

A CASE STUDY OF INFORMAL TEACHER LEARNING IN THE
FOUNDATION PHASE

by

SHAKUNTHILA GOVENDER

214582223

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Declaration

Submitted in partial fulfilment of the requirements for the degree of Master of Education, in the School of Education, University of KwaZulu-Natal, Pietermaritzburg, South Africa.

I, Shakunthila Govender, declare that

1. The research reported in this thesis, except where otherwise indicated, and is my original research.
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Student Name: Shakunthila Govender

Date: 26 January 2016

Student signature:



Supervisor Signature

Dedication

This book is dedicated to the memory of my biological father, **Mr Sakaran Govender**. Even in death you inspired me to believe that every mountain can be conquered....Love you to eternity and back....and to my eternal father **Christ Jesus**, your love, forgiveness, mercy and grace has carried me. I am forever indebted to you... My spiritual father, **Kevin Perumal** for always believing in me and being my father, friend and teaching me focus on the finish with faith.

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Abstract

This study describes how two teachers in foundation phase learn informally in the workplace. It also aims to analyse the context within each school and evaluates to what extent the context supports teacher learning. A case study methodology approach was adopted to understand the phenomenon of informal learning in an in-depth way. Three different collection methods were used to generate data. Each teacher was interviewed to generate data to answer both research questions, which are the ways in which selected foundation phase teachers learn informally and how the school context supports or impedes their learning. The participants then put a collage together to illustrate the ways in which they learn. Their explanation and discussion of the collage was audio recorded. Each participant took photographs of their learning experiences to supplement the data already generated. This was followed by photo-elicitation interview.

Data was organised using Opfer and Pedder's (2011) complex systems on teacher learning. Teacher learning is non-linear and nested into subsystems, namely the individual, the activity and the school, which all operate in a nested way and are a catalyst for teacher learning. Themes were highlighted and in-depth narratives of the participant's learning trajectories were documented. The learning activities were then plotted on a grid which distinguished between unplanned and incidental and social and individual learning activities.

Both participants generated a kaleidoscope of data. The data produced perspectives on the ways in which teachers learn informally. Sarah was a confident teacher, 37 years in the profession. Her social and individual learning were balanced equally while her learning was predominantly planned. Deborah appeared to lack confidence with just 8 years in the profession. Her learning was more individualistic since her context lacked collaborative learning experience. Her planned and unplanned learning experiences are equivalent.

The findings support Opfer and Pedder's (2011) claim that teacher learning is cyclic and nested into subsystems. It also revealed that teachers learn in different ways and their trajectories of learning may vary but learning still takes place. The context of Sarah's school supported teacher learning, but Deborah's school impeded her learning and did not provide a collaborative culture to support her learning.

This study outlined the problems faced by Deborah in a particular rural South African school context that impeded learning opportunities and development. Evidence provided in the study

supports Opfer and Pedder's Complexity Theory (2011, p.376) which argues that the school plays an instrumental part in the nested cyclic system to influence teacher learning. Sarah's school context created more opportunities for teacher learning emphasising that the context is very influential tool in learning processes.

The study shows that the school is a catalyst for teacher learning. It recommends that each school needs to review, reassess and restructure the programs available for professional development and teacher learning providing substantial opportunities for the teachers to learn.

Foreword

ABBREVIATION	ACRONYM
AIDS	Acquired Immune Deficiency Syndrome
ANA	Annual National Assessment
ANC	African National Congress
ATT	Association of Accounting Technicians
CAPS	Curriculum Assessment and Policy Statement
CK	Content Knowledge
CPTD	Continuous Professional Teacher Development programme
DBE	Department of Basic Education
DSG	Developmental Support Group
ELRC	Education Labour Relations Council
FAL	First Additional Language
FDE	Further Diploma in Education
GPK	General Pedagogic Knowledge
HDE	Higher Diploma in Education
HOD	Head of Department
IQMS	Integrated Quality Management Systems
LOLT	Language of Learning and Teaching
NGOs	Non-Governmental Organisations
NQF	National Qualifications Framework
PCK	Pedagogic Content Knowledge
PD	Professional Development
PEI	Photo- Elicitation Interviewing
SACE	South African Council of Educators
SDT	Staff Development Team
SGB	School Governing Body

Table of Contents

Declaration.....	ii
Abstract.....	iv
Foreword.....	vi
List of Figures	x
List of Tables	xi
CHAPTER 1: INTRODUCTION	1
1.1. Introduction	1
1.2. Focus and Purpose of the Study	1
1.3. Academic and Personal Rationale.....	1
1.4. Background Information	2
1.5. Research Questions	3
1.6. Conceptual Framework and Brief Overview of Literature.....	3
1.6.1. Brief Overview of Literature	3
1.6.2. Conceptual Framework: Opfer and Pedder’s Complexity Theory	4
1.7. Methodological Approach	5
1.8. Conclusion.....	6
CHAPTER 2: LITERATURE REVIEW	7
2.1. Introduction	7
2.2. Teacher Learning.....	8
2.3. Defining Formal Learning.....	9
2.4. Finding a Definition for Informal Teacher Learning.....	10
2.5 Factors that Influence Teacher Learning	12
2.5.1. The Influences of the School on Informal Learning	12
2.5.2. The Teacher’s Role in Informal Learning	16
2.5.3. The Activities that Support Informal Teacher Learning	17
2.6. The South African Context and Informal Learning.....	20

2.7. Teacher Knowledge.....	22
2.8. Conceptual Framework.....	24
2.8.1. Opfer and Pedder’s Complex Systems Model.....	24
2.9. Analytical Framework: Reid’s Quadrants of Teacher Learning.....	26
2.10. Conclusion.....	27
CHAPTER 3: RESEARCH METHODOLOGY	28
3.1 Introduction	28
3.2 Research Paradigm	28
3.2.1 Narrative Inquiry	28
3.3. Selection of Participants	31
3.4. Setting for Research.....	32
3.5. Data Collection Methods	36
3.5.1. Semi-Structured Interviews	36
3.5.2. Collages	38
3.5.3. Photo Elicitation.....	42
3.6. Data Analysis and Representation	45
3.7. Trustworthiness	46
3.8. Limitations of the Study.....	47
3.9. Ethical Issues	48
3.10. Conclusion.....	49
CHAPTER 4: NARRATIVE ON SARAH’S INFORMAL LEARNING.....	51
4.1. Introduction	51
4.2. Sarah’s Professional Biography.....	51
4.3 Sarah’s School Context.....	53
4.4 Informal Learning Activities.	58
4.4.1. Sarah’s Learning Activities	66
4.5. Using Opfer and Pedder’s Subsystems to Illustrate Sarah’s Informal Learning.....	68

4.6. Conclusion.....	69
CHAPTER 5: NARRATIVE ON DEBORAH’S INFORMAL LEARNING.....	70
5.1. Introduction	70
5.2. Deborah’s Professional Biography.....	70
5.3. Deborah’s School Context.....	73
5.4. Informal Learning Activities	77
5.4.1. Deborah’s Learning Activities.....	83
5.5. Using Opfer and Pedder’s subsystems to illustrates Deborah’s informal l.....	85
5.6. Conclusion.....	86
CHAPTER 6: DISCUSSION, IMPLICATIONS AND CONCLUSION	87
6.1 Introduction	87
6.2. Question 1: How Do Selected Foundation Phase Teachers Learn informally at School?	87
6.2.1. Key Themes.....	89
6.2.1.1. Learning through Mentoring.....	89
6.2.1.2. Language Acquisition and Competency for Learning.....	90
6.2.1.3. Using Resources to Learn.....	91
6.2.1.4. Reflection in Learning.....	92
6.2.1.5. Learning with Confidence	94
6.3. Research Question 2: How does the school context support or impede their informal learning?	96
6.4. Limitations to the Study	99
6.5. Discussion and Implications of this Study	100
6.6. Conclusion.....	101
References	103
Appendix 1: Permission from Department Of Education	116
Appendix 2: Permission from the University of KwaZulu-Natal	117
Appendix 3: Observation Schedule.....	118

List of Figures

Figure 1: Complexity Model of Teacher Learning (drawing from Opfer and Pedder, 2011)	25
Figure 2: Reid’s quadrant of teacher learning (in McKinney, 2005 cited in Fraser, 2007)	26
Figure 3: SCHOOL ORGANOGRAM FOR ZUAY PRIMARY	34
Figure 4: SCHOOL ORGANOGRAM FOR RUACH COMBINED SCHOOL	35
Figure 5: Example of collage on informal teacher learning.	42
Figure 6: Sarah's Collage on her Informal Learning	55
Figure 7: Page of the DBE workbooks which Sarah uses as a resource for her own learning and teaching.....	57
Figure 8: Poster which provides information on music notations and symbols.....	60
Figure 9: Sarah uses communiques on the culture of homework from Naptosa for her learning.....	62
Figure 10: Sarah uses the newspaper to improve her content knowledge and as a learning resource for her learners	63
Figure 11: Sarah uses Sparkle Box for her resources	66
Figure 12: Sarah's informal learning displayed through Opfer and Pedder's subsystems	68
Figure 13: Deborah's collage on her Informal Learning.....	78
Figure 14 Deborah using a dictionary to extend her vocabulary	78
Figure 15: Using the newspaper for word searches	79
Figure 16: Deborah using CAPS documents for planning and assessments	80
Figure 17: Working on the internet retrieving resources	81
Figure 18: Using her mobile and radio for learning.....	82
Figure 19: Watching a documentary in e-classroom on group (shared) reading	83
Figure 20: Deborah's Informal Learning using Opfer and Pedder's Subsystems.....	85
Figure 21: Key Themes from the study reflecting the factors that impacted on subsystem 1 in the Complex Theory Model.....	96
Figure 22: Factors that support and impede learning within the school context .. Error! Bookmark not defined.	

List of Tables

Table 1: Factors that support and impede learning within the school context.....	99
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CHAPTER 1: INTRODUCTION

1.1. Introduction

The purpose of this chapter is to describe the focus and purpose of this study and to outline my interest in informal teacher learning in the foundation phase and the historical background that prompted the interest in this area of study. I will define the concept of informal teacher learning. Subsequently, I will connect my experiences and ideas with those of other authorities on the matter. Included in this chapter are both my personal and academic rationale for the study and my research questions. Henceforth, a brief overview of literature and the conceptual framework will unfold, followed by the methodological approach of the study.

1.2. Focus and Purpose of the Study

The focus of this study is to analyse the context of the two schools and observe how it supports or impedes learning in the workplace and to describe the ways in which teachers learn informally. It further engages and explores how a teacher's dispositions, identity and the learning activities they are involved with contribute to their learning. The purpose of this study is to investigate the impact that school context has on a teacher's informal learning. My ultimate aim is to illuminate the importance of mentoring, communities of practice and informal teacher learning for the professional development of teachers working in different contexts.

1.3. Academic and Personal Rationale

The study is informed by both an academic and personal rationale. From an academic rationale, I maintain that studying informal learning is important because formal education is definitely the foundation on which every teacher would rely as a source of content knowledge which is imperative for their personal learning and professional development. The foundation determines the height of the building while informal learning is the pillar that keeps the structure of the building in place. Whitelaw *et al.* (2008) agree that novice teachers have a visible gap in their knowledge on entering the professional working environment. This gap inevitably impacts on their ability to function effectively in schools. Researchers (Fullan, 2007; Fullan and Hargreaves, 1992) understand that it is impossible for any higher education course (formal learning) to be structured to include all the skills and expertise teachers need

to acquire for their professional development. Experienced and novice teachers rely on informal teacher learning within the institutions to function effectively.

From a personal rationale, I have found informal teacher learning to be a key part of my own development as a teacher. Reflecting personally on my professional development, I realised how invaluable such a study can be for both professionals and those responsible for the professional development of teachers. As head of department (HOD) at my school, I am also responsible for the development of teachers in my phase. Conducting a study on informal teacher learning would present a matrix of evidence that is insightful for me as well. Being able to use this information and cascade it to other professionals will be an invaluable tool for development. I taught for six years prior to being promoted to HOD, in those six years I constantly remember spending time with the head of my department asking questions and using the ideas she suggested in my classroom.

Drawing on my experiences, I realised that every person's informal learning process is as unique as their thumbprint, nothing I learnt formally would prepare me for the challenges I faced every day in the classroom. Not all of us learn in the same way, this makes my study relevant and relative at the same time.

1.4. Background Information

My personal reflections illuminated various ways in which I engaged in informal teacher learning. Most of my learning arose from interaction with either other teachers or learners, learning communities within the school and sometimes by total co-incidence. Informal teacher learning is a continuous process. Researchers such as Kwakman (2003), Mawhinney (2010) and Knight (2002) agree that learning at schools (on site) can develop teachers' knowledge and impacts on them being effective and efficient within their context.

The South African Council of Educators (SACE) is responsible for monitoring the professional development of educators and accreditation is given to teachers for their professional development in formal learning environments. Globally, informal teacher learning is beginning to be rapidly recognised as an accredited practice however there is little evidence to show the same tendencies locally (Singh, 2015). A study of this nature would provide insight as to how teachers learn informally and it is likely that if it is recognised as significant it could be a catalyst to school improvement and reform. There are very limited studies on informal teacher learning in South Africa. Studies done in South Africa illustrate

that global and local teacher learning maybe significantly different. I was unable to find any study on informal teacher learning in the Foundation Phase from a South African perspective.

1.5. Research Questions

This study intends to analyse the ways in which two Foundation Phase teachers learn informally and will look critically at the context in which this learning will take place. While scrutinising the ways in which they learn, the study will further examine the ways in which learning is impeded. This will enable the researcher to draw conclusions from the activities in which teachers engage and the platforms that assist in developing teachers for the challenges they face every day. This question will not just assist with understanding the ways in which teachers learn. It will allow for the school context to be examined and conclusions to be drawn on how the context can impact the learning of the teacher. It will also analyse each teacher individually and their career path to examine how their professional image, identity and disposition have been shaped by their learning. Their emotion, behaviour, unconscious ways of learning and motivation will illuminate their trajectory of learning allowing inferences to be established on informal teacher learning.

The two research questions that inform my study are:

1. In what ways do selected Foundation Phase teachers learn informally at school?
2. How does the school context support or impede their informal learning?

1.6. Conceptual Framework and Brief Overview of Literature

1.6.1. Brief Overview of Literature

The literature review will consider three aspects that influence informal teacher learning namely, the individual, the activity and the school (Opfer and Pedder, 2011). The individual's prior experience and knowledge, orientation to, beliefs about learning and classroom practice contribute to their learning processes. Richardson (2003) suggests that the ways teachers teach are often shaped by their own encounters and experiences as students. He further stipulates that teachers may change their practices and beliefs, however not the outcomes of learning for their students. Clarke & Hollingsworth (2002) concur, suggesting that multiple areas of influence need to be considered for change to occur. Thus systems of influence will ensure that teacher learning remains cyclic in nature. All three aspects, activity, individual and context work together in a nested system.

Collective beliefs and orientations about learning, practices and norms of practice, shared learning goals within the context of the school will either support or impede teacher learning. Research explains how, why and when collaboration is imperative to teacher learning and the conduit for change (Ball, 1997; McLaughlin & Talbert, 1993). The school context will be examined and the ripple effect it has on teacher learning will be established through this study.

The learning activities, tasks and practices in which teachers engage impacts on the kind of learning that will occur. Research studies on Professional Development (PD) advocate that teachers need time to develop, absorb, discuss and practice new knowledge (Garet et al., 2001). Research on sustained and intensive PD suggests that it supports teacher learning. However activities that are sporadic and brief have the opposite effect. Guskey (2000) suggests that professional development would work most effectively if undertaken for a longer duration of time. In trying to understand and improve informal teacher learning, this study considers the interplay of individuals, the activities in which they engage themselves, communities of teachers and specific school contexts.

This study remains both partial and contingent. Partial since it is limited to my understanding on teacher learning by the literature considered and contingent in that, as a complex system, teacher learning is transitory and changeable. Researchers constantly challenge, change and support the theoretical propositions previously proposed as embryonic studies on teacher learning. Studies in differing contexts with diverse samples create emergent patterns in teacher learning.

1.6.2. Conceptual Framework: Opfer and Pedder's Complexity Theory

When viewed through the Complexity Theory framework, learning is understood as complex in its nature. Teacher learning involves many actions, elements, processes which are not easy to map out as the outcome may be different in each circumstance. The debate arises as to whether structures of learning, tasks, context and other variables are catalysts to teacher change and learning. Previously Guskey (2002) suggested that teacher learning was linear in nature. In contrast to this, Opfer and Pedder (2011, p. 376) argue that the complexity theory is a better way to view teacher learning. They explain that learning is dynamic and may take multi-dimensional trajectories.

A complexity theory perspective will help to firstly identify systems (activity, individual, school) which are nested within systems. Secondly, my study will analyse the way in which these systems would interact with each other. Lastly, I will aim to understand how teacher learning is influenced by these systems. This model does not understand teacher learning as merely a cause and effect approach rather it focuses on how, why, when and where teachers learn.

1.7. Methodological Approach

The narrative inquiry is a well-suited methodological approach in my study as it will enable me to construct in-depth descriptions of the informal learning experiences of the two teachers. The study will generate qualitative data through a range of methods, namely collages, photo elicitation and semi- structured interviews. Denzin and Lincoln (2008) explain that narratives are similar to the unfolding of testimonies or stories. Through narratives we can look through different lenses and get varying pictures of the world as others see it. It also affords us the opportunity to observe how people behave and their life experiences in different periods of time. This study was undertaken with the intention that teachers and stakeholders in education have an informed perspective on how teachers can engage in learning on an informal platform to improve their professional development.

Narratives encapsulate our journey through our professional career. Clandinin (2006) portrays stories as important in understanding cultures, places and people. It is not merely a story but enriches and changes our mind sets when we learn from the experiences of others. The stories of the participants also help us to reflect critically on how their attitudes, behaviour, cognition and motivation impact on their informal learning. The influences of their context, and the activities in which they engage either collaboratively or individually will enrich the stories.

I have only chosen two participants for the study. One participant is from a rural school and the other from an inner city school. Purposive sampling was done. Creswell (1998) suggested finding participants that are willing, accessible and able enhance your study by providing useful information on the aspect been explored. I am not familiar with my participants however I chose them in close proximity to a school near my hometown and a school near my workplace. This would make it convenient to collect data. Bertram and Christiansen (2014) explain that purposive sampling can be done through convenience

sampling. The reason I chose only two participants is simply because I want to do an in-depth analysis of both participants and understand their perceptions and experiences of informal learning but more specifically how they learn informally.

The case study approach will be used since the focus of my study is to find out how teachers learn informally and I intend examining contextual factors that are relevant to informal teacher learning. Yin (1993) explains that exploratory studies of this nature that are aimed at hypotheses and defining questions and can be used for secondary research. The case study will consider the context within the school and how it supports the teacher's learning. This study will be a multiple case study in that comparisons will be drawn between the rural and urban school and it will enable me to explore differences between the two contexts. Yin (2003) explains that multiple cases need to be chosen cautiously since the generalisations can be made either contrasting or similar of results may exist between cases.

1.8. Conclusion

The focus and purpose of the study is to analyse the influence of school context on the ways in which teachers learn informally in the Foundation Phase. Using a multiple case study and the narrative inquiry approach, I tell the story of two teachers and their informal learning trajectory. Their stories will be generated through collages, photo elicitation and semi-structured interviews. A literature review on informal teacher learning from both a local and global perspective will lay a foundation for the study. The conceptual framework will guide and direct the analysis of the data.

The following chapter will be an in-depth literature review on informal teacher learning followed by the conceptual framework. The methodology will then be outlined in the next chapter along with the data collection methods. The data will then be analysed and the findings will be published in the last chapter of the dissertation.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

This literature review focuses on unravelling the definitions of teacher development as well as teacher learning. It serves to explore the similarities and differences of both these key concepts. Globally many studies are available which focus on professional development through informal teacher learning however locally not much accreditation is given to this type of learning. Thus a visible gap is evident in South Africa and this study serves to close the gap. The study is exploratory and comparative in nature drawing attention to the informal learning of teachers in the foundation phase. It further makes a comparative analysis of both an inner city school and a rural school, examining the factors that support or impede the teacher's learning processes.

Initially the concepts of professional development will be explored with attention to teacher learning. It is imperative to define teacher learning encompassing both formal and informal learning before elucidating the contextual factors that support or impede teacher learning processes. Primarily focus will be drawn to international literature on the subject thereafter I will engage further with the limited literature available in South Africa. Further I will look at context as a factor which will either impede or support the learning processes of teachers and teacher knowledge.

This study engages teacher learning from the perspective of informal learning where learning takes place without a formal structure or designated programme. External and internal factors, activities at work and the context of the school impact on the learning of teachers (Opfer and Pedder, 2011). In my study, learning is explained as both unconscious and conscious activities that result in a modification in both cognition and behaviour. The behaviour, motivation, emotional disposition and cognition will explain the internal factors that configure their learning, while the context and the activities will disclose the external factors that shape their learning processes. Eraut (2004) in his study on workplace learning refers to this type of learning as informal teacher learning. To understand informal teacher learning, I will first define and explain teacher learning.

2.2. Teacher Learning

Defining teacher learning is very challenging as it remains an interchangeable term. Kelly (2006) explains teacher learning as a process through which teachers move from novice to expertise. Teachers move from the known (knowing) to the unknown (coming to know). Teachers are custodians of both implicit and explicit experiences and knowledge which they bring into their context. This includes their knowledge of practice and their knowledge in practice. There appears to be diverse perceptions by researchers on teacher learning. The differing perceptions support the understanding that learning in itself has a diverse nature.

Knight (2002) posits professional growth as teacher learning. Zeichner (1998) and Korthagen (2001) maintain that teachers are on a developmental trajectory while remaining knowers and learners. Jurasaitė-Harbison and Rex (2013) explain that teachers are instruments of learning and they can make choices regarding the knowledge they acquire. All these different views of teacher learning together give us an idea of the concept teacher learning. For the purpose of this study my conceptualisation of teacher learning will encapsulate several components. Some of the aspects will include the incidental, deliberate and spontaneous nature (van Eekelen, Boshuizen & Vermunt, 2005) of learning as well as professional development activity within the workplace which can become a catalyst for informal teacher learning.

There are two distinct ways in which people learn: either formally or informally (Wilson and Berne, 1999). Teachers are no different. Both types of learning are imperative for both novice and experienced teachers. Formal learning is similar to a sky scraper; it has to have a firm foundation in order to achieve great heights. While informal learning is like the cornerstone or pillars that keeps the building standing over the years. Both are very instrumental for various different reasons yet they similar in that teachers need both to function effectively. Many teachers allude to the fact that learning does not occur entirely through formal curriculum programmes but also through the absence of structured programmes (Burns and Schaefer, 2003).

The acquisition of knowledge is imperative to professional development. Hager (2001), Wilson and Berne (1999) and Erikson *et al.* (2005) advocate that the situatedness of teacher learning and the development of teachers are determined by context. The two main theories of teacher learning hinge around a situated approach and a cognitive approach. Teacher learning is viewed in a very linear perspective in the cognitive approach. Kelly (2006)

clarifies that skills, understanding and knowledge are acquired by individuals and then imparted by these individuals in another context. This lends to implications that knowledge is merely cognitive and individual in nature and easily communicable. Theorists in the socio-cultural sphere contend that the nature of teacher learning is far more multifaceted and impacted by the context (situated). This theory advises and informs this literature review and this study.

Putman and Borko (2000) provide a solid groundwork for scholars to study the ways in which teachers learn. They suggest the situated perspective means that “knowing and learning are situated in physical and social contexts, social in nature, and distributed across persons and tools” (ibid. p 12). Kwakman (2003), Knight (2002) and Lieberman and Mace (2008) argue that context and teacher learning are correlated and dependent. They further establish, due to the practical nature of the profession, that learning while teaching is inevitable. A link is founded between working and learning.

2.3. Defining Formal Learning

When learning takes place in a controlled environment, with a designated curriculum and specific outcomes, this type of learning is considered to be formal learning. Experts are responsible for delivering the curriculum and there are time specifications within which the outcomes have to be reached. Universities, colleges, workshops, courses and any other structured institution which imparts theory (knowledge based) and practical skills are considered as vehicles of formal learning (Knight, 2002).

Formal learning platforms are unable to create the reality of the classroom experience and exhibit limitations in equipping teachers with a holistic developmental programme. Kelly (2006) and Knight (2002) concur that the platform for teacher learning should be the site (workplaces) due to the pragmatic nature of the profession. Knight (2002) confers the value and need of formal education prior to admission into the profession however this knowledge cannot sustain and develop teachers in their practice. Formal learning has its merits, however it may not always be able to synchronise theory and practice. Therefore, formal learning is one of the ways in which teacher learning takes place.

The significance of formal learning should not be undermined for its purpose is profound in the introductory stage of teacher learning. Day and Sachs (2004) and Knight (2002) argue

that there are many forms of learning which are imperative to the development of teachers and they should work in synchrony with each other. Formal knowledge is imparted via knowledge values and a theoretical orientation which is expected to be transferred into classroom practice (Hutchins, 1995 cited in Kelly, 2002). Formal learning also offers accreditation by the National Qualifications Framework (NQF) either in certification or awards. This gives novice teachers the confidence that they will be able to face the challenge of the classroom.

However, teachers continue to learn in the school context through informal learning. The importance of informal education should not be marginalised over other forms of teacher learning. Learning is a complex and lifelong process that is both incidental and deliberate thus it will require a range of activities on different platforms to be sustained and effective. I believe that the knowledge imparted via formal learning gives the teacher the confidence to face the challenges of the classroom initially and eventually will become the foundation through which all informal learning will stem from.

2.4. Finding a Definition for Informal Teacher Learning

Although there are a range of definitions of informal teacher learning available, no particular researcher has been able to properly encapsulate this vast concept adequately into one explanation. Defining informal teacher learning is proving more complex than anticipated simply because the nature of the learning has mostly been studied from the perspective of cognition, where the behaviour of the teacher is measured in direct correlation to the cognition of the teacher (Richardson and Placier, 2001). Eraut (2002) and Yinger (1986) refute this as being entirely true, they mentioned concerns regarding these assertions, highlighting that teachers don't always behave in a logical and rational way.

Kolnik (2010) suggests that informal learning is a process of impartation of values, skills, attitudes and knowledge to individuals on a regular basis through their daily encounters from their environment which included sources like mass media, library, family, friend, work and marketplaces. Van Eekelen, Boshuizen, & Vermunt (2005) describe informal teacher learning as learning that occurs within the working environment which is unplanned. This type of learning is very incidental and spontaneous in its nature. They further explain that it maybe deliberate occurring during reflection or while interacting with colleagues in the staffroom, playground, corridors, during mentoring or during telephonic engagement.

Informal learning is an engaging process which suggests that learning can take place either unconsciously or consciously. Consciously teachers may try out new strategies to maintain discipline in the classroom and unconsciously teachers may refrain from using certain strategies in the classroom that may cause the children to be rowdy due to their past experiences. Leont'ev (1974, 1981 cited in Harbison and Rex, 2013) explain that informal learning inclines itself towards an in-depth study into the everyday learning of teachers in their context of their environments. The foci for teachers remains the “active choices” they continuously decide upon and their interaction with books, colleagues and the context in which they work.

Informal teacher learning refers to both the unconscious and conscious learning trajectory that becomes the catalyst to change in both cognition and behaviour. Eraut (2004) mentions three types of informal learning namely, reactive, deliberate and implicit learning. Planned and conscious learning is referred to as deliberate while unplanned and unconscious is reactive learning. Outside your conscious awareness implicit learning is fostered. These typologies further branch into numerous concepts which underpin informal learning.

Most teachers do not acknowledge or are able to consciously plot a trajectory of this form of learning. Eraut (2004) contends informal learning has an implicit nature and happens in unconscious ways. Korthagen (2005) stipulates that behavioural, motivational, unconscious ways of learning and emotional facets have not been given much consideration. As my intention is to explore informal teacher learning then my focus cannot be superficial and merely look at the cognitive aspect. An in-depth study should include broader perspective and analyse both conscious and unconscious ways of learning.

Hager (2001) contends that formal learning contrasts with informal learning in the absence of a curriculum and the learning process is implicit and knowledge tacit. Emphasis is placed on the learning process rather than the learner. The nature of learning is collegial, experimental, individual, collaborative and contextualised. No accreditation is given to informal teacher learning despite the contribution it has made to both professional development and teacher learning. Recent studies (Harbison & Rex, 2013) have illuminated the value of teachers engaging in informal teacher learning. However, there is evidence of the belief that unless

learning is taking place within a structured curriculum it is not recognised by those responsible for the professional development of teachers. Since informal learning remains incidental and implicit, there are very few who authenticate this form of learning.

For the purpose of this study I will define informal teacher learning as the conscious, unconscious, accidental, incidental, reactive and deliberate learning that take place in the context of the school or interaction with the world. This learning is directly or indirectly impacted by factors like cognition, emotion, behaviour, motivation, identity, context and the activities in which a teacher engages. When this eventually leads to change in behaviour and cognition of the teacher in the context of the school and classroom, then informal teacher learning has occurred.

2.5 Factors that Influence Teacher Learning

Opfer and Pedder (2011, p.376) suggest that three subsystems exist that impact on teacher learning. These are the roles of the school context, teacher and the learning activity with which the teacher engages.

To understand and explain why and how teachers learn, we must consider how a teacher's individual learning orientation system interacts with the school's learning orientation, and how both of these systems together affect the activities in which teachers participate and then are reciprocally affected by the changes that occur from participation in these activities (Opfer and Pedder 2011: 394).

2.5.1. The Influences of the School on Informal Learning

Research illuminates that context within the working environment would determine what and how teachers learn (Putman and Borko, 2000). Anderson et al. (1996) explains that learning is determined by context and thus is specific to context. Peculiar knowledge will arise from peculiar situations. In a South African context schools with differing socio- economic status will yield learning that is specific to context and other factors within the work place. The ethos and encounters within the work place will determine your learning experiences.

Informal teacher learning would be esteemed great value to teachers due to the specific nature of the consultation and guidance that is provided. The advantage of this kind of learning is that it takes place on site. Putman and Borko (2000) propose that physical and social

environment support acquiring knowledge and insight through engaging with resources and people. This lends to a more enlightened perception to investigate ways in which teachers learn. Emphasis and value is being positioned within the situated approach. Contrary to the cognitive approach which understands that learning happens in a linear way (simple and easily done) and ignores the context within which it occurs. Putman and Borko (2000) suggest that social and physical context promote learning and understanding via people and resources. This would certainly be an informative position to explore further on how teachers learn.

A benefit of informal teacher learning is that it can be adapted for specific needs to particular teachers that identify limitations and shortcomings in their practices. These teachers can pursue assistance from sources of their choice and from colleagues in whom they have confidence. Collaboration and learning communities are present and they understand the complexities of the context within which they operate, thus making them useful resources for intervention strategies and systems which will benefit the novice teacher. However, Opfer and Pedder (2011, p.376) warn that too much collaboration can impede originality of individuals and too little is more likely to hinder development and can lead to isolation. They suggest that collaboration should not be seen as a panacea.

Informal learning had an edge over formal learning in that it can happen on site and at any given time. It does not need a structured environment or a planned curriculum. It is supported by the context within the institution. Darling- Hammond and Richardson (2009) support informal teacher learning instead of other fragmented methods, such as once-off workshops. Burns et al. (2005, p. 1) discovered that skills being learnt “on the job” was encouraged by informal teacher learning. This type of learning also advocates for the individual needs of each teacher to be met. Each teacher can choose to learn from sources which they encounter. There will be opportunities for both incidental and planned learning from interaction with colleagues and the environment.

Learning informally is supported by both the environment and other teachers (working collaboratively). For learning to be meaningful without anxiety and pressure it is imperative to learn in a relaxed atmosphere. Learning from a colleague helps you to sustain the knowledge and to shape learning for your individual needs. You also have the opportunity to

reflect on learning and filter information accordingly. Opportunities to learn extend outside the classroom. Darling-Hammond and Richardson (2000) suggest that learning communities within school establishments outside the classroom experience can impact positively on the professional development of teachers. Ultimately this exposes teachers to a broader network of people as well as ideas and insight within a similar context.

Informal learning may take place in professional learning communities. Vogel (2009) describes learning communities as an informal group of people, looking together in the same direction trying to engage each other while using the same resources. This definition encapsulates and explains professional learning communities by suggesting its informal nature offering reassurance and assistance rather than monitoring, judging or evaluating. Learning communities in schools abroad have been the platform for much implicit and deliberate learning. Empirical studies done in Lithuania, United States and Netherlands all show evidence of teachers learning collaboratively through these communities.

The study in United States and Lithuania by Jurasaitė-Harison and Rex (2013) was a sample size of 10 teachers, from two countries and three different backgrounds which allowed researchers to make correlations between social relations and culture. Teachers would reflect on their experiences and record them once a week in journals that were provided. The time frame for this activity was a year. Interviews were used for documenting and interpreting these journal entries. Collection of documents and artefacts took place over 2 years.

This kind of research offers interesting comparisons and reveals differences of how teachers learn informally from their own perspective. Jurasaitė-Harison and Rex (2013) used coding analysis by identifying concepts and established the relationship between these concepts on a conceptual framework. The focus was on meaning and action which offered a particular analysis of the subtlety of learning. The study investigated how teacher learning can be impacted by numerous characteristics in the multifaceted individual. It also displayed the cross cultural and social phenomenon that exists in teacher learning. This study validated how socio-cultural differences impacts on perspectives and perceptions of informal learning. Some of the limitations the study presented included the teachers prepared reports of themselves and this may have impacted on the findings.

The findings from Jurasaitė-Harison and Rex's (2013) study showed that Lithuanian teachers displayed greater honesty about challenges while their American counterparts did not openly discuss their challenges. A reason cited for this included cultural differences while the Lithuanians were critical about their challenges the Americans remained positive about their circumstances. Another limitation was that it did not discover situations that would support to informal learning. Some gaps for further research include, exploration of cultural patterns that would emerge with informal teacher learning. This study reinforced Opfer and Pedder's (2011) belief that school culture impacts on teacher learning as well as the individual and activities with which they engage.

Discourse communities are different from learning communities in that they afford teachers the opportunity to discuss problems within their context and find solutions that are more realistic as all members are privy to the context they work within. Darling-Hammond and Richardson (2009) contend that discourse communities support and embrace improvement and more operational practices as well as collaborative work with colleagues. Teachers can inquire from other teachers about the problems they experience either formally or informally by chatting in corridors, over the phone, while on duty together or in staffrooms. Teachers from neighbouring schools usually meet during workshops and exchange numbers and more informal contact takes place while they share ideas and information. Recently during checking of schedules in our circuit, we found teachers emailing information to each other or templates to assist other schools. This kind of interaction is purely informal and contributes to effective professional development.

Due to the informal nature of learning, it allows for learning to take place in social or individual stages, not necessarily within the school context or classroom. It can extend beyond the school. Erikson *et al.* (2005) claims that communities of practice support collaborative work done by teachers believing that it shapes and broadens their knowledge. This drives teachers away from working by themselves and feeling isolated within the school. In our school mentoring takes place every day after instruction time by grade heads. During this time much knowledge is imparted to teachers about the plan and preparation for the next day. This allows teachers to feel equipped and confident for the challenges of the next day. These can be considered as communities of learning or practice. Confidence impacts on both learner achievement and teacher learning. It keeps teachers motivated to carry out their tasks

effectively. Motivation impacts teacher behaviour and invariably impacts learner performance. The ethos or learning culture within the school can encourage, motivate and support teachers with their learning. Context and school culture is a catalyst in teacher informal learning.

2.5.2. The Teacher's Role in Informal Learning

Different teachers will engage in different ways with informal teacher learning, depending on their own motivation, commitment, existing knowledge, capacity confidence and other variables. During the process of informal learning, knowledge, skills, attitudes and values are acquired while the environment and resources can either support or hamper this process. Informal learning takes place beyond professional centres, universities and schools (Kolnik, 2010). He explains it as lifelong process that surpasses formal learning. Knight (2002) argues that the value of informal learning is often not acknowledged. Kolnik (2010, p. 55) agrees noting that informal learning is “an enormous study reservoir” where teachers could benefit from the supply of crystallised transparent source of knowledge. With informal learning the teacher is both a learner and teacher, which is a dual role. Most teachers have difficulty contextualising the different roles and therefore may have difficulty implementing ideas and suggestions given to them.

It is imperative that teachers take responsibility for their own learning and practices. Teachers will learn from experimenting and failing. Networking, team work, staff meetings, informal conversations, self- reflection, mentoring, collaboration, learning communities; physical environment and teacher discourse via unions are all methods of disseminating information and new ideas to be conduits that bring about change in practice and teacher learning. Due to the informal nature of teaching practices, teachers are unable to pick up cues from their surroundings or feel that they are permitted to make errors simply because they consider student learning their priority and responsibility (Hoekstra et al., 2007). Implicit/ tacit manners which are not conscious attempts to acquire expertise are a component of informal learning (Eraut, 2004).

There are stereotyped beliefs that only experience can be a catalyst to teacher learning, this idea is synonymous with teachers who have been long in the profession. According to Wilson and Demetriou (2007) informal learning does not refute the claim rather it acknowledges that experience is indeed valuable and a contributing factor to improving the performance of

teachers in the classroom. Researchers caution this belief, noting that even though proficiency may be developed through experience there is no evidence that it influences expertise (Hagger et al., 2008). Further debate arises with regard to factors like motivation, emotional, behavioural and unconscious ways of learning that influence teacher learning (Korthagen, 2005 cited in Hoekstra et al., 2007).

The responsibility of learning lies with the teacher. Teachers that spend time learning on their own or from collaborative platforms often are more able to reflect on and bring about change to their practices. Learning is encountered through experimentation and error. Teachers often feel they are not allowed to make errors since they believe that student learning is their concern (Hoekstra et al., 2007). Teachers should be urged to support each other by imparting skills, experiences and knowledge contributing to their professional development. Novice teachers indicated how readily available support from staff who communicated effectively, offered support and advice was integral to their personal and professional development.

Shulman and Shulman (2004) contend that teachers should be more aware of their learning processes and their disposition to learning. This further allows them the opportunity to analyse their own practice. The needs of the teacher are specific rather than learning general information that may not be valuable for their practice. The learning process is relaxed thus allowing for trial and error. Research by Wilson and Berne (1999), Little (1994) and Day and Sachs (2004) suggests that many teachers are more prone to trying new suggestions and bringing change to their practice when a more informal approach is operating rather than a top-down cascading of information.

2.5.3. The Activities that Support Informal Teacher Learning

The nature of informal teacher learning is characterised by deliberately or inadvertently participating in activities that become a vehicle to a shift in conduct and cognition. Conventional views on PD suggest that the types of activities teachers participate in will determine their learning (Desimone, 2009), while Henze et al. (2009) suggests that teachers are constantly learning through everyday activities in the work place. The context and the experiences within the classroom afford learning prospects for all teachers despite their experience. Every teacher learns everyday through deliberate, reactive or implicit ways but analysing the trajectory of this learning would reveal a matrix of evidence. We are constantly

learning either to be better administrators in the classroom, managers in our respective departments, teaching a concept in a different way to bring clarity to learners or collating information. The contextual nature of informal learning is clearly visible but difficult to explain.

Scribner (1999), Retallick (1999) and Moore and Shaw (2000) argue that the work place is the most effective and significant area to develop the skills and competencies of teachers and prepare them for their ever evolving roles. Davis and Luthans (1980 cited in Vogel, 2009) explain the reciprocal manner the environment and the teacher operate within. Darling-Hammond, (1998); Candy, (1991); Putnam & Borko, (2000); McLaughlin, (1997); Scribner, (1999) acknowledge that learning takes place through human interaction and activity. They further explain that due to the situated nature of this learning, cognition can be considered to be context bound. Participation in activities and cognition become synonymous. McLaughlin, (1997) explains that learning is entrenched in the everyday activity of work. The activities that are provided on site are part of the professional development of teachers. For both organisational development and school improvement to occur it is imperative for learning to take place through activities (Moore & Shaw, 2000; Scribner, 1999).

There are three activities teachers engage individually in for their informal learning (Opfer and Pedder; 2011). This includes reading, experimenting and reflecting. Reading helps professionals to keep abreast with policy changes, implementation, development and insights. Darling-Hammond, (1998); McLaughlin, (1997) and King, Newmann & Young (2000) stress the importance of professionals to gather data, knowledge, information and insights through the activity of reading and experimenting. Teachers are able to improve their practices by experimenting and gaining new ideas and this activity invariably impacts on their learning. The debate arises as to whether experimentation can be regarded as teacher learning (Jarvis, 1987). The question that arises from a debate of this nature is whether teacher learning does take place through experimentation and does this learning result in the change in practice or development professionally.

Reflection is essential for learning from blunders and recognising mistakes since it is the process through which we think about our experiences which is vital to learning. Schon (1983) contend that reflection is instrumental for all learning. Moore & Shaw (2000)

maintain that reflection is the essential for behavioural change. To improve the dispensation of the curriculum it is important for teachers to reflect to their current practice and change routines (Eraut, 1995). It assists teachers to find areas of development within their practices. Informal learning is the conduit to lifelong learning. Knight (2002) argues that teachers who neglect lifelong learning have the potential to become valueless to the education component and their presence in the classroom becomes meaningless. Therefore it is imperative for teachers to constantly reflect on their practice either alone or within communities of practice and identify areas of weakness that need development. The teacher is responsible for his/her own development and must embark on the journey of self-directed learning.

Kwakman (2003) listed numerous ways in which teacher's engage in activities that support their informal learning. Some of them include reading journals, subject matter literature, newspapers, experimenting, reflecting, collaboration, classroom interaction, carrying out managerial and administrative duties and numerous other ways through which learning occurs. Some of these activities are individual, and others are collaborative. Jarvis (1997) clarifies that engaging in learning activities is social as well as individual process. Individual learning is the self-initiated learning (Candy, 1991; Clardy, 2000). Merriam & Caffarella, (2000) contend that the most engagement with individual learning activity remains self-directed. Teachers would take responsibility for their own learning, implementing, planning and assessing of the activities they engage in (Candy, 1991).

Teachers will choose their activities according to their perception of the area that they might need development in. It is assumed that learning is initiated and supported when a culture of learning is created through collaboration. However the debate will arise as to the personal disposition, identity and other variables can also be factors that will support or impede the learning of teachers. McLaughlin (1997) claim that experience through engaging in activities within their context is essential for teacher learning. However these studies investigated the teachers past experiences that contributed to change and was based entirely on the teachers reflections of learning that brought about change. According to Kwakman (2003) and Lohman & Woolf (2001) teachers reveal that learning is the by-product of the teaching process. Eraut (2002) suggested that teacher's behaviour is not always stimulated by logical and rational thinking. Day & Leitch (2001) and Sutton & Wheatly (2003) agree and cite emotions as a conduit for teacher behaviour.

The process by which teachers acquire the new knowledge, skills, and values which will improve the service they provide to clients (Hoyle & John, 1995, p. 17).

Teachers provide a service to the public, with continuous changing of curriculum professional development through activity is necessary. The acquisition of new knowledge, value and skills is constantly expected. This is needed to improve their practices and succeed in achieving their professional goals. These activities are mostly informal in nature.

2.6. The South African Context and Informal Learning

There is a visible gap with regards to research on informal learning in South Africa. Although researchers like Graven (2004) and Mestry *et al.* (2009) have mentioned the benefits of this form of learning, inadequate research is available that can illustrate teacher's informal learning processes in South Africa. The research available supports the premise that South African teachers learn informally comparably to those globally. A study by Abrahams (1997) presents the merits of the use of the staffroom as a platform for learning actively in South African schools. This concurs with Mawhinney's (2010) findings in a U.S. school showing that informal teacher learning within the context of the school and common spaces are effective ways of learning. Both researchers agree that teachers are more open to learning in a more relaxed atmosphere. These congregational areas are support structures for their development. This is encouraging for South Africa that more research is being done in even though it is on a very small scale.

However, a study by Whitelaw *et al.* (2008) claims that some novice teachers evaded these congregational spaces, as they did not provide positive learning experiences. Further they argue that experienced teachers find it challenging to include novice teachers into their community thus a great number of novice teachers leave the profession early. It is evident from this research that our South African schools need to be more supportive, encouraging novice teachers to remain in the profession and creating opportunities for them to become successful educators. Studies by Pramoney (2011) and Thaver (2011) displayed the advantages of informal learning in two high schools with the PD activities supporting teacher learning and making teachers lifelong learners.

The South African Council of Educators (SACE) developed the Continuous Professional Teacher Development programme (CPTD) recognizing the importance of professional development for teachers however has neglected to include informal learning as a recognizable form of development. Only formal platforms where information is cascaded in a top/ down approach either in school or out of school are regarded as professional development. SACE is unable to give accreditation to informal teacher learning as PD simply because its outcomes are difficult to recognise. The gap is increasingly visible yet authorities on the matter find it increasingly difficult to acknowledge informal teacher learning as developmental.

The Education Labour Relations Council (ELRC) in South Africa developed what is known as Integrated Quality Management Systems (IQMS). This system was aimed at developing teachers and advancing education (IQMS Collective Agreement 8 of 2003). Despite the good intentions of the system, many challenges were encountered in the implementation of IQMS. IQMS was intended to assist with the PD of teachers. This development would take place within the context of the school by the DSG (Developmental Support Group) and SDT (Staff Development Team). This PD will be done informally either by the HOD, SDT, DSG or the DBE.

Some challenges experienced included the cascading of information by educators who were trained for a limited period of time and expected to advocate the system to resilient teachers. Mestry *et al.*(2009) claim that resistance to change has radically compromised professional development with teachers. These isolated experiences intending to develop teachers will naturally fail if monitoring and development is not sustained. Ramnarain (2009) explains that numerous reasons can be cited for the failing system in our schools. She contends that “the lack of capacity throughout the education system” (p.82) is the key reason for its failure. From my personal experience with IQMS, I found that it was being done at school level merely to comply with expectations from the department of education (DoE). There was no circuit or district improvement plans ever since its conception thus defeating the purpose it was intended for. IQMS is merely an appraisal system rather than developmental programme. Yet it aims to bring an element of development for both the school and the individual. IQMS was formulated with the intention that it will allow teachers to reflect on their work and continually developing teachers professionally by their DSG on an informal platform. IQMS

will encourage teachers to observe, reflect and learn informally how to improve their practice but it appears to have not met the expected requirements.

2.7. Teacher Knowledge

There is a definite relationship between teacher knowledge and teacher learning. Knight (2002) suggests that there are two important types of knowledge namely procedural and propositional knowledge. Procedural knowledge or knowledge in practice is developed within the school context and remains practical in nature. Eraut (2004) elucidates “cultural knowledge” as a form of procedural knowledge. It is simply the knowledge that claims you have the know-how or expertise to perform the functions or duties of a teacher. Procedural knowledge plays a significant role in context driven activities and practices. This type of knowledge is usually acquired informally from social activity (Wilson and Demetriou, 2007). Teachers unlock procedural knowledge through their subject knowledge, sociological background, philosophical thinking and psychological theories of understanding. Continuous practise of assessment techniques and methods as well as fresh pedagogies that are introduced in education develop the confidence and proficiency of teachers.

Propositional knowledge encompasses truth which is either knowable or unknowable. Propositional knowledge can be extracted from text books, policies, research etc. Foundation Phase teachers use their propositional knowledge to teach phonemes to improve reading and literacy. Teachers’ lack of propositional knowledge has been blamed for the low literacy levels in South Africa (DOE, 2008b). Kelly (2006) explains that this kind of knowledge is similar to knowledge of practice. Knight (2002) contends that professionals need both propositional knowledge and procedural knowledge. All the theoretical knowledge needed for a teacher to get into the classroom is meaningless unless they can apply the knowledge practically within the classroom. We cannot choose one over the other as both are imperative for good classroom administration and functionality.

In informal learning more emphasis will be placed on procedural knowledge, or learning ‘how to’ since it is more context based and is assimilated frequently through social impartation incidentally (Eraut, 2007). Eraut (2007) further emphasizes the cultural nature of this kind of knowledge and explains that the likelihood of this being disregarded is highly plausible simply because of its implicit character. Similarly Wilson and Demetriou (2007) reveal that the implicit nature of this type of knowledge is difficult to trace and reflect in a

tangible textual form. Knight (2002, p. 230) elucidates that learning to do is practical knowledge and involves both “sensori- motor and cognitive skills.” Kelly (2006) agrees and explains that knowledge in practice is a self-motivated process involving learners and teachers collaboratively while working in the same context.

For teachers to develop holistically both forms of knowledge is essential. Researchers agree that both forms contribute to effective professional development. Turner –Bisset (1999, p. 52) contend that it is myopic to only draw attention to teacher competency or skills (practical knowledge) since the cognitive process and synthesis (propositional knowledge) strengthens teaching. Propositional knowledge quantifies how emotions, beliefs, motivation and other factors will impact and determine the teaching process.

Our challenges at school often find us delving into our pool of understanding and knowledge to resolve the difficulties we face. As a teacher in grade 3, I often encounter difficulty getting my children to settle down after break. Observing a colleague enlightened me on different ways to get them to listen without shouting at them. My colleague will tell her class “let’s listen to the birds outside or the car going past”. Quickly children will settle down and want to ensure that they could hear what their friends were listening to. This made it much easier to maintain discipline and get them to settle down quickly. Observing and implementing this discipline tactic enhanced my practical knowledge on classroom management and discipline.

Researchers and stakeholders in education have similar beliefs regarding teacher knowledge. An implicit understanding remains that teachers need to develop and use their skills, proficiencies and knowledge effectively. There are different types of knowledge that is acquired either intentionally or incidentally that enhance classroom management and impartation of information in a particular field. For the purpose of this study we will discuss three of these key types of knowledge.

- ▶ Content Knowledge (CK): Theories of learning are embodied within this framework of knowledge. This aspect of knowledge encapsulates the concepts and facts and the interdependent relationship they have on each other within particular subject matter. Simply, it requires having the knowledge of the learning area itself.
- ▶ General Pedagogic Knowledge (GPK): The knowledge of both learner and learning, knowledge of purpose and aims of education, knowledge of classroom management,

the general ideologies of instruction, ones beliefs, skills and general knowledge are all embedded in GPK.

- ▶ **Pedagogic Content Knowledge (PCK):** This knowledge has a broader framework which encapsulates the knowledge of what learners would already know about the subject matter and knowing what they would in all likelihood find difficulty understanding. Also understanding the purpose of teaching particular subject matter at a particular age or ability level depending which is more appropriate. PCK includes knowing both curricular knowledge and the curriculum material that is available for the learning area. Knowledge of instructional approaches for teaching a particular learning area is embodied within PCK.

2.8. Conceptual Framework

2.8.1. Opfer and Pedder's Complex Systems Model

The complex systems model views teacher learning as multifaceted not just an event. Guskey (2000) previously believed teacher learning to be merely linear process. This simple belief suggests that teacher development activity is a catalyst to teacher change. This process-product linear approach is not appropriate and research shows that it doesn't work. Teacher learning is far more complex. The model on complex systems looks at learning from a very dynamic perspective. This cause and effect perception of teacher learning is not adequate since learning and education is a non-linear process.

So this complexity model will provide a framework for me to engage with the data from the perspective of the school, the teacher, the activities and how informal teacher learning is impacted or impeded by these constituents. This model also assumes the all three variables, the individual, the school and the activities will influence teacher learning. The different variables for learning remain reliant and dependent on each other for informal learning to occur (see Fig. 1. red arrows). The model is cyclic in nature (see Fig. 1 grey arrows). It displays systems that operate within systems. The big circle represents the complex model systems. Within these systems are sub-systems which are interdependent. It moves away from the process- product assumption. It views learning as robust. The pathway of learning varies from individual to individual.

Learning in sub-systems is ultimately partial and incomplete. Teacher learning involves actions, elements, processes and mechanisms and is a complex system making it challenging

to map its outcome every time. The complex model systems allow for teacher learning to be analysed from a more spontaneous perspective rather than a premeditated or cause and effect approach. Since learning varies from individual to individual and there may be various reasons for an individual's trajectory to learning however the end product remains the same. There is a need to understand how these systems interdepend. Teacher learning is dynamic and thus can occur in both formal and informal ways. Teacher learning will be effective if it's viewed as nested into subsystems than a linear process.

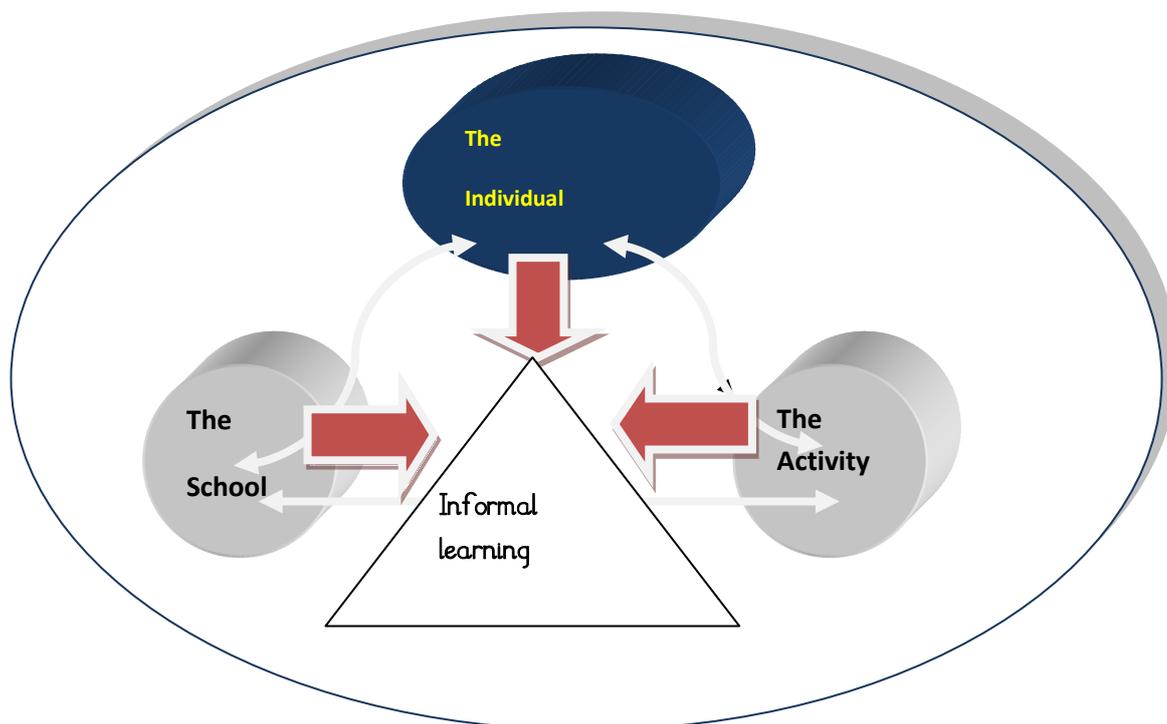


Figure 1: Complexity Model of Teacher Learning (drawing from Opfer and Pedder, 2011)

Davis and Sumara (2006) and Collins and Clark (2008) also maintain that teacher learning is not an incident rather it should be hypothesized as a complex system. Complex systems adopt the belief that simple learning incidents have multiple trajectories to learning. The uniqueness of the school, activity and the individual will all be contributing factors which influence the nature of learning (Briggs, 2007). The relationships between variables have a ripple effect however they remain nested. Very much like throwing a stone into a dam, the water across the dam will be impacted by the stone however the water will remain nested in the dam.

Stollar, Poth, Curtis and Cohen (2006) explain that teacher learning involves structures within structures which changes as a nested system.

2.9. Analytical Framework: Reid's Quadrants of Teacher Learning

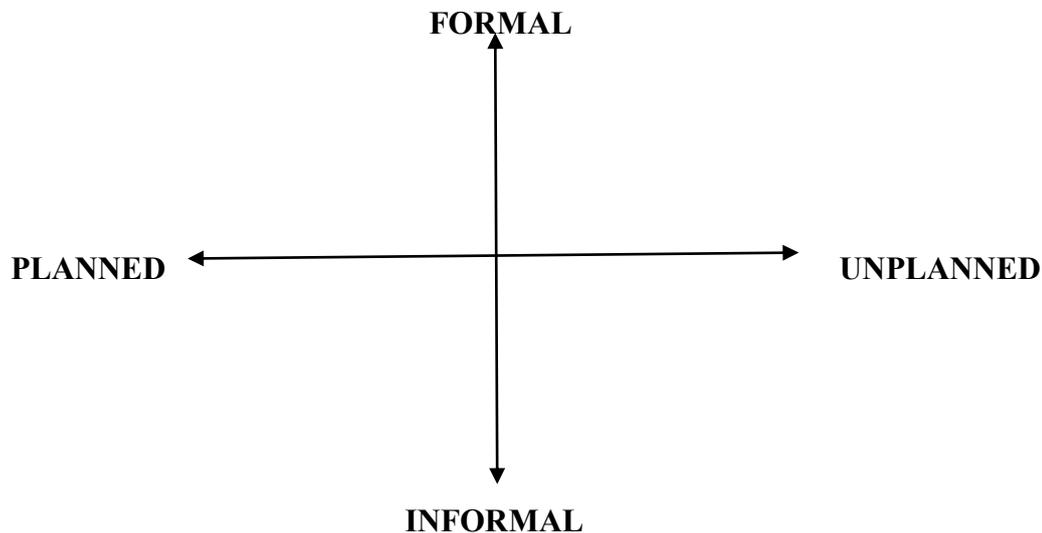


Figure 2: Reid's Quadrant of Teacher Learning (in McKinney, 2005 cited in Fraser, 2007)

Reid's quadrants of teacher learning (McKinney et al. 2005 cited in Fraser *et al.* 2007) also illustrate a further dimension of planned-incidental opportunities of learning. The quadrants are formed by placing formal-informal learning on one axis and planned-incidental learning on the other, where planned learning opportunities can be both formal and informal and incidental learning opportunities offers a similar view claiming that both formal and informal learning are part of a continuum and includes intentional (planned) and incidental (unplanned) learning opportunities. Thus professional learning opportunities for teachers exist across a vast range, and recent research indicates that there is a trend of teachers engaging in informal learning to a greater extent than they are in formal programmes of learning. The quadrant has been adapted since the focus of this study is informal teacher learning. The informal and formal axis has been replaced with the social and individual learning axis. The quadrant will assist to plot out the activities each teacher engages in according to the four quadrants. A picture will then illustrate of whether the teacher learns more through social engagement or prefers being an individualistic learner.

2.10. Conclusion

In conclusion, informal learning affords teachers the opportunity to engage in learning at their own pace, according to their individual needs without any stress and anxiety. It affords teachers the privilege of working in their contexts dealing with issues peculiar to them developing both expertise and professionalism. Yet this form of learning has not gained much accreditation or recognition in South Africa.

The literature review describes the subsystems within the Complex Model System and how these subsystems are dependent on each other for informal learning to occur. It further draws attention to the workplace being the ground for PD opportunities and teacher change. The subsystems within the Complex Theory Model remain multi-dimensional and dependent on each other for learning to occur outside a formal curriculum. This study attempts in trying to close this gap and highlight the significance of this kind of lifelong learning. This study will add to our knowledge about informal learning in the foundation phase from a South African perspective.

The next chapter describes the data collection methods (interviews, collages, photo-elicitation) as well as the methodology used for the study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter in this study reviewed literature on informal teacher learning. Initially I provided a definition for informal learning. Then I looked at the influences on teacher learning namely, the school, teacher and the activities in which teachers participated. I engaged the findings from other studies on the subject. Finally I presented a model of the conceptual framework that will underpin the study. This chapter encapsulates the methodology which includes a narrative inquiry, sampling, research ground, and the design for this study. I further examined the limitations of the design. Lastly, the reliability, trustworthiness and ethical challenges that may arise with a study of this nature will be described.

3.2 Research Paradigm

3.2.1 Narrative Inquiry

After much deliberation, the narrative inquiry has been chosen to explore how teachers learn informally and examine how schools support or impede their learning processes. Denzin and Lincoln (2008) explain that the narrative is testimonies and stories which are related by people on their perception of the world and their perspective of their identity in relation to the world at any point in time. Using the narrative inquiry assisted me to unfold the stories of how their experiences have shaped their learning. This method of inquiry is located within the interpretivist paradigm (Clandinin and Connelly, 2000). Creswell (2003) maintains that participants' backgrounds and experiences shape their view of reality. Interpretivist researchers discover reality through these lenses. Researchers will use the experiences of participants to construct and interpret the data that is collected. The interpretivist paradigm allows for multiple versions and perspectives of truth. Willis (2007) believes that the context in which the research is conducted is influential in understanding the data that is gathered. He further states that since the core belief of the interpretive paradigm suggests that reality is socially constructed. Using the interpretivist paradigm to frame this study will assist to understand how the context within which the participants learn, influences their informal learning.

Putman and Borko (2000) explain that our learning encounters shape our learning. Often teachers teach in the same way they have been taught. The debate has arisen as to whether workshops and other professional development activities are catalyst to change in behaviour for many teachers. Guskey (2000) suggests that sporadic development or engagement in activity does not generally contribute to change in the teacher behaviour. Using the narrative inquiry helped tell the tale of two teachers and how their learning has been shaped by contextual and other variables that impact on their informal learning. Being able to retell or narrate the story of participants enabled me to make sense of their informal learning and how it had impacted on their identity (Clandinin, 2006).

Informal teacher learning is not an easy concept to map out but being able to narrate it into a story helps participants and readers to relate to the topic. It helps to take a moment and reflect on how we learn every day incidentally or intentionally. When reflecting, we take notice of our learning trajectories and how they have influenced and shaped our identity as teachers. We are constantly engaged in activity with colleagues and context yet we seldom take note of the learning experiences that shape us. This was not merely a concept for research. It was my contribution to making other professionals aware of the impact we have both individually and corporately to change the face of education by impacting on both context and individuals. Clandinin and Connelly (2000) explain that the narrative inquiry approach captures both human and personal facets both continuously and chronologically. It is a true-to-life approach, allowing us to tell our story of our informal learning without inhibition.

This type of methodology will assist in making the connection between the teacher (identity and disposition), the activities and the school context through thick description of these influences and the impact it had on the learning of participants. Lyons and LaBoskey (2002) emphasize how we get to know and enquire is the important trait of narrative inquiry. Emphasis is being placed on reflection in the narrative inquiry and informal learning. Many teachers find it very difficult to reflect on their learning. The expectations of the Department of Basic Education (DBE) on teachers have increased giving them less time to reflect. Reflection will assist in telling the story (challenges, obstacles and successes) of informal teacher learning in the foundation phase. In this phase story telling is also an important part of the curriculum and learning. The intention of this study is to use reflection to close the gaps that exist and draw attention to the importance context and informal learning have on PD.

Stories are shared to assist us in understanding the world through the eyes of the storyteller. Denzin and Lincoln (2008) explain that these stories are the catalyst to transformation and changes in society. They further explain that this method of inquiry is thriving in research around the world. It assists us to identify the gaps in literature and address the shortcomings with regards to the programmes available within school context for professional development. The narrative maybe merely the telling of stories but the narrative inquiry remains far more complex (Clandinin, 2006). Denzin and Lincoln (2008) explain that narratives are testimonies and stories. It reveals participant's perspective of the world and their behaviour often stems from these perspectives. They will react according to their understanding at that particular point in time. However, the narrative inquiry is much more complicated and goes beyond mere narration (Clandinin, 2006). It journeys into explanations, translations and descriptions of the participants experiences. Similarly during the study, participants related their experiences about their informal learning, the data was then coded and analysed using the three sub-systems (namely the individual, the school and the activities in which they engaged) of Opfer and Pedder's (2011) complexity theory model. The nested cyclic subsystems emerged reflecting participant's experiences.

Participants are encouraged to reflect, remember, describe and map out their learning experiences and then their experiences are woven into a narrative. The narratives assist us in examining their experiences and plotting a trajectory of their journey of informal learning. Their journey will include both personal and professional experiences however Connelly and Clandinin (1990) explain that this may or may not encompass all their learning through their career thus far.

The context in which learning unfolds will be examined. Both participants have different background experiences and contexts in which they learn and teach. The location of the school as well as the dynamics within the school is very different. Clandinin (2006) reminds us that the narrative inquiry is imperative and vital in understanding the experiences, background, environment and all the aspects that would impact on teacher learning in general and informal learning in specific.

Chiu- Ching and Chan (2009) explain that building teacher knowledge is dependent on the feedback and stories we get from teachers and the information they produce. We can examine their learning processes, and how they filter information that is useful for them as well as the

influence the context in which they work impacts on their learning. This enables researchers to analytically examine learning experiences, the individual, the context in which they learn and the activities in which they engage in. We can further examine other influences like the presence of mentoring, collaboration within the context, the attitude of the teacher and the emotions of the teacher and how these factors impact on their informal learning.

This study employed the case study approach. A case study is appropriate as it gives the researcher a holistic understanding of the situation or phenomenon (Kumar, 2011). In the case of this study it will measure both the phenomena of the context and how it supports and impedes teacher learning and the ways in which teachers learn. The qualitative design adopted permits the views and perspectives of the participants to illuminate the variables being investigated. A case study assists to bridge the gap between theory and practice and between the academy and the workplace (Barkley, Cross, and Major; 2005). A case study allows for the researcher to be able to practice identifying the parameters of a problem, recognizing and articulating positions, evaluating courses of action, and argue different points of view.

3.3. Selection of Participants

I decided early in my study that I was going to do an in-depth comparative case study of both an urban and rural school. My focus would be the individual, the activities in which they engage and the context in which they learn. Therefore I decided to select only two participants for the study. Finding participants that were easily accessible to me and were willing to share their stories on the phenomenon being researched was most important. Creswell (1998) maintains that both accessibility as well as willingness to provide useful information must be considered when choosing participants. I preferred not to choose participants whom I had known personally since I felt that it might hamper the research process. The school where I initially chose to do my research had no participants who were willing to participate. This was my first stressful encounter with this study. Very despondent I approached my supervisor who encouraged me to use another rural school. So I went through the process of reapplying for permission to do research at another school.

Bertram and Christiansen (2014) emphasizes that purposive sampling can be done through convenience sampling. So I chose a school close to the proximity of my work place and the other school that is on my route to work. This made it convenient for me to reach my

participants whenever the need arose. The principal of the school in the urban area assisted me with the choice of participant after approaching the staff. The other participant was chosen by a colleague who worked at the school. Both these individuals had been a while in the profession, committed and resourceful at their institutions and unlikely to leave the study. I selected pseudonyms for both participants. I chose the names according to the characteristics they displayed of prominent people in the bible. The likelihood of their identities being recognised was highly unlikely. My participants Sarah and Deborah were of different races, social background, school context and the data that could be generated would reflect much about informal learning experiences of both participants as well as the contextual learning experiences in different schools. Connelly and Clandinin (1990) explain the importance of grasping the value and nature of the relationship between the participant and researcher that grow within the narrative inquiry. A well balanced relationship must develop with all stakeholders working together with a shared goal and purpose in mind. All stakeholders should feel equally connected and important to the research process. They further stipulated that the voices of both participants are vital.

3.4. Setting for Research

The settings for the research are significant, as context is significant in our informal learning experiences (Hamilton, Smith and Worthington, 2008). Both schools are situated in close proximity to travel routes and are serving children from poor socio-economic backgrounds. Each school has been given a pseudonym to protect their identity. Ruach Combined School is serving previously disadvantaged learners who face many social predicaments, such as child-headed households, drugs, alcohol, poverty and health related issues. The entire school population are black African learners. The teachers at the school face many challenges in managing discipline and control of learners. The staff establishment are black African. Zuay Primary has both an integrated staff and diverse learner population. However they also have a large number of learners who come from similar socio-economic circumstances as Ruach Combined.

When doing the data collection different venues were used depending on availability of participants. This included their homes and school. Collecting data only at school was impossible since both were occupied during working hours. Some data was collected during the school holiday. Presenting collages, interviews and photo elicitation is very time consuming. Sufficient time was essential to complete these processes. The collection of data

took place over six months due to the administrative responsibilities of the participants and the researcher. Sometimes I met with participants in the comfort of their homes where it was easier for them to share their experiences.

Zuay Primary School is on the outskirts of an urban area and has 938 learners and 31 post level one educators which include 5 SGB teachers, three HOD's (one HOD is in acting capacity), one deputy principal and one principal. There are three classes per grade, with about 40 learners per class. Sarah is the Junior Primary HOD. She is a grade three class teacher along with another novice teacher to assist with administrative duties. The school employs five SGB paid educators to assist with the dispensation of the curriculum. There are four support staff ensuring that the school is a safe and clean environment. The school offers many different codes of sport as extra-curricular activities for learners to participate in.

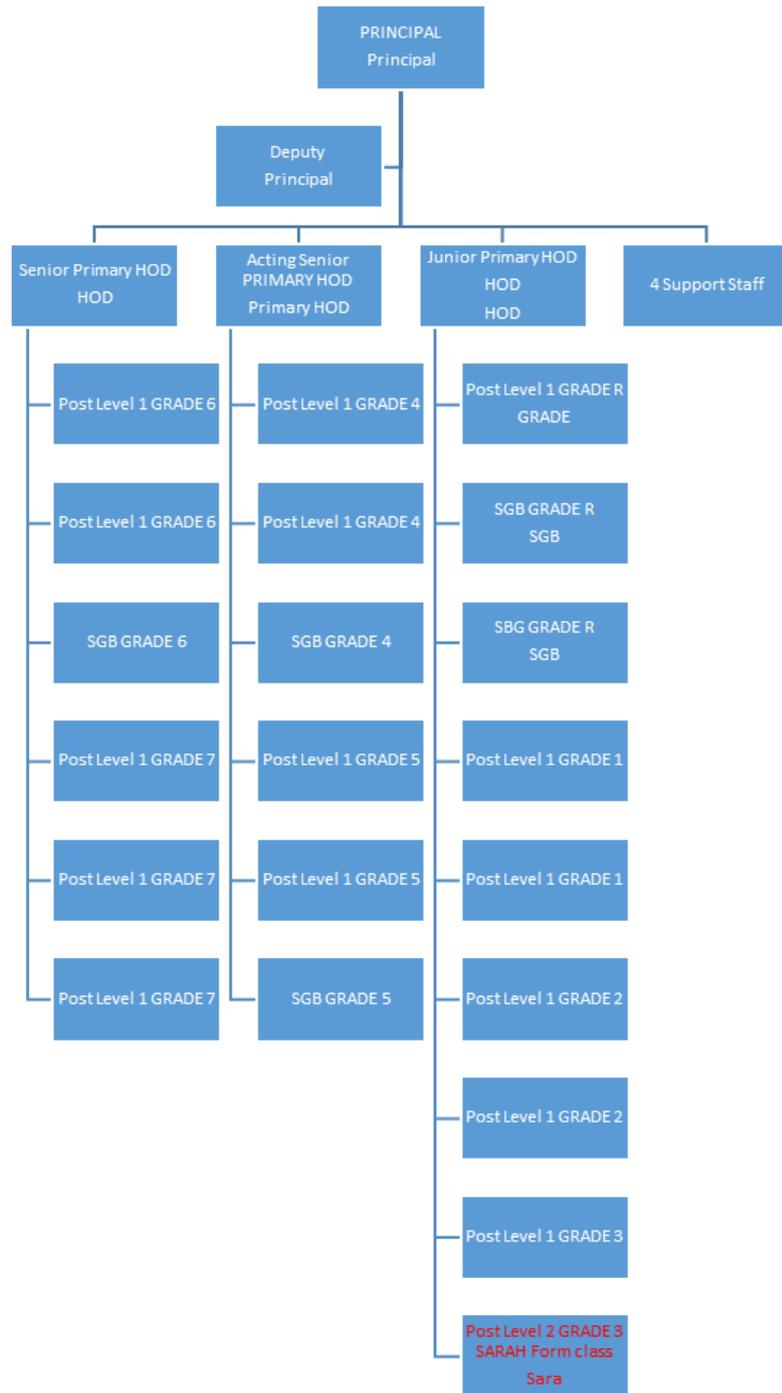


Figure 3: School Organogram for Zuay Primary

Ruach Combined School lies on the outskirts of a rural district. The school has a roll of 850 learners with 20 teachers. Three HODs support the staff, one is in acting capacity. They have one principal and deputy principal. There is either one class per grade or two depending on the enrolment per grade. The average ratio of learner to teacher is about 43:1. Deborah is the

only grade 3 teacher at her school. The school has seven support staff. Two of the support staff is part of the nutrition programme at school. Most of the children have meals prepared at the school since they come from the lower income earning group. Netball and soccer are the only extra-curricular activities the learners engage in.

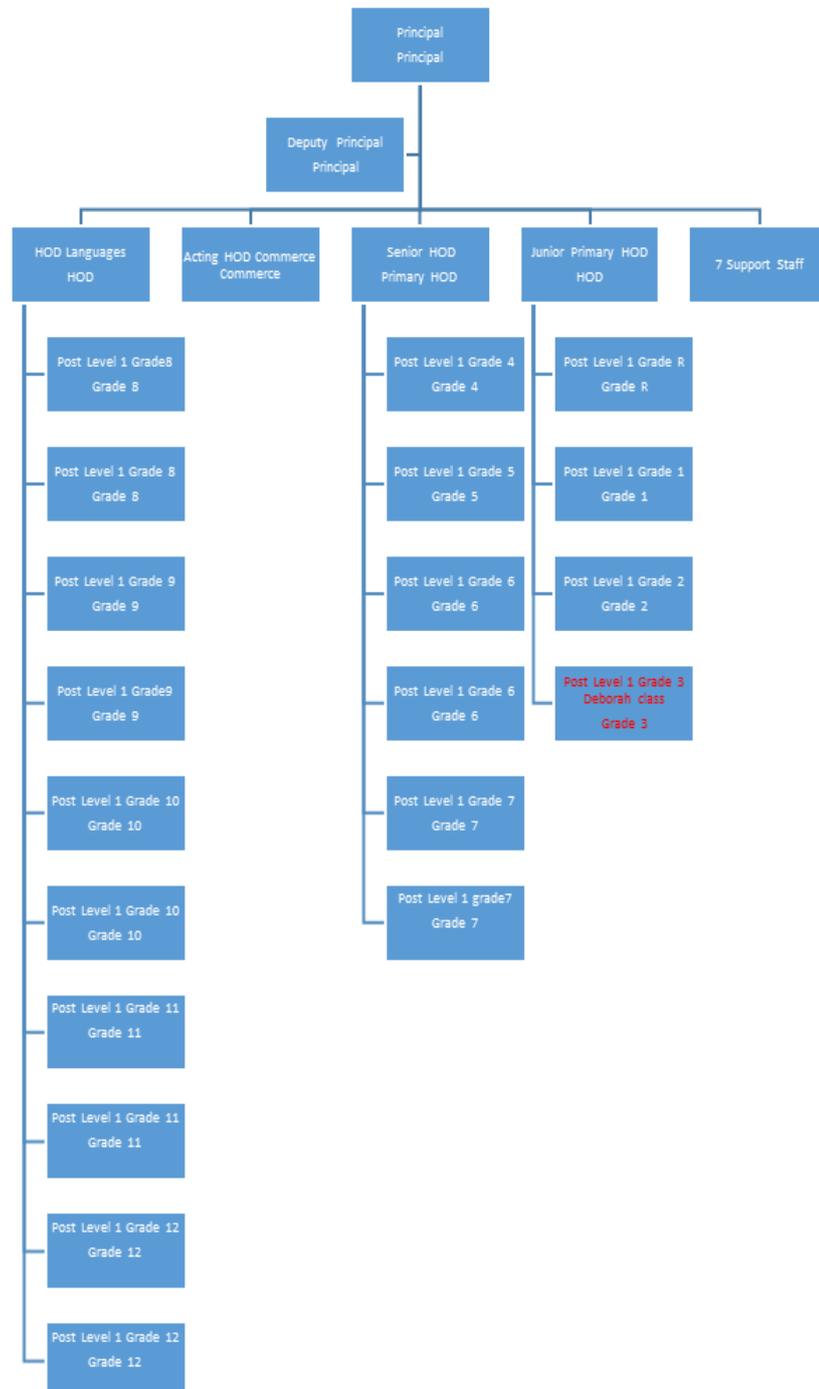


Figure 4: School Organogram for Ruach Combined School

3.5. Data Collection Methods

A variety of qualitative methods can be used to document and explore the participants' experiences concerning informal teacher learning.

The research questions are:

- In what ways do selected Foundation Phase teachers learn informally at school?
- How does the school context support or impede their informal learning?

The data produced from semi-structured interviews, collages and photo elicitation would generate the data needed to answer these questions. The experiences of participants were investigated using multi-dimensional research methods within the narrative inquiry. The data that was generated by these instruments informed the narratives.

3.5.1. Semi-Structured Interviews

Crippen (2008) acknowledges that interviews are critical when trying to ascertain how teachers learn. Denzin and Lincoln (2008) contend that interviews are a powerful tool which unravels ways in which we understand humanity. They further acknowledge that the meaning of experiences of people can be established through interviewing. They also suggest that communication and dialogue are the imperative in breaking barriers like race. My participants are from different races. Creswell (1998) highlights that researchers need to ensure that their participants are willing to articulate their thoughts and share their sentiments and ideas. Marshall and Rossman (2006) reiterate how imperative it is for the interviewer to have a pleasant demeanour and the correct attitude. The participants need to be treated with respect and there should be no breach of trust with any information that is being divulged to the researcher.

Cohen, Manion, and Morrison (2007) portray interviews as vital in that they allow data to be produced between humans through verbal interaction. It allows for participants to connect both their experience and feelings and then communicate this to me. This will allow me to see in-depth how each participant views the world and learns through different perspectives. This will also enable me to code the different ways in which participants learn. Then to analyse whether the schools either support or impede this learning process.

The data generated from an interview will be determined by how the interview is structured, the questions that the researcher prepares and how the researcher probes to obtain more depth from the vague responses. When the phenomenon is difficult to map out like informal learning the researcher relies on probing for verification and depth from the data retrieved. Kvale (1996) suggests that one very effortless way of ensuring a good interview is to ensure that the participant speaks more than the researcher. Questions also need to be phrased in a diplomatic way to ensure depth in responses rather than curt, short, simple ‘yes’ or ‘no’ questions. The first question is the most important in the interview. It will determine the flow of the interview and will reflect the knowledge of the interviewer. Spradley (1979) maintains that in open ended interviews the “grand tour” (the first question that will let the interviewee understand the topic that is being engaged and the depth of the topic) is the biggest challenge. The initial questions are the most vital in determining the depth, length of response and the language in responding.

Brenner (2006) emphasises probing is an imperative part of interviewing. He explains the use of detailed probes such as *how, where, when, who* will generate more detailed information. Encouraging probes like “tell me more” and silent probes will reflect that you are listening are all important in the interview process. Other probes that can be used for further clarification and following up information. I believe that the art of probing is a key factor in information generation and all interviewers need to perfect the art before using interviews.

Interviewing is the most frequent form of data collection in qualitative research. According to Merriam (2009) the success of an interview will depend entirely on the interaction between the interviewer and the participant and on the interviewer’s ability to ask suitable questions. Patton (2002) maintains that the aim of interviewing is to allow one to enter into the other person’s perspective. Qualitative interviewing begins with the assumption that the perspective of others is “meaningful, knowable and able to be made explicit” (Patton, 2002, p 341). Patton (2002) affirms that descriptive questions should be asked initially probing the informant for recent experiences, opinions and understanding.

My ‘grand tour’ question is:

Describe the way you see yourself and how you think others see you. I want you to include aspects of behaviour, emotions and the way you think (cognition).

Followed by descriptive questions such as:

How do you think you will learn about curriculum changes, teaching and assessment strategies?

Describe an incident in which you learnt a new strategy. Can you explain how you learnt it?

What activities are you engaging in to develop your skills and knowledge?

Explain to me which has been the most useful learning experiences that you engaged in since becoming a foundation phase teacher and how these experiences has impacted your teaching.

I tried to engage the participant and make them feel comfortable about recalling and sharing their life experiences without feeling the pressure of sharing personal information with a stranger. However, interviews seemed to be daunting for the participants and information was not so easily forthcoming since the teachers were often not aware of their learning experiences and often had difficulty recalling incidents. Neither are they constantly mapping out their learning processes or reflecting on the new knowledge that was acquired. I found myself giving examples to them and then they will respond using the similar thought processes rather than different experiences. Even though teachers are constantly engaged in learning in both different contexts and ways, the participants needed to be prompted and probed to reflect on their experiences. Their prior learning often seemed concealed. The questions were based on how teachers learn informally as well as if sites and institutions either impeded or promoted this type of learning. Both interviewer and interviewee needed to work together to ensure insightful and rich data was produced. The interviews were taped so they can be transcribed and information is not lost or distorted. The interview schedule (appendix 3) has the list of questions used during the interview process.

3.5.2. Collages

Collages were chosen as a creative method to collect data. It requires participants to use different images from magazines, books and newspapers and paste them together with a particular theme in mind. The collage can include both photographs and words. For the purpose of this study the theme given to participants was “the ways in which you learn informally”. Raht et al. (2009) maintains that creativity and forms of creative art has the ability to impact on the life of both the artist and others. This kind of creativity has a profound effect and can arouse emotion and action to inspire, empower, motivate and change the lives of people. MacEntee (2009) suggests that it is a reflection of creativity when images

are created from books, magazines, newspapers and are pasted together to create a story or image. Belenky, Clinchy, Goldberger, & Tarule (1986) explain that collages encourage participants and researcher to understand concepts in a new way. They also suggested that participants would be more engaged and connected to the topic. Butler-Kisber (1997) acknowledges that artful approaches have the tendency to reveal information which would normally be concealed especially if there is a breakdown in communication between the researcher and participant.

Davis & Butler–Kisber (1999) maintain that collages also have the potential to reveal certain dilemmas the researcher maybe facing. In a particular study the collage supplied embodied the antagonistic relationship that existed between the researcher and participant. In that particular case the researcher decided to withdraw instead of contaminating the research process. Collages also have an analytical potential. This could be really interesting phenomena to explore since the interpretation of the collage is dependent on both the participant and the researcher. Rainey (1998, p. 124) asserts that collages “give way to relations of juxtaposition and difference” and these pieces work contrary to each sparking the mind into fresh ways of understanding. Since collages are creative forms of art in research it can allow for interpretation from multi-dimensional perspectives. The researcher searches for both the information intentionally conveyed and the meanings that are hidden. Gaps and spaces in the collage can also be identified while colour and texture can also communicate data. The most interesting aspect of collages is its ability to produce data beyond just the visual evidence. The absence of visual evidence is also production of data. Interpretation of the data is left entirely with the interpreter and there are many diverse avenues for interpretation.

Collage is becoming a popular form of data collection in qualitative research. It allows for more diverse forms of realities to be exposed. Robertson (2000) suggests that collages display our reality of our existence and the objects are given meaning from our perceptions rather than the way they exist in relation to one another. Raht et.al. (2009) elucidates how the use of metaphors, pictures and symbols in collages assist to communicate messages and allows for engagement on the topic. Often messages that would be difficult to normally communicate seem to be expressed more easily through pictures. I hoped that using this method of collecting data will enable me to get information that people would not necessarily share in

conversation. People often find difficulty sharing uncomfortable experiences in conversation but will find words or pictures that would adequately express their sentiments.

Butler- Kisber (2008) contends that “the use of collage gives voice to the study and multiplies our understandings. By selecting art forms, we can give meaning to who we are” (p.273). Reflection also has the ability to connect experiences, events and associations which either support or impede our learning processes. Collages can trigger memories that have been forgotten. It has capacity for both visual and sensory experiences that can be unfolded in a picture story. When creating a collage participants are not merely pasting together a picture or story, but also generating data to be analysed and interpreted by the researcher. Norris (2009) concurs that analysing, interpretation and collection of images are an aspect of working with collages. Atkinson (1996) explains that much practise is needed when interpreting and viewing art form. He makes mention of specific technical knowledge that will enhance your skill in interpreting e.g. texture, size, colour, space and spatial awareness. Richardson et.al. (2000) and Barone and Eisner (1997) have suggested some useful hints when evaluating art-form research like collages. These criteria lean toward the written form of art (poetry, drama) rather than the visual (collages).

During our Masters’ lectures, we the students had an opportunity to make a collage on the topic of our learning experiences and to present our personal collages. While engaging in the process I quickly found that my friends and I were sharing information with each other that were both traumatic and deep emotional issues that we neglected to speak about previously. There was also a therapeutic and engaging atmosphere that enveloped the room. For some of us we discussed memories that had been locked away for many years feeling nobody really cared to know. Being able to share our experiences and challenges also gave us the reassurance that we have a crucial story to tell and a difference to make in the world. I will like my research to unravel similar transparent exchanges and my participants to know how vital their story remains. Informal learning took place during the entire time and it was a realisation for me that my research topic can make a useful contribution to education in general and teachers specifically. A very important lesson I learnt from collages is “what I think is not what I should believe.” Every person has a different perspective of the world and special lenses through which they perceive the world. We all understand things differently so the researcher (in this case me) needs to ask and inquire from participants exactly what are they portraying from the pictures they illustrated.

Collages were requested from each participant on the topic of their informal learning. Each participant was given a sample of a collage on my own informal learning to give them a basic idea of what was expected from them. Figure 5 is a copy of the collage that was given to participants as a guideline as to what is expected in putting a collage together. I later realised that providing a finished product was not very useful in helping Deborah understand the actual process in making one. I was glad that teachers did not simply copy my example and influence the data generation process. Sarah was very creative when she planned her collage. She did it in the shape of a tree to signify that her learning was in a growth process with strong roots. Deborah did not look at the exemplar collage when compiling her own collage.

Sarah had no difficulty putting her collage together. She was able to do it without any advice or assistance from me. Deborah indicated that she is not too sure of what is expected of her and also she had never done a collage before. I met her at her school and brought in all the materials she would need to complete her collage. When I explained to her what to do she seemed a bit hesitant to start. She explained that she is not too familiar with the concept of informal learning and collage making. I did not want to contaminate the process so I asked her to draw a cross on a page and think of the activities she did on her own to learn and put it into the first quadrant. Then I asked her to think of the ways she learnt at school and put into the second quadrant. Then she needed to look at learning that was done via networking and put into the third quadrant. Lastly I asked her to think of things she learnt incidentally and spontaneously without the deliberate intention to learn. She seemed to enjoy putting it together. She still expressed her concern that it might not be what is expected. I tried to calm her anxiety and told her it was a good piece of creative art.

Both participants presented their collages to me once the process was completed. They explained the meaning of each picture. They took me on a journey of their informal learning trajectory. The discussion was audio taped so I could transcribe it later. The data retrieved from this data collection method was very useful in filtering information to answer first research question, the different ways in which foundation phase teachers learn informally at school. A great deal of time was spent choosing appropriate pictures that would portray the phenomenon, namely informal learning.



Figure 5: Example of collage on Informal Teacher Learning.

3.5.3. Photo Elicitation

Photo elicitation is becoming a popular means of collecting data (Pink, 2007). It is a simple method of collecting data asking participants to take photographs of a particular topic and then asking participants to share their thoughts and information with the researcher regarding the image. Mitchell (2008, p. 369) explains photo elicitation as the process when images are examined and discussed in an interview. The researcher is given insight to what the images mean to the participant as well as the perspective of the world through the eyes of the participant. I asked participants to use their mobiles to capture evidence of their learning processes within their learning environment. The purpose is to record different aspects of their learning and to take a picture to illustrate the knowledge that was acquired in the process. This will be important information that they will need to share with me in an interview. The term auto-driving refers to the way in which the photo-elicitation interview will unfold (Jenkins, Woodward, & Winter, 2008). This term refers to when the participants drive the interview process. They explain the importance of each image and its meaning will be illustrated also at the same time eradicating any misinterpretation that could arise.

The image is a meaningful part of the process but equally imperative is the response from participants. Ruby (1995) contends that the personal meaning and value attached to the images by participants is significant when analysing the images. During the interviewing

process PEI (Photo- Elicitation Interviewing), meaning will unfold from emotions that will be awakened in participants and the observations that are made by the researcher. Also the data generated will give insight to deeper aspects that may not necessarily be revealed in the verbal discussion. Interpretations and meanings that are attached to images can be open to multiple explanations (Barthes, 1981). Un-coded messages will surface depending on the participant and then will be decoded by the researcher. This will all be dependent on the perceptions of both stakeholders and their understanding of the world. Banks (2001) explains that our cultural and social backgrounds as well as our experiences and observation with the world are pivotal to our interpretations. Observation, imagination, ways of thinking, memories, experience are all active when the participant is giving meaning to images and when the researcher is at work. PEI is a valuable instrument to triangulate between data collection methods and generate diverse insight into the research process.

Photos have the potential to draw ideas into the open by tapping into the tacit knowledge of participants. It allows participants to share information that they may sometimes be uncertain to impart (Mitchell, 2008). Due to the nature of photo elicitation it persuades dialogue about diverse things and in unusual ways. Interestingly photos goes beyond the verbal or text based language and charts territories that illuminate feelings, thoughts, lived experiences that would otherwise be difficult to articulate. Using photos can also access information that has been stored in the deep recesses of our brain. A subject like informal learning is difficult to describe and teachers find mapping out their learning challenging to remember so using photos can target information in the subconscious that the researcher wants them to bring to the fore.

According to Mitchell (2008) although this is a beneficial method of capturing data, there exists an uncertainty about photography being more art rather than research. Emmison and Smith (2000, cited in Mitchell 2008) stress the concern of “methodological adequacy” that infiltrates this data collection method. On its own it might not be the best method of data collection. One can argue that many questions can also arise from traditional methods of data collection and its authenticity. They suggest that photography may not depict reality. Mitchell (2008) explains that even though there maybe shady areas with regard to this methodology, the most significant issue is that photographs is not merely clicking on a camera and taking attractive pictures but what we capture says much about who we are. Informal learning is an elusive object of study and thus I believed that participants would be

able to elicit important information through taking photos of their informal learning and then discussing why they had selected particular image through photo elicitation.

I anticipated that this would probably be the easiest and most exciting aspect of my data collection process. It seemed simple and I expected my participants to enjoy the challenge that presented itself. Unfortunately much to my dismay the process took a while and both participants were engaged in administrative work at school and were unable to meet with me. In the last week of school Deborah finally yielded to my numerous attempts of having a PEI with her. She expressed that being a participant requires much effort and time. During this time of the year, time is the greatest commodity and she hoped the interview will not take too long. I thanked her profusely for making the time to meet with me and expressed my appreciation to her for being a part of the study. She sent me the pictures the previous day through the social network WhatsApp. I printed the pictures and had them in readiness. I asked her to number the pictures in order that she would prefer to present them. I used the audio tape to record the interview with her permission. Deborah explained very clearly and succinctly during the interview about the pictures she had taken. This data collection process revealed more about her learning than the interviews and collage.

Sarah was unable to meet with me before schools closed for the summer holidays. Her position as HOD at school and personal commitments made it impossible for her complete the photo elicitation process. She promised to meet during the holiday. The first week of the holiday was a family wedding and she was busy with preparations. In the second week of the holiday she was planning a trip to Cape Town and was unable to meet with me. I was really disappointed but realised that it would be better to collect data when my participant was more relaxed to share her learning experiences with me. By the end of the second week I got a message from Sarah that she had completed the photo elicitation process and will email all the information to me. I explained to her that it was important for me to have an interview with her and I don't mind waiting until she got back from her holiday. Then I got a call from her saying that I could come to her home the day before she left on holiday she is ready to share her experiences with me in an interview. I was really excited. I got a fruit cake to take with me to express my appreciation to Sarah for making the time in her busy schedule. I printed the pictures Sarah emailed to me but she had also had a copy of them. She chose the order in which she wanted to discuss the pictures with me. The interview was audio taped as

this is essential for ensuring the data generated is trustworthy. This was done with consent from participant.

3.6. Data Analysis and Representation

The data was generated from the collection of collages, interviews and photo elicitation interviews. Creswell (1998) highlights the importance of representing and interpreting data systematically and carefully. The data needs to be presented in a user friendly way and bring clarity to the reader. It must be meaningful and simple.

To generate data, three data collection methods were used. The more traditional semi-structured interviews were followed by two more artistic and unconventional methods, photo-elicitation and collages. After interviews were conducted, they were then transcribed. Then participants were given the task of doing and presenting collages that depicted the professional learning activities in which they engage at school. The presentation of the collages was audio taped and transcribed. The transcriptions were then used to categorise the data into the three different subsystems (Opfer and Pedder, 2011). Lastly PEI was done. Participants presented their choice of photos and led the discussion on their learning.

These interviews were also taped, transcribed and coded according to the complexity theory on teacher learning and the three subsystems (individual, school and activities). Thematic coding was initially done by colour coding the three categories (individual, activity, school). These categories were chosen according to the Opfer and Pedder's (2011) complexity theory on teacher learning. These three subsystems are categories that indicate the cyclic and nested nature of teacher learning. Pink was used to select the individual, blue for the school and yellow for the activity. Symbols were then used to code aspects that impacted on these categories. Asterisks for factors that impacted the individual, circles for the activities they engaged in and triangles for the factors within the context that impacted their informal learning. The data was then reduced and analysed.

These data collection methods have generated sufficient data that had to be analysed and presented effectively. Henning (2004) recommends that the analysis should be done recurrently through the research process. Knowing and understanding how we learn best encourages us to maintain the relationships or methods that make us learn best. The collages voiced the issues that are often not verbally communicated. It has been said that "pictures paint a thousand words." Information has been gathered from what you see and also from

what does not appear in the collage. Interviews seem to be the process that generated a fairly large amount of data. Here the interviewer was the catalyst to the process, asking probing questions yet not insinuating any expected answers or outcomes. The PEI was equally informative and interesting since the discussion was led by participants allowing them to share their learning experiences in-depth. They seemed more relaxed and confident during the PEI since they were in control of the process.

3.7. Trustworthiness

Objectivity and credibility must be upheld in order to strengthen the trustworthiness of my research. There must be strength in the arguments presented and evidence of sound reporting. Auditing and confirming your findings would verify your conclusions (Bowen, 2009). Trustworthiness in my case study is paramount. Strong arguments and evidence needs to justify all my claims. Establishing trustworthiness can be challenging in qualitative research which generates stories and experiences. Lincoln and Guba (1985) recommend four criteria which include:

- **Credibility** (establishing that the research is believable) **internal validity** (match between observations and theoretical ideas that have developed). I used the conceptual framework already established by other researchers, namely Opfer and Pedder and the Reid's framework to establish credibility in my study.
- **Dependability**. This means that findings are consistent with other studies and could be repeated. However this case study is unique to its setting and findings are unlikely to be repeated. The findings are consistent with other studies in the field.
- **Confirmability** (ensuring the findings are supported by the data collected) and **objectivity** (researcher acted in good faith). This is very important. My narratives and conclusions need to be supported by the data. The narratives were given to both participants to verify and confirm if they reflected their views.
- **Transferability** (transfer findings to other context, people and situations) and **external validity** (degree to which the results can be generalizable). This will not apply to my study since my study is not generalizable. The sample size is too small and the context is unique and peculiar to my study.

- **Methodological triangulation** (strengthens credibility) will contribute to establishing trustworthiness of data.

Triangulation enhances trustworthiness. Golafshani (2003) agrees and suggests the use of different methods enhances the accuracy and depth of the study. Denzin and Lincoln (2005, p. 454) believe that ‘triangulation allows clarity and the case to be seen from different perspectives yielding similar results.’

Credibility is strengthened through triangulation. Triangulation allows for multiple perspectives or perceptions to bring clarity in meaning and verification to the process. Three different data collection methods were used to generate data on the phenomenon of teacher learning.

3.8. Limitations of the Study

A limitation of my study is that of any case study, that the outcomes of my study are not generalizable, as they provide in-depth narratives of two teachers. I worked with two different schools across two circuits however it is not my intention to seek generalizable results. I seek to establish in-depth data and knowledge on informal learning and how best learning can support professional development within the school context. Initially I found teachers were reluctant to participate in research due to the time constraints and the demands of the classroom.

Further, the phenomenon under study is not easy to engage with. Informal learning requires a great deal of reflection by participants and probing from the researcher. Another limitation experienced during interviews was that participants found it difficult to recall information on their learning. I found that one participant in particular found it difficult to recall incidents of her learning and would often ask for explanations and examples. Working with the collages and PEI was much easier than the interviews since the participants enjoyed the process and much data was yielded. The photo elicitation was an appropriate data collection method for the phenomenon informal learning. The participant was more in control of the discussion and was able to share information more easily. Also photo elicitation allows for participants to delve into their subconscious and a subject like informal teacher learning requires the practise of recall.

3.9. Ethical Issues

Bertram and Christiansen (2014) stress the importance of observing ethics when doing research particularly if the research involves people. Some of the principles suggested include having the consent of participants, autonomy, allowing them the freedom to either engage in the research or withdraw at any particular time. Researcher need to be sensitive and not bring harm to participants. Creswell (1998) explains that issues arise during data collection and the analysis process.

Safe guarding the identities of individuals, schools or the area through the use of pseudonyms to ensure privacy and confidentiality are imperative. The participants were reassured that their confidentiality was my priority. None of the information divulged would be traced back to them. Initially the aim of the study was mentioned to participants however I could see that they needed clarity as to what informal learning is about. Bertram (2003) maintains that it is vital to disclose a clear outline and explanation of the needs and expectations of the researcher so they can decide to participate or not. Informed consent letters must be available for all stakeholders for the study to be ethical.

Marshall and Rossman (2006) believe that time and sacrifices are both important commodities a participant brings into the research process. Researchers need to appreciate, consider and remain sensitive to the needs of their participants. I considered this when Deborah was house hunting and could not meet with me and Sarah had been very busy with a visit from the DOE to her school. Marshall and Rossman (2006) explain that reciprocity is essential when doing research. I offered pace setters and work schedules to Deborah and to have coffee with Sarah when presenting her collage.

Clandinin (2006) maintains that being open to multiple voices, respect, negotiation and mutuality are aspects of ethics within the narrative inquiry. This suggests that value needs to be placed on the stories of others without allowing our personal morality and beliefs to impact on the information given. Also the way the data is displayed should protect and respect the participant especially in personal narratives.

Brenner (2002) explains that in research, humans must be protected and the responsibility remains with the researcher to ensure confidentiality. Participants must give consent with regard to transcription if it will be done by a third person and also must be given the opportunity to withdraw from the process at any time. Their identity and responses must be

kept confidential. Informed consent needs to be obtained from the university, school and participants. If you are video-taping the interview then special procedures will have to be followed and informed consent obtained to maintain confidentiality. No videotaping was done during interviews.

My participants were briefed on the nature of informal learning and their role in the study through a vignette. Woods (2006) explains the public has the right to know while the subject's right to privacy needs to be maintained. It was my responsibility to protect my participants and their privacy at all times. Building a relationship of trust is inevitable in good research. Values of integrity, honesty, respect and fairness need to be upheld.

When working with collages, some of the ethical issues that need consideration include reflexivity (examining the research process and relationship), trustworthiness (evidence to justify all assertions) and voice (there is both the verbal and non-verbal voice) because of the closeness the participant and the researcher share during the process. I needed to pay much attention to building trust in the relationship with the participant and be fully aware that keeping the information confidential is important. Teaching the participants not to violate copyright (images from the internet and public banks can be used, images that are protected should not be used) and produce original work is significant in following the correct ethical procedure. I emailed participants an original collage I had done to assist them with ideas and also be a guideline as to what is expected from them. I also explained clearly to participants that pictures available on the internet and public picture banks images that are no longer protected can be used in their collages. Formal ethical clearance was granted by both the University of Kwa-Zulu Natal and the DoE for the study to be conducted (refer to Appendix 1 and 2)

3.10. Conclusion

The use of the narrative inquiry was appropriate to describing the participant informal learning and how this can unfold in many different ways. By retelling the stories of the participants I was able to show how they learn informally and also how the context of the school is important in the process. These are real people telling real stories to make meaning of their informal learning experiences and sharing how their context supports the learning process.

Chapter four and five will present the findings of the study after data collection. It will present the narratives of the two teachers who participated in this study.

CHAPTER 4: NARRATIVE ON SARAH'S INFORMAL LEARNING

4.1. Introduction

In this chapter, I present a narrative of Sarah's informal learning experiences and her perspective on learning within her context. The structure of the chapter will be outlined using Opfer and Pedder's (2011) complex systems on teacher learning. This system explains teacher learning as nested within subsystems. The school context, the individual and the activities in which they participate (the three subsystems) interact and combine differently to influence teacher learning. I will use an adaptation of Reid's teacher learning model (McKinney et al., 2005 cited in Fraser et al., 2007) to plot different activities on the matrix. This would illuminate how much of the participant's learning occurs through individual or collaborative activities, and through planned or unplanned activities. Once the learning has been plotted a matrix of evidence will unfold that can clearly display how the school context supports or impedes learning as well as the different ways in which Sarah learns. The next chapter will encapsulate Deborah's informal learning. The last chapter will be a comparative analysis of differences and similarities between participants and the context in which they operate, as well as an engagement with how these three subsystems influence their learning. The findings of this study will then be discussed.

4.2. Sarah's Professional Biography

Sarah began her career about 34 years ago. She taught at three other schools before joining Zuay Primary for the last 27 years. Initially she did not want to specialise in foundation phase. Her first choice was senior primary but the college she attended offered her secondary school typing and accounting. She was not interested in being a commerce teacher. She believes that God strategically allowed her to choose foundation phase. She explains that it was one of the best career decisions she made. She sees herself as a successful teacher in foundation phase and has accomplished much in the last 34 years. She has a HDE (Higher Diploma in Education). She has been keen on developing professionally and enrolled for the honours degree with the University of Kwa-Zulu Natal. In 2005 she completed the degree successfully. Since then she has also been involved in co-authoring learner material and teacher guides.

She displays great compassion for the learners in her care. She mentions that "*The basic needs of the learners like food and water*", need to be provided before we even begin to think

of educating them. She further explains that most of her learners are *“visual learners and the culture of the children need to be considered”* as all these factors affect the learning and teaching processes. Sarah places much emphasis on *“fairness because children are quick to see what you are like.”* She also believes that *“integrity and tolerance”* are characteristics of good foundation phase teachers. She has a great deal of patience and exudes the qualities of a good role model. She said *“you have to be a really good role model because you must be able to emulate what you say to them and your thoughts and your actions must all be in sync.”*

Sarah has immense confidence in herself. She appears to be active in pursuing opportunities for learning. Meeting everyday challenges that surface at work instils confidence in individuals. In the interview she described herself as *“... a very successful teacher in terms of the foundation phase and the way we handle children and the way we teach and how we teach and how prepared I am every day to go into the classroom.”* This indicates that she has confidence that she believes that she is meeting the challenges and dynamics within the classroom and school. Challenges within the context need to be present in order for confidence to be developed. Sarah points out the many challenges she faces in the classroom including more visual learners (learners that learn best by seeing), poverty and limited resources for children. Through the entire interview Sarah continually revealed that she had support from both management and her colleagues. It is clear that this nested triangular relationship forms part of Sarah’s learning and context.

As HOD of the foundation phase it is critical to continually assess the teachers’ needs within your context. Sarah is constantly reflecting on the skills and learning needs of both teachers in her phase and her individual needs. She supervises 9 teachers in her department and is the co-form teacher of grade three. Feedback and support are both essential in informal learning experiences. It is important for Sarah to create a culture of support within her team. There is evidence of this support when she says *“I have a lot of compassion, I’m very supporting. I guide a lot. In terms of professional work and if teachers are lacking in any area, I never hesitate to put my work aside. I do make sure that I sort whatever they need first.”* This personality trait allows her to provide learning opportunities for learning and support constantly to those teachers in her phase.

A school is a complex environment and meeting the professional development needs of every teacher can become a daunting experience for the HOD. Sarah takes this responsibility

seriously when she discloses that *“I find that I also play a role in terms of other issues like their social issues, their personal issues and I find nobody hesitates to confide in me. If there is a problem, “Can I talk to you there in the office?” and I find that I can help most of them because I am also a life coach.”* The support Sarah gives the teachers in her phase goes beyond their professional needs. Their personal needs are as important to her as their professional needs. This kind of support would give teachers the confidence and support they need as well as ensure that they don’t feel exploited by the system. Their personal issues are as important as the collective issues of the foundation phase department.

She feels strongly that she is responsible for her own learning. She does not expect the DBE to provide opportunities for her learning even though she has benefited from programmes and department workshops. Sarah mentioned she was intrinsically motivated *“I would like to think it comes from within me, it’s like I love to come to school every day and I love to work hard. I love doing it. It excites me to make charts and make resources, make worksheets and come to class. When I see the children benefitting I want to do more.”* When teachers are intrinsically motivated it is likely that they would choose activities that would enhance their learning. Sarah appears to be purpose and goal driven. She displays a great level of competence in managing herself and her department.

Sarah displays proactive disposition meaning that she consciously seeks new ways of learning. This is likely to improve her teaching. During the presentation of the collage she explained that she is involved in *“experimenting with different ways methods of teaching and learning.”* She states this is something she constantly does. She also connects with different people via emails, Facebook and the internet to keep abreast of changes in education. She is responsive and open *“aspiring to use e-learning at school”*. She appears to embrace opportunities that arise and looks for learning experiences in almost all situations.

4.3 Sarah’s School Context

Sarah teaches at Zuay Primary School. Her school lies on the outskirts of an urban area. The location of the school is within the ANC stronghold. The ANC is the ruling party in South Africa and thus opportunities for development in terms of school infra-structure are available in these areas. The school location affords them the opportunity to get assistance from their ward councillor and aid deserving children that need grants. The roll of the school is 926 children. The staff establishment consists of 26 teachers and four support staff. Sarah

supervises nine teachers in her phase. She is the HOD of the FP at her school. The majority of the children at the school come from disadvantaged backgrounds. The school is in close proximity to an informal settlement. The school faces many challenges with learners that are orphaned, child headed households, poverty, alcoholism, HIV and AIDS. Many of the parents are unemployed. The school is a quintile three school. Children pay a minimal school fee. It is a fairly well-resourced school. There is a library, sporting field, staffroom, textbooks, internet access and enough desks and chairs for learners.

Early in the interview Sarah points out that one of the greatest challenges in the profession are in the changing dynamics within the classroom. Her informal learning from being a life coach often helps her deal with the social and personal issues that arise in the classroom. She also mentions *“it’s working in this school environment and it has made me who I have become.”* She regards the school context as one of the agents of change that has developed her professionally.

Sarah admits that early in her career much of her informal learning or knowledge acquisition took place by either her being mentored by senior teachers or the principal or when she mentored other teachers. She explains in the interview that *“it was my first HOD who helped me, basically she mentored me.”* Sarah was now doing collaborative learning through mentorship where more experienced personnel would impart and cascade their knowledge to the more novice teacher. She further claims that *“working in this environment has made me who I have become and got me where I am.”* She noted that the principal and management encouraged and supported staff with PD.

In her collage (Fig. 6) Sarah has disclosed different ways in which the school context has enhanced her informal teacher learning, through offering a range of activities. She noted that *“my collage was done in the shape of a tree because like a tree my learning is growing all the time.”* When presenting the collage she mentioned that discussion was the predominantly her method of learning. These discussions included peers, supervisors, seniors and inspectors. Most of these discussions evolved around curriculum issues and service delivery. She alleges that *“teamwork brings different types of creativity to the table and lots of learning takes place”*. Sarah noticed *“the challenge of teamwork is time but it is very effective in terms of project work.”* She is involved in a lot of teamwork, both as a leader leading the team and as a member of the team. She claims that *“more is done through teamwork than individually.”*

A community of teachers within the context appear to assist each other in their PD. It is evident learning is taking place both within school context and from outside sources visiting the school.



Figure 6: Sarah's Collage on her Informal Learning

Sarah makes mention of resources that are available at school for teacher learning, “we have lots of computers, books and guides for learning”; however she also explains that “resources for teaching are limited even though she downloads lots of stuff from the internet.” She

further clarifies that teachers share their resources but *“having your own readers¹ are important.”* The fact that they share resources shows collaborative team work. Knight (2002), Lieberman and Pointer Mace (2010) and William (2008) argue that teachers who work collaboratively in school based communities of practice support the perspective that learning is situated. This implies that the context in which teachers learn can support their learning. Sarah says that, *“there are two to three educators in my department that will always confer and check that we are doing the right thing. It’s more support and guidance to help you along so that you basically don’t want to go all by yourself.”* They support and guide each other with curriculum issues and general day to day activities.

¹ readers are graded books used by foundation phase teachers to develop reading skills in children according to their ability levels.

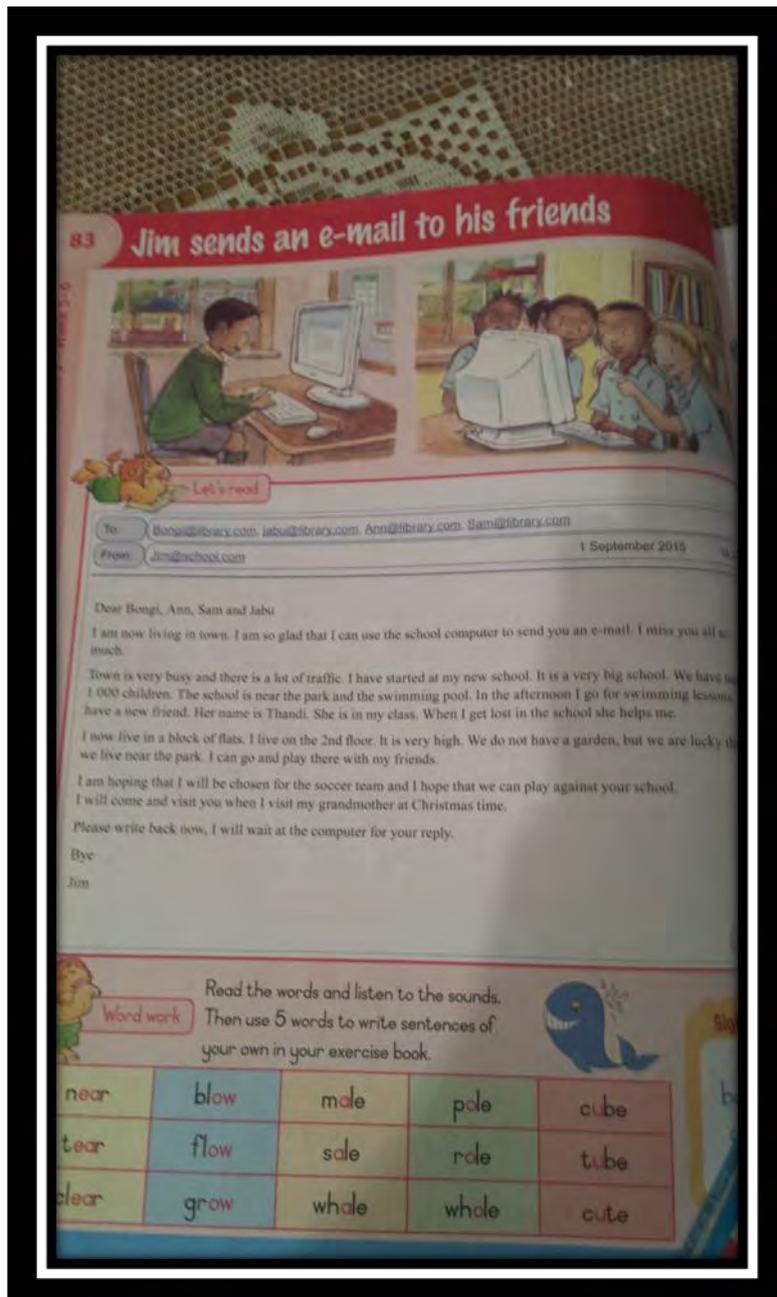


Figure 7: Page of the DBE workbooks which Sarah uses as a resource for her own learning and teaching

She also mentioned that DBE workbooks have been very resourceful in her learning as well as teaching. These books assisted her in improving her general pedagogical knowledge by giving guidance on how to structure her lesson. In the photo-elicitation interview she explained how she used the above story for shared reading. It also gave her the opportunity to introduce learners to the internet and teach them sentence writing skills and sending emails.

She also implies that her colleagues motivate and support her so “*we can be productive, very productive.*” She explains that teaching can be a laborious task without the staff doing “*their share of what has to be done.*” She is grateful for the environment in which she works, as her colleagues are able to share responsibilities. She mentions that “*collaborative team work is done during phase meetings at least three times a term and mini workshops.*” During the photo-elicitation Sarah explained how she would cascade useful information to teachers in the foundation phase from documents and newsletters she received from Naptosa (teacher union). She supports the premise that the teacher is responsible mainly for his or her professional growth. Sarah believes that as a team leader it is imperative to consult with teachers regarding their professional development and specific needs. She reveals that within their school context “*most teachers have a problem with discipline.*” The aim of their school is to improve discipline as they believe it is a catalyst to better performance. To improve discipline there will be a need to work collaboratively and discuss the alternates to corporal punishment and better ways of creating a more disciplined environment.

Just before the interview ended I overheard teachers passing by talking about throwing a party for a colleague then Sarah mentioned they will be throwing a bridal shower for a colleague who is going to get married soon. This was evidence that there is a presence of traditions within the school context. So teachers also participated in both professional and social activities. This kind of environment is bound to create an ethos of trust, mutual respect and collegiality. These opportunities of working together and in teams enhance the quality and quantity of informal learning on site.

Her closing statement encapsulates much about the ethos of the school. Sarah noted that “*we pride ourselves on collaborative work and that’s the only way forward. Nobody works on their own.*” Some of the activities she cited in the interview included, “*Teachers will sit and work in planning their assessments, sorting out worksheets and excursions.*” Many more planning activities were revealed in the collages and interview.

4.4 Informal Learning Activities.

Most of the activities Sarah engages in to support her learning were illustrated through the collage. She did her collage in the shape of a tree (see Fig 6). Sarah explained that she used the tree to illustrate her learning trajectory. The tree trunk is symbolic of the strength of her

knowledge and the roots ensure it's a good foundation. Sarah acknowledges that "*the tree won't collapse with a strong foundation.*" This was a beautiful illustration of her informal learning. She presented the collage to me and a transcript was done of the presentation.

She explained that early in a career she realised that her formal learning had gaps. These gaps would be closed by engaging in discussions and by discovery. Sarah highlights during her collage presentation that "*just by talking to friends and children I found that I learn incidentally.*" She speaks about her incidental learning through the responses from both colleagues and the children. Usually novice teachers tend to be afraid to engage more experienced teachers. They often believe that their questions may sound foolish to the more experienced teacher. They are more likely to seek advice from their peers. This shows that early in Sarah's career she had the confidence to engage with senior teachers. This confidence will allow her to be more likely to take on challenges in her career. This approach to learning has an element of observation and discussion. Practical knowledge is developed through this method of learning. Tacit knowledge is sometimes difficult to articulate or express in words. It's like learning to ride a bicycle. Even though you know how to ride a bicycle, it is difficult to explain how to ride a bicycle to someone who has not ridden a bicycle before.

Working with colleagues offers the opportunity to listen and observe but more especially creates chances to engage in activities. This is a platform to develop fresh perspectives and practices. Teachers can become more mindful of how the diverse types of expertise knowledge can impact on their personal practices. Sarah highlights that "*challenge of teamwork is time but it is very effective when organising sporting and social events.*" She recognises the merits of engaging in teamwork yet time remains a constraint. She applauded the grade R teachers noting that they were constantly engaged in activities together. Sarah mentioned that some things they did included "*teachers sitting together working on preparation and assessments.*" She went further to suggest that as team leader there is a need to "*harness expertise on the team. You must know what you going to bring to the team. A lot more is done through teamwork than by yourself.*" Sarah recognises how collaboration with the team has led to learning. They work with each other sharing resources, ideas, assessments in communities of practice.

Sarah explains during the photo-elicitation interview that there are areas of the curriculum she isn't very au fait with like music. She uses posters like the one illustrated below to assist her develop her subject knowledge so she can be more effective in the classroom. In the foundation phase music is taught during Life Skills. The music symbols and notes are taught during performing arts. These notes articulate the rhythm, pitch and tempo. Sarah was able to assimilate the content knowledge from this poster. Knowing these symbols and notes gives her the confidence to face the challenges of her classroom. She uses the knowledge from posters by publishers to develop her content knowledge and her subject matter knowledge. Subject matter knowledge is essential for teaching and imparting knowledge and skills to learners (Grossman, 1990).

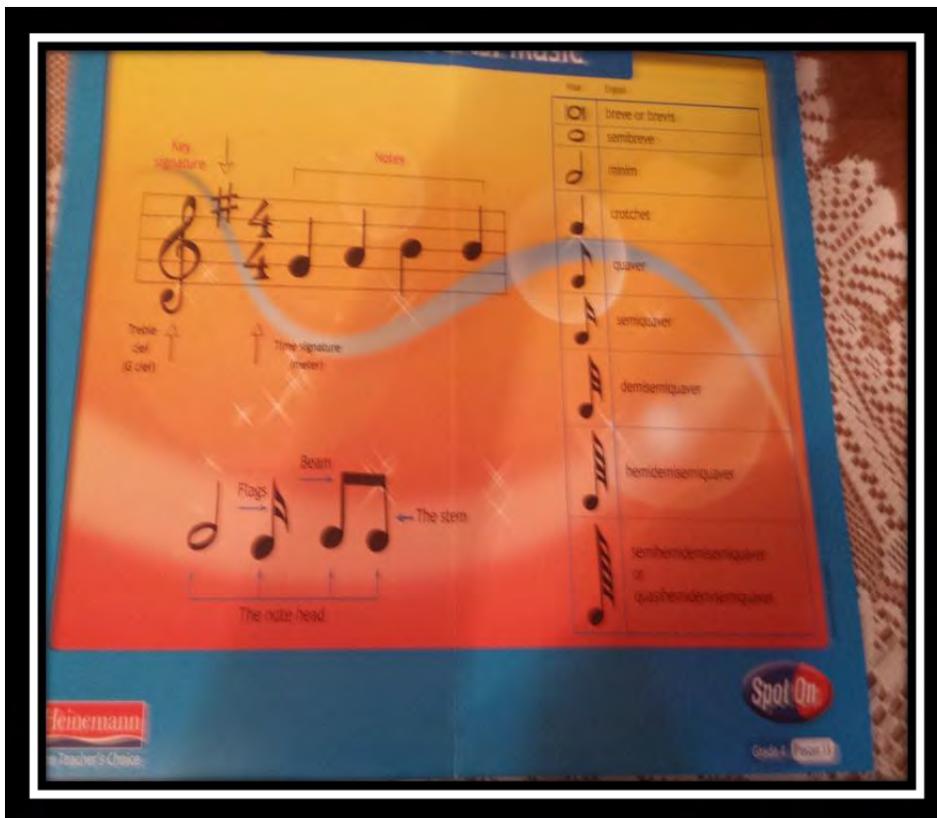


Figure 8: Poster which provides information on music notations and symbols

During the interview Sarah reveals how “*investigation formed a great part of her early learning.*” She is aware that experimentation and making mistakes are all part of the learning trajectory. Opportunities to learn can arise from two dimensions, namely making the mistakes yourself or from observing the mistakes others make. Often opportunities for learning are missed either from a lack of observation or not using listening skills. Sarah explains that

“experience is the best teacher.” She is very conscious about the different trajectories to her learning.

Asking questions and displaying a degree of curiosity to get information is imperative in the learning process. Sarah speaks about how *“curiosity has helped me to learn”* while she presented her collage. Being proactive and asking questions and searching for knowledge is one of the characteristics of good teachers. Further and more importantly is being able to find or locate the resourceful colleagues within your context. Much can be learnt from colleagues and their personal disposition can be infectious to those around them. The company individuals keep at school can also enhance or inhibit learning. Sarah mentions that being *“mentored by her HOD and the principal has taught her much, including the information imparted by the principal about Annual National Assessments.”* She locates instrumental resourceful personnel at school that will enhance her learning experiences.

South Africa has been inundated with curriculum change since the transition in 1994. Sarah mentions that she had to be constantly updating her knowledge of curriculum issues, both her personal knowledge and her pedagogic content knowledge (PCK). She discusses and makes a comparison of her formal and informal learning saying *“seventy percent of her learning was done informally and thirty percent from formal learning structures”* Sarah reads books, papers and circulars to keep abreast with curriculum change. Sarah says she finds it much faster and more effective retrieving information directly from documents, manuals and guides with regard to curriculum change. Sarah also finds reading is a good way of resourcing her pool of knowledge on both content and pedagogic knowledge. Content knowledge is crucial in that it is specific to a particular learning area and is information the teacher is expected to impart to the learner.

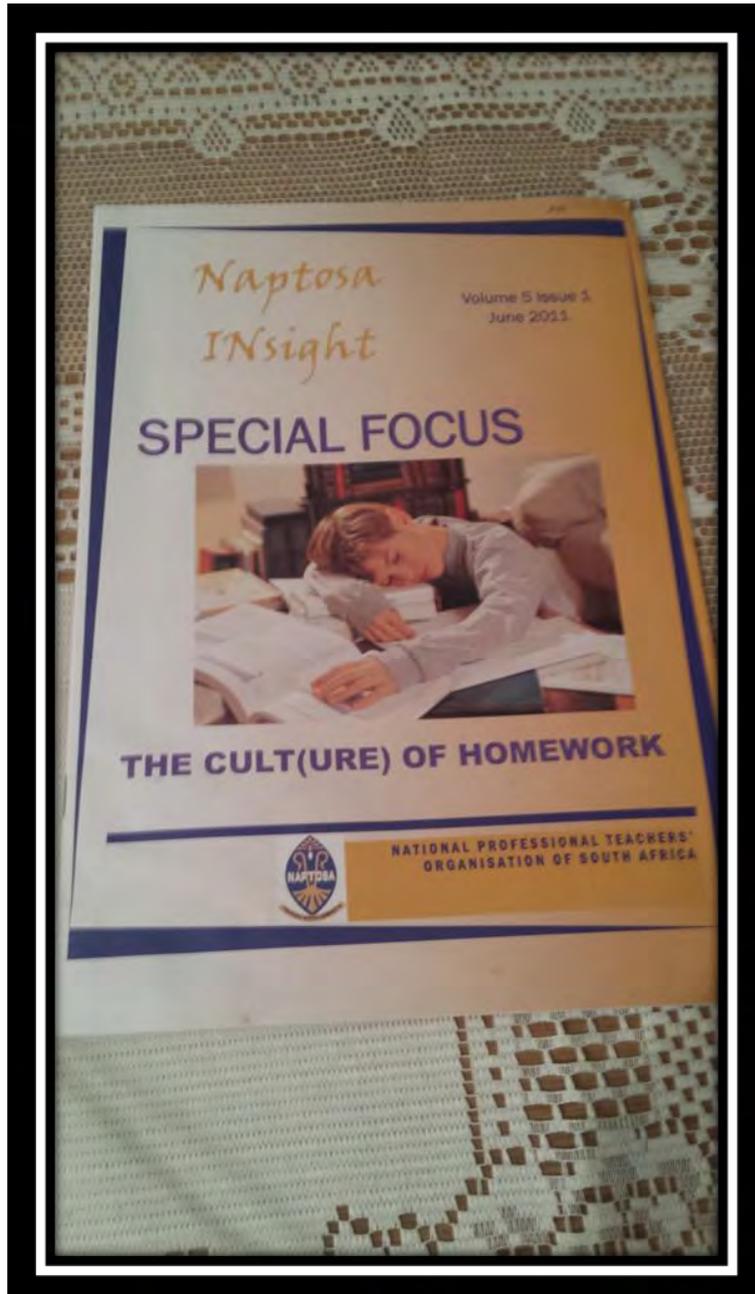


Figure 9: Sarah uses communiques on the culture of homework from Naptosa for her learning

Sarah is a member of NAPTOSA. She is appreciative for the knowledge she is able to receive from these publications. She explains that it not just helpful for educators and curriculum delivery but it is also helps her with classroom management issues regarding learners. She mentions that the knowledge is often cascaded by her to the rest of the teachers in the phase during her phase meetings to other teachers and during workshops. Both her CK and her PCK are influenced by reading these publications. She may also find her subject knowledge is improved depending on the publication contents.

Implementing IQMS at school is also meant to assist with the professional development of teachers either by the DSG (Developmental Support Group), SDT (Staff Developmental Team) or DBE. Interestingly enough Sarah speaks about her learning through observation during IQMS. During an IQMS lesson, she noted that *“a teacher had a very creative way of teaching the children counting. So I asked her to show the novice teachers how to teach the children counting.”* As HOD she quickly identified a technique that would enhance learning for both the teacher and the child. She is not only aware of her own learning but the professional development of teachers in her phase. She understands the impact PD has on learning in general and informal learning in specific. As HOD she took the initiative to ascertain the needs of the team and close the gaps in their learning.

Generally mentoring is instrumental in developing newcomers into the profession or possibly for newly appointed promotion posts. Support and feedback is always needed in any school context. Mentoring is not necessarily done by a designated group of people but rather by the group that sees the potential and urgency of learning with working contexts. Sarah claims that mentoring has been very instrumental in her informal learning. There is a need for *“mentoring and being mentored because of the new changes in curriculum and assessment”* she mentioned during the interview. Sarah sees that knowledge is not merely exchanged through books but people and interaction. Also she respects that there will always be a group of people who will support and guide you in the profession.



Figure 10: Sarah uses the newspaper to improve her content knowledge and as a learning resource for her learners

Sarah described how she used the content knowledge gained from reading relevant articles from the newspapers. She incorporated the articles of interest as resources in various lessons from general discussions to specific subjects e.g. Life Skills in her classroom. She said that attaining a wealth of knowledge from real life experiences impacts greatly on the interest of learners. In 1992 she taught the grade 2 learners about global warming and the effects on the climate and changes in weather patterns. One learner was greatly influenced about what she learnt that she chose a career in Environmental awareness and in particular climate change. She was guest speaker at the Annual school awards where she noted that she was inspired to become involved in climate change because of her lessons. In this instance Sarah's content knowledge improved and inspired her to learn. She was then able to also impart the content knowledge and PCK were the learner also benefitted from her learning.

Media and technology have been instrumental sources in her learning. I smiled when she tried to explain how influential media has been in her learning. Sarah looked at me with a new found excitement saying *"I love it, love it, love it!!!!Don't know what I will do without it. I cannot live without my data projector and computer."* I was very impressed by her enthusiasm especially when I realised that she was born before technology changed the world. This was evidence that Sarah was a life- long learner constantly looking at ways of improving her knowledge and practice. She notes that being competent and contemporary is significant in being the leader of a team. Sarah improves her practical skills by engaging in activities that promote her technological knowledge and skills. Herman and Kenyon (1987) contend that competency is developing skills or knowledge to improve your vocational competence.

She also reveals that *"watching TV and talk shows for personal development"* as well as social media *"learning from Twitter, Facebook and You Tube. Connecting with teachers from other provinces help me keep abreast with the changes in education."* Sarah is very resourceful and uses different types of media and sites on the internet to extend her content knowledge and her personal knowledge. This is also impacting on her specified codified knowledge and generic knowledge (refers to decision making or reasoning). Different types of knowledge can be accessed depending on the content that these sites may present.

Sarah accredits her family for some of her informal learning. She mentions how learning from the family has been instrumental in shaping her career. Her husband, who is a principal

has taught her about “*management, finances, administration and about the nutrition programme.*” Sarah’s son is a chemical engineer. She says he has a very scientific mind and has taught her three words when presenting workshops “*evaluate, analyse and execute. He thinks I talk too much. I need to watch my time.*” These inter-personal skills remain a part of her implicit learning.

Sarah is a life coach. Life coaching is a form of counselling that is available for people who need guidance and advice to deal with changes in different phases of their life. It assists with setting of goals and leading them to paths of accomplishment. Sarah describes how networking has been beneficial part of her informal learning. She has been coached but also has been the coach at these sessions. She describes these encounters as “*networking builds bridges*”. She is very active in networking with schools in the area and facilitating at networking sessions. She also has a wealth of knowledge which is imparted to more novice and experienced teachers at these sessions. Her content knowledge as well as her propositional knowledge is being engaged with at platforms for networking. This is evidence of planned learning experiences.

During the interviews Sarah spoke about how “*learners are more visual*” and there is a need for resources for them to learn. She voiced how they would share counting apparatus, measuring jugs and clock faces amongst teachers in the school. She reveals that she uses sites on the internet like “*Sparkle box² for resources in the classroom.*” This activity enhances her practical skills within the classroom. Also her knowledge on the learners within her classroom is enhanced, this is her knowledge of context. Every teacher needs to adapt her teaching strategies so that they are context specific (Lampert, 1984). Being aware of the strengths and weaknesses of her learners assists her to choose resources that are relevant to their learning experiences. During the photo- elicitation interview, Sarah described how she used the same internet site for making resources on fractions and time. She mentioned that these resources are invaluable tools for teaching and for learning.

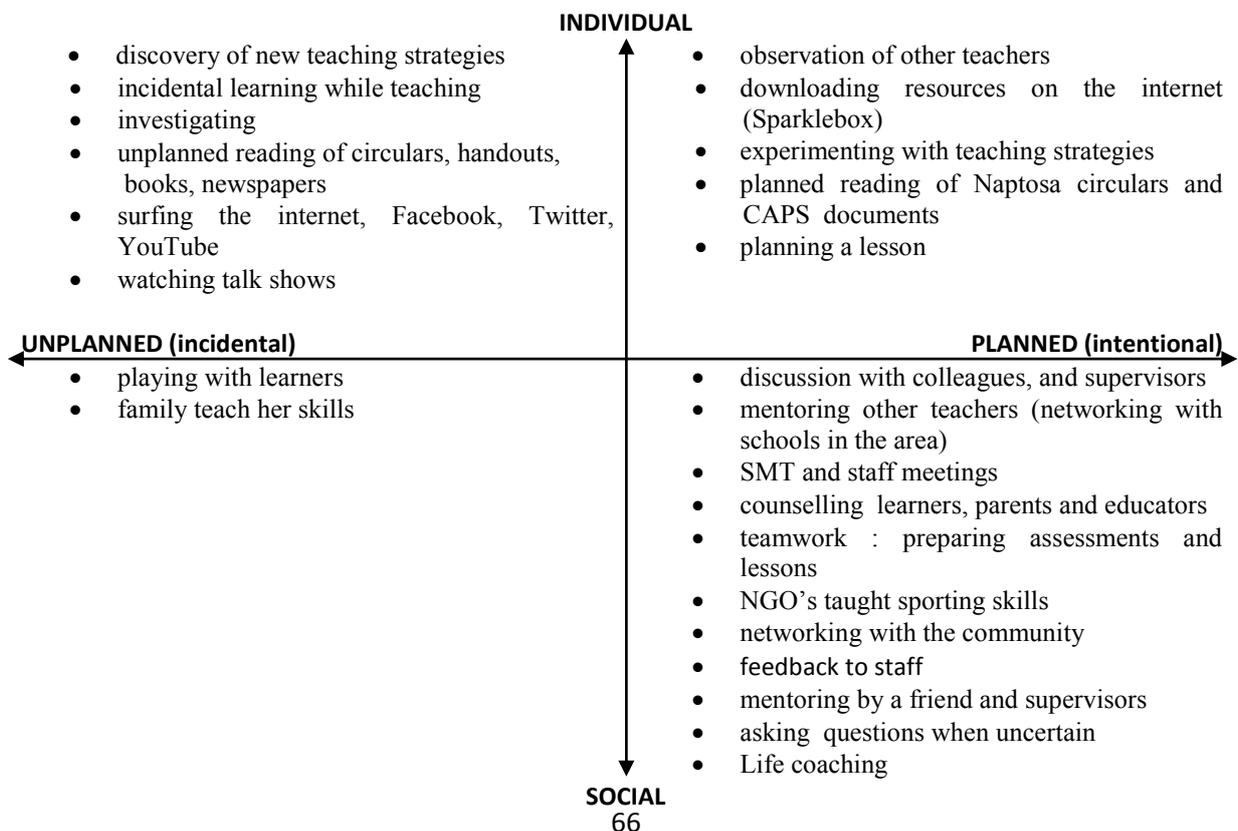
² Sparkle box is an internet site that teachers can use to download teaching resources.



Figure 11: Sarah uses Sparkle Box for her resources

4.4.1. Sarah's Learning Activities

Reid's model in Mckinney, 2005 cited in Fraser, 2007 has been adapted to illustrate Sarah's planned, unplanned, individual and social learning.



Sarah's informal learning activities appear to be both socially orientated and individual, with a fairly equal balance between both. There is evidence that suggests she learns through social engagements. The top two quadrants reflect individual activities which show 11 kinds of activities, while the social activities in the lower two quadrants are 12 different kinds of activities. The two quadrants on the left reflect the 8 unplanned activities, while the quadrants on the right reflect 15 planned activities. This shows that Sarah spends more time on planned activities. The data suggests that she is engaging in social learning and is also spending as much time on her individual learning. Being a facilitator for many programmes in foundation phase is a contributing factor to her learning socially. She supports and is instrumental in imparting knowledge and skills to other teachers in the community as well as within her context. She spends an equal amount of time on learning opportunities independently. She explained how learners are visual learners and she uses a variety of resources to impact on her practice. She uses computers, newspapers, talk shows, sparkle box [<http://www.sparklebox.co.uk/m.index.html#.VnmDrMv8Lqa>] and many other social media sites to keep abreast with changes in curriculum and for resources. She is self-motivated and confident and wants the learners to feel confident. She believes that confidence is an important aspect to learning and achieving. She is involved in planning both individually and as a member of a team.

Mentoring has also been instrumental in her learning. While she has been mentored she also remains a mentor to other novice teachers in her department. She accredits much learning to mentoring and thinks it's important for both early career development and through everyday activities.

4.5. Using Opfer and Pedder's Subsystems to Illustrate Sarah's Informal Learning

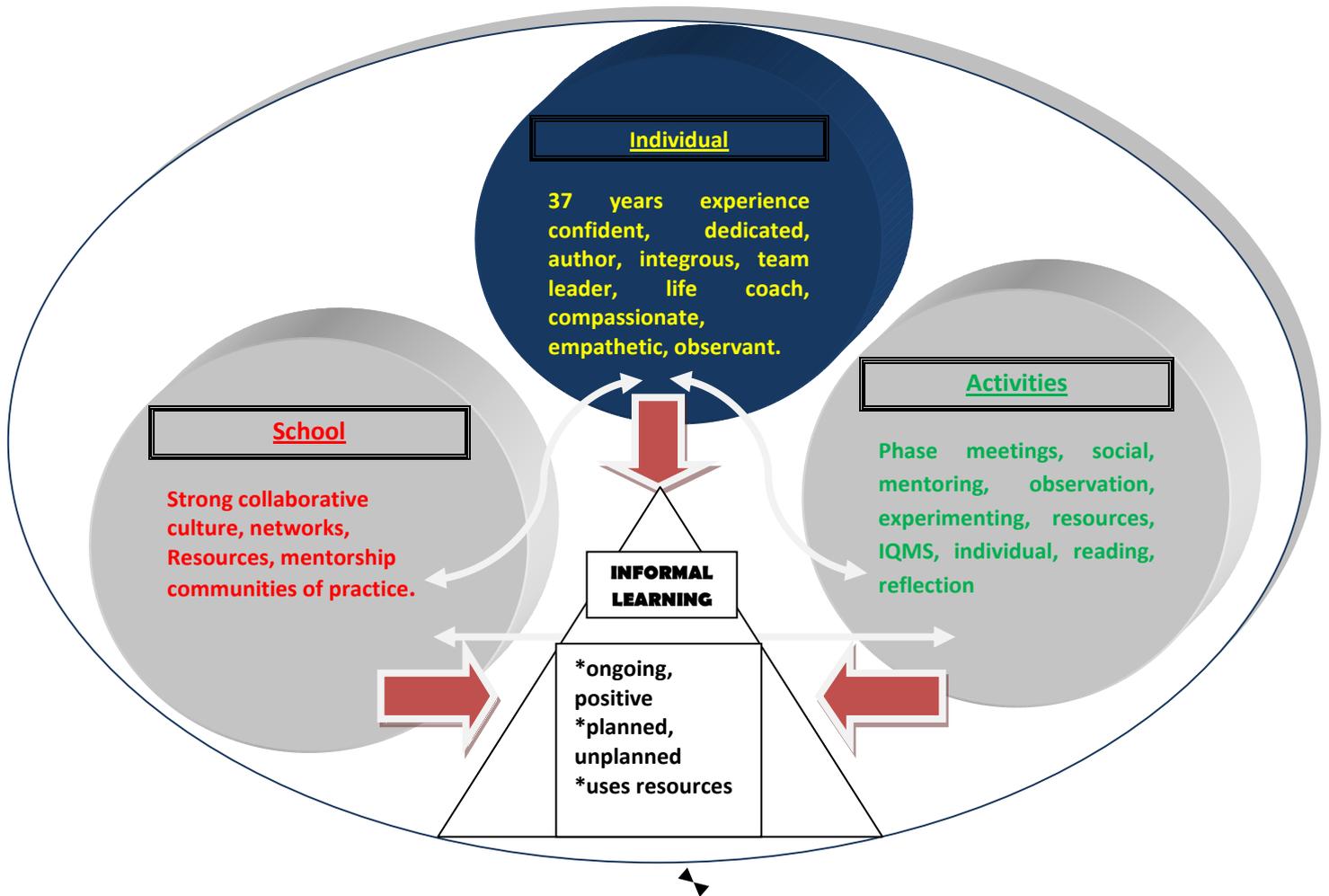


Figure 12: Sarah's informal learning displayed through Opfer and Pedder's subsystems

The larger outer circle within which the subsystems operate reflect the complex system of teacher learning. The smaller three circles nested in a cyclic movement indicate the variables and the dynamics that influence teacher learning. The thinner arrows display the reciprocal nature the subsystems have on each other while the thicker arrows signal that each subsystem contributes to informal teacher learning. The nature of learning is dependent on the context, the individual and the activities for professional development. Sarah's workplace has many collaborative opportunities and activities with various resources to support her learning. Her identity and disposition have assisted to positively impact on the other two subsystems.

4.6. Conclusion

In this chapter Sarah's informal learning was outlined using Opfer and Pedder's complex systems of teacher learning. The activities she engages in were then mapped out on the matrix adapted from Reids' quadrants of learning to describe her learning activities. The following chapter will describe Deborah's workplace learning using the same structure as this chapter. Then a comparative discussion will emerge from both these chapters.

CHAPTER 5: NARRATIVE ON DEBORAH'S INFORMAL LEARNING

5.1. Introduction

This chapter presents a comprehensive narrative of Deborah's learning experiences which occur in her workplace. I used Reid's teacher learning model (McKinney et al., 2005 cited in Fraser et al., 2007) to plot different activities on the matrix so as to understand how Deborah learns. The structure of the chapter is similar to my previous chapter. The outline of the chapter will utilize complex systems on teacher learning by Opfer and Pedder (2011). This system explains teacher learning is influenced by the three subsystems, the individual, the context and the activities. Deborah's learning will be reviewed through these specific lenses, that is, her personal biography, her school context and the learning activities that she engages in.

5.2. Deborah's Professional Biography

Deborah started her teaching career on 8 October 2008 at Ruach Combined School. She is from Swaziland. Her home language is Siswati. She explained that her qualifications at the time were not adequate. The qualification was not recognised by the South African DBE. Her qualification was for Association of Accounting Technician (ATT). Then she enrolled at distance learning university to complete her qualification. The university initially turned down her application and she had to complete matric in 2012. Subsequently she applied to do a Diploma in education. She explains how she is in the process of acquiring better qualifications to improve her practice as well as her personal circumstances. She teaches grade three. She explained that she had not chosen to be a foundation phase teacher rather it was a position that was offered to her.

She considers her main role as a foundation phase teacher is

to help the learners. They are at a stage when we have to give them something concrete to be able to live [She means teach them values and skills to cope with the challenges of life]. That's all I can say about that.

She explains that she *“never chose foundation phase but was given work for foundation phase. As time goes on I really noticed that these were the only learners I will be able to*

teach because they still flexible and do whatsoever you tell them to do.” Thus she feels competent to teach children in that age category with the barriers she is facing.

She believes that foundation phase teachers need to be *“flexible and patient and know the needs of learners so you can help them.”* She explains that even though she is a disciplinarian she does not get angry quickly. She does not discipline children immediately. She always waits until she is more rational to handle the situation.

Deborah reveals how she lacks confidence with implementing curriculum in the classroom and preparing for lessons. She explicates how:

right now I’m very behind most of the time with my teaching. I am unable to do my lesson plans. I mean like what am I going to deliver to the learners most of the time. There is no teacher book, so I need to refer to the other teachers as to what I need to do. So there is a lot I need to learn.

When I met with Deborah to do her collage, I took some lesson plans from my school for the year to assist with her planning. This was also my way of expressing my appreciation to her for being part of the study. I also realised that the school needed assistance with programming assessments so I offered assistance by giving her samples done by my school. She was really appreciative of the gesture. This gesture was also an example of how teachers learn informally.

Teachers need confidence to face the challenges of the classroom. Swanson (2012) contends that language teachers need to feel a sense of efficiency within the classroom. This confidence is likely assist cope with lesson preparation and communication with learners. It can impact on their longevity in the profession. He further stipulates that the teacher must feel competent about intercultural interaction. Teachers who feel confident about the impact they have on learners are likely to cope with the challenges of the classroom better. Deborah is from Swaziland and her home language is Swati. She is still learning the isiZulu language and English. The LOLT (Language of Learning and Teaching) of the school is isiZulu and the FAL (First Additional Language) is English. This is one of the barriers she is experiencing which has a direct impact on her confidence in the classroom.

In the interview Deborah confessed that:

I can say most of the time the language, I learnt it from my colleagues because you find most of the time my pronunciation of the words are different from what I am suppose to say. So I go to the Grade 1 teacher or grade 2 to get some help or ask them to come teach the learners cos you will find that maybe I taught something and I will see that they are not understanding, then I will go and ask one of the teachers to come and explain to them up until they understand and then we will continue from there.

This is evidence that Deborah does not feel competent enough in the language of learning and teaching at the school. Her difficulty arises with the pronunciation of words. She approaches colleagues to assist her. Deborah is able to expand her own knowledge both by planning to engage in the activity of improving her vocabulary or incidentally by learning new vocabulary that she is unfamiliar with. This knowledge is used to teach oral skills and writing skills and improve her vocabulary so she is more confident in the classroom.

Even though Deborah lacks competency in the language she still has the confidence to ask for assistance. She displays a genuine interest in ensuring her learners understand the concepts taught to them. Confidence can be interpreted from different perspectives. Knowing can give a teacher extra confidence but not knowing does not necessarily show a lack of confidence. Not knowing and pretending to know shows a greater level of incompetence and lack of confidence. Deborah realizes that she is on a learning trajectory and approaches others for assistance so this can be considered as her developing her confidence. Wenger (1998) explains that changing roles of teachers has compromised the confidence of teachers. Teachers that are experienced have also found that their confidence has been challenged and this has had a ripple impact on their competence in the classroom

When asked about what motivates her to learn Deborah was initially hesitant to answer. She then revealed that she is motivated intrinsically. She spoke about being motivated in that “*most of the time when I see something I want to know it.*” She has a desire for knowledge. She also explained that she is sometimes extrinsically motivated by a few senior teachers at the school. Watching their commitment to their work encourages her to be a better teacher.

One of the major challenges I faced during the data collection process is getting Deborah to reflect on her learning and practise. During the interview she struggled to reflect on her learning trajectory. This is shown in the following interview excerpt:

INTERVIEWER: Ok how do you learn? What's the best ways that you learn your cognition? What you enjoy learning in a particular way?

DEBORAH: Learning! Who me?

INTERVIEWER: Yes..... Your learning, your own learning

DEBORAH: Hey I don't understand the question

INTERVIEWER: ok...do you like learning from the computer or from your friends, at a workshop, in school, with your colleague. Which is the ways you find you learn the most?

The above extract from the interview shows that Deborah has a challenge reflecting on her classroom practice in general and her informal learning specifically. After providing her with a reflective framework to answer the question, she was still unable to coherently explain her own learning. The following extract from the interview continues to show that Deborah has challenges with reflection on practice.

INTERVIEWER: Ok what is the most useful experience you have engaged in since you became a foundation phase teacher and how has these experiences impacted on your teaching?

DEBORAH: ok ... please explain that to me

Such a response suggests that Deborah is having trouble with reflection- on- action. After analysis of the interview transcript I found that there were many more examples displaying visible gaps with regard to being able to reflect. The interview was conducted in English. Deborah's competence in English is still being developed. This could also be a factor impacting on her ability to reflect as well as articulate her thinking about her learning in the language of English.

5.3. Deborah's School Context

The school is a combined school located on the outskirts of a rural area. Most of the children that attend her school come from economically disadvantaged backgrounds. The majority of their parents are farm labourers. These children face a variety of socio-economic challenges. Some of these include: alcoholism, poverty, child headed households, HIV and AIDS. There

are 414 boys at the school and 436 girls. The roll of the school stands at 840 children from Grade 1 - 12. The school has 26 teaching staff. Unfortunately this will mean that each teacher teaches over 40 children in their classroom. There are three support staff at the school who assist with maintenance and cleaning and two staff in the kitchen. The children are provided with hot meals on a daily basis. This remains part of the nutrition programme supported by DBE for the school.

Deborah workplace staff and learner population is not racially integrated. The school remains under resourced like most African schools during the apartheid era. Fair redistribution of resources in all schools after 1994 is proving to be much harder than originally anticipated. This school has high ratios of learners to teachers as much as (1:57) and is under resourced. Most grades have one or two classes per grade. The school can boast of a computer room however the computers are not functional. There is no library on site. There is a sports field and the learners enjoy both netball and soccer. No coaching is available for other codes of sport. Although textbooks are available, these are not sufficient for each learner in the grade.

Recent literature suggests that context has an impact on teacher learning. Hollingsworth's (1999) study claims that unsupportive condition within the school context has a direct impact on implementation of new strategies within the classroom. Some of these included a lack of professional development activities, little or no collegial activity and absence of leadership and coordination.

Deborah reveals early in the interview that the culture within the school context has not promoted teacher learning programmes. The following extract from the interview shows that there is clearly a lack of support in terms of professional development activities. Deborah also considers the day off given to her for exam preparation is support from the school however that is the regulation of the DBE.

INTERVIEWER: How does the school leadership support your professional learning? The leadership, the heads of Department, the principal and the management team, how do they support you?

DEBORAH: I can only say that they support me because they allow me to go and write the exams, they give me a day before I go and write. So it's supporting.

INTERVIEWER: When I say how do they support your learning I mean do they provide activities for you to learn, do they assist you with the learning programmes in

school where teachers can engage each other, where they can offer assistance to each other?

***DEBORAH: No it's not like that. Only if maybe you go and ask they cannot just.....
[She suggests that she will have to ask for assistance. There are no professional development programmes at her school.]***

This is also evidence that teachers need to approach someone on staff when in need of assistance. Deborah is still developing her confidence as a teacher and finds herself often approaching her colleagues for assistance. Teachers are generally afraid to ask the more experienced teacher for assistance on entering the profession (Paese, 1990). Therefore it is important for schools to adopt a mentoring programme where more senior teachers mentor novice teachers. Gordon (1991) contends that senior teachers in the profession should not expect novice teachers to seek assistance neither should they expect other colleagues to look out for them. Since they often feel inexperienced and their questions may be bothersome or burdening to the more experienced colleague. DePaul (2000) explains that teachers should be invited to sit in and observe veteran teachers. Deborah explains that the teachers in her school have not offered any mentorship support on arriving at the school. However she does say that she receives support when she approaches a colleague for assistance. When Deborah was asked about IQMS and how the programme assists in her professional development she responded with:

No. You know with IQMS, I will tell you the honest truth. With IQMS in this school they will just come and ask 'when can we IQMS you', they will then bring the form, really it's not an IQMS because I don't know. Normally they don't.

The context is impeding Deborah's learning process by not offering developmental programmes like IQMS which is likely to improve her informal learning and improve service delivery at the school. Mboyane (2002) postulates the professional development of teachers has been jeopardised by the non-implementation of IQMS. Mestry et al. (2009) contend that teachers need to acquire both skills and knowledge in the interest of improving service delivery through engaging in PD.

Deborah was asked about the challenges the school faced to which she responded:

DEBORAH: *There is a lot and I don't know where to start*

INTERVIEWER: *Ok just give me a few of your ideas.*

DEBORAH: *Like our school is a combined school. It's a school from grade 1 to grade 12. So most of the time I would like maybe the school maybe to separate the two. There should be a high school and a primary school. The high school shouldn't be allowed to come to the young children because they are vulgar most of the time. They do wild things, so many things. So you will find that while we are teaching foundation, they will be making noise the other side and our breaks are different. You will find our foundation phase [learners] are out for break and the other side they are teaching although our school is in the same premises. So our breaks are different so you will find noise everywhere. There is a lot.*

Deborah felt strongly that primary and secondary schools should not operate together because of the big age disparity with learners. She cited both noise and the older children being vulgar as the reasons for her concerns. The school appears slightly dysfunctional in that the breaks are different and this makes the school appear a bit chaotic. The primary school disturbs the secondary school while the secondary has the same impact on the primary school. Deborah expresses her disappointment about the atmosphere within the school. She expresses more despair when she is asked about collaborative work at school.

INTERVIEWER: *Yeah... For your own teacher learning, not just for the functionality of the school but for your own learning. Do you feel that the school is helping you learn?*

DEBORAH: *No... No*

INTERVIEWER: *Is it disappointing?*

DEBORAH: *Very disappointing. Instead we are going down the drain. No*

INTERVIEWER: *Is there no culture of learning where you can teach each other?*

DEBORAH: *No*

INTERVIEWER: Ok is there collaborative culture like working in groups or teams like all the grade one's work together, grade two's work together, grade three's work together in the afternoons.

DEBORAH: No there is nothing like that. Everyone works individually.

There is not much evidence of collaborative work within the school context. During the presentation of the collage she mentioned that the culture within the context is frustrating for her and some of her colleagues. Borko (2004) contends that learning has both a social nature and an individual nature. Skills are acquired from individuals developing competency on their own as well as from involvement with communities of practice. It is clear that Deborah does not have the opportunity to participate in learning through communities of practice within her context. Teachers at the school work individually and have not been exposed to the benefits of teamwork. The collage and the photo elicitation data generation methods managed to reveal more about the learning activities Deborah engages in.

5.4. Informal Learning Activities

The activities Deborah was actively involved in were mainly illustrated in the collage presentation and photo elicitation. Deborah asked for me to be present while she put the collage together. She was very unsure as to what is expected from the activity. I explained to her that I will be there only to guide the process and not to contaminate the data retrieved. She drew four quadrants on a page and in each block she wrote activities that she engaged in on her own, in social groups, at school and other random activities. The collage displays mainly individual activities and a few social activities that supported her learning. In the collage below are some of the activities that supported and directed her learning experiences.

Deborah explained during photo elicitation that she uses the newspaper to improve her vocabulary by doing word searches. She uses many opportunities to develop her competence in the English language. Improving her vocabulary gives her more confidence in her classroom management. It also assists with implementing the curriculum and the facilitation of the teaching and learning process.



Figure 15: Using the newspaper for word searches

The activities in which Deborah engages seem to be individually planned activities. It seems that partly because she is intrinsically motivated most of her learning happens by herself. The absence of a collaborative culture at the school is another factor impacting on her individual learning. She plans her learning so that she can better cope with the challenges of the classroom and her personal life. She engages in a lot of reading, such as reading of CAPS documents to improve her pedagogical content knowledge and content knowledge and assist to plan her lessons and assessment procedures and expectations. A picture in her collage illustrates how she plans lessons by herself while she explained in the interview during photo elicitation that she uses CAPS documents for her lesson planning and assessments. Her PCK is broadened and she is able to be more competent in her classroom and improve on her teaching and learning processes.

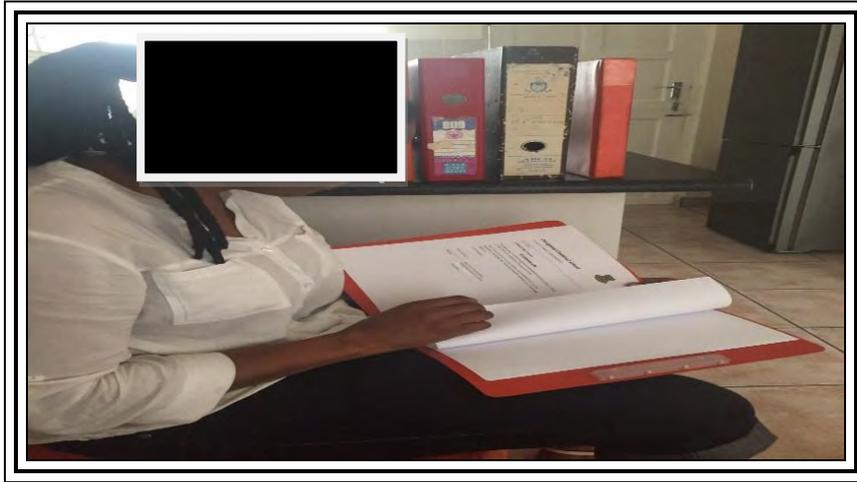


Figure 16: Deborah using CAPS documents for planning and assessments

During the interview, collages and the photo elicitation, Deborah elucidates that the internet is a major resource for her informal learning. Deborah has internet access at home but the school does not have access to internet. This is very useful for Deborah when she needs assistance immediately. The internet is easily accessible when we lack expertise and need direction especially in the absence of personnel within the working place to provide guidance. The following is an extract from the interview of Deborah's response to the use of the computer.

INTERVIEWER: Yeah. Has technology impacted your learning?

DEBORAH: Not much...not much. You know why I say not much ...because in my school we are not using the data projector in the foundation phase department. The Ipad. I'm the only one who was supposed to go and learn how to use the laptop. I had a clue but not most (meaning most teachers at the school do not know how to use technology effectively).

INTERVIEWER: Do you work on your own on the computer at home and learn through the computer and internet?

DEBORAH: Yes I do that most of the time. My work is done through the computer.

INTERVIEWER: So then technology has impacted on your learning...

DEBORAH: Yes ... Yes I have seen that when I answered you.

During the photo elicitation she explained that she uses the computer to find pictures to narrate stories to her learners. Her learners seem to understand better with the use of teaching aids. She also spoke about using the internet to get resources on various templates of butterflies for the theme on insects. These activities enhance her practical skills on the use of the internet and the use of resources. Her content knowledge is also developed by reading information on the internet that she will impart in beginning knowledge to the learners on the theme insects.

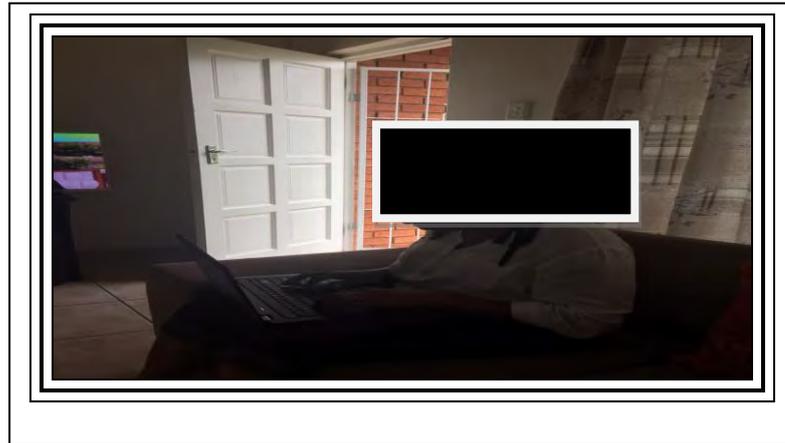


Figure 17: Working on the internet retrieving resources

In the collage Deborah has illustrated that she observes other teachers in her department while they are teaching especially senior teachers at her school and takes pictures of her personal learning experiences to assist to recall important information that she is afraid she might forget. These activities usually take place incidentally. She also uses her mobile phone and radio for her learning. She explained that she would call a friend for assistance with teaching strategies when she found that children did not understand fractions. The radio is helpful in that it assists her with language development and sentence construction. The mobile and radio is part of her unplanned learning. Deborah seems to engage in activities for her personal growth. It is unclear as to the type of social activities that she engages in for her learning.



Figure 18: Using her mobile and radio for learning

Deborah uses her mobile for planned learning as well. During the photo elicitation she explained that she noticed her children did not understand fractions when she initially taught the concept. She phoned her friend for assistance. Her friend advised her telephonically to use concrete examples like oranges to teach the concept. She also explained to her how to show the learners how a fraction explains part of the whole. Improving content knowledge is essential for good teaching.

She learnt skills on how to do shared reading from a documentary on television (e-classroom). Shared reading is done in the foundation phase to develop learner's reading skills. Both the teacher and the children read together in a group. Deborah attended a workshop organised by the DBE on how to teach reading to beginner readers. During the interview Deborah explains that she had six learners who were unable to read but after applying the skills that improved her CK she was delighted to find that they now competent with their reading.

INTERVIEWER: So those workshops helped?

DEBORAH: They did. I had about 6 learners who were unable to read. They all can read now.

INTERVIEWER: Good! Was it a department workshop or school?

DEBORAH: Yes it was a department workshop.

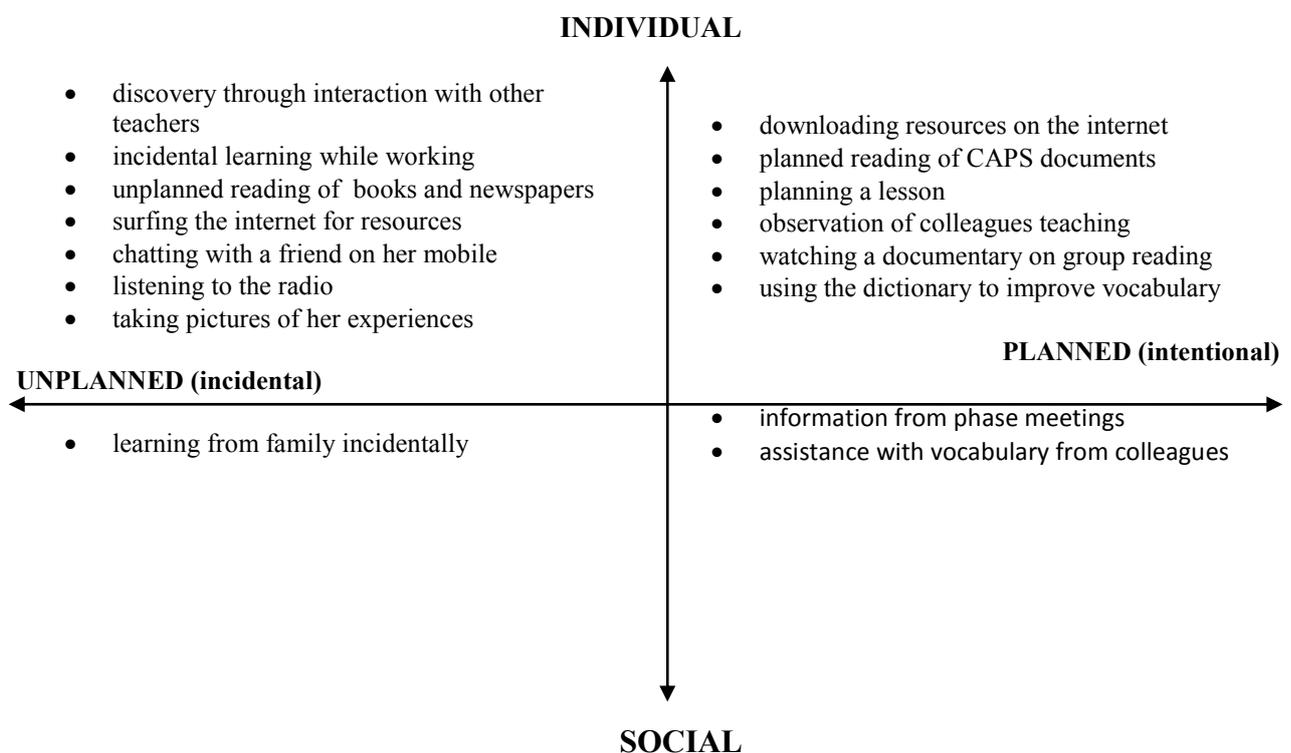
Below (Figure 19) is an image in which Deborah is learning skills on how to teach shared reading from a television programme. She has implemented these ideas with her learners and has been able to improve learners' reading skills.



Figure 19: Watching a documentary in e-classroom on group (shared) reading

5.4.1. Deborah's Learning Activities

Reid's model (in Mckinney, 2005 cited in Fraser, 2007) has been adapted to illustrate Deborah's planned, unplanned, individual and social learning.



Deborah's learning takes place both socially and individually, but the data shows overwhelming evidence of more individual learning activities than social activities. The two upper quadrants display 13 different individual activities while the two lower quadrants reflect only 3 social activities. When focusing on the planned and unplanned learning the two quadrants on left show 8 unplanned activities while the two quadrants on the right reflect 8 planned activities. The data suggests that there is an equal balance with regard to planned and unplanned learning activities. It is apparent that her school context has not supported much learning while her motivation to learn has been the driving force to most of her learning. She uses a variety of learning opportunities to improve her PCK and CK. During the interview she emphasised that her formal learning (refers to her learning through a structured learning programme and set curricular) has assisted her predominantly in the classroom. Her PCK has been attained primarily from formal education. She said that there is still very much she needs to learn in order to feel competent in the classroom. She finds that her knowledge is not sufficient for the challenges of the classroom and there is a need to engage in learning opportunities. She finds using resources (such as the internet, television, radio and mobile phone) helps with the challenges and barriers she faces. The teaching aids support visual learning in her classroom. During the interview she elaborated on the insufficient resources at the school. She also explained that she used her income to purchase resources for the school. She does planning on her own. There is a dire need for more collaborative work within her context. Novice teachers need guidance with planning and curriculum implementation. There has been no program for mentoring when Deborah entered the profession. Teachers that are mentored on entering profession have more confidence to face the challenges of teaching and learning. Clardy (2000) and Retallick (1999) agree that teacher learning motivated by the involvement in activity cannot be guaranteed however they believe that the contextual and personal factors are the exclusive factors for workplace learning. However this study supports the premise that activity is nested within both the personal and contextual and is equally important for teacher learning. Deborah's context impeded her learning potential to a degree.

5.5. Using Opfer and Pedder's subsystems to illustrate Deborah's informal learning

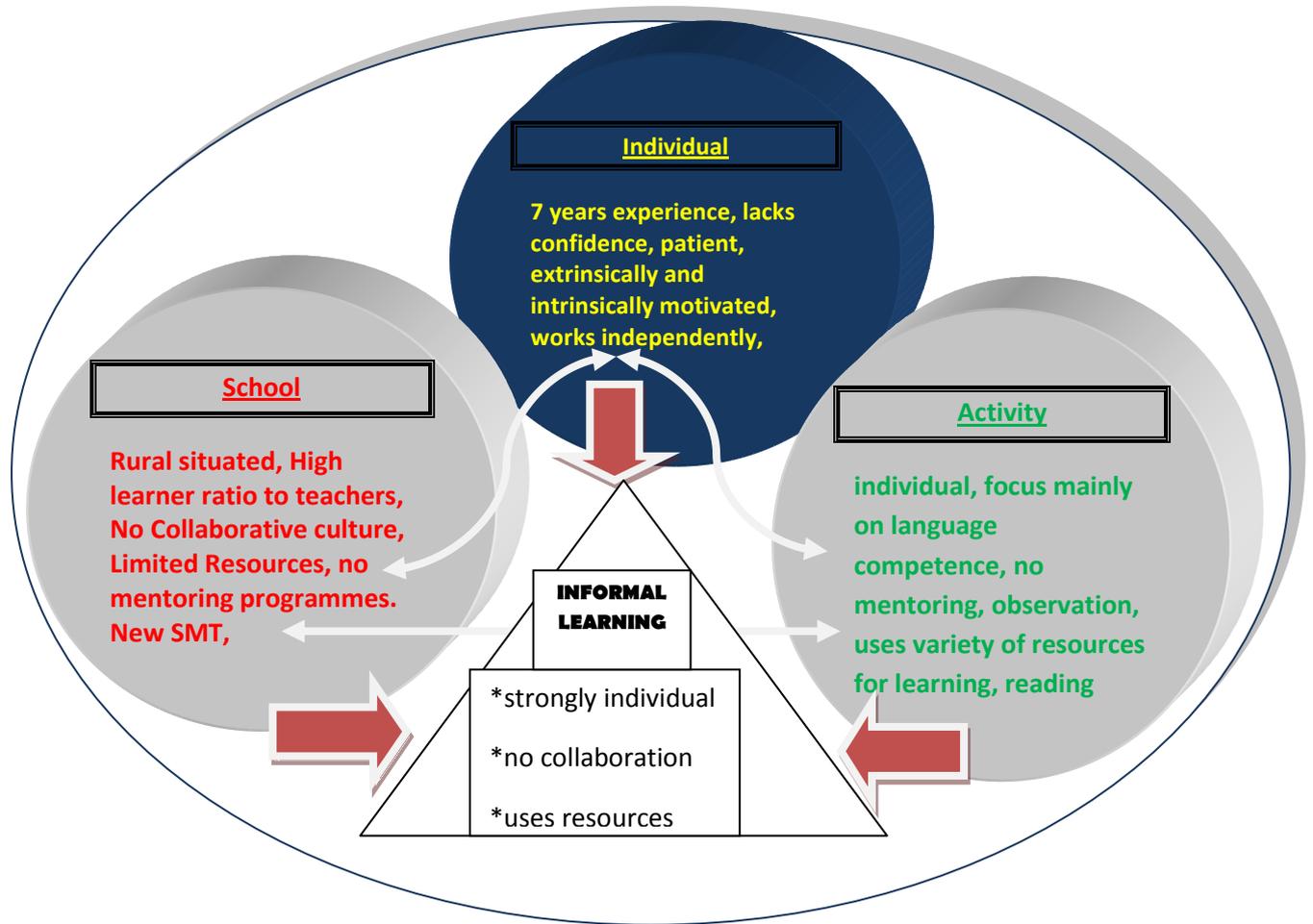


Figure 20: Deborah's Informal Learning using Opfer and Pedder's Subsystems

The diagram above is used to illustrate how the complex system of teacher learning (big outer circle) is embedded in subsystems (the smaller 3 circles). The subsystems are influential and each other and teacher learning. The narrow arrows reveal the altruistic relationship each subsystem has on the other. The wider arrows signify the contribution each subsystem makes to informal teacher learning. The lack of collaboration and resources at Deborah's workplace has a ripple effect on all the subsystems. Deborah faces many challenges that have influenced her identity and disposition and this is further compounded by her school context and opportunities for learning. The diagram above illustrates the cyclic nature of the subsystems and its impact on Deborah's informal learning.

5.6. Conclusion

This chapter outlined Deborah's experiences of informal learning and learning trajectory. Opfer and Pedder's complex learning systems was used to frame her learning trajectory. Reid's quadrant was useful in charting out her learning activities. The subsequent chapter will provide a comparative discussion of these findings.

CHAPTER 6: DISCUSSION, IMPLICATIONS AND CONCLUSION

6.1 Introduction

This chapter discusses the findings of the previous two chapters and aims to answer both research questions using the data that has been provided in chapters 4 and 5.

1. In what ways do selected Foundation Phase teachers learn informally at school?
2. How does the school context support or impede their informal learning?

The methods of data collection included photo elicitation, semi-structured interviews and collages. Two Foundation Phase teachers were participants who contributed to these findings, each from different school context.

Chapter one of the study provides an introduction for the study while chapter two reviews literature on informal teacher learning and also provides a framework to analyse the data. Chapter three unfolds with detailed information regarding the methodology for this study. Chapter four and five incorporates a narrative of each participant's learning revealing the different trajectories to learning, the differing school contexts, the myriad activities in which they engage with and the diverse identities of both participants.

In this chapter I will compare the two narratives concerning the informal learning experiences of both teachers. Finally I will analyse how the context in which they work has contributed to the learning and professional development of each participant. Further research investigating the context within rural and urban schools is recommended to close the gaps regarding informal teacher learning in a South African context.

6.2. Question 1: How Do Selected Foundation Phase Teachers Learn informally at School?

The two participants Deborah and Sarah produced data that had similarities and differences. The complex pattern of data generated a varied background on informal teacher learning in the foundation phase. Sarah has 37 years of experience in education. She is HOD of her phase and she is very involved in both taking responsibility for her own learning and providing professional development opportunities to other professionals. Her matrix reveals that she is

involved in both social and individual learning activities. There seems to be a balance of activities in both these quadrants. She engages in more planned learning than relying on learning that would take place incidentally. Sarah is reflective and her school context tends to be very supportive which is imperative for learning. There is both collegial support and professional development activity within her context to support her informal learning. This is significant in extending her PCK and subject knowledge.

Deborah has seven years of experience in the profession. She is both extrinsically and intrinsically motivated. Her language acquisition (in both English and isiZulu) is one of the major barriers she faces in the classroom and her learning. She involves herself in many different individual activities trying to close the gaps in her learning. Her learning seems to be hampered by her context, the lack of PD activities at school, an absence of mentoring, non- collaborative workplace environment, her language acquisition, the LOLT of the school, her confidence which is impacting on her identity. She has difficulty expressing some of the challenges she has in her informal learning. Lack of collegial support within her context has partially responsible for her having challenges reflecting on her practice. She uses a variety of resources for her informal learning. Deborah is involved in more individual activities and her social learning opportunities are limited. She tends to learn both incidentally and intentionally (planned and unplanned).

Both teachers read a variety of resources to close the gaps in their learning. Resources like the internet, mobile phone, radio, television, posters, books, circulars, curriculum documents and the newspaper are popular sources of knowledge. Some of the common ways in which both teachers learn include: observation of other teachers, experimenting, investigating, incidentally and through interaction with the family. While mentoring, life coaching, networking, discussion with colleagues and teamwork has influenced Sarah's learning. Deborah's learning was influenced by using a dictionary, taking pictures of her learning experiences and relying on colleagues to improve her vocabulary and understanding. The following four themes are important regarding how these two teachers learn. These include learning through mentoring, the role of language in learning, the use of resources and the question of confidence.

A thought-provoking illustration developed regarding the first sub-system of the Complex Systems Model: the individual. The two foundation phase teachers couldn't have been more

different: Sarah with 34 years of experience, extensive formal training, and much opportunity for informal learning at school while Deborah is still engaged in formal initial teacher education, with minimal opportunities to learn at school and the challenge that she could speak neither English or isiZulu, the language of the school, with academic fluency.

The cultures within their workplaces were equally diverse and different. Sarah worked in a collegial environment with a supportive culture of learning while Deborah worked in isolation with little support from the principal. The activities for development at school varied according to their context. These factors (activity and individual) have a correlation with the context of the school.

Making a comparison between such different variables proved more difficult than anticipated. Their socio-cultural backgrounds was also influential on each individual's learning experiences.

6.2.1. Key Themes

6.2.1.1. Learning through Mentoring

Mentoring usually occurs with an induction programme when teachers enter the profession. They are offered guidance and support by being paired with a more experienced teacher or team of teachers. The support and guidance received is confidential and exchanged through observation, asking questions and reflecting on practice. Mentoring is then a continual process through the profession when teachers themselves then locate resourceful personnel either within their schools or within the profession. The data generated in this study alluded to mentoring being strategic for informal teacher learning. The presence of mentors in Sarah's learning trajectory promoted learning and built confidence. The absence of mentoring within the school context impacted on the lack of confidence and limited learning for Deborah.

DePaul (2000) argues that teachers should be encouraged to talk about the challenges they face in their practices. He further suggests that time must be invested into teacher development. Sullivan (1999) contends that new teachers need to meet with mentors on a weekly basis to prevent them from feeling isolated. This encourages teachers to feel supported and these platforms can offer them guidance with regards to the expectations of the profession in general and school in particular. It is important to find ways of introducing

teachers to the broader community within the school. This will also encourage them to speak and relate to members of staff that can offer support and guidance.

Mentoring is instrumental in teacher learning. Foundation Phase teachers rely on mentoring with the continual changes in curriculum since 1994. Sarah mentioned that mentoring was instrumental especially after the changes in curriculum expectations and she was instrumental in offering mentoring to other teachers in the district through workshops, mentoring and networking. The workshops provided by the department are not sufficient to assist with planning and assessments. Assessments seem to be a challenge for both teachers in this study. Both of the teachers relied heavily on support through mentoring. Sarah mentioned that she received guidance from the principal for ANA while Deborah mentioned that the lack of support and mentoring has left her feeling incompetent to face the challenges of the classroom. There are studies (Ballantyne, Hansford & Packer, 1995) that support and have documented changes in practice after mentoring but to date none have observed the impact it has on student achievement or on instructional practice.

6.2.1.2. Language Acquisition and Competency for Learning

Understanding English as well as the home language of the children in the school is imperative for teacher learning. Language competency is very influential on teacher learning. Being competent in reading and understanding English can accelerate learning as educational resources are generally printed in English. Deborah faced a dual challenge in that her home language was Siswathi and the LOLT of the school was isiZulu. The resources available for her learning were in English. Evidence from the data suggested that Deborah's learning is hampered by her competency in English. Deborah spends a lot of time developing her language competence. Sarah's acquisition and competency in English is good. This could possibly assist in accelerating her learning allowing her to engage in various learning opportunities with ease.

Teachers in the foundation phase require a wide range of material to function efficiently in the classroom. There is a level of competency in English that has to be attained to use these materials effectively in the workplace. Data from this study suggests that language competency is necessary for accelerated teacher learning. A teacher with a barrier in language finds her learning paced according to her understanding of the language. Language competency has the potential to limit the kind of learning taking place.

6.2.1.3. Using Resources to Learn

Both teachers found the use of resources instrumental for their learning despite their different contexts. Each of them used various resources including the computer, books, newspaper, radio, and television. The uses of resources are individual activities with which they engaged for their learning. Since these activities are individual in nature, it was clearly guided by the teachers themselves in areas they deemed necessary. Accessing resources helped them close the gap in their personal learning and assisted them with introducing concepts in a more understandable way to their learners.

Both teachers were computer literate. Deborah indicated that she was one of few teachers at her school who were able to use the computer and she assisted other teachers to develop their skills. Burns *et al.* (2005) found that skills are learnt informally while executing your tasks on hand. While Sarah was also a “techno-junkie” she related that teachers at her school were well acquainted with using different resources. Many schools in rural areas in South Africa still do not have access to computers or the internet. Deborah explained that at her school they used their personal computers. Although they had a computer room, the equipment was not working.

Teachers accessed different kinds of knowledge while they sourced the internet. Content knowledge was always easily accessible on different websites. Their practical skills on using the computer and general knowledge were influenced while working with the computer and they used the computer for resources in the classroom. They both relied heavily on finding resources for teaching and learning, explaining that learners in the classroom were visual learners and there was a need to engage them with different resources so develop their knowledge. Both teachers used CAPS documents provided by the DBE for planning and assessments developing their subject matter knowledge and PCK. These documents outline the policy and assessment guidelines with regards to specific learning areas. Teachers need to be competent in knowledge of subject matter, knowledge of curriculum and skills needed for classroom management if they intend to impart content in an understandable way (Leinhardt & Greeno, 1986).

Deborah used more resources for her learning since there was an absence of a collaborative culture at the school. She relied predominantly on the radio, television, computer and various other resources to close the gaps in her learning. Despite Sarah’s age, she was excited about

learning from the computer and using the data projector for teaching. Resources appear to be a vehicle for impacting on teacher's informal learning for both Sarah and Deborah. In the absence of professional development programmes Deborah took responsibility for their learning by finding adequate resources to improve their knowledge and learning.

Deborah explained that the dictionary was often used to assist her with barriers she had understanding both isiZulu and English. Her resourcefulness improved her self-confidence and competence in the classroom. Deborah also spoke about television programmes (e-learning) which guided her with regards to group work and teaching in groups. This improved her general pedagogic knowledge (GPK) and skills related to group work and classroom management (Cohen, 1986).

The reading of CAPS policy documents, books, journals, newspapers, union communiques and posters was a significant aspect of teacher learning. These resources directly impacted and influenced their pedagogic and content knowledge. Both teachers PCK was broadened by the reading they engaged in. Reading is important for use of resources. Most resources are in English since it is the language primarily used on the internet. Acquisition and competency in understanding English assists with the use of resources and determines the acceleration in learning. Since reading is a self-directed activity, the learning will be according to the specific needs of the teacher. The learning would assist the teacher with a variety of skills and knowledge.

6.2.1.4. Reflection in Learning

Defining reflection in learning or teaching is not simple since the term has diverse meanings to diverse individuals (Russell, 1993). The following are some of the aspects that reflection encompasses which include, teachers that are able to find solutions to classroom dilemmas, frame, examine, question assumptions, question their value and presence in the classroom, is involved in continuous PD, takes responsibility for their personal growth and is aware of the context and the cultural nature of the institution (Zeichner & Liston, 1996).

Wenger (1998) contends that reflection is significant in learning since our perception and perspective on learning matters. While Schön (1987) maintains that reflection is influential on the practices and beliefs of individuals resulting in changes in behaviour at work. Reflection is the conduit for bringing about change to classroom practices and finding solutions to the challenges of constantly changing dynamics within classrooms and contexts.

Reflection allows us to accelerate our learning, to take ownership of our professional growth and to direct our learning (Zeichner & Liston, 1996).

Reflection is an important part of learning. Valli (1993) explains that teachers understand themselves better and improve their classroom practices when they are reflective. Reflection allow teachers to develop an attitude of constantly analysing their work and bringing about change in school setting, teaching, their own feelings and emotions. Russell (1993) indicates that a crucial element in cultivating a culture of reflective practices lies with an effective, helpful and appropriate school context. Data produced found that in Deborah's school the context was deficient with regards to providing collegial or collaborative support. Deborah reflects on her practices individually to assist her to find solutions to the challenges she faces as a teacher. Zeichner and Liston (1996) assert that reflection is a collective practice. Teachers learn this when they are in collaborative groups discussing ideas. Deborah mentioned that there was an absence of this type of interaction at her workplace. This could be part of the reason why Deborah had difficulty with reflection on her practice. Schön (1983) made a distinction between the two terms "*reflection-in-practice*" and "*reflection-on-practice*." Reflection-in-action is the insight a teacher develops from interacting with their environment while reflection-on-action refers to evaluating, explaining and recalling following the lesson. Reflection-on-action includes thinking about reflection- in- action during the lesson. The argument would then arise that reflection is not only collective but can also be an individual practice which teachers can engage in to improve their practice. Teacher development programmes lack the capacity to influence the practise of reflection however the context within which an individual works has the capacity to shift teacher's dispositions and provide opportunities for them to reflect on their practise.

The FDE research project undertaken at Wits University (Adler and Reed, 2002) discovered that many teachers in that particular study were unable to reflect and implement ideas and adapt them to their context even when they provided a reflective framework to assist them. Zeichner and Liston (1996) contend that teachers who reflect on their practice are aware of the cultural and institutional context of their workplace. Teachers that work in more disadvantaged circumstances and contexts tend to rely more on the support of other teachers within their context and the school as a whole. So it is important for the school to have collaborative platforms for teachers to reflect on their learning and teaching. Deborah was a

casualty of her context in that it lacked all the components needed for reflection- on and in-practice.

This study is similar to the FDE project (Adler and Reed, 2002) in that the findings correlate with each other on reflection, language acquisition and the fact that the research is taking place in English which is not the teachers mother tongue is hampering the teacher's ability to speak reflectively on their practice or learning. The FDE project (Adler and Reed, 2002) also found that rural primary school communities were less likely to reflect critically on their practice. Teachers in these communities are not exposed to wider ranges of communication in English. Rural communities tend to speak more in their mother tongue, not giving teachers the opportunity to improve their communication skills in English. Deborah is placed in such a rural context and this may have further impact on her learning.

Sarah was experimental and observant and tended to be more reflective in her workplace and classroom. Pennington (1996) found that teachers that were more reflective on their practice already had been predisposed to reflectivity in their attitudes. These teachers were interested in learning new strategies and curious about learning in general. The individual engaging in collaborative activity within their school context would develop their ability to reflect on their practices. These subsystems are nested and cyclic impacting on each other, and influencing teacher learning in different ways.

6.2.1.5. Learning with Confidence

Confidence and learning are synonymous and reliant on each other. Broekmann (1998) explains that confidence is the belief or knowledge that you can achieve and learn what is expected within your job description. Confidence is imperative for learning and when you learn and understand more it has a positive impact on your confidence in the classroom as well as your self confidence in learning. Eraut, Alderton, Cole and Senker (2000) contend that confidence, support and challenge in learning remain nested in a triangular relationship. There are several ways in which teachers can develop their knowledge and confidence. Both these variables can impact greatly on improving their ability to learn and teach. Subject matter knowledge is significant in teaching and learning processes. Teachers who have vast content knowledge may still face the challenge of imparting this knowledge without General Pedagogical Knowledge (GPK), knowledge of context and PCK. Teacher knowledge is

imperative however the attitude and confidence of the teacher remains a catalyst to the teaching and learning processes.

Graven (2002a) contends that after the first democratic elections in 1994 in South Africa, the curriculum has been adapted to a more learner centred approach adding pressure on both the competency and confidence of teachers. The continuously changing curriculum with inadequate PD activity has further put strain on teachers' confidence. Wenger (1998) argues that teacher roles can be blueprinted however they are unable to pattern the identities of teachers. He further contends that the teacher confidence is undermined by the constant changing functions of teachers impacting on their competence.

The data collected indicates that confidence of the individual is a contributing factor to the teacher's learning processes. Sarah displayed greater confidence in herself and her own competence. Sarah's confidence appears to be partly the reason she seemed to learn in myriad ways. Confidence also tended to be instrumental in collaborative learning. Working in teams and with groups of teachers, confidence is important for interaction and inquiry. Teachers whom lack confidence may be intimidated by other colleagues to express their challenges. Collaborative platforms will develop the confidence of teachers when they are able to observe that they are not the only teachers experiencing challenges in the classroom. This evidence further suggested that the school with a collaborative culture influenced the confidence of the individual to be involved in professional development activity that required social interaction. Deborah displayed a lack of confidence in herself, her teaching ability and social interaction in her learning. Her learning remained more individual since the opportunities to learn within her context was limited.

This study supports the premise that learning creates competence which develops confidence. Collaborative culture appears to impact positively on the confidence of Sarah in the study. So the culture within the school context is influential on the disposition of the individual. The nested cyclic system advocated by Opfer and Pedder (2011, p.376) suggest that the confidence of the individual would have a ripple effect on the way in which the individual interacts with her context and the activities in which she engages in for PD.

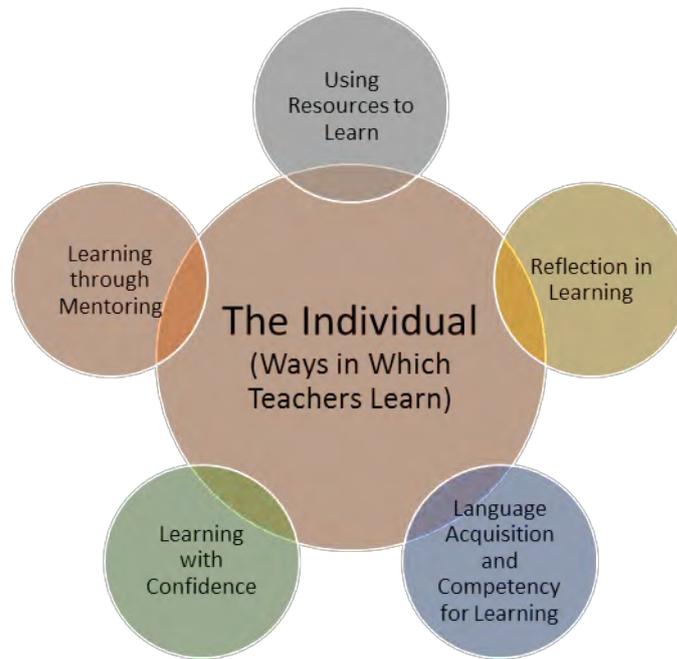


Figure 21: Key Themes from the study reflecting the factors that impacted on subsystem 1 in the Complex Theory Model.

6.3. Research Question 2: How does the school context support or impede their informal learning?

The school culture is influential in the learning processes of both teachers. In Zuay Primary there were professional development programmes that promoted teacher learning. The absence of these forums at Ruach Combined impeded learning opportunities for Deborah, leaving her feeling isolated and challenged by the system. The presence of programmes does not necessarily ensure that teacher learning has taken place but it creates platforms for interaction and opportunities to learn. Hammerness et al (2005) and Slonimsky and Brodie (2006) maintain that an integral factor in teacher learning is the relationship between the context in which the individual learns and the teacher's learning. Jurasaitė-Harbison and Rex (2010) agree that the context will determine the kind of teacher learning that will occur.

Deborah explained that teachers at her school worked on their own. There were no prospects for collaboration. She also mentioned that during the year there were only three Foundation Phase meetings and none of them included PD activities. Pedder and MacBeath (2008) contend that there are schools that have challenges implementing and developing a collaborative culture to improve the individual or collective practices of teachers and their knowledge. I could hear the frustration in Deborah's voice during the interview when she

explains that the management team at school is still fairly new. The staff has not adapted yet to the new management team. The team was also adapting to the school so they still have not implemented programmes for development. Deborah also mentioned during her collage presentation that teachers at the school are not committed to learning and teaching. She felt that teaching was merely a way of earning an income for most of them. Very few teachers in her school seemed committed to the profession and learners. Research suggests that teachers are influenced by school level beliefs of learning, teaching and professional ethics. Teachers are very easily influenced by teachers and the context in which they operate. Deborah mentioned during the interview and collage presentations that teachers at her school were often absent from school, they also did not honour instruction time and most of them did not support the new management team. Sampson, Morenoff and Earls (1999) explain that these philosophies and attitudes impact on both collective behaviour and the individual. Novice and inexperienced teachers are most likely to be impacted by group pedagogical behaviour (Woolfolk Hoy & Burke-Spero, 2005). Deborah's school context lacks a synchronised, harmonised, consistent and coherent approach to learning, which impeded the informal learning of teachers. Deborah explained from her experiences at school that no attempt was made to orientate teachers. It is not sufficient or intensive enough to equip teachers adequately with knowledge, especially pedagogic knowledge they need to know in order to function effectively at this school.

The dynamics in Sarah's school context is very different. The context offered teachers several prospects and opportunities for professional development and informal learning. There was collaborative work that went beyond the school context to traditions, such as having a bridal shower for a colleague. This cultivated a tradition of caring and celebration displaying a communal approach which went beyond education and learning. Collaboration is imperative for teacher learning and growth in any school context. Teachers at Zuay Primary worked in teams with learning communities, while preparing lesson and planning for assessments.

Stoll and Louis (2008) elucidate that learning communities allow teachers to reflect on their practices and enhance their collaborative ways of learning. The school context is responsible for creating this kind of ethos and culture for learning. They focus not just on the individual teacher but the team as a collective group. The presence of teaching communities at school does not necessarily mean that learning is taking place. McLaughlin

and Talbert (2008) differentiate between communities that reinvent and strengthen practices and those that preserve the status quo and conventional practices. Sarah explained that the during phase meetings they would continually address the changing challenges they faced as a team. This illustrates that they had effective learning communities at their school.

The presence of continuous mentoring at the school was evidence that the management team supported informal learning through mentoring programmes. Both novice and experienced teachers find that they are drawn into the school community through these programmes. They have the opportunity to learn from more experienced members of staff. Mentoring is not necessarily evidence that learning is taking place, however it can support teacher learning. The novice and fairly new teachers are very impressionable so it is important to pair them with teachers who offer the kind of guidance and support that is influential and developmental. The school offers development from mentoring at different levels. The principal was involved in a development programme teaching the staff about requirements for ANA. It is clear that mentoring takes place in different levels and a cascading of information via activity is influencing teacher learning. This is evidence of the nested cyclic system in operation.

There are also resources for learning available at Sarah's school. WiFi and unlimited internet facilities are available which supports informal teacher learning. Resources are fundamental in any school context for learning to take place. It allows teachers to take responsibility to reflect on their own shortcomings and close the gaps in their learning. The absence of resources limits this kind of interaction stunting the personal growth of teachers at the school. There were also other resources like books, magazines and journals that are available on site to assist teachers with ideas and information on curriculum and general educational issues. The presence of resources does not necessarily mean that learning is taking place neither does the absence indicate that learning is impeded. Resources indicate that information is at hand and available at the disposal of the educator at any time. These resources make it possible for learning to take place on site.

Ruach Primary School engages in what is known as single loop learning (Schön, 1978). This school may provide access to professional development however it may not necessarily address the needs of the staff. Zuay Primary engaged in double-loop learning support which is more planned PD that is associated with teacher learning and change.

Working with both teachers during the study highlighted the importance context had in teacher learning. The school context contributed and supported Sarah’s informal learning with professional development programmes and the collegial atmosphere. Deborah’s context impeded her learning by not providing the necessary programmes to support her informal learning. School contexts are very influential in creating platforms for learning. With a fairly new management team adjusting to the new environment, planning for PD was not evident at the school.. This with all the other challenges Deborah faced compounded her challenges to development. Deborah had very little mentoring available, the school is responsible for setting up teams within the sites that are responsible for mentoring of new teachers that join the institution.

Table 1: Factors that support and impede learning within the school context

Deborah’s School Context		Sarah’s School Context	
Factors that support learning	Factors that impede learning	Factors that support learning	Factors that impede learning
Helpful colleagues	Fairly new management team	Established management team	Background of learners
Funding available from Department	Lack of mentoring for teachers	Continuous mentoring	School (quintile 5) does not receive enough funding from department
Nutrition programme available for learners from disadvantaged background	No professional development available at phase meetings	Electronic and other resources available	
	School culture and attitude of colleagues hinders development	Professional development available at phase meetings	
	Under-resourced school	Ongoing Staff meetings	
	Background of learners		

6.4. Limitations to the Study

The aim of this study was to describe informal learning of two teachers in the foundation phase and view how the school context can support or impede their informal learning. The two teachers in the study, particularly Deborah, found it difficult to reflect on their learning and give concrete evidence of their learning. They would often vaguely describe an incident. I had to probe and revisit them for information. Trying to analyse the data has proven challenging as Eraut (2000) notes that the concept of informal learning is arduous to map out due to the elusive nature of informal learning. One of the research challenges is getting your

participants to reflect on their informal learning (which largely takes place unconsciously) and share that information.

The sample size used for this dissertation was comparatively small therefore the finding of this study is limited to the context of the school and individuals that participated in the study. The findings corroborate with literature (Glewwe and Kremer, 2006) that have been previously published however there remains a need to research school contexts in South Africa in both rural and urban areas to establish how schools can influence teacher development and learning.

6.5. Discussion and Implications of this Study

I posit that this study could be part of numerous other studies that could shed light on how to improve professional development in the workplace, improve teacher confidence and support teacher learning within school cultures. There is a dire need for us as South Africans to re-evaluate, reassess and review educational programmes within school contexts that can lead to improved PD and adjusting the knowledge, behaviour and beliefs of teachers in their workplaces. Formal workshops do not seem to be effective in influencing professional development or altering beliefs, dispositions or change in classroom practices. One of the reasons include that there are too short and there is no follow up consultations to address the challenges teachers face implementing new strategies. School contexts are the best platforms to address the challenges teachers face in continuously changing roles and expectations of teachers.

This comparative analysis of two teachers, their school context and the activities in which they participate reflects a dynamic and complex model of teacher learning. This is not merely an analysis of the professional development activities in which teachers engage for learning but also considers the individual teacher and their school contexts. Significant challenges within Opfer and Pedder's (2011) subsystems arise since there are a myriad of factors that impact teacher learning. This is contrary to Desimone's (2009) suggestion that teacher learning is linear in nature where the change in practice and belief leads to teacher learning. This study supports the premise that the structural culture, routine and approaches to professional development at their school are partially responsible for professional change. It further supports Opfer and Pedder's (2011) suggestion that the individual and PD activity impacts on teacher learning.

The nature of teacher learning is dynamic suggesting that teachers may follow several different trajectories but achieve the same learning effects. The context in which each teacher learns is diverse so the type of activities and learning is also different. The different ways in which each teacher interacts with their specific context determined exactly how each individual learnt. Ultimately I posit that more research needs to be done with regards to the multi-dimensional, multi correlational and causal trajectories of teacher learning. This study contends that the school context, professional development activity and individual invariably impacts on the teachers' learning in dynamic ways and the three components cannot be separated. However it also concludes that there are general patterns like the teachers' use of physical learning resources across particular contexts, activities and individuals.

6.6. Conclusion

This study uncovered different ways in which two teachers in the foundation phase learn informally within the school contexts of an urban and rural school. Three data collection methods were used to generate evidence of their learning trajectories and information of the factors within the school context that supported or impeded their informal learning. The data suggests that teacher learning at these schools is influenced by three subsystems: the individual, activity and the context in which they operate.

The data was plotted on a matrix (Mckinney, 2005 cited in Fraser, 2007) of learning activities which was adapted from Reid's model of informal learning. Looking at the grid made it clear that teachers learn both through social and individual activities. It further differentiated the planned activities from the unplanned activities. The narratives postulated an in-depth analysis of each teacher's learning and their understanding of the concept teacher learning. The narratives also highlighted the gaps within the school context that impeded teacher learning.

Finally, this study uncovers some of the ways in which teachers learn informally in the foundation phase. It also examines school context and its importance in teacher learning. Further research needs to be done with regards to informal learning in South Africa and school cultures. Teacher learning is important and has a ripple effect on learner achievement. School context are most important platforms for learning and needs to support teacher

engagement and learning. Schools need to reshape and restructure developmental programmes available for teacher learning.

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Appendix 1: Permission from Department Of Education



education

Department:
Education
PROVINCE OF KWAZULU-NATAL

KWAZULU-NATAL DEPARTMENT OF EDUCATION POSTAL: Private Bag X 9137, Pietermaritzburg, 3200, KwaZulu-Natal, Republic of South Africa PHYSICAL: 247 Burger Street, Anton Lembede House, Pietermaritzburg, 3201. Tel. 033 392 1004 EMAIL ADDRESS: kehologile.connie@kzndoe.gov.za / Nomangisi.Ngubane@kzndoe.gov.za CALL CENTRE: 0860 596 363; Fax: 033 392 1203 WEBSITE: WWW.kzneducation.gov.za

Enquiries: Nomangisi Ngubane Tel: 033 392 1004 Ref.:2/4/8/412

Ms S Govender
PO Box 136
DALTON
3236

Dear Ms Govender

PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

Your application to conduct research entitled: **“INFORMAL TEACHER LEARNING AT SCHOOL: A CASE STUDY OF FOUNDATION PHASE TEACHERS”**, 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 15 May 2015 to 30 June 2016.
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 Connie Kehologile 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.

Nkosinathi S.P. Sishi, PhD
Head of Department: Education
Date: 12 May 2015

Appendix 2: Permission from the University of KwaZulu-Natal



6 May 2015

Ms Shakunthla Govender 214582223
School of Education
Edgewood Campus

Dear Ms Govender

Protocol reference number: HS5/0234/016M

Project title: Informal teacher learning at school: A case study of Foundation Phase teachers

Provisional Approval – Expedited Application

This letter serves to notify you that your application received 24 March 2015 in connection with the above, has been provisionally approved, subject to the following:

1. Gatekeeper permission letter(s) required

This approval is granted provisionally and the final approval for this project will be given once the above condition has been met. In case you have further queries/correspondence, please quote the above reference number.

Please note that the research study cannot start until Full Approval has been granted.

Kindly submit your response to the Chair, Dr Shenuka Singh, Research Office as soon as possible.

Yours faithfully

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

/pm

Cc Supervisor: Dr CA Bertram
Cc Academic Leader Research: Professor P. Majojele
Cc School Administrator: Ms T Khumalo/Ms B Bhengu

Humanities & Social Sciences Research Ethics Committee

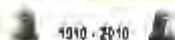
Dr Shenuka Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag 254001, Durban 4000

Telephone: +27 (0) 31 260 3587/3550/4552 Facsimile: +27 (0) 31 260 4929 Email: ethics@ukzn.ac.za / seny@ethics.ukzn.ac.za / ethics@ukzn.ac.za

Website: www.ukzn.ac.za



Humanities & Social Sciences Research Ethics Committee
Edgewood Howard College Medical School Pietermaritzburg Westville

Appendix 3: Observation Schedule

INTERVIEW SCHEDULES : INFORMAL TEACHER LEARNING IN THE FOUNDATION PHASE		
BIOGRAPHICAL	QUESTIONS ADDRESSING RESEARCH QUESTION 1	QUESTIONS ADDRESSING RESEARCH QUESTION 2
<p>1. What do you think is the main role of a FP teacher?</p> <p>2. So tell me what made you choose to become a FP teacher?</p> <p>3. What teaching qualifications do you have? From which institution?</p> <p>4. Are you presently studying further?</p> <p>5. Do you have enough resources at your school to engage in learning?</p> <p>6. How would you describe the characteristics of a good FP teacher?</p>	<p>1. Describe how you see yourself and how others see YOU? I want you to include aspects of behaviour, emotions and the way you think (cognition)?</p> <p>2. What do you think you still need to learn to become a more expert FP teacher?</p> <p>3. How do you think you will learn about curriculum changes, teaching and assessment strategies?</p> <p>4. Describe an incident in which you learnt a new strategy. Remember to explain how you learnt it</p> <p>5. What activities are you engaging in to develop your skills and knowledge?</p> <p>6. Explain to me which have been the most useful learning experiences that you have engaged in since you became a FP teacher and how these experiences have impacted on your teaching.</p> <p>7. Who do you think is responsible for your professional development...yourself or the D.O.E.? Why do you say this?</p> <p>8. How has technology impacted on your learning?</p> <p>9. What do you think were the most effective programmes you have engaged in to contribute to your learning?</p> <p>10. What are the factors that motivate your learning?</p>	<p>1. In what ways does your school support the professional development of teachers? How do you feel about the support you receive from the school?</p> <p>2. Do you have a mentor or group of persons at school whom you always confer with, to improve your teaching strategies? If so, explain the nature of the support you receive.</p> <p>3. Where you mentored when you first arrived at the school? Are you engaged in a mentoring programme assisting new teachers?</p> <p>4. How does your school leadership support your professional learning?</p> <p>5. Tell me about the professional development programmes offered at the school?</p> <p>6. How often do you have phase meetings and is this a platform for learning?</p> <p>7. What do you learn from phase meetings?</p> <p>8. Give me some of your ideas on how you think professional development can be most effective within your school context.</p> <p>9. Does a collaborative culture (working together in teams and groups) exist within the school. If so give me some examples of the activities in which you engage?</p>