47). The determination is around understanding behavior or practice and about wanting to do so from the idea of understanding of the research participants (Rule & John, 2011). Similarly, I collaborated with participants in the form of interviews. I collect data, interpret and analyze data and draw findings to answer the research questions. The enquiry was comprehensive and open-ended letting the participants raise issues that matter most to them.

### **3.3 Research style**

The research design that is used in this study is the case study. It “is a study of a case in a context” (Cohen, Manion & Morrison, 2013, p. 290). It offers a unique example of real people in

real situations. It provides a systematic and in-depth investigation on how the Sunshine DTDC supports teachers in their professional development, in their context, to generate knowledge (Rule & John, 2011).

There are three forms of case studies: descriptive, exploratory and explanatory (Rule & John, 2011; Henning, Van Rensburg & Smit, 2004; Cohen, Marion & Morrison, 2013). Descriptive case studies present a complete account of a phenomenon inside its setting. An “exploratory case study often sees a phenomenon that has not been explored previously and can lay the foundation for more study” (Cohen, Manion & Morrison, 2011, p. 291). An explanatory case study tries to describe what occurs in a case or why it occurs.

This study presents an exploratory case study since DTDCs have not been researched previously which can lay the basis for further studies (Rule & John, 2011) and influences the need for future research (Henning, Van Rensburg and Smit, 2004). Furthermore, this study satisfied my curiosity and my desire as the researcher for better understanding of the Centre, thus, familiarizing myself with the Centre by taking a good look at it (Rule & John, 2011).

Whilst engaging in this study, I kept reflecting by asking myself questions: “Am I clear about the case? How are my research instruments working? Is the data relevant to my research questions? Do I have enough data? Am I behaving ethically?” (Rule & John, 2011, p. 36).

### **3.4 Methods of data generation**

The first step to data collection was “securing access and building relationships to facilitate the process” (Rule & John, 2011, p. 67). I telephoned the Circuit Manager and visited the Centre to meet with her to explain my research study and to give my consent letter, as my starting point.

Data was generated through the following methods:

#### **3.4.1 Documents**

Documents written by the Centre manager, such as progress or evaluation reports, workshop attendance registers, schedules of events, were collected as they give understanding of the case-in-study and consist of information that may prompt questions to guide the interviews.

I made a collection of documents, copied them and filed them in a case file for data analysis. I collected documents such as newsletters, minutes, reports, vision and mission statements and other relevant documents.

### **3.4.2 Transect walk**

Transect walk is when the researcher goes on a walk with an active participant who shows him or her around the research site whilst he or she takes field notes using a note book in collecting data. Because of this, the transect walk prompts important questions to use during the interviews.

I took a walk with the Centre Manager (CM) who showed me around the Centre whilst I took notes using my note book to collect data. Starting with the transect walk helped give me the background picture about the Sunshine DTDC, its history, its sections, mostly about access, site, identification boards, learning spaces, electricity, water, sanitation, security and safety as required by Norms and Standards for Provincial Teacher Development Institutes (PTDI) and District Teacher Development Centres (DTDCs) in South Africa (DBE, 2015).

The transect walk prompted important questions about the Centre which I pursued during the interviews. Consequently, it laid a good ground for the incoming face-to-face interviews with individual participants. Whilst walking, the CM pointed out the buildings, gardens, parking area, administration area, conference rooms, classrooms, kitchen and more infrastructure of worth whilst explaining history and milestones of the Centre – with me taking field notes in my note book.

### **3.4.3 Interviews**

Qualitative interviews are one-on-one discussions, guided by a set of pre-set questions to lead the discussion between the researcher and individuals or groups.

I started by meeting with my participants, the Centre Manager and the ICT specialist, individually in the Centre to develop rapport with them, laying out the area that I would like interviewees to explore (Polkinghorne, 2005). The attendance registers for teachers who often visit the Centre for activities and use of resources, helped me see who of them were most suitable

to be invited to participate in the study and who could give light on the study due to experience using the Centre (Rule & John, 2011).

I explained the nature and purpose of the study and explained the informed consent form. The consent was fully informed to help “participants fully comprehend the nature of the research project” (Cohen, Manion & Morrison, 2011, p. 78). The consent form explained the right of participants to consider the dangers and benefits of engaging in research and decide whether to take part or withdraw (Cohen, Manion & Morrison, 2011). Thereafter, I allowed interviewees to ask questions of clarification about the study and made sure they were keen to proceed before I began the interviews (Rule & John, 2011).

I used semi-structured interview schedules of 60 minutes with a single person in their own chosen times so as not to interrupt their work schedules. The participants were the CM, the librarian, ICT specialist (see Appendix 3) and eight teachers (see Appendix 4) to achieve thick rich informational data. In conducting good interviews, I applied co-operative skills and communicative ability, established a comfortable atmosphere to develop an open relationship (Polkinghorne, 2005). Since the interviews were conducted after work time, I organized refreshments to keep participants at ease through the interview process.

The interview schedule comprised of the two sections. In a group of students with whom I am working in the study, it was piloted by discussing it in a group, and the questions were read, analyzed and changed to suit the study. The first section required biographical information. Herein, participants filled in their personal information which helped to instill a rapport to handle the circumstances in the interview delicately and professionally (Cohen, Manion & Morrison, 2011) and to lay the area that I would like the interviewee to explore (Polkinghorne, 2005) whilst I established a relaxed atmosphere for the interviewee (Rule & John, 2011).

The second section of an interview schedule comprises of the prearranged open-ended questions which initiate the discussion. This was followed by further questions which raised discussion through probing which allowed individual participants to expand their responses. In other words, people differ in their experience and understanding of reality (Rule & John, 2011).

I became an “effective listener and probed to make informed inferences and be able to keep a clear sense of direction so that the case is kept on track” (Cohen, Manion & Morrison, 2013, p. 296). The semi-structured interviews were recorded using audio recording and were transcribed precisely. The interview focused on the phenomenon of the learning experiences of teachers at the Centre (Rule & John, 2011). It allowed time to discover their involvement in depth (Polkinghorne, 2005).

According to Cohen, Manion and Morrison (2013) the raw data remained in ownership of the participants up until it is analyzed and interpreted, to be owned by the researcher. Therefore, a month later, after the data had been transcribed using the word document, I gave it back to the participants to confirm if it was a true reflection of what they shared with me. I further asked for clarity from some participants. Furthermore, I developed themes that had arisen from the oral interviews (Rule & John, 2011) to simplify the explanation and the participants added recently recalled information (Polkinghorne, 2005). To those participants whose schools might be far, I allowed at this stage for their telephonic responses in more detail on earlier responses from the face-to-face interviews (Cross, Hong & William-Johnson, 2011).

#### **3.4.4 Visual material**

Photographs are visual materials. They contain creative data gathering. They helped me to explain in more detail and give clarity in the form of illustrations. For example, I used photographs to show the type of books that are there in the library at Sunshine DTDC.

#### **3.4.5 Observation**

A qualitative observation is when the researcher takes field proceedings on the behavior and actions of people at the research site (Creswell, 2013). To explain, the researcher takes a record of significant incidents that happen each day in an unstructured or semi-structured way to build up a rich description of the activities at the research site. Qualitative observers remain full participants or non-participants. In this study, I remained non-participant.

My observations at the Centre were informed by a set of field questions within an observation schedule of the Centre (Appendix 5) to observe what resources are available for teachers. Is there

a computer lab? How many computers? Is there internet connection? Is there a library? Approximately how many books are there? What kind of books? For which subjects? Grade level? Number of offices for staff, computer lab, computers, library, books, board rooms, offices, conference rooms, classrooms? I took notes using the note book. I took care of the ethical consideration first to take photographs. I did not include the faces of people in the photographs to ensure participants’ privacy, confidentiality and anonymity (Bertram & Christiansen, 2014; Rule & John, 2011). Using photographs in the observation helped to provide a further chance for capturing observations (Rule & John, 2011).

Effective professional development includes “content focus, active learning and collective participation” (Desimone, 2011, p. 69). To explain, content focus entails professional development that emphasize subject matter. In active learning teachers should engage rather than sitting inactively in the lectures.

I observed the teacher activities that take place in the Centre, like in the conference room. The information was collected using a combination of a note book and an observation checklist (Appendix 6). Observing teachers’ activities helped to answer the research questions.

In the note book I took notes of all behavior considered significant during the observation to use for data analysis. In the observation checklist I indicated the teachers’ development activity, the date of observation, who presented, who were attendees and I entered notes about the activity and resources used. The following table directs how data from interviews and observation were collected:

Research Question	Data generation method/ instrument	Participants and how selected	Additional Data Source	Anticipated analysis
What activities are offered at the District Teacher Development Centre?	Observation schedule  Observation	Centre Manager (CM) who is the key informant about the Centre.  Teachers who	Documents – official reports from the Centre.	Harland and Kinder’s (1997) framework: Professional development

	Checklist Transect walk	come to Centre often – identified using attendance registers.		outcomes
What resources are there to support teacher learning in the District Development Centre?	Semi-structured interview Observation Checklist Transect walk	CM, Librarian, ICT specialist (work in the Centre).  8 Teachers who use Centre to their benefit were identified in attendance registers.	Field notes	Harland & Kinder's (1997) framework: Professional development outcomes
To what extent do teachers say these activities and resources enhance their learning?	Semi-structured interview	8 Teacher participants	Note book/Journal	Harland & Kinder (1997) framework: Professional development outcomes

**Table 1: Research questions and data generation methods**

### 3.5 Table 2 Research Participants

Participants' Names	Years teaching	Grades Teaching	Subjects Teaching	Qualification	Age Group	Gender	Race
Philani	24	4, 5	NS, TECH	Post - graduate	45-55	Female	African

Sydney	11	8, 11, 12	EMS, History	Post- graduate	35-45	Female	Colored
Malwande	14	8, 9	TECH	Post-graduate	35-45	Female	African
Pranesh	14	8-12	Life Sciences, Geography & LO	Post- graduate	35-45	Male	Indian
Mabheleni	21	10, 11	Economics & Business Studies	Post- graduate	45-55	Female	African
Majeyi	2	10-12	Business Studies, ENG	Post- graduate	25-35	Female	African
Benzile	29	7	Social Sciences, LO	Post graduate	45-55	Female	African
Kele	25	7	Natural Science, Mathematics	Post- graduate	45-55	Female	African
Helen	11	NIL	Centre Manager	Post- graduate	55-60	Female	African
Alex	5 months	NIL	Intern based on IT Supporter	National Diploma in IT	25-30	Male	African



The table above describes my participants. I had face-to-face interviews with these ten people. The eight teachers who participated in this study were working in different schools in the district around Sunshine DTDC during the research time of this study. Five teachers were teaching in High schools and three were in Primary schools. Sydney, Malwande and Pranesh taught in the same town school which is 15kms away from the Centre. Mabheleni taught in a township school 25 kms away from the Centre. Majeyi, Benzile, Kele and Philani taught in different deep rural schools about 30-45kms away from the Centre. This range of schools helped me in getting a general understanding of their needs to help this study in exploring the role of Sunshine DTDC in supporting teachers' professional development. The Centre Manager was a participant who gave the bigger picture of the Centre. The IT specialist was an appropriate participant for being in the Centre supporting teachers who come to use resources in the Centre.

### **3.6 Sampling**

Sampling comprises of making choices about which people, circumstances and activities to include in a research (Bertram & Christiansen, 2014). Sampling indicates that it is the researcher who decides on how many people should be involved in a study.

This study employed purposive sampling which means that it focuses on purposefully selected people and not the whole community. A site-based approach was used to recruit participants. The case in this study is one district teacher development Centre. Purposive sampling suits the purpose since the study is about one case. This sampling further helped the researcher to choose people who could give evidence or more information about the DTDC to address the research questions.

The sample size of this study comprises of 10 participants who are the Centre Manager (CM), Information and Communication Technology (ICT) specialist and, for convenience, eight teachers who often come to the Centre.

The CM is the potential participant who gave the bigger picture of the study. She is the starting point and she made it easier to go to other participants after meeting with her and having explained the study and received the informed consent that was delivered to her first. The ICT

specialist and the librarian are suitable participants for being in the Centre assisting teachers who come to use resources.

Convenience sampling means that a group of teachers chosen are within reach (Bertram & Christiansen, 2014). Teachers who come to the Centre often will best enlighten the research with their experience in using the Centre. I was guided by the attendance registers of teachers who come to the Centre to identify teachers who come to the Centre often and who with their experience in attending the activities and using resources in the Centre can give the researcher a big picture of the study. I considered the phase teaching, the subjects teaching and gender to ensure a mixed group. The participants were chosen because of their suitability in steering the research (Rule & John, 2011).

### **3.7 Data analysis**

Data analysis is the process involving “organizing, accounting for and explaining the data, in short, making sense of data” (Cohen, Manion & Morrison, 2011, p. 537).

There are three movements in the process of data analysis. They are “data reduction, data display and conclusion drawing” (Bertram & Christiansen, 2014, p. 116). Furthermore, “data reduction is the process of picking out and reducing data that appear in” (Bertram & Christiansen, 2014, p. 116) the note book or interview transcripts. Data display is orderly, reduced and gathered “information that allows the researcher to draw conclusions” (Bertram & Christiansen, 2014, p. 116).

There are two approaches to data analysis. They are the inductive approach and the deductive approach (Bertram & Christiansen, 2014). The inductive approach moves from specific to general. It uses themes that emerge from data as analysis tools. The deductive approach moves from general to specific. This study employed the inductive approach as well as using the Conceptual Framework by Harland and Kinder (1997). It enlightened my study. Also, it stimulated how I analyzed the data and I used its typology outcomes to help me to make meaning of the data that I collected. In fact, it linked clearly with the research aim and research questions.

The steps that I used for the data analysis strategy are explained by Creswell (2013). First, I prearranged and formulated data for analysis and transcribed the interviews with a word processor personally to fully involve with it. I scanned material like documents, for example, the mission statement of Sunshine DTDC. Along with it, I filed all the visual material, for example photographs. I immersed myself in the data to get a general understanding. The semi-structured interviews allowed me to summarize to confirm my understanding.

Secondly, I used the inductive process to read through all data to establish recurrent thoughts, notions, code the data, recognize themes and forms of belief and controllable data packages (Creswell, 2013). To do this, I wrote notes, codes and themes in the margins of interview transcripts and field notes. According to Cohen, Manion and Morrison (2011) in coding, data is collected and broken apart and then restructured to yield a new understanding that determines contrasts and changes, across various cases.

Thirdly, I grouped the codes into categories of commonalities using verbatim quotes from interviews. Coding data meant uniting data into portions and writing a sentence or word in place of that category.

To sum up, I used the coding procedure to create a picture of the context about where it is located, its people, places and what activities are associated with the context. I created codes and themes for this explanation. I used the same codes and themes as headings when drawing on the findings.

I worked out how the numerous themes, sub-themes, photographs, various viewpoints from individual participants would be formatted and represented in the qualitative narrative. I did not report on positive events only but also on negative events, including contrasting ideas. Lastly, I recorded data into a qualitative narrative in the next chapter – Chapter Four.

Finally, in Chapter Five, I made interpretations and conveyed findings which were my personal interpretation guided by my understanding of the study. To do this I drew from my experiences and incorporated them with an evaluation of the findings and with information gathered from the literature or the conceptual framework by Harland and Kinder (1997).

Then, I used the Conceptual Framework by Harland and Kinder (1997). It enlightened my study. Also, it stimulated how I analyzed the data and I used its typology outcomes to help me to make meaning of the data that I had collected. In fact, it linked clearly with the research aim and research questions.

### **3.8 Ethical issues**

Ethics enhance the quality of research and contribute to trustworthiness (Rule & John, 2011). It matches norms and rules of tolerable behavior. Being a student at the University of KwaZulu-Natal (UKZN) I am guided by the UKZN Research Ethics Policy that I familiarized myself with and signed an undertaking to comply with the University's Code of Conduct for research. In this note, this study has been ethically reviewed and approved by the UKZN Humanities and Social Research Ethics committee (approval letter included in Appendix 1) and by the Department of Education (approval letter included in the Appendix 2).

According to Bertram & Christiansen (2014) it is crucial that all research studies be guided by certain ethical values. These ethical values are autonomy, non-maleficence and beneficence (Bertram & Christiansen, 2014; Rule & John, 2011; Cohen, Manion & Morrison, 2013).

Autonomy implies that the researcher regards participants' privacy, confidentiality and anonymity as important (Rule & John, 2011). To ensure autonomy, I obtained permission from the University of KwaZulu-Natal (UKZN), the Department of Education (DoE), CM and consent from all participants. Once the permission was received, I started communicating with participants. I applied the principle of informed consent to protect and respect the rights of participants for them to weigh up the risks and benefits of permitting me to engage them in the study (Cohen, Manion & Morrison, 2011).

The consent explained that the information that they provided would be used for scholarly research only. Their participation was voluntary, they had a choice to participate or not to participate, they could withdraw at any time when they wished so and they would not be penalized for taking that decision. Their views were presented anonymously.

Non-maleficence ensures that research does not harm participants in any form (Rule & John, 2011; Bertram & Christiansen, 2014). Pseudonyms were used to ensure that neither the participants' names, identity nor the Centre name were disclosed in any form in the study. During observation of the Centre, the researcher asked for permission to take photos of the resources that are there, but the faces of people were not included in the photographs as this would have ethical implications for using the photos in the thesis. The interview schedules and the transcriptions of audio recordings will be securely stored in the researcher's supervisor's office at UKZN for a period of five years. After a period of five years, in line with the rules of the university, it will be disposed of either by shredding or deleting. Unanticipated ethical issues arising during research were dealt with caution and, if need be, advice was attained from the researcher's supervisor.

Beneficence implies that the study should be of advantage to either participants, other researchers or the whole society (Rule & John, 2011; Bertram & Christiansen, 2014; Cohen, Manion & Morrison, 2013). This study, as it indicates in the consent letter, will provide no direct benefit to the participants.

The researcher considers a requirement in the approval letter from the DoE, that a short summary of the findings, recommendations or a full report/dissertation/thesis should be submitted to the research office of the Department. Therefore, this report is likely to bring improvement in the Centre and the quality of the teachers' development activities in future to support interviewees' concerns.

As a researcher, my understanding of the DTDCs, being a teacher myself, influenced the data gathering process. Being a novice researcher, I kept seeking advice from the group whom I am studying with in the project. Also, regular meetings and emailing the group supervisor helped me go on with the research at my own pace. With the study being in the interpretive paradigm, I remained subjective and relied on the responses of the participants to build a case.

### **3.9 Trustworthiness**

Trustworthiness is like a yardstick in the qualitative study to determine to what extent the research is meaningful or makes sense and can be trusted. Trustworthiness determines if the research results reflect the reality and lived experiences of participants.

#### **3.9.1 Credibility**

Credibility in the interpretive paradigm demands that research should mirror the participants' real world. Interview transcripts of raw data in this study were given back to participants for them to check and remark if they were a true duplication of what they said. The data collection and analysis for this study should reflect people's real experiences in their setting which is Sunshine DTDC. Also, it must reflect many truths since the participants all understand reality and apply meaning in different ways.

#### **3.9.2 Dependability**

Dependability indicates the level which the researcher justifies for differences in the study (Bertram & Christiansen, 2014). The study needs to compare with previous studies when the researcher can explain similarities and differences. In this regard, there is no record of previous studies about Teacher Development Centres in South Africa.

#### **3.9.3 Transferability**

Transferability means that the research findings can apply to other situations with similar characteristics (Bertram & Christiansen, 2014). Since the study is a single case design, the findings will not be transferrable to other situations. It will apply only to Sunshine DTDC and to the teachers using the Centre.

### **3.10 Limitations**

The study was restricted to Sunshine DTDC in KZN since the case is to explore its role in supporting teacher learning and it is restricted to the Centre Manager, librarian, ICT specialist and eight teachers who were selected to participate in the study. This means that the findings are not generalizable to other Centres. Being a part-time researcher and full-time teacher limited my

opportunities of visiting Sunshine DTDC often to collect data mainly due to the Centre's being far away.

### **3.11 Conclusion**

In this chapter, I discussed the interpretive paradigm, the qualitative approach and the case study research design as they are suitable to my research on Teachers' Professional Development. The data generation methods used to gather data are described to help me answer the research questions. The sampling and the description of participants selected was explained. Then, the steps that I will use in data analysis were summarized. I further explained the ethical issues with reference to consent, anonymity and confidentiality and elaborated on how trustworthiness of my study will be strengthened. Lastly, the limitations to my study are explained. The next chapter explains the findings of this study.

# CHAPTER FOUR

## DATA PRESENTATION

### 4.1 Introduction

The aim of this study as mentioned in Chapter Three is to explore the role of Sunshine DTDC in supporting teacher professional learning. The focus is on the activities that are offered, resources that are there and the extent to which these activities and resources enhance teacher learning.

This chapter presents the findings of data generated from the qualitative face-to-face interviews conducted with ten participants comprised of eight teachers, the Centre Manager and the ICT Specialist. Additionally, data was generated using transect walk, documents, observation and audio and visual material.

This is a qualitative study. I employed the inductive approach to data analysis to help me make meaning of the data. First, I used the coding process to generate themes (Creswell, 2013). Secondly, I linked data within a matching category and across categories. These themes demonstrated various views from individual participants and were reinforced by various extracts and evidence.

In the first part of this chapter, I discuss the history and the purpose of Sunshine DTDC, accessibility, staffing and safety in the Centre. This includes information about people, places and events in the Centre. In the second section, I discuss further themes from the inductive analysis. These themes are: Sunshine DTDC as a venue for a whole range of activities; managerial understanding of professional development; clusters help; teacher monitors; curriculum coverage; teacher frustrations at the lack of resources; learning from activities at the Centre; and teachers taking the initiative for their own learning. The chapter concludes with a summary from findings.



## **4.2 The setting – Sunshine DTDC**

### **4.2.1 The history and the purpose of the Centre**

According to Helen (Centre Manager) the site was initially a school of industry for learners that had behavioural problems. In 2011 this school had an enrolment of 24 learners and 12 teachers (City News, 2017 October 2). According to Helen, it closed in 2012 due to a decrease in enrollment and financial constraints. In 2014 the site was converted to an Education Centre and at that time the focus was on learners, community and teachers. Then, in 2015 the Education Centre was converted to a DTDC.

The purpose of Sunshine DTDC is now wider than only serving as a Teachers' Development Centre. A wide range of people are served by this Centre. This finds its meaning in the mission statement which is displayed on the wall, indicating that it empowers and capacitates learners, educators, School Governing Bodies, Local Traditional leaders, Adult education and Training and Early Childhood Development learners and the wider community with appropriate skills, attitudes, values and knowledge that will allow them to contribute in the market world expressively. Furthermore, it researches and provides related information for curriculum support and development in Information and Technology, library, administration and management in the schools.

Helen explained that their focus is to make sure that they develop teachers, but they cannot ignore the community and youth.

### **4.2.2 Accessibility**

Driving from the local Municipal town to Sunshine DTDC takes about 25 minutes. The road to Sunshine DTDC leads through peri-urban settlements and turns again into a small winding road which leads through some scattered rural homes. Sunshine DTDC is in the deep remote rural area. It is on its own amongst the bush. Coming from a distance away, the Centre is seen as having a fine view in amongst the hills and far away from any community houses.



**Figure 2 Photograph of Sunshine DTDC from the fence taken on 22/02/2018**

The policy states that the site of the DTDC should be suitably located for ease of entry by public and private transport and walkers (DBE, 2015). However, Malwande felt that *“the Centre is far, we need to have our own cars to go there. It should be relocated.”*

Similarly, Majeyi claimed that *“there is not even transport to come to the Centre, people have to get lifts with others.”*

Mabheleni who had visited the Centre eight times since 2017 and who drives 25 km from her school, also felt that the Centre is too far. Furthermore, it is in a remote area with no signal for cellphones. She continued: *“we just come because we have no alternative and the road is bad.”* Throwing up her hands, Mabheleni claimed that *“the road is a one car route, one day a car will roll down the hill.”* Kele agreed with Mabheleni that *“the road is bad gravel – the authorities need to improve it.”*

Sydney, who was teaching in the town school, felt that:

*“maybe the hindrance is the road, especially when it rains, it’s gravel road, it’s not hard but other than that, it’s not an issue going there, I like the place, it’s nice, peaceful and quiet.”*

The Centre Manager, Helen, explained that they have challenges like transport and the road. She has approached the local municipality to sort out the potholes before but, showing anger, she sobbed and said:

*“but what they did, they came and removed all the tar and replaced it with gravel. That’s why we have this road that we have, when it’s raining the soil is washed away but if it was tar as before, we wouldn’t have a problem.”*

She continued to say that some teachers were complaining about that – *“the unevenness of the road for their cars”*, *“...oh we have to repair our cars now and then.”* There is no public transport coming to the Centre. *“If you use public transport you may have to alight at the peri-urban area and walk all the way to the Centre.”*

Helen mentioned that if there is a workshop, she makes arrangements with a public taxi to meet teachers in town by the main library as early as 08:00 in the morning but unfortunately the driver ends up waiting with 3 to 4 teachers. If they use the taxi in the morning, in the afternoon they take lifts with other teachers, whilst the taxi is waiting for them in the Centre.

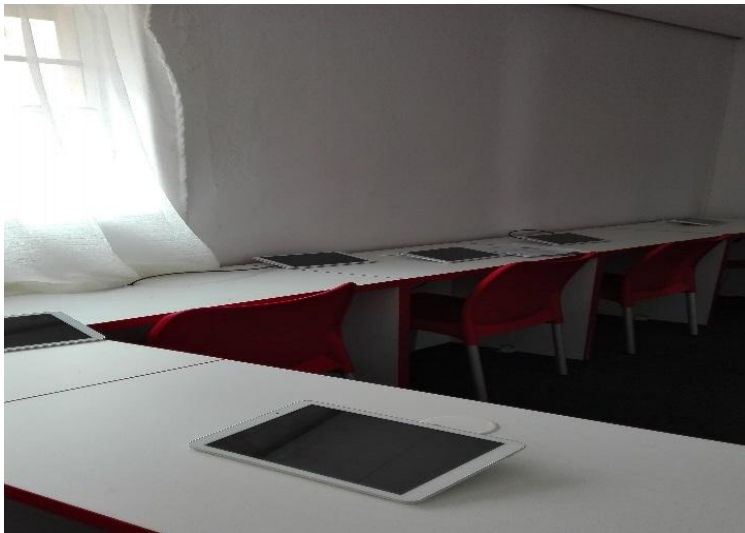
I was in the Centre on the afternoon of 22 February 2018 to observe the site when it started raining heavily. The road was washed away. I nearly got stuck inside the Centre for a couple of days. I owe a big gratitude to Helen and her own children who, according to her, without anyone noticing went out in the rain with spades to divert the water to the side of the road to prevent it from washing the road further in.



**Figure 3 Photograph of a road to the Sunshine DTDC taken after flooding on 22/02/2018**

#### **4.2.3 Staffing**

According to policy, the provision of staff in the DTDC should include the Centre Manager, personal assistant, programme coordinator, resource coordinator, ICT specialist, library coordinator, cleaner, gardener and security guard (DBE, 2015). At Sunshine DTDC there is a Centre Manager, an IT specialist, who is an intern, 2 cleaners, one gardener and two security men – day and night shift. Helen (Centre Manager) is the only one who is permanently employed by the Department. Other staff members are employed by the Department on a contract basis.



**Figure 4 Photograph of the computer lab taken on 22/02/2018**

There is a computer lab with 12 laptops, 1 printer and WI-FI for use by teachers and the community. Using the computers has a significant influence on teachers' work. On completion of a computer course, they get certificates. Teachers get material to use like CDs to download information. Because of attending the computer literacy workshops, teachers now know how to use their laptops at school. Majeyi, Malwande, Benzile, Kele and Philani indicated that *“we type our own question papers now.”*

Benzile declared that *“we download CPTD forms, curriculum documents and policy documents.”* Malwande stated that *“we are computer literate, we do it ourselves, we visit websites and download information.”*

Philani stated that:

*“we need to develop ourselves. Technology is what made me attend that Microsoft Word course in the Centre. We attend computer classes, there’s E-Learning, the communication is technology now, the Department is moving away from pen and paper. They email documents to school and we respond back and submit using our email. Technology is encouraging us to move away from chalk. Because of my computer skills, I can download curriculum documents.”*

Malwande indicated that *“my computer literacy skills go a long way, now I can read and send emails from my cellphone too, something that I couldn’t do before without computer skills.”*

Philani indicated that: *“I encourage parents and learners to use their cellphones to google so they can help their children using E-Learning.”*



**Figure 5 Photograph of a flower garden and a reception area taken on 22/02/2018**

The Centre has beautiful flower gardens and an administration space that is equipped with reception area furniture that appears and feels hospitable (DBE, 2015).

#### **4.2.4 Safety**

The Centre is fenced. There is a locked gate with a 24-hour security man to take control. There is a control book to sign when you enter and when you leave the gate. The doors have burglar guards.

The Centre should not be in a crime zone (DBE, 2015). However, Mabheleni, Benzile, Malwande and Majeyi are concerned about the peri-urban area that they travel through to the Centre. Malwande described the area as a “*hit and kill*” area. She described the people living in that area as dangerous people. She insisted that you cannot walk alone in that area. According to her, one needs to have somebody to accompany one to go there. Mabheleni stated that “*we have not heard of any incident, but we fear to drive alone as females in the area.*”

The following section describes the themes generated from an inductive analysis of the data.

#### **4.3 Sunshine DTDC as a venue for a whole range of activities**

According to policy, teachers experience difficulties in accessing and receiving support, resources and continuing professional development opportunities close to where they live and work (DBE & DHET, 2011), which is why the Centres exist.

All the teachers understood the purpose of the Centre to offer a venue for teacher meetings. Sydney affirmed that “*Sunshine DTDC helps teachers because there is no suitable venue in their schools for teachers to have moderation or conduct workshops.*” Pranesh and Majeyi saw the Centre as the platform for networking and a common meeting ground for teachers.

According to Pranesh and Sydney, in networking, they decided as a group of teachers to use the Centre as their common meeting venue. Pranesh further explained that “*after hours schools are left locked, but the Centre is open for us to meet instead of meeting at each other’s homes or in the library where there has to be silence.*” They stated that there they sit and discuss what activities they may discuss, for example, they use computers to help each other in designing work schedules. Those who are good in some areas help the others. They share ideas and go back to their schools and implement them. Sydney stated that:



*“we discuss learner errors for example; learners usually fail to understand challenging words like ‘justify’ in the examination paper then we compile glossary words in the group and use that to make our learners find a definition and we check on them every day.”*

Furthermore, Majeyi regarded the Centre as the venue to help teachers from different schools in the same area to come together and to form clusters. He believes that teachers improve their teaching ability on how to assess learners. Majeyi stated that “they get empowered in the workshops.”

Helen declared that “the resources in the Centre support teacher learning. In this way, teachers come to register online to study at UNISA and at UKZN. Furthermore, they come to plan and type their lessons and to develop each other as members of subject clusters.”

The Centre is the venue where teachers get assisted by lead teachers. Benzile, Majeyi and Pranesh described the lead teacher as an experienced teacher who is well versed in the subject. The subject advisor in the moderation workshop held on 24 April 2018 (Appendix 7) described the lead teachers as tutors.

Majeyi also affirmed that they learn from experienced teachers in the Centre. Benzile added that the Centre is there to capacitate and develop teachers. She, Helen, Malwande and Alex affirmed that the Centre is the workshop Centre for Natural Science, Technology and Mathematics teachers.

Furthermore, the Centre caters for Environmental and NGO’s activities, for principals’ forums, meetings and workshops. In addition, it is a Centre for Grade 12 learners to study. Alex, Helen, Pranesh, Majeyi and Mabheleni indicated that the Centre caters for matric winter classes which start usually in June and July. Spring classes start in October and teachers come with learners for weekend camps where they come on Friday and leave on Sunday.

Helen stated that there are agents that are conducting workshops for learners. She and Philani stated that the University of KwaZulu-Natal (UKZN) students come at times to assist matric students during winter camps in the school holidays. Also, staff from uShaka Marine Sea World in Durban come yearly to present a workshop to teachers, where they learn about projects on

pollution, recycling and global warming (Appendix 8). So, all the teachers stated that the information that they gain from the workshops helps them when they go back to use it in their classrooms.



**Figure 6 Philani's and Kele's school environmental project on recycling – (City News, 2017, October 2)**

Accordingly, the engagement of Benzile's and Kele's school team of teachers in the above NGO education programmes, is evident as their school took on an environmental project's competition. Also, their learners' engagement, including their pictures whilst engaging in recycling projects and in doing research on marine plants and animals, including drama and poetry was made known (City News, 2017, October 2). So, Philani's and Kele's school team thanked Helen, the Centre Manager, for allowing them to participate in the projects. Accordingly, teachers in the Centre learn how to teach subject content, how to conduct experiments and how to make their own resources. Learners partook in the beauty contest in their attires made from recycled material.

In my observation on 7 August 2018, staff from uShaka Marine Sea World in Durban presented a content workshop to Grade 7 teachers in the Centre. Teachers engaged in five topics, namely, what is matter, chemical properties, heat conductivity, phases of matter and mixtures and solutions. Furthermore, in groups they were given a scale and real objects to touch, to feel, to



measure, to convert to smaller scale, to conduct experiments, to observe and to discuss the findings. In addition, they kept calling to the facilitator for help to ask questions and for clarity. Helen declared that *“all teacher activities in the Centre are hands-on. As a result, teachers go back to school knowing exactly what to do.”*

#### **4.4 Managerial understanding of professional development**

The DTDCs are sites from which curriculum support staff can operate and where CPTD courses are delivered (DBE, 2015). In my observation at the Centre, I discovered that it has a mission statement (Appendix 9) that indicates the provision of relevant information for curriculum support, administration and management in the schools. The mission statement upholds the role of the Centre in supporting teachers' professional development which according to participants' responses reflects a managerial understanding of professional development. The professional development is top-down: the subject advisors take control of the development process. To explain, teachers do not seem to see the Centre as a place where they can learn professionally on their own initiative, but they see it as a place where they go to workshops when the Department calls them to workshops or meetings.

Benzile claimed that *“teachers need to be empowered, monitored, managed and to upgrade teaching skills.”* Sydney stated that *“the subject advisors invite us to workshop on moderation. They develop us to be well-versed in our subjects.”*

Teachers confirmed that they are invited to the Centre by the subject advisors for content workshops, curriculum coverage, to learn about strategies to fill gaps and to draw improvement plans.

Majeyi stated that:

*“we are checked if we are behind with curriculum and we come with strategies on how we are going to fill those gaps because if you are behind there is an annual teaching plan where you state the date when that section of work will be done because the Department has got the exact date for the completion of each lesson or topic.”*

Mabheleni stated that:

*“In the beginning of the year we come for orientation, where teachers old and new will be orientated as to how to go about teaching the subject for the whole year. Then, after the examinations we come for memo discussions. As we were here today, we came for the examination that was written in March.”*

Kele, Philani and Benzile stated that the Department of Education invites them to the workshops where the facilitators educate them on how to deal with learner discipline. Correspondingly, in my observation in the Centre on 26 April 2018, facilitators from the teacher development directorate from the District office presented a workshop to newly appointed Principals, Deputy Principals and HoDs.

The School Management Teams (SMT) were cautioned about corporal punishment and its implications for their jobs. Furthermore, the facilitators discussed with them the strategies to deal with learner discipline. For example, to mention a few, teachers need to come to class prepared and ensure that learning takes place. Also, they need to promote punctuality and regular attendance. Furthermore, a guideline document on the school attendance policy was distributed to all teachers.

Benzile, Sidney, Pranesh and Majeyi declared that the Department of Education invites teachers to development workshops on professionalism, Continuous Professional Teacher Development (CPTD) and Integrated Quality Management System (IQMS).

Benzile stated that *“CPTD is about self-initiated development activities.”* Pranesh stated that *“CPTD is a continuous teacher development programme, though we have taught for many years there are a lot of changes that have come about.”*

In my observation in the teachers' workshop on 26 April 2018 in the Centre, the workshop was mostly giving teachers information about CPTD. Teachers needed that information to implement CPTD in their schools. Furthermore, it was emphasized to the newly appointed SMTs that it is their responsibility to manage systems of CPTD for all teachers in their schools. They were advised to encourage all teachers under their leadership to engage in lifelong activities to

improve knowledge and capacity. Furthermore, they were encouraged to regard IQMS as being about quality and strategy to improve oneself in the job. Helen, the Centre Manager, had a slot in the agenda to address the newly appointed SMTs about the purpose of the Sunshine DTDC.

In her address, Helen explained that DTDCs are here to bridge the gap between well-developed and under-developed communities by bringing closer the resources to the previously disadvantaged communities. In particular, she made a note that other schools in town are well resourced and rural schools are poorly resourced.

Helen further explained that in the Centre there are resources like the computer lab but not all educators use it because they say that the Centre is far. Also, there are desktop computers, photocopier machines, data projectors, a Science lab with microscopes, that teachers can loan out. In addition, there is the Microsoft Digital Literacy course which is for free. Teachers may write examinations online. If they achieve 80% in all modules, then, they will get a Microsoft certificate with the certificate number.

#### **4.5 Clusters help teachers monitor curriculum coverage**

According to policy, individual schools need to be shown the advantages of operating as clusters (DBE & DHET, 2011). Jita and Mokhele (2014) describe clusters as groups of schools that are brought together for managerial or capacity purposes. In addition, teachers in clusters will probably form subject groups where they share and discuss knowledge and resolve problems (Jita & Mokhele, 2014). Accordingly, Pranesh stated that *“they put us into groups, into clusters because they want to envisage us working in clusters, so, we form cluster coordinators and secretaries.”*

In addition, Majeyi confirmed that *“as schools in the same area, we form clusters to improve where one is lacking.”*

Teachers confirmed that clusters benefit them a lot because when they come for moderation, they also do marks analysis where they analyze how their learners have performed, they track learner performance using each question, they are checked on how they cover the curriculum which they call curriculum coverage.

On 24 April 2018, I visited the Centre for my observation. The Business Studies subject teachers had a moderation workshop for Grades 10, 11 and 12 as a cluster and 34 teachers attended. It was planned for 8:30 but it only started at 9:00 because the teachers came late. The Economics subject advisor coordinated the workshop activities because, according to her, there had been no Business Studies subject advisor for 15 years since the one who had been appointed resigned. The first session of the workshop was on moderation and the second session on content.

In the first session of the workshop, teachers were advised by the subject advisor to always keep statistics on how many learners were doing the subject and how many were performing, for a submission to the curriculum and assessment department. Teachers submitted learners' marks for the first and second terms to the subject advisor and they signed. Teachers had to indicate if curriculum coverage was at par or at a week's backlog. If at backlog, they needed to come up with a Subject Improvement Plan on how they were going to cover the work that still needed to be covered. According to Mabheleni, being the Subject Head in her school, she was going to manage the Subject Improvement Plan with her subject teachers at school to ensure curriculum coverage.

In the second session of the workshop two lead teachers led the discussion. Teachers formed groups and a schedule of question papers was distributed for discussion (Appendix 10). There were shortages of question papers and the teachers were advised to share and to photocopy for each other later. Other than that, they were advised that the question paper was going to be available on the internet. As the tutors took a stand, the subject advisor advised teachers that if their schools perform poorly, they were not going to be made tutors. Furthermore, they had a lot of work to improve to reach that level.

Tutor One, who happened to be Mabheleni (my interviewee), advised teachers to look at term two topics only. The main idea was to prepare for term two examinations. The structure of the paper and the new developments, including writing an essay, were discussed. Teachers were apprised that for the first time in the examinations, the Business Studies examination paper will have two sections, that is, Paper 1 and Paper 2. Teachers were advised to communicate these developments to learners back at school.

Tutor Two discussed learner errors, for example, learners confusing sectors and the environment. Therefore, teachers were developed on the styles of questioning and were advised that all examination questions come from the Department's examination guide. Also, teachers were instructed on how to allocate marks.

The tutors invited questions from the teachers. One of the teachers asked if the tutors could please explain how to mark an essay. The subject advisor asked if tutors could prepare something on that aspect. Tutor One decided to respond at the same time indicating that there were also notes to markers that they were going to copy and share with them.

In my observations, during the discussions a lot of talking and explanations were coming from the subject advisor and the two tutors. Teachers were not engaging much in talking except by saying "yes", "no" or by nodding their heads. The subject advisor kept moving around the groups and ensured teachers paid full attention. Tutors skillfully delivered without being assisted by the subject advisor.

In my interview with Mabheleni later, asking her if she became motivated and inspired because of attending the moderation workshop, she responded:

*"Hawu! I was more inspired because as I was given an opportunity to facilitate – as you facilitate you see the crowd of teachers having an interest in what you are saying. It inspires you a lot and you become more motivated. Then, that makes me have an interest in coming back to the next workshop."*

Mabheleni further explained that:

*"it may be someone else who will be facilitating. I will be sitting down listening as I was looking at my other colleagues who were listening and asking questions. It motivated me to answer those questions back to them."*

In addition, Mabheleni claimed to have a lot of experience and expertise having served in and outside the district which she claims to be benefitting her cluster and her school. Mabheleni stated that:

*“I do facilitate in the other workshops as I have said that I am a senior teacher. I have been used for marking at the marking Centre. I started as a marker, then senior marker and now I am a deputy chief marker. This makes the Department, or the subject advisors use my expertise as a teacher that normally go for marking and that get first-hand information that I come back to our district and spread whatever new developments that I have encountered at a marking Centre. Also, I have been used to develop the papers or the material that is used in our Province – KZN. Furthermore, I used to be called every year to Durban or anywhere where it is arranged to develop the whole booklet or handout that will be used for our learners as well including both second chance learners who are struggling with school work and the highflyers. The material, information and knowledge are shared with other teachers in the cluster and at my school.”*

## **4.6 Teacher frustrations about the lack of resources**

### **4.6.1 The lack of physical resources**

The DTDC should be properly resourced to support Teachers’ Professional Development (DBE, 2011). Even so, according to Helen, Sunshine DTDC is not fully resourced, but it is resourceful. She maintains that there is a hall that hosts 200 people, 4 classrooms, 8 offices for staff and 1 board room. In my observation, the hall and the classrooms are down stairs which is not user friendly to people with disabilities and which hinders access to people in wheel chairs (DBE, 2015). Correspondingly, Kele stated that *“there are buildings that are down stairs, what about the people who are physically challenged, how can they reach down there?”*

There is a library with almost empty shelves. Benzile visited the Centre library to borrow pamphlets and charts to use for her environmental projects at her school. She felt that the library has minimal books, needs variety and needs to be upgraded. Likewise, on the transect walk with Helen, I went into the library which had only 12 encyclopedias and one kit each for Mathematics, Science, Biology, Technology and Physical Science. Helen maintained that she does not have a functional library.

Mabheleni did not know that there was a library in the Centre and surprisingly she stated: *“Is there one here in the Centre? I haven’t seen it. We used to just come to this hall, that’s it.”*

The DTDC should have equipment requirements for specialist rooms such as computer labs, science labs, libraries, and administration spaces (DBE, 2015). However, the Centre is facing a lot of challenges. Helen (getting distressed) indicated:

*“we have 30 computers but due to poor connectivity, we use only 25. As a result, we divide teachers into groups to alternate days. Sjoh! I wish to have a Science lab with all equipment.”*

Alex added that *“we do not have a science laboratory for use by teachers who come with their learners.”*

Helen indicated that the computer lab is connected to the WIFI, but the network is so bad that it caters for three computers only. She maintained that *“if the Centre had good connectivity, it would do well.”*

Mabheleni indicated that *“sometimes you find that there is no signal for the cellphones, even if you want to use your WIFI you cannot use it because this is a remote area, so there is need to make the area more user friendly.”* Malwande, Kele and Benzile suggested that the network needs an upgrade.



**Figure 7 Photograph of the library taken on 22/02/2018**

According to Helen she managed to get some books from donors. She added that she wished that UKZN and UNISA might consider using Sunshine DTDC as a satellite site since there are more than 50 teachers enrolled in these institutions. Because of this, these teachers are travelling long distances to the main sites. She continued to say: *“If they agree, they are the ones who are supposed to bring relevant books for their students.”*

Helen (raising her voice) indicated:

*“when I first came to the Centre there were no books, I tried donors with no luck. I want to have a Centre with indigenous plants for teachers to teach their learners. I want a Centre with sports facilities for teachers to develop themselves.”*

Alex added that: *“we do not have enough textbooks that are based on subjects.”*

Teachers indicated that they need Sunshine DTDC to have a library with a computer, a printer and a photocopier to download and to make copies. For now, they indicated that the documents that are distributed in their workshops become insufficient. In contrast, Helen indicated that they support teachers with equipment like a photocopier and printing.



In all my observation sessions during the teachers' workshops (24 April 2018, 26 April 2018, 7 May 2018 and 2 August 2018) there were always shortages of documents or handouts and there were no facilities in the Centre to photocopy more copies.

Mabheleni explained that:

*“you can go and ask for copies in this Centre and they will tell you that they do not have the ink and there is no paper. The Centre is struggling, we depend on what we bring ourselves, but no resources are obtained from the Centre. We need a photocopier, overhead projectors, data projectors, everything that is going to be useful to us. There is no tuck-shop, we stay hungry. Even the learners get bored, there is no TV, I wish there was a gymnasium, sports ground or machines to make our learners refresh their minds. For now, it is tuition - it's study, study, study and go back home.”*

#### **4.6.2 The lack of Human resources**

There is no administrator or librarian at Sunshine DTDC. When Helen was asked about this situation during interviews, she mentioned that the Department always says there are no funds to hire more staff. She continued to say:

*“I started to be the Centre Manager in one of the districts since 2007, but I never had an admin, an IT specialist and a librarian...till today.”* (Raising her voice); *“I do admin ... I do admin!”*

Though the Centre is not fully resourced, Helen indicated that she never had a problem with that because according to her she is a person who likes to explore and learn things every day. She proudly made a remark that today she is good at computers because she taught herself. She stated that:

*“I had to do computer training, whatever that was needed to be done at the Centre, I had to be hands-on because there was no one to say; can you do A, B, C, D”.*

According to Helen, she never thought the Centre would be functioning so well by now because when she first assumed duties in the Centre there was a lot of criticism:

*“the Centre is too far...to reach there on time, it will require us to get permission for early leave from school...blah...blah...blah...it won't work! Meanwhile, I see it working far better than some of the Centres in my history of networking. Some are not operational at all.”*

Helen felt that although they have challenges, the Centre is functioning well.

She stated that sometimes IT specialists help her with administration work when there are no IT students. Sometimes she even asked the cleaner to help her. The teachers indicated that they would like to see full-time staff like a librarian being appointed. They felt that they are being assisted by the in-servers who come and go. They felt that there is one Centre in the area and it must be upgraded.

#### **4.7 Learning from activities at the Centre**

According to policy, teachers struggle to get curriculum support and resources closer to where they live and work (DBE & DHE, 2011). So, the teachers at Sunshine DTDC stated that they come to use the Centre because they do not have resources in their schools to host workshops or moderation. Furthermore, they had an opportunity to develop in computer skills such as Microsoft Word, on how to type, how to use Microsoft Excel, power point, how to create databases, how to use email and they got certificates. Because of attending the computer literacy workshops, teachers indicated that they now know how to type their own question papers at school.

Philani indicated that:

*“we come from different backgrounds, we do not have all facilities, we need to develop ourselves, Technology is what made me attend that Microsoft Word course in the Centre.”*

In my interview with Philani later, she indicated that with her computer skills, she can now use her laptop at school. Furthermore, Philani, Malwande, Majeyi, Benzile and Kele claimed that the

Centre taught them to improvise, making their own resources, and they got instructed in recycling and in conducting experiments.

#### **4.8 Teachers taking initiative for their own learning**

According to policy the DTDCs will support teachers to access suitable development opportunities (DBE & DHET, 2011). It is where CPTD courses are delivered (DBE, 2015). During face-on-face interviews with teachers, it became evident that they knew about CPTD and their development needs and their responses indicated that they are beginning to do something about it.

Philani claimed that:

*“I am adjusting to change, I am taking CPTD to the next level, you take initiative as the teacher either you enroll, you go on line and study to improve in the areas where you are not doing well. We need to develop ourselves, Technology is what made me attend that Microsoft Word course in the Centre. These days communication is technology. The Department is trying to move away from pen and paper. Technology is encouraging us to move away from chalk. Because of my computer skills, I can download curriculum documents.”*

Benzile claimed that *“CPTD is about teacher development, I am going to develop myself, I will enroll and study, it is an individual thing.”*

Majeyi indicated that *“We need to move with the times, move with the movers, I use my ICT skills to report my self-initiated activities in my laptop for CPTD developments.”*

Kele indicated that *“I learnt about CPTD in the workshop, I signed up, I will not wait for the Department to develop me, I will identify my development needs and develop myself.”*

Malwande stated that *“ I have signed up with the CPTD development programme, we teach in an area where there are a lot of barriers and social ills are affecting learners, we need to develop ourselves, signing up with CPTD is going to develop me in these change demands.”*

Mabheleni, Philani, Benzile and Majeyi thought that as teachers they are lifelong learners, so they learn a lot at Sunshine to keep themselves up-to-date with all the curriculum changes.

## **4.9 Conclusion**

In this chapter, I presented data which I collected from ten individual participants who are the Centre Manager, IT Specialist and eight teachers from both primary and secondary schools. The choice of participants helped me to collect data that is balanced to assist me in drawing reliable findings. The data indicated that Sunshine DTDC is playing its role in supporting teachers' development. Though the teachers do not come to the Centre of their own accord, they seemed to be very active and enthusiastic in all the activities that they engaged in in the DBE workshops. This helped me come up with very rich data. They engaged in a lot of activities which they regarded as benefiting them. The next chapter summarizes the study and it presents findings and recommendations found in the study.

## **CHAPTER FIVE**

### **DISCUSSION AND CONCLUSION**

#### **5.1 Introduction**

This study intended to explore the role of Sunshine DTDC in supporting teachers' professional development. The focus of the study was on activities and resources that are offered and the extent to which these activities and resources enhance teacher learning.

As mentioned in detail in Chapter Three, this is a qualitative study in the interpretive paradigm. Therefore, when interacting with the teachers using interviews, I relied on their views to describe how Sunshine DTDC supports their learning. This chapter presents a discussion of the research questions and the recommendations and conclusions, based on the findings. Lastly, limitations of the study are indicated.

I will use the conceptual framework by Harland and Kinder (1997) to engage with the research questions about teacher learning. This conceptual framework, as discussed in detail in Chapter Two, describes the classification of outcomes of a teacher development activity. Now I want to recap it. Harland and Kinder (1997) propose that there are three 'levels' of possible outcomes following teachers' involvement in a professional development activity. The 3rd order outcomes include material, information and new awareness. The 2nd order outcomes include emotional outcomes and collective influence. The 1st order outcomes include value congruence and knowledge and skills and their impact on teachers' practice. Harland and Kinder (1997) suggest that these outcomes are all needed to bring about change in teachers' classroom practice. This conceptual framework helped me to draw on ideas that informed my research study as to where these ideas came from, how I used them, why they were important for my study and the relevance of these ideas to my research focus. I connected data to the outcomes of the conceptual framework, and I used a literature review to help me align the study with the research questions (Creswell, 2013).

As mentioned in Chapter Two, teacher learning is “the process by which teachers move towards proficiency” in teaching (Kelly, 2006, p. 506). It is perceived as a dynamic and productive activity by a group of teachers together in a real-life situation (Kwakman, 2003) through a range of different activities, both formal, informal, intended and unintended (Bertram, 2011; Lohman & Woolf, 2001; Jita & Mokhele, 2014).

## **5.2 Research Question 1: What are the activities offered to support teacher learning at Sunshine DTDC?**

Teachers do not come to the Centre of their own accord. That is, they do not seem to see the Centre as a place where they can learn professionally on their own initiative, but they see it as a place where they go to workshops when the Department calls them to workshops or meetings. This managerial understanding of the Centre means that the professional development activities often focus more on transmission of information than transformative classroom practice (Kennedy, 2005). To explain this, transmission of information happens in a learning process whereby a practitioner delivers information to the teachers who sit, listen, and remain inactive participants (Kennedy, 2005). According to Kennedy (2005) this is common in the training model which is a strategy that supports teachers in becoming proficiency independent.

Transformative practice transpires when CPD is perceived of as a support to teachers allowing them to engage meaningfully in curriculum policy, thus, more likely to influence their instruction and practice (Kennedy, 2005). Increased teacher autonomy becomes evident when CPD is seen as being so supportive as to prompt teachers to make a shift from transmission to transformative classroom practice (Kennedy, 2005).

To explain the above, it seems that teacher activities in Sunshine DTDC are informed by the transmission view of CPD (Kennedy, 2005) whereby the subject advisor as an expert or lead teachers as experienced teachers who are well versed in the subjects, deliver information in a workshop whilst the teachers mostly remain seated and inactive in their groups. Kennedy (2005) suggests that one needs to increase one’s capacity further through a transitional process informed by coaching, mentoring, and community of practice activities for one to transform from

transmission to transformative groups. Furthermore, Kennedy infers that transformative practice is where the teachers show potential opportunities to influence teacher learning activity.

To respond to Question 1, I looked at the main teacher development activities that the teachers say are offered at Sunshine DTDC to support their professional development. The teachers declared that they attend computer literacy activities, cluster meetings, teacher networking and teachers' NGO activities, which I will discuss in more detail.

### **5.2.1 Computer literacy training**

There is a computer lab with 12 laptops, 1 printer and WI-FI. The computer lab is open from 8:00 to 17:00. The teachers first go to their schools because in the morning out-of-school youth occupy the computer lab from 8:00 to 12:00. Then, the teachers' training starts at 12:00 and finishes at 15:00. Due to the limited resources, the teachers alternate the dates to attend. Some come on Tuesdays and some on Thursdays. They do not come on week-ends. But if the teacher is desperate to come on a week-end, the Circuit manager always makes that arrangement. There is an ICT Specialist who is on internship. Even though the ICT Specialists keep coming and going, the computer lab remains functional because it has the Centre Manager who likes to explore and learn things every day. In the absence of an ICT Specialist, she takes over and develops teachers in computer literacy. Her expertise enables her to do whatever is needed to be done at the Centre because the Centre is very short-staffed.

In the computer literacy training, the teachers develop and master deep knowledge in computer skills like Microsoft Word on how to type, how to use Microsoft Excel, power point, email and how to create databases. According to Harland and Kinder (1997) this explains a Level 1 order outcome where skills show when the teacher has learned knowledge and skills about technology. According to the teachers they attend computer training workshops and when they finish all the modules, they get certificates. Clearly, this reflects Kennedy's claim that "the training model is compatible to a standard based view of teachers' development where the teachers strive to demonstrate skills" (2006, p. 237). They become experts in using computers (Kelly, 2005). However, I could not confirm the skill in practice because I relied on what the teachers told me.

### **5.2.2 The cluster activities**

The second type of activity is cluster activities which include teacher meetings, moderation or workshops. Teachers from different schools who are teaching the same subjects come to meet in subject clusters. Lohman and Woolf (2001) explain this teacher activity as collaboration where teachers in the same or different schools or who share a common grade level or discipline, subject matter or activity work together. Collaboration generates “a learning culture and helps to build a community in which further learning is supported” (Kwakman, 2003, p. 152). In addition, collaborative learning allows teachers chances to progress and be developed well in their teaching (Bantwini, 2018). At Sunshine DTDC, subject clusters like Mathematics, Business Studies and Economics meet with their subject advisors to do moderation termly which, according to interviewed teacher participants, is helping them, especially the newly appointed teachers. In other words, district and circuit leadership has an obligation to generate a supportive environment in which individuals are inspired to work enthusiastically, efficiently and with desire (Bantwini, 2018). This statement confirms that cluster activities at Sunshine DTDC support teacher learning. The Centre fulfills its role to support teacher learning and it meets the requirements of DTDCs, as laid in policy, that designated highly skilled and knowledgeable teachers and subject advisors are recognized to advance the capacity and competence to induct new teachers into the profession (DBE & DHET, 2011) in the form of meetings, workshops and moderation.

The subject moderation workshops that I observed had two sections. One was a Business Studies moderation workshop. In the first session of the moderation, the subject advisor gave guidance in drawing analysis of each term’s results, highlighting the number of learners’ percentages obtained, the number that passed, and the number that failed. In the same way, Brodie (2013), Putman and Borko (2000) suggest that teachers should use actual classroom data to identify their development needs and learner needs in collaboration. In addition, the moderation plan was discussed. Also, it was checked if everyone was at par with curriculum coverage or at a week’s backlog. So, at a week’s backlog, they could come up with an improvement plan indicating how they plan to cover the work that still needs to be covered. In moderation teachers are given feedback as to the changes in the curriculum. Also, Bantwini (2018) argues that collaboration offers feedback generally constructed on teachers’ observations. According to Harland and



Kinder (1997), this is information which is a Level 3 outcome of a professional development activity. In this regard, Sfard (1998) regards this way of understanding learning as acquisition of concepts which are basic units of knowledge and which are passed on to the learners. Bantwini (2018) maintains that collaboration is a way of confirming individual performances while reassuring mutual attention on the pupils' learning goals.

In the second session of moderation, the discussion led to curriculum development. The two lead teachers in the presence of the subject advisor made teachers form groups and a schedule of question papers was distributed for discussion. According to Harland and Kinder (1997) receiving resources is a Level 3 outcome whereby teachers gain access to a professional activity. If there were shortages, they were told to photocopy for each other later because there were no facilities in the Centre to help them with the shortages. Lead teacher 1 coordinated the mid-year examination paper which included the structure of the examination paper which was discussed with the teachers. Teachers were advised to communicate the new developments to learners back at school. According to Harland and Kinder (1997) this is information – a Level 3 outcome of professional development activity.

Also, teachers received information that made them aware of curriculum and management developments. According to Harland & Kinder (1997) this is a Level 3 outcome of professional development activity. The subject advisor was delivering information whilst teachers were listening passively with not much collaborative learning. I could not prove if this knowledge really impacted on teachers' skills, knowledge and practice because I relied mostly on what the teachers told me.

Teachers say that they become motivated and inspired because of attending the moderation workshops. According to Harland and Kinder (1997) this is an emotional outcome which is Level 2 of the professional development activity outcomes. One of the lead teachers who was interviewed declared that she also became more inspired because she was given an opportunity to facilitate, as were the teachers who were interviewed from the groups. As she facilitated, she saw the crowd of teachers were interested in what she was saying. It inspired her a lot and she became more motivated. Then, that made her interested in coming back to the next workshop.

The lead teacher declared that it motivated her to answer the questions back to the other teachers. This describes Harland and Kinder's (1997) Level 2 collective influence outcome of the professional development activity now that teachers are working collectively, sharing and supporting the curriculum. As a result, when they gain knowledge, it is hoped that they will improve their instruction and practice as well as learners' results. However, I was not able to see the impact in the classroom because I was relying on what the teachers say about learning activities in the Centre since the case was on the role of Sunshine DTDC in supporting teacher learning.

Tutor 2 discussed learner errors, for example, learners confusing the terms 'sectors' and 'environment'. Therefore, teachers were developed on the styles of questioning and they were instructed on how to allocate marks. In this way, teachers keep questioning their practice, continuously, reflecting collectively to encourage and improve student learning (Brodie, 2013). According to Harland and Kinder (1997) this is information – a Level 3 outcome of a professional development activity where teachers are appraised of curriculum management as well as implications for their practice.

To summarize, the subject advisor wrapped up the workshop by inviting more teachers to work hard towards improving their learners' marks, so they can become lead teachers. Teachers were encouraged to network with teachers from other schools, to telephone subject advisors, to get somebody from another school to come and help when experiencing problems and to network as far as outside the district for teachers' professional development.

### **5.2.3 Teacher networking**

The teachers regard Sunshine DTDC as a platform for their networking. In fact, "teachers' networks, communities of practice and clusters make teachers learn together, share, exchange expertise and solve problems" (Jita & Mokhele, 2014, p. 3). In the same way, Brodie (2013) regards network meetings as being effective to sustain professional learning communities. According to Bantwini (2018) collaboration has turned out to be the source of professional learning communities which stimulates peer support. Kwakman (2003) suggests that teacher learning must be empowered by creating a satisfactory learning atmosphere in which teachers

take charge of their learning. Therefore, according to the interviewees who are teachers in this study, they have decided as a group to use Sunshine DTDC as their common meeting venue for networking. Teachers indicated that their schools are left locked when they go home, but the Centre is open for them to meet instead of meeting at each other's homes or in the library where there must be silence.

As explained earlier, community of practice is a transitional model of CPD and regarded as increasing capacity for professional autonomy (Kennedy, 2005). Clearly, Sunshine DTDC played its role in supporting teachers by providing a venue for networking. Perhaps with more supportive CPD, and a full recognition of this teachers' networking by the subject advisors at Sunshine DTDC, teacher networking is likely to become a fully serving community of practice in the Centre. Likewise, a "community of practice will give teachers a chance to observe and learn from each other and for experimentation" (Bantwini, 2018, p. 5). In my view this possible transaction will work towards helping teachers increase their capacity for professional autonomy, thus moving them to transformative practice.

Teachers in the networking group at Sunshine DTDC sit and discuss what activities they want to discuss and plan towards their development according to where they are lacking. According to Putman and Borko (2000) teachers should use actual classroom data to identify their development needs. At Sunshine DTDC, teachers design work activities, for example, they design work schedules for use in their schools. Furthermore, they help those who are still struggling in activities as a group. For that reason, the learning at Sunshine DTDC is not individual but it is social in nature and it is strongly related to the context in which it takes place (Putman & Borko, 2000). Furthermore, teachers bring diverse understanding and knowledge to group discussions, thus, developing common understanding as a group (Putman & Borko, 2000).

Teacher networking helps teachers to bring up-to-date their skills to advance their competence within their group (Kennedy, 2005; Engelbrecht & Ankiewicz, 2015). As a result, these teachers become aware of the need to make a shift from old ways to new demands. According to Harland & Kinder (1997) this is new awareness, which is a Level 3 outcome of the professional development activity.

Teachers who are good at some areas in the subject help the others. Furthermore, they discuss learner errors. According to them, learners usually fail to understand challenging words like ‘justify’ in the examination paper. In this aspect, teachers compiled a glossary of words as a group to help learners improve at school. According to Harland and Kinder (1997) the development of knowledge and skills is a Level 1 outcome of the professional development activity. Consequently, Brodie (2013) regards networking as important because teachers offer a variety of feedback and learning opportunities. So, Sunshine DTDC as the venue for teacher networking is fulfilling its role of supporting teachers’ professional development.

#### **5.2.4 Teachers’ NGO activities**

The records in the Centre and attendance registers indicated a series of workshops that take place for the primary and secondary school teachers mostly in Mathematics, Natural Science, Technology and Environmental activities. These workshops are run by NGOs. In this regard, teachers gather in the Central venue, Sunshine DTDC, to attend these activities which are facilitated by experts, for example, the staff of UShaka Marine Sea World in Durban. These teachers’ activities include how to teach subject content, how to conduct experiments and how to make their own resources.

Teachers were hands-on using various resources that they do not have in their own schools to expose their learners to conducting experiments. According to Harland and Kinder (1997) this is material, information and new awareness which is a Level 3 outcome where teachers are given resources, for example, a scale to measure various objects. Accordingly, “the sharing and exchanging of expertise are improved when teachers learn together and solve problems collaboratively” (Jita & Mokhele, 2014, p. 3).

Teachers had the opportunity to touch, pull, stretch and squeeze objects and measure volume, liquid, gas, to mention a few: “teachers exchange knowledge by talking, collaborating, observing and sharing resources” (Lohman & Woolf, 2001, p. 66). In my view, the NGO workshop was more democratic, characterized by collaboration, sharing and collective decision making amongst the teachers as a group (Day & Sachs, 2004). According to Harland and Kinder (1997)

this is collective influence – a Level 2 outcome of professional development activity. Furthermore, teachers showed enthusiasm to implement new strategies back in their schools.

These activities form the strategies and techniques for teachers to cascade change to their classrooms (Kennedy, 2000). According to Harland and Kinder (1997) this is a new awareness Level 3 outcome of the professional development activity, indicating the strategies and techniques to meet required standards. In the same way, teachers in Sunshine DTDC indicated that they cascaded information from NGO activities back into their schools and engaged learners in various activities including recycling projects, debates, drama, poetry and a beauty contest. According to Putman and Borko (2000) this explores learning and the desire for teachers to create new insights in teaching.

Teachers declared that these activities improved their instruction and practices in their classrooms. On the other hand, I could not prove this teacher instruction and practice because I relied on what the teachers told me about their engagement in these activities in the Centre. Some evidence is that the local City Newspaper (City News, 2017, October 2) show-cased the highlights with pictures of the school that took on an environmental projects' competition. Clearly, transformation practice transpired at Sunshine DTDC where NGO activity was perceived as supportive to teachers, letting them involve meaningfully in curriculum policy, thus, influencing their instruction and practices (Kennedy, 2005). In my view, the teachers' NGO activity and the evidence of a successful schools' environmental project competitions, seemed to indicate all the 3 levels of typology of outcomes as suggested by Harland and Kinder (1997) to be present in an effective CPD for change in practice and learner attainment. Though, I did not observe teachers in practice, I only relied on what they told me.

### **5.3 Research question 2: What resources are offered to support teacher learning in Sunshine DTDC?**

According to Darling-Hammond et al. (2009) comparing the South African study with international studies, in Finland the schools within the area are stimulated to work together and share resources. Similarly, in South Africa the KZN Department of Education has strengthened DTDCs by providing resources for sharing by the teachers who use the Centres (DBE & DHET,

2011). According to Harland and Kinder (1997) this is collective influence – a Level 2 outcome of the professional development activity now that Sunshine DTDC allows the teachers to work collectively and share resources to support the curriculum.

To answer this question, I will focus on the computer Centre, the hall, the classrooms, dormitories and the library.

### **5.3.1 The computer Centre**

The computer lab is connected to WI-FI, but the network is so bad that it caters for three computers only. There is a need to improve internet connectivity for effective use of the internet by the teachers who access information that they require in teaching.

Teachers attend computer classes in the Centre. Using computers has a significant influence on teachers' work. They can use uploaded CDs to download information. Now that they are computer literate, they visit websites and download information like CPTD forms, curriculum documents and policy documents. According to Harland and Kinder (1997) receiving materials is a Level 3 outcome of a professional development activity. They come to the Centre to register online to study at UNISA or at UKZN. Also, they come to plan and to type their lessons.

### **5.3.2 The hall**

There is a hall that hosts 200 people. It has got two hundred chairs and it is used as a venue for workshops, seminars or meetings. The hall is mostly used by the teachers for workshops. Sometimes teachers come with learners for winter or spring camps and use the hall. They also use the hall for extra lessons for the week-end or to study for examinations and for writing examinations. However, the buildings in Sunshine DTDC do not comply with the requirements in the Norms and Standards (2015) relating to teachers with special needs since the classrooms and the hall are down stairs. This requires urgent attention to ensure that these requirements are rectified to meet with the Norms and Standards policy (2015).

### **5.3.3 The classrooms**

There are four classrooms that are used for teachers' workshops or learners' extra lessons which are arranged by the schools or for NGOs' workshops. It depends to how many subject advisors

come to use the Centre: if they are more than one, they use the classrooms. Each classroom has got one big teacher's table, 24 learners' tables arranged in groups, one cupboard, a chalkboard, a bulletin board and two electric plugs.

#### **5.3.4 Offices**

There are 8 offices for staff and 1 board room. Unfortunately, these facilities are not in use since there is no staff to occupy them. The Circuit Manager is the only staff member that is employed by the Department and she occupies one office. Most importantly, there is an urgent need to appoint staff like an administrator, a librarian and a full time ICT Specialist for the effectiveness of the Centre administration office, library and computer lab.

#### **5.3.5 Dormitories**

There are two dormitories for learners who sleep over and 4 teachers' chalets for the teachers who accompany the learners for winter camps, for spring camps, for matric students who come to study for examinations and to write the examinations. There are no facilities to refresh learners after a long day especially if they have been at the Centre for days. There should be a tuck-shop to help the teachers and learners if they are staying since there are no shops around the Centre. There should also be a gymnasium, sports ground or play machines to help teachers make their learners refresh their minds. Other than that, there is a kitchen, running water and enough toilets.

#### **5.3.6 The library**

There is a library. It is not functional due to a lack of resources. It has got only one kit each for Science, Mathematics and Life Sciences and 12 microscopes that were donated by UKZN. The library needs books to function well. In the meantime, there are not enough textbooks that are based on subjects. It has got charts and science kits only. Teachers need a fully serviced library that has a photocopier, a computer and a printer to help teachers to download and to make copies. For now, the documents that are distributed in the teachers' workshops become insufficient. They also need overhead projectors, data projectors, everything that is going to be useful to them.

### **5.4 Research question 3: To what extent do teachers say these activities and resources enhance their learning?**

The activities and resources empower and develop teachers. Because of attending the computer literacy workshops, teachers now know how to use their laptops. According to policy (DBE & DHET, 2011) the DTDCs aim to assist teachers to gain access to and become skilled in using laptops and the internet to recognize and address the development needs of individual teachers (DBE & DHET, 2011). Consequently, Sunshine DTDC has met its role in supporting teacher learning now that the teachers can type their own question papers at school. So, they end up with a clean typed work. Bertram (2011) declares this type of teacher learning as formal learning which requires the teacher to attend and come back to school to transfer information to his or her practice.

Teachers with computer skills can access E-Learning programmes and can teach their learners at school to access information pertaining to their subjects and projects using E-learning. They use Information and Communication Technology (ICT) to communicate. In addition, these activities enhance teacher's "knowledge, skills and classroom practice" (Desimone, 2011, p. 69).

According to Harland and Kinder (1997) this is a Level 1 outcome – knowledge and skills indicate when the teacher has mastered skills of how to use technology more effectively.

Using computer literacy, teachers can receive emails from the Department, and they can respond back and submit documents using their email. In addition, email assists teachers to gain access to distributed skills (Putman & Borko, 2000). Technology is encouraging them to move away from chalk and pen and paper. According to Harland and Kinder (1997) this is new awareness, a Level 3 outcome of professional activity. Teachers can now read and send emails from their cellphones as well, something that they could not do before without computer literacy skills. Teachers encourage parents and learners to use their cellphones to google so parents can help their children in using E-Learning to download information.

In the computer literacy classes, teachers develop deeper levels of understanding in computer skills. They become experts in using computers as they cascade it back to school to develop others and to use the skills in their daily written work.



In the subject cluster workshops at Sunshine DTDC which is a centralized venue for teachers, teachers declare that they learn from experienced teachers and they develop in curriculum coverage. Luneta (2012) and Engelbrecht and Ankiewicz (2015) argue that programmes in which large numbers of teachers are trained during centralized CPD fail to prepare teachers due to the complication of implementation. To explain, they further claim that this is because of trainers of CPD who lack confidence, information and understanding to carry out the training procedure. However, in my view this is not always the case because at Sunshine DTDC the activities that are offered are run by highly skilled, confident, knowledgeable and experienced subject advisors and lead teachers who, despite the challenges, still manage to offer workshops to a certain standard to enhance teacher learning and still make teachers enjoy going back to the Centre for more workshops. At Sunshine DTDC, the subject advisors are in authority for subject precise support and success of the cluster (Jita & Mokhele, 2014). It is hoped that these workshops really change teachers' instruction and practice and improve learner results, but this study did not collect data regarding change of practice.

According to teachers, cluster workshops give them a chance to bring up-to-date their skills to advance their competence within their schools (Kennedy, 2005). In the Centre teachers attend workshops and get material like handouts to use in their classrooms. According to Harland and Kinder (1997) receiving materials is a Level 3 outcome of a professional development activity. Workshops inspire them and they became more motivated and it creates in them that interest to come back to the next workshop, which is a Level 2 emotional outcome (Harland & Kinder, 1997). The cluster workshops are attended termly, and teachers claimed that this gave them ongoing support and collective learning opportunities to help enhance improved practice and learner performance (Borko, 2004).

In networking, teachers share ideas and go back to their schools to implement them. Teachers who are in networking in Sunshine DTDC master deep knowledge of pedagogy and curriculum content, as they share activities that they regard as important according to their needs and where learning is situated in their own context which is Sunshine DTDC (Putman & Borko, 2000). In networking, teachers share ideas and, in their discussions, they select skills and knowledge that they need to grow (Kennedy, 2005).

Teachers declared that attending NGO workshops have enabled them to develop new skills. They get information on how to conduct experiments and cascade it back to their schools and engage their learners. Moreover, they come back and promote change to others (Kennedy, 2005). They can improvise, since they do not have resources in their schools, which benefits their learners and improves the results.

Overall, there is hope in bringing about educational change at Sunshine DTDC now that teachers in networking are beginning to take charge of their own development and come and meet at the Centre on their own without being invited by subject advisors.

## **5.5 Recommendations**

I present the following recommendations for meaningful and sustained teachers' professional development activities in Sunshine DTDC.

First, the road to the Centre is bad and gravel: it needs to be repaired as the Norms and Standards policy (2015) requires.

Secondly, according to policy, the DTDC should be suitably located for ease of entry by public and private transport and walkers (DBE, 2015). However, Sunshine DTDC is not suitably located as the policy requires. It is in a remote area with no public transport that comes by it. It is not easily accessible to teachers who do not have their own cars, which makes it difficult for the Centre to carry out its primary function to support teachers' learning. For teachers who drive 25 to 45 kms to reach the Centre, this contextual factor cannot be ignored. Further arrangements need to be made to support the teachers who come from these schools, which could be allocating them to other Centres that may be closer to their schools if there are any or considering a travelling allowance or a mode of transport for convenience to all schools that come to use Sunshine DTDC. Furthermore, one mode of transport may help to ensure their safety as they go through the peri-urban area on their way to the Centre.

Thirdly, the history of the Centre, indicates that the site was initially a rehabilitation Centre. Therefore, the Department of Education needs to re-evaluate the site for necessary review of policy in terms of the applicable budgetary sources and processes for new facilities and the

upgrading of existing facilities at DTDCs (DOE, 2015) to establish DTDCs. Consideration needs to be given to the buildings – they are not conforming to people with special needs due to difficult stairs.

Lastly, the Centre could make a good satellite site for higher education since there are many teachers who are enrolled every year with UNISA and UKZN and who travel long distances to the main institutions.

## **5.6 Limitations of the study**

I was not able to describe how the learning activities impacted on teachers' practice (Harland & Kinder, 1997) since I relied on what teachers reported in the interviews. The study was restricted to Sunshine DTDC in KZN since the case was to explore its role in supporting teacher learning, and it is restricted to the Centre Manager, ICT specialist and eight teachers who were selected to participate in the study. This means that the findings are not generalizable to other Centres. Being a part-time researcher and full-time teacher limited my opportunities of visiting Sunshine DTDC often to collect data, mainly due to the Centre's being a distance away.

## **5.7 Conclusion**

This chapter discussed the findings that arose in the data study. The findings of the study indicated that Sunshine DTDC is functional. There are teacher learning activities that are offered in the Centre: computer literacy training, subject cluster activities, teachers' networking and teachers' NGO activities. The resources that are there are the computer Centre, the hall, the classrooms, offices, dormitories and the library. The activities and the resources helped me to answer the research questions. The teachers' networking activity was started by the teachers themselves due to a concern that some of them are battling in some areas of teaching because sometimes the short courses that they attend are not enough, including the computer training. It took some people some time to master it well. Networking was started by the teachers who came to the Centre to help the others who were still not confident to do their own typing of work schedules. Another finding was that the Centre needs support itself in terms of physical resources to be able to play its primary function of supporting teachers. Overall the Centre is functioning

well despite the challenges of the bad road, the difficult stairs for people with special needs and the resources for use by teachers which include a photocopier. The Centre Manager is very instrumental in ensuring functionality. Teachers are keen to learn; therefore, their needs need to be attended to.

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## APPENDIX 1: UKZN Ethical Clearance letter



25 January 2018

Ms Ntombezining Olga Shange 210556012  
School of Education  
Pietermaritzburg Campus

Dear Ms Shange

Protocol reference number: HSS/2237/017M

Project Title: Exploring the role of the Sunshine District Teacher Development Centre (DTDC) in KwaZulu Natal in supporting teachers' professional development

Full Approval – Expedited Application

In response to your application received 28 November 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has 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



.....  
Professor Shenuka Singh (Chair)  
Humanities & Social Sciences Research Ethics Committee

/pm

cc Supervisor: Dr Carol Ann Bertram  
cc. Academic Leader Research: Dr SB Khoza  
cc. School Administrator: Ms Tyzer Khumalo

## APPENDIX 2: DoE permission letter

**KWAZULU-NATAL DEPARTMENT OF EDUCATION** Postal Address: Private Bag X9137 • Pietermaritzburg • 3200 • Republic of South Africa  
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Youtube: kzndoe

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Enquiries: Phindile Duma Tel: 033 392 1063 Ref.:2/4/8/1411

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Ms NO Shange  
PO Box 101343  
Scottsville  
3209

Dear Ms Shange

### **PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS**

Your application to conduct research entitled: “**EXPLORING THE ROLE OF SUNSHINE DISTRICT TEACHER DEVELOPMENT CENTRE (DTDC) IN KWAZULU-NATAL IN SUPPORTING TEACHERS’ PROFESSIONAL LEARNING**”, in the KwaZulu-Natal Department of Education Institutions has been approved. The conditions of the approval are as follows:

1. The researcher will make all the arrangements concerning the research and interviews.
2. The researcher must ensure that Educator and learning programmes are not interrupted.
3. Interviews are not conducted during the time of writing examinations in schools.
4. Learners, Educators, Schools and Institutions are not identifiable in any way from the results of the research.
5. A copy of this letter is submitted to District Managers, Principals and Heads of Institutions where the intended research and interviews are to be conducted.
6. The period of investigation is limited to the period from 11 January 2018 to 30 June 2020.
7. Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials and Learners are under no obligation to participate or assist you in your investigation.
8. Should you wish to extend the period of your survey at the school(s), please contact Miss Phindile Duma at the contact numbers below
9. Upon completion of the research, a brief summary of the findings, recommendations or a full report/dissertation/thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermaritzburg, 3200.
10. Please note that your research and interviews will be limited to schools and institutions in KwaZulu-Natal Department of Education.

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**Dr. EV Nzama**  
**Head of Department: Education**

**Date: 15 January 2018**

## **APPENDIX 3: INTERVIEW GUIDE FOR LIBRARIAN/ CENTRE MANAGER COMPUTER/LAB MANAGER**

### **Section A: Personal Information**

Gender

Age Range

Highest Professional Qualification

Highest Academic Qualification

Position at the Centre

Length of Service at Centre.

### **Section B:**

How long has this Centre been operational?

1. What is the purpose of the teacher development Centre?
2. What do teachers come to the Centre to do?  
[Probe: can you tell me a bit about these activities e.g. Who facilitates the various activities?]
3. In what ways do you think that these activities benefit teachers and their professional development?
4. What are the resources that are available at the Centre for teachers? [Probe: do you think teachers are aware that these resources are available?]
5. How do these materials/resources support teachers' professional learning?

6. Can you provide me with any reports/stats of how many teachers
  - a) use the library every day?
  - b) use the computer centre every day?
  - c) visit the centre to attend workshops every day?
7. Do you think that the centre is functioning well? Why do you say this?
8. What hinders the centre from functioning well?
9. How would you like the Centre to improve over the next two years?
10. Who else uses the Centre besides teachers? For what activities?

# **APPENDIX 4: INTERVIEW SCHEDULE FOR TEACHERS USING THE DISTRICT TEACHER DEVELOPMENT CENTRE**

(revised 12 Feb 2018)

Date of interview: \_\_\_\_\_

Name of Centre: \_\_\_\_\_

## **Section A: Biographical details**

Name of teacher:

School name:

Years of teaching:

Grade taught:

Subjects:

How far is your school from the Teacher Development Centre? \_\_\_\_\_

How do you travel from your school to the Centre? \_\_\_\_\_

## **Section B:**

1. What do you think is the purpose of the teacher development centre?
2. In the last year (since Feb 2017), how often have you visited the centre?
3. What do you come to do at the Centre? [probe: what activities such as content workshops or moderation or finding resources]
4. Tell me about a recent workshop / moderation process that you attended at the Centre. (Probe: who facilitated the workshop, what was the purpose of the workshop, what was the focus of the workshop, how long did the workshop last, who attended the workshop)

5. What did you gain from the workshop / moderation process – (new materials/resources; if so, how did you make use of the materials/resources to better your learning development?
6. What new knowledge did you gain from attending that workshop /moderation? [Probe: Can you provide a clear example of this knowledge? E.g. new content knowledge?]
7. Did you gain any new skills from attending the workshop /moderation? If so, what new skills?
8. Are you able to use the new knowledge and skills in your classroom? If yes, can you give some examples?  
If not, can you explain why?
9. Have you become more motivated or inspired to teach as a result of attending a workshop / moderation session?  
If yes, can you provide details?
10. Do you use the library or the computer centre?
  - a) If yes, for what purpose? [probe: to download curriculum documents, to find teaching resources; to study]
  - b) How often did you use the library in 2017?
  - c) If not, why not?
11. What is your main reason for coming to the Centre? Does it play an important role in your professional development?
12. What prevents you from using the Centre more?
13. Do your subject advisor/ principal/ colleagues encourage you to use the Centre?
14. What do you think that the Centre could do to support teacher development better?

## **APPENDIX 5: Observation schedule of the Centre**

[Note about taking photographs: ask permission to take photographs. Do not include faces of people in the photographs, as this has ethical implications for using the photos in your thesis.]

No. of meeting rooms in the Centre

No. of offices for staff

Other rooms/ offices

What resources are available for teachers? Photocopier?

Is there a computer lab? How many computers? Printers? Internet connection?

Is there a library? Approx. how many books?

What kind of books (e.g. textbooks? Reference books? For which subjects/ grade level? (Take photos of the shelves)

Look inside a selection of books. Are there date stamps to indicate that these have been borrowed by teachers?

Is there a well- tended garden?



## APPENDIX 6: OBSERVATION CHECKLIST – TEACHERS’ ACTIVITIES

**Research topic:** Exploring the role of the Sunshine District Teachers’ Development Centre (DTDC) in supporting Teachers’ Professional Development.

A tick (✓) indicates the type of teachers’ development activities observed at Sunshine DTDC and notes thereto:

	Teacher development Activity offered	Observed (✓)	Date observed	Who presented?	Who were attendees?	Notes/remarks
1	Subject teachers	✓	24/04/2018	Subject advisor and Lead teachers	Business Studies teachers grades 10, 11,12	-Subject advisor explained administration matters on curriculum coverage.  -Lead teachers address teachers on the structure of an examination paper.
2	Workshop	✓	26/04/2018	Teacher Directorate – Skills development	Newly appointed SMT	SMT induction programme on:  -Learner attendance policy.  -Professional ethics.  -IQMS collective agreement no. 8 of 2003.  -Overview of CPTD.  -The role of DTDCs.
3	Workshop	✓	07/05/2018	NGO – staff of UShaka Marine, Durban	Natural Science teachers – grade 7	Teachers conducted experiments, converted scale, observed and discussed findings.
4	Subject teachers	✓	02/08/2018	Subject advisor and lead teachers	Business studies teachers grades 10, 11, 12	-Administration matters.  -Discussed question papers, style of questioning, how to allocate marks and learner errors.

**Overall comments on teacher development activity observed:**

A tick (✓) indicates the outcomes that in my view, were achieved in the teachers' development activity observed on 24/04/2018:

No.	Teacher learning outcomes:	Is there evidence of teacher learning		Notes/Remarks:
		Yes	No	
1	Quality knowledge.	✓		It seemed relevant to curriculum needs.
2	Teacher learning is relevant to teachers' needs.	✓		It was all about curriculum coverage.
3	Teachers' learning is ongoing.	✓		Moderation is done termly – eight times a year. There is evidence in attendance registers.
4	Active participation by teachers.		✓	Subject advisor and lead teachers did all the talking and teachers remained passive role players.
5	Teachers' discussions.		✓	Teachers sat in groups, but no group work was given.
6	Expert delivery.	✓		Subject advisor
7	Teachers utilizing resources.		✓	Example; teachers ran short of handouts and there was no photocopiers to make more copies for them.
8	Teachers' activities interesting.	✓		Teachers nodding their heads and indicating yes/no made activities seem interesting.
9	Activity encouraged teachers to think.		✓	Activities did not seem to challenge teachers' thinking.
10	There was an indication of new knowledge/skills.	✓		Teachers learned about the new structure of the question paper.
11	Activity updated teachers' knowledge.	✓		Teachers were apprised of the new format of question paper.
12	Teachers show interest of applying knowledge/techniques to their practice.	✓		Teachers seemed positive to use the new knowledge in their classrooms.
13	Teachers show some indication that knowledge will benefit learners.	✓		Teachers seemed certain that knowledge will benefit learners.
14	Teachers showed an interest in sharing knowledge with others.	✓		Teachers seemed positive to cascade information back to others.

**Overall comments on teachers' development activities observed:**

A tick (✓) indicates the outcomes that in my view, were achieved in the teachers' development activities observed on 26/04/2018:

No.	Teacher learning outcomes:	Is there evidence of teacher learning?		Notes/Remarks:
		Yes	No	
1	Quality knowledge.	✓		Knowledge seemed relevant to SMT and their management.
2	Teacher learning is relevant to teachers' needs.	✓		Seemed relevant especially now that teachers were the newly appointed SMTs.
3	Teacher learning is ongoing.		✓	There was no prior evidence in attendance registers, and I couldn't prove if these activities will be ongoing.
4	Active participation by teachers.		✓	Facilitators did all the talking and teachers remained mostly passive role players.
5	Teachers' discussions.		✓	No teachers' discussions were made, they only asked questions for clarity here and there.
6	Expert delivery.	✓		Teacher Directorate coordinators.
7	Teachers utilizing resources.		✓	No resources were used.
8	Teachers' activities interesting.	✓		Teachers nodding their heads and indicating with yes/no seemed an indication of their interest in activities.
9	Activities encouraged teachers to think.		✓	There was no clear indication of activities challenging teachers' thinking.
10	There was an indication of new knowledge/skills.	✓		Information seemed relevant and developmental to newly appointed SMT.
11	Activities updated teachers' knowledge.	✓		Information seemed a good starting point to newly appointed SMT.
12	Teachers showed an interest in applying knowledge/techniques to their practice.	✓		Teachers seemed positive about using the new knowledge in their schools.
13	Teachers show some indication that knowledge will benefit learners.	✓		Teachers seemed certain that knowledge will benefit learners.
14	Teachers show interest in sharing knowledge with others.	✓		Teachers seemed positive about cascading information back to others at school.

**Overall comments on teachers' development activities observed:**

A tick (✓) indicates the outcomes that in my view, were achieved in the teachers' development activities observed on 07/05/2018:

No.	Teacher learning outcomes:	Is there evidence of teacher learning:		Notes/Remarks:
		Yes	No	
1	Quality knowledge.	✓		Knowledge seemed relevant to curriculum.
2	Teachers' learning is relevant to teachers' needs.	✓		Seemed relevant especially now that teachers got exposed to the use of resources something that they do not have in their schools to make learning meaningful.
3	Teacher learning is ongoing.	✓		There was evidence in attendance registers that since 2017, staff from UShaka Marine Sea World in Durban conducted development workshops to teachers and learners in grades 4-9 at Sunshine DTDC.
4	Active participation by teachers.	✓		Teachers' activities were hands-on.
5	Teachers' discussions.	✓		Teachers discussed in groups as they conducted experiments and when agreeing on conclusions.
6	Expert delivery.	✓		Teachers' Directorate coordinators.
7	Teachers utilizing resources.	✓		Conducted experiments using real objects.
8	Teachers' activities interesting	✓		Teachers' excitement seemed like an indication of their interest in activities.
9	Activities encouraged teachers to think.	✓		Activities seemed to challenge teachers' thinking.
10	There was indication of new knowledge/skills.	✓		Information seemed to develop teachers in conducting practical lessons in class.
11	Activity updated teachers' knowledge.	✓		Teachers seemed updated.
12	Teachers show an interest in applying knowledge/techniques to their practice.	✓		Teachers seemed positive in taking the new knowledge back to their schools.
13	Teachers show some indication that knowledge will benefit learners.	✓		Teachers seemed certain that knowledge will benefit learners
14	Teachers show an interest in sharing knowledge with others.	✓		Teachers seemed positive about cascading information back to others.

**Overall comments on teachers' development activities observed:**

A tick (✓) indicates the outcomes that in my view, were achieved in the teachers' development activities observed on 02/08/2018:

No.	Teacher learning outcomes:	Is there evidence of teacher learning:		Notes/Remarks:
		Yes	No	
1	Quality knowledge.	✓		Knowledge seemed relevant to curriculum.
2	Teachers' learning is relevant to teachers' needs.	✓		It all seemed to be about curriculum coverage.
3	Teachers' learning is ongoing.	✓		There was evidence in attendance registers that from 2017 this activity was conducted termly. Also, from the date of my first observation which was 24/04/2018, these activities continued 22/05/2018 and now on 02/08/2018.
4	Active participation by teachers.		✓	Teachers were non-active participants.
5	Teachers' discussions.		✓	Teachers' seating was arranged in groups but only to view and confirm each other's learners' marks.
6	Expert delivery.	✓		Subject advisor.
7	Teachers utilizing resources.		✓	No resources were available to use.
8	Teachers' activities interesting?	✓		Teacher's attentive listening seemed an indication of their interest in activities.
9	Activities encouraged teachers to think.		✓	Activities didn't seem to challenge teachers' thinking.
10	There was indication of new knowledge/skills	✓		Information seemed developmental to teachers to use back in their classrooms.
11	Activities updated teachers' knowledge.	✓		Teachers seemed updated.
12	Teachers show interest in applying knowledge/techniques to their practice.	✓		Teachers seemed positive in taking the new knowledge back to their schools.
13	Teachers show some indication that knowledge will benefit learners.	✓		Teachers seemed certain that knowledge will benefit learners.
14	Teachers show interest in sharing knowledge with others.	✓		Teachers seemed positive about cascading information back to others.

# APPENDIX 7: ATTENDANCE REGISTER: BUSINESS STUDIES

- 24/04/2018

## ATTENDANCE REGISTER

COURSE / SEMINAR: BUSINESS STUDIES

VENUE: 11

FACILITATOR(S): \_\_\_\_\_ DATE: 24/04/2018

NO	INITIALS & SURNAME	PERSONAL	SCHOOL	Email address	SEX	DISABILITY Y/N	RACE I/ANWC	TEL/CELL	AGE DATE BIRTH	SIGNATURE	RANK
1					M	N	C		2	<i>[Signature]</i>	PL2
2					M	N	B		2	<i>[Signature]</i>	PL1
3					M	N	B		1	<i>[Signature]</i>	PL1
4					F	N	B		2	<i>[Signature]</i>	PL2
5					F	N	I		2	<i>[Signature]</i>	PL1
6					F	N	I		1	<i>[Signature]</i>	
7					F	N	B		1	<i>[Signature]</i>	PL1
8					F	N	B		1	<i>[Signature]</i>	PL1
9					F	N	B		2	<i>[Signature]</i>	PL1
10					F	N	B		2	<i>[Signature]</i>	PL1
11					F	N	B		2	<i>[Signature]</i>	PL1
12					F	N	B		2	<i>[Signature]</i>	PL1
13					F	N	B		2	<i>[Signature]</i>	PL1
14					F	N	B		2	<i>[Signature]</i>	PL1
15					F	N	B		2	<i>[Signature]</i>	PL1
16					F	N	B		2	<i>[Signature]</i>	PL1
17					F	N	B		2	<i>[Signature]</i>	PL1
18					F	N	B		2	<i>[Signature]</i>	PL1
19					F	N	B		2	<i>[Signature]</i>	PL1
20					F	N	B		2	<i>[Signature]</i>	PL1
21					F	N	B		2	<i>[Signature]</i>	PL1
22					F	N	B		2	<i>[Signature]</i>	PL1
23					F	N	B		2	<i>[Signature]</i>	PL1
24					F	N	B		2	<i>[Signature]</i>	PL1
25					F	N	B		2	<i>[Signature]</i>	PL1

\*NB (1=<35, 2=35-55 & 3=>55

Please note that information on this attendance register will be used for statistical purposes as required by the Skills Development Act, employment Equity Act and other relevant legislation. Information supplied will not be used to disadvantage candidates or for discrimination purposes.

1=1-34 2=35-54 3=55 and above

# APPENDIX 8: Teachers' NGO workshop: UShaka Marine Sea World Durban – 07/05/2018



## uShaka Sea World Educators' Workshop

March 2018 Sponsored by SAAMBR

*Micro to Macro aspects of the food chain, Energy and Light*

**At the end of this workshop an understanding about the following should have been achieved:**

- An understanding of the micro and macro aspects of the marine ecosystem
- The chemical reaction of photosynthesis
- Food chains, food webs and food pyramids
- Human impacts on the marine environment
- Understanding of the forms of energy, the sources and the use of energy
- Light energy, visible light and white light spectrum

### Intermediate phase

#### Natural Science & Technology

		<b>Strand:</b> Life and Living	Energy & Change
<b>Topic:</b>	Grade 4	Living and non-living things	Energy transfers, Sound
<b>Content:</b>	Grade 4	What plants need to live	Forms of energy
<b>Content:</b>	Grade 5	Food chains	
<b>Content:</b>	Grade 6	Photosynthesis	
<b>Content:</b>	Grade 7 – 9	Photosynthesis, Energy Sources, Heat transfer, Visible light	

## **APPENDIX 9: The Mission Statement of Sunshine DTDC**

### **VISION**

To improve the quality of education in schools and the entire community of \_\_\_\_\_

### **MISSION STATEMENT**

We exist to

- To empower and capacitate learners , educators ,SGB's Local Traditional leaders, AET, and ECD learners and wider community with relevant skills ,attitude , values and knowledge that will enable them to participate in market world meaningfully.
- To research and provide relevant information for curriculum support and development in information and Technology library, administration and management in the schools.

### **OBJECTIVES**

- To foster communication with schools and other educational institutions ,sister departments and subdirectories of the Department of Education to enhance relationships.
- To account to all parents, teachers, learners and non-teaching and to perform functions in a democratic and transparent way.
- To further the interest ,educational well-being of the centre clientele to foster cooperation and sound relationships among parents, educators, learners, non-teaching staff and between the immediate school community and residents of \_\_\_\_\_, schools that may catch up with new trends in educational matters.



# APPENDIX 10: Question paper for teachers' development activities

– 02/08/2018

November 2017 4

## QUESTION 2: BUSINESS ENVIRONMENTS

2.1 Name THREE types of business sectors. (3)

## QUESTION 3: BUSINESS VENTURES

3 Identify the leadership style applied by Kobus Limited in EACH case below.

3.3.1 Employees are allowed to make their own decisions as long as they do not violate the company's policies. (2)

3.3.2 Employees are requested to give inputs during planning sessions. (2)

3.3.3 Employees are rewarded for meeting sales targets and punished for not meeting deadlines. (2)

3.4 Explain the role of personal attitude in successful leadership. (6)

## QUESTION 4: BUSINESS ROLES

4.1 Name FIVE components of corporate social responsibility (CSR). (5)

4.2 Discuss the benefits of corporate social investment (CSI) for businesses. (8)

4.3 Distinguish between corporate social responsibility (CSR) and corporate social investment (CSI). (4)

4.5 Describe THREE criteria for assessing successful team performance. (9)

4.7 Mr Cloete was treated unfairly in the workplace and decided to stay away from work. Advise Mr Cloete on the correct procedure to deal with his grievance. (10)

## QUESTION 5: BUSINESS OPERATIONS

5.5 Describe any FOUR quality indicators of the purchasing function. (8)

5.6 Read the scenario below and answer the questions that follow.

**COCO FRUIT LTD (CFL)**

Coco Fruit Ltd supplies fruit juices. Speedy Supermarket complained to CFL that the juices go sour soon after delivery.

Investigations at CFL revealed that most of their employees are not trained properly, equipment is outdated, an effective organisational structure is not in place and management is ignoring issues. Speedy Supermarket decided to change to another supplier.

5.6.1 Quote FOUR reasons from the scenario why Speedy Supermarket changed to another supplier. (4)

5.6.2 Explain to CFL the advantages of monitoring and evaluating quality processes as an element of total quality management (TQM). (6)

5.6.3 Advise CFL on the benefits of a good quality management system. (3)

5.7 Discuss the importance of quality circles in TQM. (4)

## BUSINESS ROLES

6.5 Read the scenario below and answer the questions that follow.

**LIZEL CLOTHING MANUFACTURER (LCM)**

The management of Lizel Clothing Manufacturer has appointed health and safety representatives. They will be responsible for checking the effectiveness of LCM's health and safety measures and for identifying potential dangers in the workplace.

6.5.1 Quote TWO roles of the health and safety representatives from the scenario above. (2)

6.5.2 Describe TWO other roles of health and safety representatives in the workplace. (4)

6.5.3 Explain the responsibilities of workers in promoting human health and safety in the workplace. (4)

6.5.4 Recommend TWO ways in which LCM can protect the environment and human health. (4)