TEACHER LEARNING IN PROFESSIONAL LEARNING COMMUNITIES: A
STUDY OF THREE PRIMARY SCHOOLS IN THE PINETOWN DISTRICT OF
KWAZULU-NATAL

by

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Submitted in partial fulfilment of the Master of Education degree in the discipline
Educational Leadership, Management and Policy, School of Education, College of
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Project title: Teacher learning in professional learning communities: A study of three primary schools in the Pinetown district of KwaZulu-Natal

Dear Ms Gounder,

In response to your application dated 28 November 2013, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its Implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

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

Yours faithfully

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This dissertation has been submitted with/without my approval

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DECLARATION

I, Roxanne Gounder, declare that:

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

iii. This dissertation does not contain other persons’ data, pictures, graphs, or other information unless specifically acknowledged as being sourced from other persons.

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ROXANNE GOUNDER

205507084

December 2014
DEDICATION

I dedicate this dissertation to my darling nephews:

Reon and Tristian

whose love and admiration have inspired me to continuously strive for success.
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ABSTRACT

The purpose of this study was to explore teacher learning in Professional Learning Communities (PLCs) by investigating how teachers learn in a PLC. In addition it sought to explore the experiences of teachers’ professional learning in a PLC. Literature on PLCs has proliferated in the last decade, signifying the importance of collaborative learning practices. This study draws on Reid’s (2007) quadrants of teacher learning and Wenger’s (1998) community of practice theory to understand and interpret teacher learning in PLCs. This is a qualitative study, located within the interpretive paradigm. A case study research design was utilised with the case being three primary schools in the Pinetown district and it was the case of teacher learning in PLCs. Data generation methods included focus group interviews with six teachers in each school and semi-structured interviews with the principals of each school to triangulate the data. The findings of the research revealed that learning occurred predominantly in a collaborative capacity both formally and informally. Various modes of teacher learning were expressed: dialogue, workshops, networking and mentoring. However, dialogic practices were acknowledged as the most prevalent form of teacher learning in a PLC. It was further revealed that the nature of these dialogic practices were not thoroughly addressed in schools thereby hindering the reflective inquiry of engagement it requires for optimal teacher collaboration in a PLC. In terms of teachers’ experiences of learning in a PLC, occurrences were mostly positive. This was a result of engaging with social agents such as subject advisors and learning from each other. One of the most challenging factors of teacher learning in a PLC was the lack of support that was afforded to teachers. In addition the lack of time and work intensification hindered successful teacher learning in a PLC. These findings prompted the need for more involvement from leaders to support teacher learning in PLCs which was expressed as one of the recommendations. Furthermore, it was recommended that leaders play an integral role in establishing virtual PLCs for teachers to collaborate with members within and outside their organisation, allowing for networking and learning from external social agents. In this way the barrier of time as a hindering factor to teacher learning in a PLC would be addressed and teacher collaboration would be optimised.

Keywords: Teacher learning, Professional learning communities, collaboration
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<thead>
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<th>Definition</th>
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<tr>
<td>CAPS</td>
<td>Curriculum Assessment and Policy Statement</td>
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<td>CPTD</td>
<td>Continuous Professional Teacher Development</td>
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<td>DoE</td>
<td>Department of Education</td>
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<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>PLC</td>
<td>Professional Learning Community</td>
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<td>SMT</td>
<td>School Management Team</td>
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CHAPTER ONE

BACKGROUND AND ORIENTATION TO THE STUDY

1.1 INTRODUCTION

We as a nation must finally get serious about ensuring that all teachers receive support and have the opportunity to develop the knowledge and skills necessary to help all children succeed in all our schools. The gap exists because not all teachers have the opportunity to develop the skills they need. If these professionals are to become more effective as our children deserve them to be, their knowledge and skills must be enhanced, their instructional strategies must be more appropriately determined and delivered. The surest way to help teachers to help their learners is to engage all teachers in professional learning communities.

(Hord & Hirsh, 2008, p. 23)

Post 1994 paved the way for educational transformation in South Africa with a plethora of policies being instituted in schools. The need for this policy dictation was clearly expressed by Kader Asmal, ex-Minister of Education, in his speech on the Norms and Standards for Educators (2000). Whilst highlighting the poor state of the quality of teaching in our country Kader Asmal noted that the Norms and Standards for Educators (2000) is an endeavour to deal with this barrier. The Norms and Standards for Educators (2000) was established as national policy in accordance with the National Education Policy Act, 27 of 1996 to provide guidelines for the development of educators. The fourth role of an educator is to be a scholar, researcher and lifelong learner. This is enshrined in the Norms and Standards for Educators (2000) which stipulates that “the educator will achieve ongoing personal, academic, occupational and professional growth through pursuing reflective study and research in their learning area, in broader professional and educational matters, and in other related fields” (Republic of South Africa, 2000, p. 47). This policy clearly envisions teachers as lifelong learners and scholars hence, promoting the need for continuous teacher learning.

This perpetual learning that teachers need to engage in is further enunciated in the Department of Basic Education Action Plan 2014 Towards the Realisation of Schooling 2025
which was developed from the Presidency’s 2009 national strategic plan. Goal 16 of the action plan states that teachers need to: “improve the professionalism, teaching skills, subject knowledge and computer literacy of teachers throughout their entire career” (DoE, 2011, p.107). The policies above clearly give credence to teachers’ life-long learning in an attempt to develop teachers professionally and improve the quality of teaching and learning in schools however, such learning is still not a reality in many schools. This was reiterated in a recent article in the *Sunday Times* in which Spaull (2013, p.26) articulated that “we should not be surprised that virtually no learning is taking place in many schools”. He argued that this is due to a lack of teachers’ subject knowledge. This presents a problem since learning by learners will only take place when teachers themselves learn (Barth, 2011).

1.2 RATIONALE AND MOTIVATION FOR THE STUDY

From my six years of experience as a teacher in a primary school, it had been my observation that teacher learning at the school in which I am employed varies significantly. Through interaction with other teachers it was evident that most teachers only engaged in professional learning in an individual capacity when it was mandatory to do so. Collaborative interactions were minimal. In addition, new curricula and professional development opportunities are continuously arising in education, such as: Continuous Professional Teacher Development (CPTD) Curriculum and Assessment Policy Statement (CAPS) and Action Plan 2014, which require teachers to engage in on-going learning. Therefore, the school staff need to keep abreast of and embrace such new developments to enhance their professional growth. In essence, perpetual learning needs to take place within schools to ensure continuous teacher professional development, therefore there is a need for other institution based learning programmes to enhance teacher learning. One of the possibilities could be Professional Learning Communities (PLCs). Nelson (2008) explains that the features of PLCs disintegrate the isolation of teaching by enhancing teacher learning through collaboration. Riveros, Newton and Burgess (2012, p. 204) assert that “the underlying assumption in PLCs is that peer collaboration has the potential of transforming teaching practices in ways that will bring about higher rates of student achievement.”

Furthermore there have been studies conducted on teacher learning (Harbison, 2009; Meirink, Meijer, Verloop, & Bergen, 2009 Hoekstra & Korthagen, 2011; Sing 2012) and studies on
PLCs (Lieberman & Pointer Mace, 2009; Harris & Jones, 2010; Riveros et al., 2012). However, there have not been many studies that have focused on teacher learning within the context of PLCs. It is for this reason that I explored teacher learning in PLCs.

1.3 SIGNIFICANCE OF THE STUDY

The increasing awareness of the need for PLCs in schools is articulated in current research, however, much of the existing literature have focussed on the benefits of PLCs on student achievement (Vescio, Ross & Adams, 2008; Lomos, Hofman & Bosker, 2011) and school improvement (Harris & Jones, 2010; Siguroardottir, 2010). This study is significant in that it attempted to focus on the learning that teachers engage in within PLCs with an emphasis on the manner in which teachers learn and the modes of learning they utilise to engage in these communities optimally. Furthermore, there have been studies conducted on teacher learning within PLCs (Lieberman & Pointer Mace, 2010; Wong, 2010; Rigelman & Ruben, 2012) however, this is limited therefore this research study will be significant by adding to the current body of research.

1.4 AIMS AND OBJECTIVES OF THE STUDY

The aim of this study was to explore teacher learning in PLCs in three primary schools in the Pinetown District of KwaZulu-Natal.

It sought to attain the following objectives:

- To investigate how teachers learn within a PLC.
- To explore the experiences of teachers’ professional learning in a PLC.

1.5 KEY RESEARCH QUESTIONS

Collectively this study sought to address the following key research questions:

1. How do teachers learn within a PLC?
2. What are teachers’ experiences of learning within a PLC?
1.6 DEFINITION OF TERMS

In order to ensure a common understanding of key terms used in this study, definitions of the key terms, Teacher Learning and PLC will be explored below.

1.6.1 TEACHER LEARNING

Teacher learning is a concept that lacks definitional precision in literature, however Fraser, Kennedy, Reid and Mckinney (2007, p. 157) maintain that “teachers professional learning can also be taken to represent the processes that, whether intuitive or deliberate, individual or social, result in specific changes in the professional knowledge, skills, attitudes, beliefs or actions of teachers”. Congruent to this definition is the view of Borko (2004) who asserts that the essence of teacher learning can only be understood by exploring it in different contexts and by taking into account the professional learning that teachers engage in on an individual capacity as learners themselves and more broadly as part of a social system such as a learning community. Borko (2004) further acknowledges the importance of collaborative interaction amongst teachers to foster teacher learning. This is affirmed by Desimone (2009) who explains that the collaborative interactions between teachers of the same school and grade serve as influential tool to teacher learning. Drawing on Fraser et al., (2007) this study views teacher learning as a holistic process of individual and collaborative processes that aim to improve the professional knowledge, skills, attitudes and beliefs or actions of teachers. This definition was therefore best suited for the purpose of this study since it encapsulated the core element of collaboration which is aligned to PLCs.

1.6.2 PROFESSIONAL LEARNING COMMUNITY

The true essence of a PLC consists of an engagement of professionals who collaborate with each other with the aim of improving learner achievement. This view is extensively supported by a vast array of scholars (DuFour, DuFour & Eaker, 2009; Lieberman & Pointer Mace, 2009; Harris & Jones, 2010; Riveros et al., 2012, Steyn, 2013). DuFour (2004) refers to a PLC as a team or a group of teams working interdependently to achieve a common goal for which members hold themselves mutually accountable. Similarly, Siguroardottir (2010) views a PLC as a cluster of professionals who share a common purpose by interacting with each other in order to enhance their practices. In this study, I viewed the collaborative learning of teachers in schools with the aim of improving learner outcomes as a PLC.
1.7 REVIEW OF LITERATURE
The purpose of the literature review in this study was to present issues in literature pertaining to teacher learning and PLCs in an attempt to illustrate how this phenomenon has been understood. To this end I engaged with both international and national scholars on current and completed research. The vast array of research I consulted was obtained from the library at the University of KwaZulu-Natal.

1.8 RESEARCH DESIGN AND METHODOLOGY
This study was located within the interpretive paradigm since it allowed for the interpretation of the world from the participants perspective (Cohen, Manion and Morrison, 2011). The interpretive paradigm is based on the premise that multiple realities exist (Creswell, 2012). This correlated with my study since it relied on the perspectives of the teachers to gain insight into the different perspectives of their experiences of professional learning.

In terms of methodology, this paradigm usually uses a qualitative research approach (Creswell, 2012). Qualitative research is research that emphasises detailed descriptions of social setting, intended to explore social phenomena (Slavin, 2007). The qualitative approach was appropriate since it allowed for the exploration of the phenomena of teachers’ professional learning by gathering data that consists of the in-depth descriptions, experiences and views of teachers.

The case study research methodology was utilised for this study since a case study is an in-depth focus on one specific thing which is viewed from various perspectives (Thomas, 2011). The case in this study was three primary schools in the Pinetown district and it was the case of teacher learning in PLCs. Semi-structured interviews and focus group interviews were used to generate data. These methods are preferred to other common qualitative methods such as document analysis since they are sometimes difficult to find and acquire (Creswell, 2012). Semi-structured interviews allowed for the freedom to probe for further responses and engage with the participants in the appropriate level of articulacy and comprehension (Gilbert, 2008) and focus group interviews allowed for a shared understanding of teacher learning in PLCs (Creswell, 2012), therefore these methods were appropriate for this study.

I purposively chose the three schools from the Pinetown district based on convenience since I work in this district, hence costs were minimised. The focus group consisted of six teachers,
three most senior from junior phase and three most senior from the senior phase, from each school to elicit data. Yin (2003, p. 83) maintains that when “findings, interpretations and conclusions are based on such multiple sources, the case study data will be less prone to the quirks deriving from any single source, such as an inaccurate interviewee or a biased document.” In light of this belief, principals were interviewed to corroborate the data obtained from the teachers.

All interviews were digitally recorded and thereafter transcribed, verbatim. The transcripts were analysed using content analysis. According to Krippendorf (2013, p. 24) “content analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use.” This was the best way to analyse the data since emphasis was placed on content and themes as opposed to narrative analysis where the unit of focus is language and story-markers rather than content (Rule & John, 2011).

1.9 DELIMITATION OF THE STUDY

This study was conducted in the Pinetown district of KwaZulu-Natal and elicited data from participants of three primary schools in Mariannhill. This area is characterised by a poor socio-economic status and two of the schools in which the research was conducted, are classified as No-fee schools.

1.10 CHAPTER OUTLINE

This research study is divided into five chapters.

Chapter One provides a general background and overview of the key aspects of the study. The introduction commenced with a brief overview of the importance of teacher learning in South Africa. Subsequent to this was the presentation of the motivation and rationale for embarking on this research. Thereafter, the significance of the study is outlined followed by the aims and objectives of the study. The key research questions that inform this study are listed followed by a brief definition of pertinent terms. Finally, the chapter concludes with the research design and methodology of the study.

Chapter two presents literature reviewed with consideration of the key questions that inform this study. The chapter begins with the theoretical framework comprising of Reid’s four
quadrants of teacher learning and Wenger’s community of practice that underpin this study. This is followed by a review of national and international literature that pertains to divergent views and issues surrounding teacher learning and PLCs.

Chapter three provides the research methodology of this study. It presents and justifies the research methodology and design. The data collection methods and research instruments are explained. The sampling procedures are discussed followed by a presentation of the ethical considerations made in this study and the limitations of the study.

Chapter four entails an analysis of the data and a discussion of the findings.

Chapter five concludes the study by presenting the findings of the study and a holistic summary of the study. Recommendations based on the findings are then articulated.

1.11 SUMMARY

This chapter commenced with a background to the study. Subsequently the rationale and motivation of the study was expressed giving significance to the need for the current research on teacher learning in PLCs. Next, the aims and objectives were highlighted to clarify the intentions of the research study, followed by the key research questions which the study attempts to answer. Then definitions of key terms were explained to ensure a uniform understanding of the concepts and a brief overview of the literature review. Finally, chapter one provided a brief overview of the prospective chapters in this study.

The next chapter entails a presentation of the theoretical frameworks that underpin this study. In addition a review of related national and international literature will be presented.
CHAPTER TWO

THEORETICAL FRAMEWORK AND REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

The previous chapter presented an outline of this research study by eloquently presenting the background and introduction to the study. The thrust of this chapter firstly presents the theoretical framework that underpins this study which comprises Reid’s quadrants of teacher learning to understand the formal and informal learning practices of teachers and Wenger’s community of practice theory to provide the foundation for understanding participation in social learning systems such as PLCs. Secondly, this chapter reviews related literature which revolves around the examination of pertinent international and national literature to understand teacher learning in PLCs. The relevant literature is informed by the two key questions formulated in the previous chapter. The key questions are as follows:

- How do teachers learn within a PLC?
- What are teachers’ experiences of learning within a PLC?

I present my theoretical framework first to illustrate the formal and informal nature of teacher learning which are aligned to Reid’s quadrants of teacher learning (Fraser et al., 2007) and to further demonstrate Wenger’s (1998) components of a community of practice which are closely linked to a PLC. This informed the thematic approach which I adopted to develop my review of related literature. It firstly discusses the formal and informal learning practices of teachers to understand how teachers learn. This is followed by a review of relevant literature pertaining to PLCs which is inclusive of its benefits and challenges. The final theme of the review entails an exploration of the resources and conditions that are necessary for optimal teacher learning in PLCs.

2.2 THEORETICAL FRAMEWORK

Many theories have been used to understand teacher learning practices, such as adult learning theories which are based on the reasoning behind learning or forms of learning and Shulman’s knowledge theories which emphasise the pedagogical and cognitive elements of
teacher learning. These theories fail to correlate with the aim of my study which is to explore how teachers learn in a PLC. Based on this reasoning, these theories were considered irrelevant to my study and were therefore discarded. Reid’s quadrants on teacher learning (Fraser et al., 2007) and Wenger’s (1998) community of practice have greater potential since they provide an insightful foundation into the social nature of learning which is closely related to the core element of collaborative learning which defines a PLC. These two theories will therefore be utilised to theorise teacher learning in PLCs.

In an effort to offer a holistic overview of my interpretation of Reid’s quadrants of teacher learning theory and Wenger’s community of practice theory, I have attempted to depict a diagrammatic representation to illustrate the link between the two theories that underpin my theoretical framework. This framework provided the foundation for understanding teacher learning in PLCs. My interpretation of the combined theories is that teacher learning occurs in four different domains or quadrants: formal, incidental, informal, planned (Fraser et al., 2007). Each domain is illustrated with examples below. Wenger’s community of practice (1998) comprises of key elements which strategically differentiates between the four different components of a social learning system: community, practice, identity and meaning.

Implicit in this holistic view is the idea that teacher learning occurs in each quadrant in different ways, however, each domain is inclusive of the key characteristics of a community of practice since the interaction between members involves the process of learning in a collaborative manner, whether planned and formal, spontaneously and formal, incidentally and informal or planned and informal. The social nature of participation that occurs in the various quadrants are aligned to the core elements of Wenger’s theory of community of practice. Firstly, the social interaction that occur in each quadrant is characteristic of a community which epitomises the relationships developed in a social system. Secondly, is the concept of practice which signifies learning by doing through social interaction. Third, is the component of identity which is realised when a member actively participates in a community of practice. Finally, is the component of meaning characterising a community of practice which is established when members engage in social interaction.

In essence, this illustration, (refer to figure 1, p. 12) represents teacher learning as being a social phenomena that can be understood as occurring in different quadrants with each
process sharing the commonality of the key components of being a community of practice. This assertion is based on the premise that social participation occurs in the learning process of each quadrant and members construct meaning through their active participation and negotiation which consequently impacts on the development of a member’s identity. Each social interaction in therefore considered to be a community of practice since these interactions are defined by the common goal of learning to improve practice and contribute to quality teaching and learning.

Formal
- Workshops
- Union meetings
- University courses
- Staff meetings

Informal
- Subject advisor meetings
- Supervision

Planned
- Mentoring interactions

Incidental
- Staffroom conversations
- Peer Interactions

Figure 1: A holistic representation of Reid’s quadrants of teacher learning and Wenger’s community of practice.

2.2.1 Reid’s quadrants of teacher learning

To conceptualise the learning experiences of teachers, Reid’s four quadrants of teacher learning (Fraser et al., 2007) is useful in explaining teacher learning as both an individual and collaborative process which occurs in four domains: formal, informal, planned and incidental. Each quadrant is characterised by the learning opportunities experienced by teachers in different domains. The first quadrant entails formal opportunities which include those that are explicitly established by an agent other than a teacher (e.g. taught courses, workshops). Next is the informal quadrant where informal opportunities are sought and established by the
teacher such as networking with other schools, incidental meetings with subject advisors. On
the opposing axis are planned opportunities which can either be formal or informal but are
characteristically pre-arranged (collaborative planning), whereas incidental opportunities are
impulsive and random such as teacher interactions at staff meetings (Fraser et al., 2007).

![Figure 2: Reid’s quadrants of teacher learning (McKinney et al., 2005 cited in Fraser et al., 2007)](image)

2.2.2 Wenger’s (1998) community of practice

The notion of social learning which characterises current teacher learning practices and
underpins the development of PLCs coincides with the work of situated theorist Etienne
Wenger (1998) who proposes a social theory of learning. This lays the foundation for
understanding teacher learning as a community of practice. At the heart of Wenger’s (1998)
community of practice theory is collaboration or collective learning which embodies social
learning practices. This requires active participation of individuals which extends beyond
merely just engaging in activities; rather it allows a sense of belonging which defines our
identity and learning practices. This mutual engagement of individuals is characterised by
shared activity which results in a community of practice. In explaining the concept of
learning Wenger (1998, p.7) differentiates between individual learning and a community’s
learning. “For individuals, it means that learning is an issue of engaging in and contributing
to the practices of their communities, for communities, it means that learning is an issue of
refining their practice and ensuring new generations of members”. In essence learning is perceived as a collective activity and is a fundamental part of our daily lives which occurs consciously or unconsciously.

The roots of this theory are deeply embedded in the process of learning in a social system (Wenger, 1998). Wenger (1998) further posits that learning is a social practice and knowledge is derived from participation in complex social learning systems. According to this theory, participation in these social systems are characterised by four structuring elements.

1. Meaning: a way of talking about our (changing) ability – individually and collectively to experience our life and the world as meaningful.
2. Practice: a way of talking about the shared historical and social resources, frameworks and perspectives that can sustain mutual engagement in action.
3. Community: a way of talking about social configurations in which our enterprises are defined as worth pursuing and our participation is recognizable as competence.
4. Identity: a way of talking about how learning changes who we are and creates personal histories of becoming in the context of our communities (Wenger 1998, p. 5).

![Figure 3: Components of a social theory of learning (Wenger, 1998, p. 5)](image)

The concept of legitimate peripheral participation is coined by Wenger (1998) and is described as the participatory process of novice members into a community of practice. The contribution made to the practice consequently leads to the development of a novice
members’ identity which is defined by their social participation in a community of practice. Those members who are new to the community of practice are therefore considered as legitimate peripheral participants since they contribute lower levels of participation as compared to fully fledged members.

Another key aspect of a community of practice that warrants discussion is the concept of boundaries which is accredited to Wenger (1998). It is established that boundaries are a result of sustained involvement in multi-membership of communities of practice. Meetings, networking with other schools, peer conversations and subject advisor visits can be categorised as boundary encounters since it is a one-on-one conversation between two members of different communities of practice (Wenger, 1998). The advantages of these boundary relations between members are clearly articulated by Wenger (1998) who explains that as a result of this boundary encounter, negotiated meaning occurs within the practice with members as well as with outsiders. Furthermore, Wenger (1998, p.113) maintains that “this process allows each side to get a sense of how the negotiation of meaning takes place in the other community.”

The two theories I have explored above: Reid’s quadrants of teacher learning and Wenger’s community of practice provide the foundation to analyse teacher learning in professional learning communities. From Reid’s quadrants of teacher learning the core elements of formal learning, informal learning, planned learning, incidental learning, shared practice come to the forefront. This theory will assist in recognising teacher learning practices in and out of the workplace with emphasis on the each of the four domains of learning opportunities. Wenger’s (1998) community of practice theory epitomises teacher learning as social activity characterised by active social participation in a community of practice which is also aligned to the core elements of a PLC. Characteristics of collaboration, meaning, practice, identity and community define this theory. This will be used as a lens to view the collaborative practices of teachers in a structured manner with the core principles of Wenger’s (1998) dimensions of community of practice model to establish how teachers learn in a PLC. The combination of the core elements of these two theories provide the foundation for understanding teacher learning in PLCs holistically.
2.3 REVIEW OF RELATED LITERATURE

A literature review is defined as a “written argument that promotes a thesis position by building a case from credible evidence based on previous research” (Machi & Mcevoy 2012, p.3). Creswell (2007) expands on this description of a literature review by articulating the need for a literature review. He adds that a literature review justifies the need for a proposed study and further explains that it is conducted to illustrate how the proposed study will add to existing literature. This literature review aims to explore how teachers learn by analysing current literature related to teacher learning and PLCs. The summation of this chapter then justifies the need for this study.

Much has been written about teacher learning in the past decade. Schoemoker (2005, p.141) expresses his belief that “isolation is the enemy of improvement” and further elaborates that “teachers learn best from other teachers, in settings where they literally teach each other the art of teaching”. Current literature on teacher learning reinforces this view and advocate support for teacher learning as a collaborative practice (Jurasaite-Harbison 2009; Lieberman & Pointer Mace, 2009; Harris & Jones, 2010; Wong, 2010).

The collaborative nature of teacher learning is a contemporary approach to teachers’ professional learning practices since it yields many benefits to the quality of teaching and learning. According to Hord and Sommers (2008, p. 19) when teachers work together they engage in dialogic practices about teaching and learning and this consequently leads to a demonstration of “higher commitment to the goals, mission and vision of the school.” In addition, the knowledge base of teachers and their technical skills are accentuated by their engagement in professional learning which contributes to increased effectiveness (Wong, 2010). The benefits of teacher collaboration is further articulated by Schoemoker (2005) who indicates that teacher collaboration that is well planned out results in the enhancement of teaching quality, improvement of professional morale and increases learners’ learning.

The thrust of this literature review therefore draws on the views of the father of modern philosophy, Rene Descarte (2008, p.16) when he proclaims “I think therefore I am”. Additionally, it draws on the philosophy of Ubuntu which states that “a person is a person because of others” (Nussbaum, 2003). This review thus revolves around the social practices
of teacher learning which occur in an individual and collaborative basis as well as in a formal and informal capacity.

2.3.1 INFORMAL TEACHER LEARNING PRACTICES

An ethnographic study conducted by Jurasaitė-Harbison (2009) explored the informal contexts of teachers learning by firstly questioning how teachers learn in schools within their school cultures and secondly how school cultures create opportunities for their workplace learning. Using Bourdieu’s cultural way of learning as a theoretical framework, this study adopted a socio-cultural perspective which perceives teacher learning to be a social practice. Data collection methods included interviews, reflective journals and field notes and data analysis comprised of case study and discourse analysis. In addition the researcher presents an ethnographic account of three specific schools: An American elementary school, a Russian and a Lithuanian school with the aim of engaging in a comparative analysis of the cultures to categorise the contexts and participants viewpoints of their learning. Some of the selected schools were not English medium and therefore the transcription of interviews needed to be translated to English. Unfortunately translations could lead to a loss of data and interpretation therefore this serves as a possible weakness of the study since pertinent information could have been omitted.

Findings from the study reveal that all three schools reflected different representations of opportunities for workplace learning in informal contexts. Leadership approaches to professional growth of teachers varied amongst the three schools. The Russian school provided close supervision and judgement for teachers’ professional growth whereas the American school accommodated teachers’ professional needs and the Lithuanian school empowered teachers to take responsibility for their work quality and professional growth. Findings from the study suggest that there are three facets of school culture that provide or fail to provide opportunities for teacher learning in informal contexts: school leadership, teachers’ professional relationships and their individual stances as learners. Although this study provides a comparative analysis of three schools in establishing opportunities for teacher learning by extracting the views of teachers, it fails to elicit the views of the principal as the leader of the school. This would have been beneficial as a form of triangulation of the data presented by the teachers and to interpret the experiences and views of the leader of the
school as to how learning opportunities are promoted since it is the leader that sets the platform for professional learning of teachers in school.

A qualitative South African study conducted by Prammoney (2011) aimed at exploring how teachers learn informally, emphasised the importance of informal learning practices of teachers. A strength of this study is the use of Reid’s quadrants of teacher learning theory to provide the foundation for understanding the informal learning practices that teachers engage in. Unfortunately this study was confined to findings in one high school with a limited sample selection of five participants. Furthermore the variation of participant selection was inconsistent since it comprised of two novice teachers and three experienced teachers. Based on these flaws, my study elicits the views of eighteen teachers in total, comprising of six teachers from each of the three schools.

In contrast to the limited sample size of participants in the above study is a larger scale, mixed method study by Meirink et al., (2009) which elicited the views of 34 Dutch teachers. This study is noteworthy in that the findings exemplify the importance of individual learning and collaborative learning practices. The aim was to establish how teachers learn in the workplace; findings were confined to the context of Dutch school teachers. Questionnaires were employed to attain information on the teacher preferences of learning and digital logs were used to explore teachers’ ways of learning in the workplace. Unfortunately the article fails to mention the method of sampling that was used for the study; however the sample size comprised of 34 Dutch teachers with varied teaching experience ranging from three to five years, who collaborated in five teams involving four to nine teachers from different subject departments with a different topic of interest. The years of teaching experience held by the participants contribute to a flaw in the study since these participants would yield a limited range of experience of which to draw from. Bearing this in mind, it would have been more suitable to include teachers with more teaching experience since they would have experienced more learning events and would therefore offer rich data as to how teachers learn. Drawing from this flaw, my study entails the use of the most experienced teachers as participants in my research.
Mean scores and standard deviations obtained from the questionnaires indicated that when faced with difficult tasks, teachers often critically reflect in an individual capacity. In addition, it was found that they also trust their own intuition in such instances or consult peers for advice. The digital logs used as a method of data collection, highlighted fifteen general sequences of learning activities which are categorised into three broad themes: peers in the learning experiences of teachers in different ways, individual learning experiences and conscious awareness of own learning. It was found that teachers often critically reflect individually when confronted with challenging tasks. Secondly it was found from their digital logs that teachers reported learning experiences that involved their colleague which were positive collaboration. Learning involved listening to their colleague’s experiences with teaching methods or observation of colleagues using these methods. The final way of learning derived from the data was through experimentation whereby teachers would often learn by trying different things or experiment with new methods. Based on the comparison of findings for both data collection instruments, it was concluded that digital logs contributed to a more comprehensible understanding of how teachers learn in the workplace as opposed to the questionnaire. The teacher learning exemplified in this study implies that learning occurs on an adhoc basis with collaboration taking place when the need arises.

These claims are contrasted by Meirink, Meijer and Verloop (2007) whose study examined teachers’ individual learning in collaborative settings. Individual learning as an isolated practice is frowned upon in current literature; however learning is known to be enhanced when it occurs in conjunction with collaborative learning. The aim of this study was to explore what learning activities experienced teachers undertake in a collaborative setting and how these learning activities relate to changes in cognition and/or behaviour in collaborative groups and to determine how teachers learn in their collaborative environments for the duration of one year. The sample selection consisted of six teachers who were interviewed after group meetings. In addition, a digital logbook was used to report their learning experiences. From the analysis of data it was found that activities such as experimenting (with an adjusted teaching method of colleague, with a copied teaching method of a colleague, with a self-invented method, with a teaching method developed in a group meeting), reflecting (reflecting on exchanged teaching methods, reflecting on own teaching practice, reflecting on collaboration in study group, and becoming aware of earlier practice), learning from others without interaction (observing, listening and reading) and learning from
others in interaction (brainstorming, discussing, exchanging teaching methods, receiving feedback from colleagues on own experiments) characterised the collaborative groups. Furthermore, the results of the study suggest that collaboration in teacher groups allow for a powerful environment for learning. Although the findings of the learning activities are systematically categorised, it unfortunately offers a very broad categorisation of learning activities that teachers engage in.

2.3.2 FORMAL TEACHER LEARNING PRACTICES
Contrary to the findings above are the results obtained from Hoekstra and Korthagen (2011) that reported and advocated support for a formal learning practice. It is claimed that supervision promoted increased conscious awareness of learning which is not illustrated in informal learning practices. The collaborative and official nature of supervision correlates with Reid’s quadrant of formal and planned teacher learning and would have been more suitable as a theoretical framework, but this study chose to use Korthagen’s (2005) theory as a framework to understand teacher learning. Data was elicited through an initial questionnaire measuring a teacher’s beliefs and interviews and videotapes of the participant’s recorded lessons. It was revealed that during the first year the participant had no systematic support and in the consecutive year she received individual supervision. During the follow up study the participants engaged in supervisory sessions every three weeks for the duration of six months. All supervisory sessions were video recorded and after completion the participant filled out another questionnaire. An additional interview took place two years after the completion of the supervisory sessions. All interviews were digitally recorded and transcribed. The transcripts were then analysed by the content with the generation of specific themes. The findings derived from the qualitative approach to the study found that the informal and formal learning that the participant in the study received differed in many ways with the latter being more beneficial to teacher learning. Furthermore, it was evident from the study that during supervisory sessions the participant in the study adopted a meaning-oriented reflection with her students as opposed to her prior action-oriented reflection. In addition, it was found that the formal learning which was created by the supervision allowed for the participant to learn by modelling. The various data collection instruments that were used to collect and verify data such as interviews, questionnaires and video recordings strengthen the methodological approach of the study.
Reciprocal peer coaching is a form of collaborative teacher learning that entails working with and supporting a peer in the learning process. The learning that teachers need to engage in, in this learning process are characterised by three distinct activities: regular discussions based on efforts to support student learning; experimentation with instructional methods; and teacher classroom observations of lessons (Zwart, Wubbels, Bolhuis & Bergen, 2008). In a study undertaken by Zwart et al., (2008) the learning activities of eight experienced teachers were explored to determine what and how they learned for the duration of one year in a reciprocal peer coaching trajectory. A flaw in the study was the inconsistency in articulation of participant selection. The researcher mentions that eight experienced teachers were included as participants in the study, however a closer analysis of the tabular representation of participant overview reflects that three of the teachers have between five to seven years of teaching experience as opposed to the other participants who all have over ten years of experience.

The notion of collaborative learning practices is further accentuated by Maistry (2008) who aimed to examine the nature of teacher learning of economic and management sciences teachers involved in the teaching economic and management sciences (TEMS) teacher development project. The methodological techniques employed to generate data warrant recognition since it serves as a strength of this study. The study employed a qualitative approach using interviews with seven of the core members of the TEMS community, a reflective journal containing critical incidents that influenced teacher learning and detailed observation reports were also used as data collection instruments by the researcher, however he fails to mention the reasoning behind the sample selection and furthermore this study only looks at teacher learning in the context of the TEMS. In relation to my study, an attempt is made to address teacher learning in a broader context, analysing the practices of teachers in a primary school setting. Although Maistry (2008) acknowledged that communities of practice model proposed by Wenger (1998) posed possible challenges such as failing to identify the identity of individual learning and absence of an expert as a resource for content knowledge he also asserted that “they do in fact have much potential as vehicles for teacher professional development in the South African context characterised by the marked absence of formal or official teacher development programmes in areas of need” (Maistry, 2008, pp. 149-150).
Contrary to the aim of the collaborative nature of the studies examined above is the use of observational data as the main data source derived from field notes of thirty seven collaborative meetings conducted by Levine and Marcus (2010) who aimed to establish how the structure and focus of teachers’ collaborative activities facilitate and constrain teacher learning. Using Wengers (1998) community of practice theory as a theoretical framework for the study, findings of this desktop study indicate that teacher learning is facilitated through protocol-guided meetings which are instruction-focused. Implicit in this research is the idea that collaboration plays a pivotal role in creating divergent opportunities of teacher learning. Levine and Marcus (2010, p. 397) suggest that “different kinds of activity structures for collaboration, like the use of protocols and structured workshops could be complimentary.”

A qualitative study using the interpretive paradigm by Mothilal (2011) focussed on teacher learning through clustering, eliciting the views of five participants experiences within a cluster. It was revealed that cluster learning was instrumental in instilling collegiality and collaboration amongst teachers and was also beneficial in providing opportunities for teachers to engage in self-initiated learning. Furthermore, it was found that teachers in the cluster engaged in informal reflection practices as a result of sharing content knowledge about lessons. Finally, the study revealed the theme of shared expertise which arose as a result of the senior teachers imparting knowledge as a form of resource to other teachers.

The studies I have critiqued above have examined teacher’s formal learning in the form of supervision and informal practices such as reflection, consultation with peers, observation of colleagues and learning by modelling. Common findings from the studies indicate the significance of individual learning in conjunction with collaborative learning and shared practice in teachers’ professional learning. Two assertions can be made from these findings. Firstly, the question of how teachers learn differs in literature and as a result there isn’t a uniform manner in which teachers engage in professional learning. Secondly, the question of how teachers learn in South African literature is limited to the informal learning practices that teachers engage in and do not adequately contribute to current trends of teacher learning practices as advocated in international literature.
2.4 PROFESSIONAL LEARNING COMMUNITIES

International studies conducted on teacher learning (Lieberman and Mace, 2008; Meirink et al., 2009; Sargent & Hanumm, 2009) advocate support and success of PLCs whereby teachers learn from and with each other. Hord (1997) proposes five dimensions of a PLC: supportive and shared leadership, shared values and vision focusing on learners learning, collective learning, supportive conditions, and finally, shared personal practice. Wong (2010) also adds two additional elements to the five dimensions proposed by Hord (1997). The first element is action experimentation which involves a trial and error approach to problem solving. This “provides opportunities for members to co-construct their knowledge with the aim to improve their individual practice” (Wong, 2010, p.625). The second additional element is double-loop learning which is the distinguishing factor between a professional community and a PLC. Double-loop learning is characterised by creating new forms of knowledge by analysing and evaluating existing knowledge.

2.4.1 BENEFITS OF PROFESSIONAL LEARNING COMMUNITIES

Involvement in a PLC yields many benefits to teachers and students. Drawing on large scale qualitative, multi-case studies by Crowther and Andrews (2003) on the experiences of Australian schools engaging with a process of professional enquiry, sharing purpose and developing identity, known as Innovative Designs for Enhancing Achievement in Schools, Andrews and Lewis (2007) discovered that teachers knowledge base and teaching practices were impacted when teachers were developed in a PLC. The result of this increased knowledge base is also recognised by Hord and Sommers (2008) and Hord and Hirsh (2008) who explain that invigorating, intellectual learning activities are produced by teachers who involve themselves in a PLC.

In addition to the popularity of PLCs as a form of teacher learning and the numerous benefits it yields to improved teaching and learning, literature also suggests that PLCs have the potential to transform teaching practices (Levine & Lomos, 2011) and increase student achievement (Vescio et al., 2008). This is confirmed by Vescio et al., (2008) who surveyed literature to investigate the impact of PLCs on learner achievement using a desktop study reviewing 11 studies. Analysis of the literature revealed that eight of the studies linked participation in a PLC to student achievement. Louis and Marks (1998) study reviewed by Vescio et al., (2008) proved that schools which had strongest PLCs had achieved much
higher learner achievement levels than those with weaker PLCs. Vescio et al., (2008) recognises that this learner achievement is based on PLCs which have a high focus on learners learning. Harris and Jones (2010) support this view and assert that PLCs have the potential to change teachers’ behaviour and improve learning outcomes of learners. They further elaborate that “where PLCs work best, there is evidence of more satisfaction, higher morale and lower rates of absenteeism among teachers” (Harris & Jones, 2010, p. 175). This could be the result of interacting with other members of the team, participating in decision making and improving teaching practice.

Hord and Hirsh (2008) add to this list of benefits by pointing out that teachers involved in a PLC contribute to school reform and improvement. Harris and Jones (2010) concur and maintain that PLCs cannot be seen as a panacea for school reform, however they argue that transforming the collaborative and communication practices of people can consequently result in system-level improvement. A mixed method study using purposive sampling was conducted in three schools in Iceland with the aim of establishing the relationship between a school’s level of effectiveness and its level as a professional learning community. Data collection methods comprised of observations, interviews, questionnaire surveys and document analysis. Findings from the quantitative data indicated a strong correlation between school effectiveness and teachers perceptions of PLCs. Furthermore, it was found that improvements with regards to teaching practices in PLCs in one of the schools consequently resulted in an increased level of the schools effectiveness which was measured by learner progress.

2.4.2 TEACHERS AS LEARNERS
The dialogic interaction between teachers as learners was proven as a fundamental characteristic of a PLC in a five year qualitative study by Nelson (2008). A case study approach eliciting the views of three of the nine purposively selected PLC participants were chosen to represent mathematics and science teachers. An attempt was made to establish what PLC work is and to determine the impact it had on teacher learning. An inquiry stance of dialogic interaction in a PLC is advocated by Nelson (2008). She argues that “it is the nature of the dialogue, one characterised by an inquiry stance that contributes to transformative learning which impacts on classroom practice and student learning” (Nelson, 2008, p. 578). Findings from the study indicate that teachers’ PLC dialogue was largely focused on three
areas: “collectively planning and implementing activities; raising questions about teaching, learning, curriculum, and disciplinary goals; and reflecting on both the impact of their actions on student learning as well as what to do about their still existing questions” (Nelson, 2008, p. 557).

2.4.3 CHALLENGES ASSOCIATED WITH TEACHER LEARNING IN PROFESSIONAL LEARNING COMMUNITIES

The study conducted by Nelson (2008) assessed the nature of PLC work and its impact on teacher learning. Analysis of the qualitative data revealed that teachers faced challenges with regards to asking critical questions relating to their practices. The external environment has been argued as a great challenge to teachers who participated in a pilot study by Harris and Jones (2010). They found that the demands of external priorities such as inspection and new initiatives from the external environment served as a barrier since teachers were consumed with too much work and as a result they tended to drift away from their PLC group. Furthermore, in identifying teachers’ challenges in sustaining a PLC, it was discovered that “some PLC groups found it a challenge to link with other teachers in other schools and found that paperwork, classroom management tasks and lesson preparation often reduced the time available for enquiry and collaborative activity” (Harris & Jones, 2010, p.178).

Implementation and sustenance of PLCs in secondary schools is identified as a challenge for teachers (Stoll & Louis, 2007; DuFour et al., 2008). According to Stoll and Louis (2007) creating PLCs in secondary schools is problematic where size and structure militate against school wide collaboration, and where, specific disciplinary knowledge takes priority over shared knowledge about pedagogy and adolescence.

Resources can enhance the development of PLCs and the lack of it can cause an impediment to effective teacher learning in PLCs. The subsequent discussion and review of literature highlights some of the resources and conditions that are required to ensure that effective teacher learning occurs in PLCs.

Time is argued as being an important resource in creating and sustaining a PLC (Hord, 2004; Hord & Sommers, 2010). Taking a contrary view, Nelson (2008) has argued that creating opportunities for the occurrence of learning in a PLC is insufficient. Based on the findings
from her qualitative study that investigated the nature of PLC work which impacted teaching practices, she argued that teacher support is a more significant element since teachers need support to create an optimal environment for PLC work which according to her is an inquiry stance to dialogic interactions between its members.

According to Hord (2004) the role of the principal in providing support to teachers is of paramount importance for the development of a PLC. The necessity of supportive conditions offered by leadership is reiterated by Sargent and Hannum (2009) who investigated the nature and forms of PLCs in rural Gansu, one of China’s poorest provinces, by conducting a qualitative study viewed through an interpretive lens. Interviews and observations of lessons were used as a method of data collection in 11 schools in 6 purposively selected rural countries across Gansu, with a sample consisting of 30 teachers. It was found that PLCs are evident in some of China’s under resourced schools. These schools are characterised by principal leadership, teachers own initiative and institutional support. It was also evident that strong leadership of the principal was linked with the engagement of PLCs. Furthermore, results revealed that notions of collective lesson planning, peer observation, demonstration lessons and teacher research were familiar ideas to all. However, the regularity of these activities differed amongst the eleven schools. Finally, findings suggest that PLCs are thriving even in one of China’s most under-resourced rural regions, Gansu.

Similar results were derived from a desktop study conducted by Steyn (2013) who explored how PLCs in schools can be implemented successfully to improve the continuing professional development of South African teachers. This desktop study is a summation of various research studies that have already been conducted. Although it highlights significant findings from those studies, it fails to acknowledge the lived experiences of participants. Analysis of literature in his study revealed that significant factors need to be ensured for the development of professional learning communities in schools. This included: creating a clear understanding of PLCs, identifying suitable facilitators for PLCs, creating a supporting environment for PLCs, principal’s involvement in PLCs and networking with other schools.

Interacting and drawing on external agents as a resource of learning in PLCs is articulated by many scholars (DuFour et al., 2004; Stoll, Bolam, Mcmahon & Thomas, 2006; Hord & Sommers, 2008). Jackson and Temperley (2007, p. 48) posit that network learning occurs when members from one school interact with members from another school “to engage in
purposeful and sustained developmental activity informed by the public knowledge base, using their own know-how and co-constructing knowledge together.” This networking allows for four distinct learning processes: learning from one another, learning with one another, learning on behalf of and meta-learning. Stoll, Bolam, McMahon, Wallace and Thomas (2006) explain that PLCs can utilise other social fields of influence to network with, such as communities and universities. They also add that “a networked society may offer possibilities for closer cooperation between schools, and between schools and their communities” (Stoll et al., 2006, p. 242). Hargreaves (2007) concurs with this view and adds that the prosperity of PLCs is defined by their connection with other schools in networked learning communities. The benefits of networking with other schools are concisely expressed by Stoll, Robertson, Butler-Kisber, Sklar and Whittingham (2007, p. 63) who maintain that networking enables teachers to:

share and tease out principles of good practice, engage in in-depth dialogue across schools, create knowledge to respond to particular challenges that any school might find hard to resolve, observe colleagues elsewhere, experience fresh perspectives, reduce isolation and see their own school through a different lens.

Findings from Steyn’s (2013) research pertaining to the importance of networking and facilitators coincides with the findings of a qualitative study conducted by Wong (2010) who reported that networking with other schools and expert agents is a social resource that is required for the enhancement of a PLC (Wong, 2010).

Embedded in these studies on PLC is evidence substantiating the claim by Riveros et al., (2012) who argues that the most important aspect of PLCs is teacher learning; however they attest to the lack of research on this phenomenon in literature. This claim contributes to the justification behind this research study on teacher learning in PLCs. Although South African literature suggests that there is currently an increasing awareness in the need for teacher learning (Uddin, 2010; Mothilal, 2011; Prammoney, 2011; Thaver, 2011; Sing, 2012) the studies conducted are confined to the context of educational reform and are not conducted within the context of PLCs. As illustrated through the discussion on teacher learning and PLCs, it is evident that the significance of PLCs has proliferated in international literature. However, teacher learning in PLCs in South African literature is under-researched. In light of this observation, this study utilised a case study approach which entailed the use of focus
group interviews with teachers to explore their learning within PLCs. In addition, principals as leaders of the school were interviewed to triangulate the data obtained from the teachers.

2.5 SUMMARY

In this chapter I have presented Reid’s quadrants of teacher learning and Wenger’s theory of community of practice to form my theoretical framework which provided the foundation for understanding teacher learning in PLCs. This was followed by an array of recent related literature pertaining to studies conducted around teacher learning and PLCs. The next chapter focuses on the research methodology and design of this study.
CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The previous chapter presented the theoretical framework that underpinned this study and also articulated the current debates in related literature pertaining to teacher learning and PLCs. This chapter concentrates on the research design and methodology employed in this study. It addresses the paradigmatic positioning of the study, the methodological approach, methods and sampling that was used to generate data for the study. Finally, the ethical issues, trustworthiness and limitations of the study are examined in this chapter.

3.2. PARADIGMATIC LOCATION

A paradigm is defined as a set of assumptions by which reality is understood (Maree, 2007; Gilbert, 2008, Cohen et al., 2011). In an attempt to find the most applicable lens in which to locate my study, I researched various paradigms: positivist paradigm, interpretive paradigm, critical theory, poststructuralist theory, modernism and postmodernism (Maree, 2007). Each had its distinct classifications of reality or world views. However, due to its interpretive and meaning-orientated set of assumptions I was undoubtedly convinced that the interpretive paradigm was best suited for my study.

The interpretive paradigm is underpinned by unique ontological and epistemological assumptions which serve as distinguishing features when compared to other paradigms. In explaining the link between epistemology and ontology, Krauss (2005, p.758) purports that “... ontology involves the philosophy of reality; epistemology addresses how we come to know that reality”. The notion of a unitary existence of truth is a defining characteristic of the positivist paradigm. On the other hand, the interpretive paradigm refutes the existence of a single reality. Ontologically, the interpretive paradigm is based on the assumption that multiple realities exist (Maree, 2007; Merriam, 2009; Cohen et al., 2011; Creswell, 2012). Each participant in the study had their own perspectives based on their individual experiences of learning in a PLC thereby contesting the existence of a unitary reality. Krauss (2005)
affirms that each individual experiences reality from an individual perspective, therefore every individual experiences a different reality. In contrast, the positivist paradigm is based on the premise that there is a single, objective reality (Maree, 2007). In terms of epistemology the interpretive paradigm is based on the assumption that knowledge is socially constructed (Maree, 2007, Merriam, 2009). The experiences elicited by the teachers substantiated this belief by exemplifying the different realities that each participant possessed in an interactive discussion, knowledge of their learning in PLCs was therefore socially constructed. On the contrary, the positivist paradigm is based on the epistemological belief that knowledge can be found through scientific inquiry (Maree, 2007).

My justification behind locating my study through the interpretive lens extended beyond its epistemological and ontological beliefs. I was drawn to this paradigm because it emphasises a concern for the individual and the meaning that is inherent in their experiences (Cohen et al., 2011). Viewing the phenomena of teacher learning in PLCs through the interpretive lens allowed for interpretation of the world through the experiences of the teachers who were the primary sources of data in this study. The socially constructed knowledge derived from the participants allowed for a deep understanding and interpretation of their lived experiences. Furthermore, Merriam (2009) affirms that the interpretive paradigm is common in qualitative research. This was the research approach chosen for this study. The subsequent paragraph explores this qualitative research approach in further detail.

3.3. METHODOLOGY

This study utilised a qualitative research approach. In differentiating between quantitative and qualitative research, Creswell (2012) points out that quantitative research is best suited if a research problem requires quantifiable variables, assessing the impact of these variables on results or if results need to be applied to a large number of people. This is in contrast with qualitative research which is used when a research problem requires one to learn about the views of individuals or to obtain detailed information about a few people or research site. Furthermore, qualitative research aims to offer a rich description of a social phenomenon or it provides the reasoning behind it (Slavin, 2007). In addition, Denzin and Lincoln (2005, p.3) express the core element of qualitative research as involving “an interpretive, naturalistic approach to the world.” In essence, qualitative research aims to understand how people
interpret the world they live in (Opie, 2004, Merriam, 2009). The assertion that can be made from this is that qualitative research allows for an exploration of a phenomenon through inquiry of a participants experience of reality, as opposed to quantitative research which relies on numeric data and emphasises the role of the researcher in the research process. Merriam (2009, p. 14) refers to a participants perspective as the “emic” and an outsiders perspective as the “etic” and asserts that one of the fundamental elements of qualitative research is to understand the phenomenon of interest from the participants perspective. Drawing from this, the qualitative approach allowed for a deep understanding of how teachers learn with an exploration of different teachers’ experiences of learning in a PLC therefore it was the teachers experiences and views that was understood. The emphasis was on the participants’ perspective of learning.

In terms of the methodology, this qualitative study used a case study methodology. According to Thomas (2011) a case study is an in-depth focus on one specific phenomenon which is viewed from various perspectives. The case study approach is commonly used in the interpretive paradigm (Cohen et al., 2011). Merriam (2009, p. 81) describes a case as “a single unit, a bounded system”. The case in this study was three primary schools in the Pinetown district of KwaZulu-Natal and it was the case of teacher learning in PLCs. Rule and John (2011, p. 105) clearly articulate the richness of a case study research by suggesting that “it is fit for the purpose of generating in-depth, holistic and situated understandings of a phenomena.” Based on this belief, a case study approach to research was the most appropriate since it allowed for the exploration of an individual case with a single unit of focus which was obtaining teachers experiences of learning in a PLC.

3.4. DATA GENERATION METHODS

The methods of data generation that were utilised in this study were focus group interviews with teachers and one-on-one, semi-structured interviews with the principal of each school.

3.4.1 FOCUS GROUP INTERVIEWS

Focus group interviews were used as a method to generate data from teachers who were the primary sources of data collection to explore how they learn in a PLC. Focus group research
is defined as a “form of qualitative method used to gather rich, descriptive data in a small group format from participants who have agreed to focus on a topic of mutual interest. The emphasis is on understanding participants’ experiences, interests, attitudes, perspectives and assumptions” (Wilkinson & Birmingham, 2003, p. 90). The aim of the focus group interviews with teachers were to elicit their first hand experiences of learning in a PLC and to also establish other elements in relation to their learning, such as the resources they require to learn and the possible challenges they encountered with learning in a PLC.

In terms of size, a focus group consists of five to ten participants who are brought together with the purpose of eliciting information from them on a specific issue (Krueger & Casey, 2009). According to Creswell (2012), a focus group consists of four to six participants. The consistency of the required number of participants to be included in a focus group is unclear in literature. Wilkinson and Birmingham (2003, p. 98) balance this argument by acknowledging that focus groups do not have to have a fixed number of participants but also indicate that “fewer than four may jeopardise the valuable group dynamic you seek, and more than twelve may make the group unwieldy.” For the purpose of this study, six participants were chosen to be included in the focus group interview.

In differentiating between a focus group and a one-on-one interview Wilkinson and Birmingham (2003) explain that the social nature of a focus group interview in akin to a everyday conversations whereby people interact in an uninhibited manner and therefore results in a reflection of participants genuine thoughts and feelings. This is contrasted with individual interviews which reflect a more inhibited response which are restricted by time. Furthermore, I chose to use focus groups interviews with the teachers as opposed to one-on-one interviews because it allowed for a group interaction which expressed diverse experiences in one setting. In doing so I gained a richer response from many participants who actively engaged in the discussion simultaneously.

**3.4.2 SEMI-STRUCTURED INTERVIEWS**

Interviews are classified into three distinct categories: unstructured interviews, semi-structured interviews and structured interviews (Wilkinson & Birmingham, 2003). The unstructured interview is defined by its flexibility in interviewing since it is not restricted by a set of predetermined questions. A semi-structured interview differs in that it is more
structured with predetermined questions however flexibility still exists. The structured interview is rigid and the flow of data is solely controlled and directed by the interviewee. For the purpose of this study, semi-structured interviews were used to collect data from principals since it allowed for the freedom to probe for further responses and engage with the participants in the appropriate level of articulacy and comprehension (Glibert, 2008) as opposed to structured interviews which limit the flexibility of questioning (Wilkinson & Birgmingham, 2003). Furthermore, semi-structured interviews were favoured because it allowed for an exploratory nature of learning experiences in a PLC. In addition to focus group interviews, one-on-one, semi-structured interviews were conducted with the principals of each school as a means of triangulation to generate information on how teachers learn in a PLC. Yin (2003, p.83) maintains that when “findings, interpretations and conclusions are based on such multiple sources, the case study data will be less prone to the quirks deriving from any single source, such as an inaccurate interviewee or a biased document.” In light of this belief, principals were interviewed to corroborate the data obtained from the teachers.

Creswell (2012) describes one-on-one interviews as the involvement of one participant at a time in a process of a researcher asking questions and recording responses. This was a preferred method of data collection since it correlated with the aim of my study which was to explore how teachers learn in a PLC. The utilisation of other methods such as a questionnaire is advantageous in that it is inexpensive to generate data but, it offers a limited, “surface element of what is happening” (Wilkinson & Birgmingham, 2003, p. 44). Drawing from this, one-on-one interviews were best suited since they provided richer and meaningful data.

3.5 DATA GENERATION INSTRUMENTS

An interview schedule for the focus group as well as for the semi-structured interview was formulated.

3.5.1 THE INTERVIEW SCHEDULE

The focus group interview schedule (Appendix H, p. 91) and the semi-structured interview schedule (Appendix I, p. 92) was systematically formulated with clearly constructed open-ended questions. The aim of this was to allow for an interactive discussion between participants in the focus group. The same was applicable to the one-on-one interviews with
the aim of encouraging and eliciting rich feedback from principals. An additional aspect of the interview schedule was the participant’s biographical details. This included stipulation of their qualifications, their number of years experience and gender. This information assisted in the formulation of a tabular representation of the description of all participants’ gender, experience and qualification.

3.5.2 THE PILOT STUDY

Wilkinson and Birmingham (2003) suggest that piloting questions on a few people can assist in testing your research instrument in order to gain clarity. They add that it helps to eradicate redundant questions and establish the flow of the prospective interviews. I piloted the study with the teachers and Deputy Principal of the school where I work. This experience proved to be informative and challenging. The tedious task of trying to find a suitable time for all participants to come together simultaneously made me aware of the challenges I could encounter in interviewing several teachers simultaneously during my research. After my pilot study I took into cognisance that time could be a restricting factor when conducting my research with a focus group. Therefore, I was able to plan ahead to prevent a delay in my research process. Furthermore, the pilot study allowed me to eliminate redundant questions and to rephrase others in an attempt to gain more clarity from my participants.

3.6 SAMPLING AND PARTICIPANTS

Purposive sampling was utilised in this study. Creswell (2012) purports that a distinguishing characteristic between qualitative and quantitative research is that in quantitative research participants were identified through random sampling as compared to qualitative research which utilises purposive sampling to determine the selection of participants. Cohen et al., (2011) offer a different view by indicating that purposive sampling is commonly used in qualitative research but it is not a defining characteristic of the approach. Creswell (2012, p.206) goes on further to explain that in purposive sampling, “researchers intentionally select individuals and sites to learn or understand the central phenomenon”. In this study I purposively sampled three schools from the Pinetown district based on proximity because of convenience. According to Merriam (2009), time, money, location and availability of participants are justifications behind the reasoning of convenience sampling. Teachers were purposively selected since they were the primary sources of data in this study. The schools in
my study were chosen from Mariannhill because I work in the area, thus it was convenient for me in terms of accessibility. Furthermore, costs were minimised.

The sample size was also purposively selected. The sample size of the focus group consisted of six teachers, specifically three senior teachers from the junior phase and three senior teachers from the intermediate phase of each of the primary schools. The assumption behind this reasoning is that the teachers with more teaching experience contribute to a richer collection of data since they possess a wealth of experience when compared to novice teachers.

3.6.1 DESCRIPTION OF THE CASE STUDY SCHOOLS AND PARTICIPANTS

Three schools were chosen to be a part of this research study. The location of the schools serves as a common link between the three schools. All three schools are located in Mariannhill in the Pinetown district of KwaZulu-Natal. A total of 20 participants participated in the study. To ensure confidentiality, pseudonyms were given to the names of the schools and participants. A tabular representation of the participants from the three schools is represented below. Birdpark Primary is the pseudonym given to the first primary school which is located in a socio-economically disadvantaged community in Mariannhill. The school has been declared a No-fee school, Section 21 and has been classified as a quintile 3 school according to the Department of Education’s Norms and Standards for School funding. The learner population in this school is 1048 and comprises of 33 qualified teachers. A total of six teachers from both the foundation and senior phase participated in the study. Unfortunately the principal of the school withdrew from the study therefore the deputy principal replaced her as a participant.

<table>
<thead>
<tr>
<th>PARTICIPANT</th>
<th>NUMBER OF YEARS TEACHING EXPERIENCE</th>
<th>HIGHEST QUALIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms Eagle</td>
<td>9</td>
<td>Advanced Certificate in Education</td>
</tr>
<tr>
<td>Ms Swallow</td>
<td>33</td>
<td>Master of Education Degree</td>
</tr>
<tr>
<td>Miss Canary</td>
<td>10</td>
<td>Bachelor of Education (Honours)</td>
</tr>
<tr>
<td>Mrs Crane</td>
<td>28</td>
<td>Master of Education Degree</td>
</tr>
<tr>
<td>Miss Parrot</td>
<td>30</td>
<td>Bachelor of Arts, Higher Education Diploma</td>
</tr>
<tr>
<td>Mrs Myna</td>
<td>30</td>
<td>Bachelor of Education</td>
</tr>
<tr>
<td>Mr Hawk (Deputy Principal)</td>
<td>28 years teaching 6 years as Deputy Principal</td>
<td>Bachelor of Education (Honours)</td>
</tr>
</tbody>
</table>
The second primary school in Mariannhill is Birthstone Primary (pseudonym). The learner population of this school is 1003. There are 30 teachers and 3 administrative staff and has a quintile 5 ranking. Six teachers, inclusive of the foundation and senior phase participated in the focus group interview and the principal was interviewed to triangulate the data obtained from these teachers.

### PARTICIPANT

<table>
<thead>
<tr>
<th>PARTICIPANT</th>
<th>NUMBER OF YEARS TEACHING EXPERIENCE</th>
<th>HIGHEST QUALIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs Ruby</td>
<td>24</td>
<td>Bachelor of Arts</td>
</tr>
<tr>
<td>Mrs Pearl</td>
<td>29</td>
<td>Bachelor of Education (Honours)</td>
</tr>
<tr>
<td>Mrs Emerald</td>
<td>12</td>
<td>Bachelor of Education (Honours)</td>
</tr>
<tr>
<td>Mrs Sapphire</td>
<td>20</td>
<td>Bachelor of Education (Honours)</td>
</tr>
<tr>
<td>Mrs Diamond</td>
<td>40</td>
<td>Lower Secondary Teacher Diploma</td>
</tr>
<tr>
<td>Mr Tanzanite</td>
<td>21</td>
<td>Bachelor of Arts</td>
</tr>
<tr>
<td>Mr Topaz (Principal)</td>
<td>29 years teaching 4 years as Principal</td>
<td>Bachelor of Arts Bachelor of Education</td>
</tr>
</tbody>
</table>

Flower Primary (pseudonym), the third primary school in Mariannhill which consists of 1425 learners, 44 teachers and 2 administrative staff. The school has been declared a No-fee school and has been classified as a quintile 3 school according to the Department of Education’s funding ranking system. Due to other commitments one of the teachers was unable to participate in the focus group interview, therefore only five teachers from the foundation and senior phase participated in the focus group interview. The principal was also interviewed to corroborate the data obtained from the teachers.

### PARTICIPANT

<table>
<thead>
<tr>
<th>PARTICIPANT</th>
<th>NUMBER OF YEARS TEACHING EXPERIENCE</th>
<th>HIGHEST QUALIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miss Daisy</td>
<td>10</td>
<td>Bachelor of Education</td>
</tr>
<tr>
<td>Mrs Tulip</td>
<td>30</td>
<td>Higher Education Diploma</td>
</tr>
<tr>
<td>Mrs Lilly</td>
<td>23</td>
<td>Higher Education Diploma</td>
</tr>
<tr>
<td>Mrs Sunflower</td>
<td>26</td>
<td>Higher Education Diploma</td>
</tr>
<tr>
<td>Mr Violet</td>
<td>20</td>
<td>Bachelor of Education</td>
</tr>
<tr>
<td>Mrs Protea (Principal)</td>
<td>19 years teaching 2 years as Principal</td>
<td>Bachelor of Education</td>
</tr>
</tbody>
</table>

### 3.7 DATA ANALYSIS

Rule and John (2011) maintain that data analysis is a significant part of the research process since it allows for the creation of thick descriptions, identification of themes, generation of explanations of thought and action apparent in the case.
All interviews in this research were digitally audio recorded and then transcribed verbatim. Data from the interviews were then analysed using content analysis. Other methods of analysing data include discourse analysis and narrative analysis. Discourse analysis places emphasis on language and meaning is interpreted through language devices such as imagery and metaphors (Rule & John, 2011). Narrative analysis on the other hand focuses on analysis of data through story telling.

Content analysis was the best way to analyse the data since emphasis was placed on content and themes as opposed to narrative analysis which is common in case study methodology since the unit of focus is language and story-markers rather than content (Rule & John, 2011). According to Krippendorf (2013, p. 24) “content analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use.” The process of analysis requires data to be interpreted, coded and categorised into common themes. Rule and John (2011) assert that the process of coding is time consuming and requires constant interpretation and recoding of data.

Data obtained from the interviews with principals and focus group interviews with teachers were transcribed from their verbal responses to text transcriptions. The textual data was coded then grouped into categories according to common themes that resulted from participants’ responses. This coded data was then interpreted and used to provide an analysis of results.

3.8 ETHICAL ISSUES
According to Creswell (2012), the need to address ethical issues is paramount in the process of conducting research. Ethical considerations are derived from three basic principles in research: autonomy, nonmaleficence and beneficence (Rule & John, 2011). The principle of autonomy is eloquently captured by Rule and John (2011) as ensuring that a participant’s self-determination is not compromised by the research. This means that the participant’s privacy, confidentiality and anonymity must be ensured. Firstly, ethical clearance was sought and gained in writing from the School of Education of KwaZulu-Natal This allowed me to gain official permission from the gatekeepers of the three schools which participated in this study (See Appendix A, B, C pp. 81-83). Next, permission was requested from the principal to conduct the research at their school (See Appendix D, p. 84). Then, informed consent was
obtained from the participants, the principal (See Appendix E, p. 86) and the teachers (See Appendix F, p. 88). Participants were made aware, in writing and verbally, that they had the freedom to participate and withdraw from the research process at any stage if they wanted to without it resulting in any punitive measures. Letters of informed consent were signed by participants (See Appendix G, p. 90). Furthermore, confidentiality was guaranteed by protecting the participants identities. Data from the participants were presented using pseudonyms. The safe keeping and incineration of the audio material after a five year period further promoted participants confidentiality.

The second principle of ethical issues, non-maleficence, is described by Rule and John (2011, p.112) as the principle of making certain that no harm is inflicted during all phases of the research process. This was addressed by ensuring that none of the questions or any aspect of my study caused injury or harm to any of the participants or any other individual for the duration of my study.

The final principle is beneficience which is concerned with providing feedback (Rule & John, 2011). This was fulfilled by informing participants of the value of my study and its potential to develop insights and deepen the understanding of teacher learning in PLCs in respect to social transformation. In addition, participants were given a copy of the study to reflect on as a means of ensuring that the interpretations of the provided responses were accurate.

3.9 TRUSTWORTHINESS

Lincoln and Guba (1985, p. 290) assert that trustworthiness allows the researcher to “persuade its readers that the findings of the study are worth paying attention to and taking account of.” Trustworthiness was ensured in this study by adhering to the four principles proposed by Lincoln and Guba (1985). These were: credibility, transferability, dependability and confirmability.

The first principle of trustworthiness is credibility which refers to the extent to which the study has captured the true essence of the case in the case study (Lincoln & Guba, 1985). In articulating the significance of trustworthiness, Shenton (2004) enlists several procedures which could be undertaken by a researcher to strengthen the credibility of the captured data in
the research process. Some of the ways of establishing credibility that I have adhered to are through peer scrutiny, member checks and triangulation (Shenton, 2004). In this study credibility was ensured by firstly engaging in member checks. I provided a hard copy of the transcripts for participants to read to verify the accuracy of the data. Secondly I enlisted the help of a competent, critical peer reader to examine my research study to offer a different perspective and confirm the accuracy of my interpretation of the data. In addition, cohort sessions with other students and lecturers were attended to critique my presented work. Finally credibility was established by means of triangulation. The semi-structured interviews with the principal were conducted with the intention of corroborating the data obtained from the focus groups with teachers. According to Shenton (2004), using different methods of data collection serves as means of triangulating data and consequently strengthens the credibility of the research.

Based on the notion of generalisability, the concept of transferability developed (Lincoln & Guba, 1985). According to Rule and John (2011) transferability occurs when the researcher acknowledges that the case is associated with other similar cases. The debate surrounding transferability of qualitative data has been given much recognition in literature (Shenton, 2004; Merriam, 2009; Rule & John, 2011). As noted earlier, this is a case study of teacher learning in PLCs which was interpreted and understood in three specific schools. The unique results of this study therefore could not be applied to other similar cases, however, as noted by Merriam (2009) and further reiterated by Rule and John (2011), thick descriptions of the setting, participants of the study and findings of the data strengthen the transferability of qualitative research. These components were fully addressed in this study.

According to Lincoln and Guba (1985), the confirmability audit, which entails an audit trail is the main method used to ascertain confirmability. In this study confirmability was ensured by expressing participants’ words verbatim when interpreting the data. In addition, bias and influence over the study was prevented. According to Rule and John (2011, p. 107), “full disclosure of the research process, including limitations, researcher positionality and ethical requirements helps to ensure dependability and confirmability of a case study.” A detailed description of all three aspects were ensured and articulated in this study thereby strengthening the trustworthiness of the study.
The final element of trustworthiness is dependability. According to Rule and John (2011, p. 107), dependability “… focuses on methodological rigour and coherence towards generating findings and case accounts which the research community can accept with confidence.” To address the issue of dependability I relied on an independent audit of my research method by a critical friend. Dependability was further established by ensuring that findings derived from the primary sources of data (teachers) in the form of interviews, were corroborated by data obtained from the principals of the school which was elicited by one-on-one interviews. This methodological rigour and coherence that was maintained in the study strengthened the issue of dependability.

3.10 LIMITATIONS OF THE STUDY
A limitation of this study is that it is a small scale study comprising of a sample of eighteen teachers, six teachers from each of the three schools, who acted as the primary sources of data generation on teacher learning in PLCs. This serves as a weakness of the study since a generalisation of the findings cannot be made of the learning practices of all teachers. In discussing qualitative research studies, Cohen et al (2011) explains that qualitative studies do not generalise findings but rather create meaning and understanding. Taking this into cognisance, it is significant to note that it was not my intention to generalise the findings from participants. Instead the intent was to elicit the experiences of the teachers in three specifically selected schools who formed the foundation of the case study.

3.11 SUMMARY
This chapter clearly articulated the research process that was undertaken in this study. The research design and methodology that was employed in this study was addressed with an exploration of key elements such as the paradigmatic positioning, case study methodology, data collection methods and sampling. In summation this was a qualitative study located within the interpretive paradigm which utilised a case study methodology to explore teacher learning in PLCs. Data collection methods comprised of focus group interviews with teachers who were the primary sources of data since the study sought to explore the rich descriptions of lived experiences of teachers learning in PLCs. In an attempt to strengthen the methodological rigour of the research, semi-structured interviews with the principal of each school was conducted. This also served as a means of triangulating the data obtained from the
teachers. In addition, themes were categorised using content analysis to interpret and analyse data. Furthermore, considerations of ethical issues were taken into account by addressing the standards of autonomy, non-maleficence and beneficence in the study. Finally, the manner in which the four key principles of trustworthiness: credibility, dependability, transferability and confirmability were addressed in the study concluded the chapter. The next chapter focuses on data presentation, findings and discussion of findings.
CHAPTER FOUR

DATA PRESENTATION, FINDINGS AND DISCUSSION

4.1 INTRODUCTION

The previous chapter presented the research design and methodology used to generate data for this study. This chapter focuses on the presentation, findings and discussion of the data in terms of my research questions:

- How do teachers learn within a Professional Learning Community?
- What are teachers’ experiences of learning within a Professional Learning Community?

In this chapter the findings and discussions of the findings from data generated from the focus group interviews with teachers and semi-structured interviews with principals from each of the three schools: Birthstone Primary, Birdpark Primary and Flower Primary are presented. The data is presented under themes and sub-themes which emerged from an inductive analysis of the transcribed data.

4.2 HOW TEACHERS LEARN WITHIN A PROFESSIONAL LEARNING COMMUNITY

Various modes of teacher learning were expressed by teacher participants. With regards to how teachers learn two distinct categories of learning emerged from the data. Firstly, the theme of learning in an individual capacity which is aligned to Reid’s quadrants of teacher learning (Fraser et al., 2007) and secondly, learning in a collaborative capacity which is congruent to Wenger’s (1998) community of practice theory of social learning which formed the basis of my theoretical framework.

4.2.1 LEARNING INDIVIDUALLY

The importance of teachers engaging in individual, personal learning is one of the characterising factors of a learning organisation (Moloi, 2010) and learning communities such as PLCs (Hord & Sommers, 2008). Furthermore it embodies the notion of life-long
learning encapsulated in the *Norms and Standards for Educators 2000* (Republic of South Africa, 1996) specifically role four which articulates the need for teachers to be researchers, scholars and life-long learners. As so eloquently phrased by Wenger (1998, p.7) for individuals learning is “an issue of engaging in and contributing to the practices of their communities.”

In terms of learning individually there were varied responses from the teacher participants, however, there was a certain degree of commonality between the three schools in each category of learning. The following sub-themes of individual learning emerged from the data: utilising the internet and reading of educational policy documents.

### 4.2.1.1 Utilisation of the internet

The dominant view of the focus group with the teacher participants indicated that they are technologically informed and as a result participants utilised the internet to engage in researching information to improve their teaching skills and practice and to keep abreast of curriculum developments. Mrs Sunflower from Flower Primary said: “*In your class you look at what is the problem and you go out and research different ways that you want to approach learners*”. When asked to elaborate on how she did this research she indicated: “*I Google a lot.*”

The utterances expressed above mirror the results of a mixed method study conducted in Russia by Lapham and Lindemann-Komarova (2013). It was revealed that Google was one of the popular sites visited by teachers to access information. It was also found that 77 percent of the teachers in the study used the internet to gain materials for their classroom whilst 48 percent utilised the internet to gather educational policy information.

Likewise this technological method of researching on the internet was conveyed by Mrs Diamond, a teacher from Birthstone Primary who indicated that she also used the internet to engage in research. When asked how teachers go about learning on an individual level, she said: “*We go on the internet and we research.*”

These responses also correlated with an ethnographic study conducted by Pattahuddin (2008) who aimed to explore the factors which inhibit mathematics teachers from using the internet
to improve their teaching practices. The utterances expressed above correspond with the teacher from the study who was considered as a high use internet teacher. In exploring the factors that support and inhibit effective professional development for using the internet as a tool for teaching and learning mathematics, it was revealed that this participant viewed the internet as a rich source in developing mathematical teaching and learning practices.

All three principals are aware of the merits of the internet to improve teaching practices and have therefore confirmed the significance of the internet as a source of teacher learning. The Deputy Principal of Birdpark Primary, Mr Albatross confirmed these responses by signifying the importance and utilisation of the internet as a source of teacher learning in his school. He said:

\[\text{We are improving our IT components, we find that we are teaching in the 21st century and our teachers need access to the internet to access the latest information in terms of planning, in terms of lesson plans, study aids for children and so forth.}\]

From the data generated it has emerged that a common way of individual learning that teachers engage in is by making use of the internet as a source of learning ways to improve practice and familiarise themselves with other techniques and skills to approach learners. The various responses ascertained that teachers are awarded with internet access in their schools to keep them abreast of new curriculum developments and to access information that would assist them to develop their practice and skills.

Pattahuddin (2008) explains that the internet or computers are merely a tool that could either enhance or confine learning and it is noted that although computers are promoted and provided by government, the attitudes of teachers can restrict learning if it is not utilised optimally. This was the case of a teacher participant from the study which was defined as a low use internet teacher. Similarly two of the three schools in this study have been fortunate enough to be provided with free computers and laptops by government. This reinforces the significance of technology as a source of learning and teaching in South African schools therefore strengthening the inference that the teachers in this study utilise computers as a resource to aid them in developing their teaching and learning practices. The data generated on individual, self-initiated teacher learning is further corroborated by Reid’s quadrants on teacher learning specifically the individual, planned and incidental learning domain of teacher learning quadrants (Fraser et al., 2007). In addition these self-initiated learning experiences
coincide with one of Wenger’s (1998) peripheral components of learning, namely meaning, which occurs when members express their ability to practice their life as meaningful in either an individual or collaborative capacity.

4.2.1.2 Reading of Educational Policy Documents

From the data it emerged that teachers also read educational policy documents as a form of individual teacher learning. When asked how teacher learning takes place on an individual level, participants from the focus group with teachers from Birthstone Primary and Birdpark Primary concurred that they read and engaged with policy documents such as the current educational policy document, CAPS as a form of individual learning. Ms Swallow from Birdpark Primary stated:

_Basically I go through the curriculum, like recently reading the CAPS document, engaging with the document and trying to work with the document closely, I do a lot of reading on it._

These responses correlate with a South African study conducted by Moloi (2010) which signifies the importance of teachers’ engagement in personal learning to ensure that teaching practices promote student achievement. Another teacher, Mrs Sapphire from Birthstone Primary expressed a similar response by indicating that she also engaged with policy documents to learn about curriculum developments on an individual basis. She concisely said: “I read my guide and policy document, that’s the first thing.”

Similarly Mrs Crane from Birdpark Primary stipulated that she empowers herself by engaging with current information. She said: “I use bulletins and circulars that come out.”

These utterances are consistent with the findings of a qualitative study conducted by Slavit and McDuffie (2013) which found that teachers served as brokers in their own learning process whilst developing awareness for broader educational policies. This CAPS policy is what is referred to as external support which assists the teacher in developing individually. In addition these responses are also congruent with West-Burnham’s (2009) argument of self directed adult learning which occurs when teachers engage in voluntary learning.

This data clearly confirms that reading of policy documents is a form of individual learning that teachers engage in to empower themselves on curriculum and school developments. However, one of the most notable observations from the data was that school principals were
silent on the issue of reading of policy documents as a form of teacher learning. The inference that can be made from this silence is that principals do not see the value of self-initiated reading of policy documents as a form of individual teacher learning. Furthermore, it can be assumed that they are unaware of how teachers go about learning on an individual capacity, therefore hindering their ability to mention it. Theoretically, the data generated is corroborated by Reid’s quadrants of teacher learning, distinctively the domain of planned, informal learning which is characterised by teachers’ initiative to engage in deliberate professional learning (Fraser et al., 2007).

4.2.2 LEARNING COLLABORATIVELY

The collaborative nature of learning epitomises the core of a PLC (Fullan, 2009; DuFour, 2004; Schmoker, 2005; Hord & Sommers, 2008). In addition, Wenger (1998, p.7) maintains that for communities learning is “an issue of refining their practice and ensuring new generation of members.” When asked about how teachers go about learning when engaging with other teachers Mrs Pearl from Birthstone Primary succinctly expressed the informal nature of teacher learning when she said:

*I think its incidental learning. We don’t go out of our way to say today I am going to learn something. I think we just learn incidentally. You know something another teacher may be doing like using a chart for a certain aspect of work then you would like to use it in your class because you know it will work.*

This response correlates with the sentiments expressed by Schmoker (2005, p.141) who adds that “teachers learn best from other teachers, in settings where they literally teach each other the art of teaching.” This view was corroborated by many of the other teacher participants in the focus group who expressed their agreement non-verbally by nodding their heads. This validated the informal, social nature of teacher learning that teachers engage in. The inference is that these teachers interact with their peers on an ongoing basis in an informal capacity to improve practice.

All three principals confirm the importance of this peer interaction that teachers engage in on an informal capacity. Mrs Protea says:
You cannot sit in your own corner because once you are in your corner you will just do your own thing and you may end up taking a different direction. So once people are always together and are always sharing ideas they will be developed.

In exploring the benefits and challenges of collaboration to teachers and the education system Egodawatte, McDougall and Stoilesce (2011) concur that teachers learn best from each other. Likewise Mr Topaz, the Principal from Birthstone Primary expresses the importance of teachers meeting informally since it allows for the sharing of ideas and learning between members of the school organisation. He commented:

*It is in an informal gathering that they begin to share and talk more freely ... So just by talking informally they are sharing ideas and they are learning from each other or even chatting on the veranda with their HODs or Principal and DP, they bouncing ideas and learning is taking place all the time.*

He further expressed his sentiments regarding the benefits of collaborative learning when he stated:

*They not the only ones that are going through those challenges in the classroom. The teachers in the next classroom or the other classes are also having similar experiences so together you can find more uh appropriate, maybe solutions to the challenges you are facing. There’s a lot of power in team work and there’s a lot of strength in team work.*

The benefits of collaborative learning have been clearly articulated in literature from the beneficial influence that it has on student achievement to the impact it has on teachers (Stoll *et al.*, 2006; Hord & Sommers, 2008; Vescio *et al.*, 2008).

The utterances of both the teachers and principals confirm the significance of learning collaboratively as compared to learning in isolation. Theoretically this collaborative learning is a characterising component of Wenger’s social learning theory (1998) whereby social participation defines a community of practice such as a PLC. Participants further expressed different modes of learning that they engage in through peer interaction. These modes of learning include: dialogue, workshops, mentoring and networking. These were just some of
the ways that teachers engage in learning in a PLC and are therefore discussed in the subsequent sub-themes.

I. Dialogic practices

When teachers from the focus group and the principals were questioned about the mode of collaborative learning that teachers engage in within a PLC it was noted that there was a general consensus that they engaged in dialogue with their peers. From the data it emerged that these dialogic practices differ on the basis of its formal and informal capacity. Miss Parrot from Birdpark Primary exemplified dialogue experienced through an informal capacity. She said: “I know the grade ones we normally just have a simple chat, we discuss our problems”

This is similar to the findings of a recent study conducted by Meirink et al., (2009) which argues that teachers learn through listening and conversing with each on their experiences and problems. Similarly Mrs Myna, a teacher from the same school added: “With my colleagues we use conversation, we speak to each other and we meet during school, after school and lunch breaks.”

Mrs Ruby from Birthstone Primary expressed related views. She stated: “CAPS is new to us so we are always talking to each other, finding out which is an easier method of teaching.”

The Principal, Mrs Protea from Flower Primary confirmed the significance of dialogue as a mode of informal, teacher learning which teachers engage in on a regular basis. She confirms that during this informal discussion, teachers communicate their challenges with each other. She explains:

Sometimes if it is break time or if two or three teachers are free and they are sitting in the staffroom, informally you can hear them. They are just talking about what is touching them the most in terms of learning and teaching.

In explaining the seven components which are essential in sustaining a PLC, prominent PLC authors, Hord and Sommers (2008) highlight that coaching is associated with modelling and on-going conversations and it is the task of leaders to promote these practices in order to sustain PLCs and increase learner performance. Furthermore, the role of the principal in creating a supportive environment and instilling a professional learning culture is to then
create a learning culture in the school which according to Hord and Sommers (2008) can be done by organising conversations between all stakeholders which revolve around learning. It is further elaborated that the development of conversational skills are of paramount importance for enhancing and sustaining a PLC, a task which rests upon the principal of the school. Drawing from this argument, it is clear that the principal does not encourage or model such dialogic practices by either coaching her teachers or developing their conversational skills. It can therefore be deduced that this lack of support hinders the sustenance of PLCs.

The common link between the responses rendered above is the informal capacity of dialogic practices that teachers engage in. The dynamics of the discussion that teachers engage in are not uniform. Some teachers have indicated that they use this as a platform to discuss challenges whilst others use it as a means to enquire about other ways of teaching because of new educational advancements such as CAPS. This lack of uniformity in topic of discussion signifies the adhoc basis in which informal dialogic learning occurs but it is clear that it is mainly about teaching and learning practices experienced by teachers. These utterances are congruent with Hord and Sommers (2008) who confirm that when teachers collaborate together they engage in dialogic practices about teaching and learning. The informal capacity of dialogue as a mode of teacher learning is also linked with Reid’s (2007) informal, incidental quadrant of learning. In addition, it coincides with Wenger’s (1998) community of practice. When teachers engage in this dialogue they become active members who construct meaning and sustain mutual engagement and in doing so form a community of their own.

On the other end is the formal nature of teacher learning which is expressed by Miss Parrot who elaborates about learning through dialogue by commenting on her interaction with peers. In this instance her response differs in that learning through dialogue now occurs in a formal capacity during structured meetings. She commented:

*Through dialogue, we have grade meetings once a week where we discuss our common issues and motivations and how we have improved, where we are lacking so it’s an ongoing thing. Dialogue is ongoing, it’s an everyday thing.*

The engagement of dialogic practices during formal meetings is confirmed by the Principal of Flower Primary, Mrs Protea. When asked how time has been created for teacher learning to
take place in PLCs, she said: *In our year plan we do have meetings. “If there are meetings that are scheduled in the plan, you have to go there and have the meeting.”*

When she was asked to elaborate on the mode of learning that teachers use to engage with each other in these meetings, she confirmed that it was through dialogue. It is apparent that the formal nature of dialogue which occurs in PLCs is more structured and constitutes of a reflective engagement of teaching and learning practices. This is asserted by Nelson (2008) who acknowledges the importance of an enquiry stance towards dialogic practices in a PLC. It is also significant to note that these dialogic practices are not lead and supported by the principal. The role of the principal in leading and modelling systematic conversations needs to extend far beyond merely just acknowledging that teachers engage with one another, as is the case in the response rendered above. Principals would then need to focus on how teachers interact and the nature of the dialogic interaction. In articulating the skills needed to sustain PLCs, Hord and Sommers (2008, p. 97) express the importance for principals to develop staff members’ meaningful conversation skills since “dialogue is used to create infinite conversations to promote learning for the adults.” The notion of speaking with meaning in a PLC, proposed by Clark, Moore and Carlson (2008) would benefit teachers’ dialogic engagement in a PLC by developing their communication skills in a PLC. According to Clark et al., (2008) this form of meaningful and conceptually based description of communicating with peers is a distinguishing factor between a successful and ineffective PLC. In addition principals should assess the nature of dialogic interaction that takes place in a PLC. Hord and Sommers (2008) add that reflective practice should be embedded in our daily work. This translates into reflective dialogic practices between teachers.

II. Workshops

The findings from the data generation process with teachers revealed workshops as another form of collaborative teacher learning. Contrasting views on the significance of curriculum workshops were expressed by the teachers. Whist the dominant view articulated an approval of the workshops in terms of its assistance; a few teachers concurred in expressing their disapproval of these workshops. Mr Violet from Flower Primary clearly articulated his approval by saying: “*Workshops work a lot and we gain a lot. They are very informative.*” Similarly Mrs Tulip from Flower Primary expressed the same sentiment when asked how she engaged in collaborative learning in a PLC. She indicated: “*Workshops help us a lot.*”
These views are consistent with the findings of a qualitative study conducted by Free and Olivier (2010) which found that teachers believed that the workshops held by the Department of Education in the Eastern Cape by trained specialists were beneficial to them in terms of being related, providing support and equipping the teachers with successful training. The merits of a beneficial workshop is further highlighted in a mixed method study conducted by Boston (2013) which investigated secondary mathematics teachers’ learning and instructional change after participating in a professional development workshop. It was revealed that teachers’ learning was improved when they participated in solving mathematical tasks. Furthermore it was found that these workshops assisted teachers to improve their knowledge and their instructional practices which consequently had a positive impact on student learning.

These responses are confirmed by the principal of Birthstone Primary, Mr Topaz who indicated that they are dependent on the Department of Education to disseminate information in terms of curriculum development to teachers. He said:

“We rely a lot on the Department of Basic Education. Teachers are called to workshops and meetings and they attend, the subject advisors communicate that to teachers and members of management also attend. When we return to school, meetings and workshops are also held at school level where you can discuss this further.”

The above responses rendered by the participants signify the importance of workshops as a form of teacher learning. However, these views were contrasted by the response of Miss Parrot, a teacher from Birdpark Primary who indicated the ineffectiveness of these Department workshops when she stated:

“We have very limited workshops from the Department. They are expecting us to deliver the goods but they haven’t work-shopped teachers effectively yet, so it is a difficult task.”

She goes on to further express her frustration by indicating that department workshops are limited and not beneficial. She said:
It’s very limited. Very few workshops are held. That too it’s just a matter of telling us what to do. We have to do things in a certain time. It’s not much of a workshop.

Younie and Leask (2013) mention that teacher’s desire learning opportunities which assist in the improvement of useful teaching strategies therefore these workshops which do not accommodate for teachers needs are considered as ineffective and a futile attempt to cascade information.

A similar view is expressed by Mrs Sapphire from Birthstone Primary when she conveyed her dissatisfaction with Departmental workshops. She said: “The Departmental workshops are not so helpful; they mostly just read from the guides and things like that. It’s very boring.”

These views coincide with the sentiments expressed by McConnell, Parker, Eberhardt, Koehler and Lundeberg (2013) who argue that these once off workshops do not cater for teachers’ individual needs. These teachers’ utterances are also congruent with a study conducted by Younie and Leask (2013) which aimed at exploring the platforms of learning in schools and universities. The findings correlated with the views expressed by the teachers above in that minimal support and training is awarded to teachers in schools. Furthermore an additional commonality that emerged from these expressions and literature was teachers’ desire and need for this kind of development.

The principal, Mrs Protea from Flower Primary confirmed that teachers attend workshops to equip them with new curriculum information. When asked how knowledge and information of the CAPS policy is cascaded to teachers this is what she said: “They go to workshops organised by the Department.”

The inference that can be deduced from these contrasting views is that teachers desire such workshops as a mode of learning from external agents such as departmental officials who cascade pertinent information to them. Furthermore, from these responses it was also noted that there are challenges experienced by teachers in terms of the frequency and the credibility of these workshops. Clearly some of the teachers were disappointed with these and this hindered the learning opportunities for them.
Mentoring

Mentoring has been articulated as a mode of learning which teachers engage in but the dynamics of the mentoring process and teacher’s opinions of who is involved in the mentoring process differs amongst the three schools. When asked about participants’ engagement in mentoring as a form of teacher learning, Mr Tanzanite from Birthstone Primary had a very constrained view of mentoring in that he saw it as a one way process whereby trainee teachers are mentored by experienced teachers in a specific time of a school year. He explains the mentoring process as follows: “What happens is students come to us yearly and we serve as their mentors.”

The response rendered above demonstrates a hierarchical view of mentoring with the mentor portrayed as the provider of learning and correlates with Sato’s (2006) view that mentoring in the educational setting is envisioned as a guiding process between an experienced teacher and a novice teacher during the initial years of his teaching career. This view is not in accordance with the shared membership principle of a community of practice and PLC. In addition it defies the notion of collaboration because learning is perceived as being one sided which is in contrast to the belief of Bush and Middlewood (2005) who argue that mentoring is beneficial to the school as an organisation since it promotes collegiality.

When other teachers in the same focus group were questioned to clarify if they felt that mentoring only takes place between novice and experienced teachers Mrs Sapphire, from Birthstone Primary offered a broader view of the mentoring process. She saw it as a joint learning process between peers. She said:

No I think we mentor each other. We work as a team. So let’s say if Mrs P uses an item in her classroom like she just said, she will share it with the other educators in her grade to assist them in their classroom as well.

This view was shared by another teacher Mrs Myna, from Birdpark Primary who said:

I am an English specialist and if there are any other teachers that are teaching English for the first time, I’ll do the mentoring where I’ll be the mentor.

This collaborative mentoring process between teachers is further confirmed by Le Cornu (2005) who asserts that traditional hierarchical views of mentoring is a practice of the past which has been replaced with more collaborative learning between peers during their
practical teaching experiences and therefore suggests that the concept and process of peer mentoring is more beneficial in terms of transmission of a reciprocal process of learning. Furthermore, the community of practice that is established as a result of mutual engagement is derived from a common purpose identified by these teachers. In addition, the engagement of novice English teachers that are being mentored are reflective of what Wenger (1998) describes as legitimate peripheral participation since they offer lower levels of social participation in comparison to the English specialist or mentor. Sato (2006) broadens the terms given to these reciprocal relationships between peers which extend far beyond the mere mentor and mentee conceptualisation commonly associated with mentoring. These include critical friends, community of learners, support network and study groups which is highlighted in current literature.

Mr Albatross, the Deputy Principal of Birdpark Primary confirmed the significance of mentoring by stating the following:

Mentoring is a non-negotiable in school. Part and parcel of individual’s job description in school is mentoring...the induction, orientation and mentoring programmes are official.

This view coincides with the view expressed by Coleman (1997) when he indicates that mentoring can bring about transformation in a school. Both formal and informal mentoring encourages a climate of equal opportunities and allows for professional development thus signifying the link between mentoring and staff development.

Contrasting views are expressed by two teachers from Flower Primary who clearly convey different responses when asked about mentoring as a form of teacher learning in their school. Mrs Lilly’s response gave an indication that there was a lack of mentoring at her school. She stated:

I haven’t seen much mentoring in my school ... a lot of people say there’s mentoring going on but I don’t see it, whether it’s coming from Department or wherever, there is no proper mentoring going on.

Mr Violet’s response suggested that mentoring does take place in this school but was an obligatory process whereby instructions were imposed without any consultation.
When it comes to mentoring it’s a bit of a problem because it’s like things are imposed, you are told this is how it is done. You have to do it this way and you do not have an input.

The inconsistency in responses between participants from the teachers in the school above with regards to the mentoring process indicates that credence is not given to mentoring as a form of teacher learning in the school. Furthermore, it is viewed as a process that is imposed onto teachers and as a result it defies the collaborative nature of a PLC.

This is confirmed by the principal of Flower Primary, Mrs Protea who acknowledges that mentoring was not given much recognition in her school. She justified this by indicating that she is a newly appointed principal and realised that it is a process that needs to be addressed. She said:

*I’m new in this school. I’m just looking at other things now. As we are discussing mentoring, it’s coming into my mind that it is one thing that we need to look into so that we will see how we are going to do it.*

From these responses two distinctive deductions can be made. Firstly mentoring is seen and practiced in a very bureaucratic, hierarchical manner in two of the schools. Secondly, it is not addressed effectively in one of the schools, thus hindering the process of collaborative learning in a PLC. A study conducted on the effects of induction and mentoring on school effectiveness by Makhanya (2004) found that only when induction and mentoring programmes are implemented effectively, can it lead to sound relationships in schools which then result in school effectiveness. The significance of mentoring is further elaborated by Abdul (2004, p.63) when he signifies that mentoring has the potential to restore a “culture of quality teaching practice.” The process of mentoring as a form of teacher learning is aligned to the facets of identity and meaning of Wenger’s (1998) community of practice theory. The social participation that mentor and mentees engage in within a collaborative learning process affords both members the opportunity to engage in shared narratives and develop mutually.

**IV. Networking**

From the data obtained from teachers in the focus group interview it emerged that teachers network with teachers from other schools on a personal, informal basis when the opportunity
arises as well as on a formal capacity. When questioned about her engagement in individual learning Mrs Lilly inadvertently expressed her interaction with teachers from other schools. Her response gives a clear indication of how networking with teachers from other schools benefits her teaching practice when she said:

*I think because my husband’s school is a mainstream combined with a remedial education unit that’s very effective, I find myself consulting with their remedial education teachers whenever I get the chance ... I’m always consulting with them and question how to approach this problem because a lot of our children are performing very poorly under the level they supposed to so it’s always interesting to know what they are doing in these remedial education units.*

The significance of networking resonates with a study conducted by James and McCormick (2009) which revealed that teachers engaged in networking with teachers within their schools and outside of their schools on a personal and professional basis. Mrs Tulip from Flower Primary expressed her experience of networking with teachers from other schools which was done in a formal capacity. She explained:

*We work with teachers from other schools like X primary, we meet them, have meetings where you have discussions and you’ll find that if you doing the same thing you’ll make comparisons with each other.*

Similarly Ms Swallow from Birdpark Primary shared her views:

*Another thing is networking with other schools. A few weeks ago we went to Y Primary. They had a Maths teacher who was very good in Maths so they invited Maths teachers.*

It is clearly evident from the responses above that teacher’s network with teachers outside their organisation. These utterances are in contrast to the results obtained by Lapham and Lindemann-Komarova (2013). It was found that formal existing networking associations were lacking in the context of Russian schools. The principal from Flower Primary, Mrs Protea confirmed this networking that teachers engage in by saying:

*We also network with Z Senior and sometimes we visit the A School... We also involve teachers coming from outside schools...and sometimes the HODs have to*
have communication with other HODs from other schools. I also got the one principal who I have to visit now.

The benefits of networking with other schools are expressed by Stoll et al., (2007, p.63) who maintains that networking enables teachers to:

“... share and tease out principles of good practice, engage in in-depth dialogue across schools, create knowledge to respond to particular challenges that any school might find hard to resolve, observe colleagues elsewhere, experience fresh perspectives, reduce isolation and see their own school through a different lens.”

Furthermore, networking with members outside the organisation allows for what Wenger (1998) refers to as boundary encounters. This is when a teacher who is a part of a community of practice within their organisation engages with a member from another community of practice outside of their organisation. This interaction between members allows for a negotiation of meaning through social participation.

From these responses it can be construed that networking occurs in a formal and informal capacity in an attempt to learn with other teachers who share similar expertise in their field of development. An additional noteworthy observation that surfaced from the focus group interview with teachers was the social networking that teachers engage in, within one of the schools. When asked if there were any other ways that learning in a PLC takes place informally, Mr Tanzanite said: Yes sometimes through technology. This was reinforced by Mrs Ruby who shared the direct source of this social networking. She said: “Yes through whatsapp ... chatting to colleagues” The reason behind this social networking is articulated by Mr Tanzanite when he responded that the reason for this form of interaction was because: “It’s free.”

It is evident that teachers use social networking sites such as Whatsapp to interact and engage in teacher learning. This form of technological communication in the form of social networking is reinforced by a study by Colibaba, Vlad and Petrescu (2012) who signify the power of social networks for foreign language teachers as a teacher learning tool. Facebook, LinkedIn and Twitter were some of the other social network sites that participants in the study utilised. The engagement of learning in these networks is what Jones and Dexter (2014) refer
to as a Personal Learning Network and differs from a PLC and a community of practice in that it has no link to the teachers school or learning organisation. Results illustrate that 80% of participants in the study use these sites to communicate with their colleagues and share resources. It was further established that the majority of the participants in the study, 66% used these sites to set up a network of professional contacts. Finally, it was revealed that teachers in this study used these social networks for professional purposes.

The affordability and accessibility factor as mentioned by the participants and its contribution to teacher learning add to the merits of social networking as a mode of teacher learning in a PLC. Furthermore, this network of teachers that are created in this social network domain form a community of practice defined by mutual engagement and social participation as construed by Wenger (1998).

4.3 TEACHERS EXPERIENCES OF LEARNING WITHIN A PROFESSIONAL LEARNING COMMUNITY

The questions that were posed to the teachers in the focus group interview were aimed at generating data on their experiences of learning in a PLC. The data revealed that although teachers found it beneficial to collaborate with their peers in a PLC, there were a few challenges that prevented them from doing so optimally. Therefore I have categorised teachers’ experiences into challenges and successes.

4.3.1 CHALLENGES ASSOCIATED WITH TEACHER LEARNING IN A PROFESSIONAL LEARNING COMMUNITY

With regards to teachers engaging in learning within a PLC, the following challenges were identified: work intensification and insufficient time, poor support from school management, differential support within phases and conflict amongst teachers.

4.3.1.1 Work intensification and insufficient time

In terms of articulating teachers’ learning experiences within a PLC, there has been an agreement amongst all teacher participants in the focus group interview that time was a hindering factor which prevented them from collaborating with one another. Mrs Pearl from
Birthstone Primary clearly indicated that the reason for a lack of time to work together with her peers was due to the massive workload because of the new CAPS curriculum. She stated:

Now because of CAPS we just have no time to interact with our peers. In fact sometimes during our breaks we cannot have a break because we are committed to completing so much of work in a short space of time.

Mrs Ruby provides a similar response by saying: “Work is prescribed so every minute of that lesson is used up. There’s no time to do anything else.”

When asked what prevented her from collaborating in a PLC, Miss Parrot from Birdpark stated:

The workloads are heavy and time. I think the scope of work is so vast, the amount of work and you bogged down with so much of marking that has to be done before the next day so there’s so much that we are trying to bite off more than we can chew.

Similarly Mrs Diamond stated: “The amount of marking that we have and the administrative work really holds us back.”

Ms Swallow agreed with these sentiments when she said: “The administrative work takes up so much of your time.”

The intensification of administrative work that teachers are bombarded with clearly restricts teacher learning in a PLC. This is confirmed by a qualitative study conducted by Schechter (2012) which found that both teachers and principals perceived work overload as an inhibiting factor in the development of a PLC. The massive overload that teachers experience is further concurred by Hord and Sommers (2008). It is also maintained that school leaders can assign time and resources for collaborative learning amongst teachers. In addition time was also considered as a hindering factor which merely slowed down the learning process in a PLC. Hord and Sommers (2008) agree by suggesting that leaders need to be creative in eliminating barriers such as a lack of time which prevents the successful implementation of PLCs and in doing so one of the ways is for them to be creative in creating time and space for teachers’ collaboration.

All three principals could not confirm that time or work overload was a barrier to effective teacher learning in a PLC. On the contrary the principals believe that teachers are awarded
with sufficient time to engage in collaborative discussions. According to the deputy principal of Birdpark Primary time is set aside for staff and grade meetings. He indicated that time is set aside and teachers are afforded with the opportunity to engage with others collaboratively. He stated:

So how you manage your time is crucial amongst your various levels. Even when it comes to your teachers on the ground, when will they be afforded the time to interact with their managers, to interact with others when working in their committees, when they will be allowed to go for workshops, network with other schools. So it’s planning. You build this into your year plan, your time allocations, formal planning.

The disjuncture in views articulated by the teachers and the deputy principal illustrates the lack of consistency in terms of time allocation for teacher learning in a PLC. Teachers are of the view that there is insufficient time to collaborate with their peers whereas the deputy principal feels that time has been managed effectively to accommodate for different modes of teacher learning in school.

4.3.1.2 Lack of support from management

When asked if the management of the school comes together with the staff to share information with regards to curriculum development, teachers from Birdpark primary and Flower Primary concurred that this seldom happened in their school. The following responses were given by the teachers in the focus group interview. Miss Parrot said: “There’s no sharing of information and I think that’s where we are lacking.”

This lack of support from management is further articulated by Miss Parrot who clearly expresses the lack of support from management. In doing so, her desire for such support surfaces when she stated:

Here we are actually in two different ships you know and it is only when results are out that we are reprimanded for that but I think during the term we need management to come in.
Mrs Lilly from Flower Primary had expressed a comparable view to the response above when questioned about support from management in terms of sharing information, she said:

*I haven’t had any incident where I’ve had senior management come up to me and say these are the things I’ve learnt from a workshop. We’ve never had that.*

These responses correspond with the views expressed by Harris and Jones (2010) who explain that supportive conditions offered by leadership is a necessity for sustaining PLCs. This is reiterated by Hord (2004) who adds that the development of a PLC rests upon the principal who plays a pivotal role in providing support to teachers. Ms Swallow conveyed a similar view which highlighted the lack of support from management. In expressing her experiences, she indicated that management also hindered the opportunity for her to cascade information she acquired from workshops, onto others. She explained:

*I feel as much as we are supportive of teacher development; they are not approaching it in the correct manner. The onus is left upon the teacher to develop themselves on their own ... when I come back from development workshops to share this information with others in a kind of a workshop or cascading information, we are not given the opportunity ... I think we are not getting the opportunity by the management to do so.*

Ms Eagle expressed her sentiments with regard to the positive impact that a supportive management would have on overcoming challenges. She said:

*If we and the management work together we would have planned and sat down together and planned something else to combat the situation of second language learners that we are teaching ... so now we find that we are on our own on different islands.*

This coincides with a desktop study conducted by Steyn (2013) which aimed to explore how PLCs in schools can be implemented successfully to improve the continuing professional development of South African teachers. Analysis of literature in his study revealed that significant factors such as creating a supporting environment for PLC’s need to be ensured for the development of PLCs in schools. Therefore, it is necessary for PLCs to be managed effectively with the management playing a key role in instilling a supportive environment for others to learn which is clearly not the case in some schools.
In contrast to these views are the sentiments expressed by Mr Albatross, the deputy principal of Birdpark Primary who paints a picture of a supportive management system in school. He creates the impression that management is strong enough to eliminate any barriers that teachers may have when he stated:

*We go further in ensuring we break down the barriers, that we are accessible and approachable, that everybody can contribute and learn from each other. Bottoms up, top-down. Both systems work at school.*

A qualitative study conducted by Schechter (2012) which aimed at revealing superintendents, principals and teachers perceptions of inhibiting and fostering factors of a PLC found that a principal’s commitment to maintaining a collaborative learning climate in school plays a pivotal role in the development of a successful PLC. In addition, Hord and Soomers (2008, p.29) affirm that “the central task of a leader is to involve others in creating a shared vision of the organisation. The principals’ actions, not just his or her words, make believers out of teachers.” Zepeda (1999, p.28) adds another dimension to the role of the principal in creating a supportive environment. She maintains that modelling effective lines of communication by having an open-door policy, providing emotional support because teachers need to feel professionally secure and “teachers need emotional support to sustain the momentum to expand knowledge and refine skills”.

### 4.3.1.3 Differential support and learning opportunities within phases

A significant observation that was noted during the focus group interview with teachers from Birdpark Primary and Flower primary was a disjointed approach to teacher learning in the foundation and senior phase. Firstly, teachers in the foundation phase are awarded more time to collaborate with peers since they have different dismissal times which allow them to interact more often than their senior phase colleagues. This is clearly articulated by two teacher participants from Flower Primary. When asked how often teachers meet to engage in professional learning activities, Mr Violet from the senior phase indicated:

*Like once a month because with us we are in school from half past seven until half past two or quarter to three on some days. We do not have time to come together and discuss things unless there’s a problem that has popped up where
Contrasting views of learning opportunities are expressed by the junior phase teachers. Mrs Daisy said: *Well we are fortunate because our children go home at half past one so we have a grade meeting once a week.*

When commenting on the learning opportunities that take place in the junior phase Mrs Lilly states: “*See there is a big difference in the way things are run in the JP and SP*”

Mr Violet articulated a similar view and in doing so he signified the incoherence of support that was given to teachers from the same school. It was evident that the Junior phase teachers were given ample support in terms of developing their teachers but this was not the case for the senior phase teachers of the same school. Mr Violet said: “*Why don’t we get the same support because we are in the same school that is the biggest problem.*”

Nelson (2008) argues that creating opportunities for the occurrence of learning in a PLC is insufficient. Based on the findings from her qualitative study that investigated the nature of PLC work which impacted teaching practices she argued that teacher support is a more significant element since teachers need support to create an optimal environment for PLC work.

It is significant to note that all three principals were silent on this issue and therefore could not confirm that a disparity in learning opportunities existed between the junior and senior phase teachers. Based on the responses from the teachers it is apparent that the junior phase teachers have different notional times as compared to the senior phase teachers. Therefore they are awarded with more time to collaborate with their peers. In addition, it is evident from the responses rendered above that the junior phase teachers are given more support from management in terms of their learning.

### 4.3.1.4 Conflict amongst peers

When given a hypothetical scenario of teachers being given less hours than others to teach to comment on (a scenario which was derived from Mrs Protea, the principal of Flower Primary’s response of hindering factors to teacher learning in a PLC), Mrs Lilly shared her disapproval of this inconsistency of time allocations when she stated:
With us in the Senior Phase we get very annoyed by that because we all have a certain amount of work to cover and when you find out that some people have more free time than you... it’s just not fair. I think the best way in any school is never to have teachers teaching different hours, it’s an unfair situation and only aggravates teachers.

This response is agreed upon by Mr Violet who indicated:

It’s one of the bad experiences and anyways when we are a group of teachers at school we are here for the benefit of the children and we need to pull our weight the same way and share the load equally.

These views are congruent with that of Yukl (2009) who identifies conflict amongst stakeholders in an organisation as a barrier which leads to disagreement about objectives and priorities and therefore acts as a barrier to collective learning since it hinders the success of shared values and vision. According to Hargreaves (2007) trust and relationships are defining characteristics of sustainable PLCs. Stoll et al., (2006, p.239) posits that “teachers are unlikely to participate in classroom observation and feedback, mentoring partnerships, discussion about pedagogical issues, curriculum innovation, unless they feel safe” therefore leadership plays a significant role in fostering a safe and positive working relationship based on trust amongst peers.

Mrs Diamond of Birthstone Primary painted a contrasting picture of conflict as to that of the one highlighted above when she explicitly highlighted that there was sometimes conflict amongst peers in a PLC. When asked to describe the relationship between peers when they learn in a PLC, she stated: “It is quite cordial, there are times when we agree to disagree.” When questioned if there has ever been conflict amongst peers when learning in a PLC, she mentioned this: “Yes, but in a professional manner.”

Mrs Protea, the principal of Flower Primary expressed conflict and a lack of trust as a possible challenge to effective learning of teachers in a PLC. She was aware that teachers in her school lacked uniformity in the number of hours they taught. Furthermore, she also acknowledged that this could create conflict amongst teachers but this matter was not addressed accordingly. She said: “You know what, the challenge will be when they find out that a particular teacher is having half hour less than the other one”
Harris and Jones (2010, p.179) succinctly add that the role of the leader is “one of establishing a high-trust environment where it is safe for teachers to change practice and to innovate.” A possible manner in which this challenge can be managed is by “building a culture of shared values for learning and flexibility, encourage a win-win solution to conflict and create optimism” (Yukl, 2009, p.52). Hord and Sommers (2008, p.108) on the other hand suggest that “leadership and members hold each other accountable for the goals, actions and evidence they developed in a collective manner...because sometimes the discrepancy can cause conflict”. They go on further to suggest that “confronting issues forthrightly saves time and builds trust.”

4.3.2 SUCCESSFUL EXPERIENCES OF LEARNING WITHIN A PLC

In terms of teachers experiences of learning within a PLC there were an unequivocal balance between the negative and positive impact that it had on teachers. The fruitful learning experiences that teachers encountered as a result of learning from others in a PLC contribute to its success. Some of these successes include: learning from each other and learning from external agents such as subject advisors and NGOs.

4.3.2.1 Learning from external agents

An additional positive impact experienced by teachers in a PLC is the learning opportunities they were afforded with by external agents such as subject advisors and NGOs. From the data obtained from the focus group interview with teachers and interview with the principals it emerged that these sources of learning equipped teachers with new methods of teaching and gave them direction which they appreciated and embraced.

I. Learning from Subject advisors

The beneficial impact that subject advisors have as external resources of teacher learning are clearly acknowledged by teachers in the focus group interview. With regards to the assistance given by the subject advisors, Mrs Tulip from Flower Primary commented as follows: “Even though she has told us what we should have in our file and what we should have done, she is still coming with the capacity of helping us.”
Mrs Lilly from Flower Primary expressed similar sentiments which illustrated how beneficial she perceived the assistance given by subject advisors to be when she said:

\[ I \text{ think it keeps us on track so we know what’s going on otherwise we don’t know what’s going on ... These subject advisors are so important for the development of each and every subject. } \]

In addition was Mr Violet’s view which clearly articulated what he gains from the subject advisors assistance: “Sometimes they have new methods of doing things so we learn from them”. These responses are confirmed by the principal, Mrs Protea of Flower Primary who exemplified her satisfaction with these subject advisors. She said:

\[ \text{We call upon the subject advisors when we feel there is something we are not sure of. Already we have been able to call in like four of them. One for Afrikaans, one for IsiZulu, one for Natural Science and one was specifically for the Foundation phase.} \]

This is expressed by Schechter (2012) who maintains that principals are in the driver’s seat to manage meetings by outside experts. He further reveals that these meetings between external experts and teachers can be transformed from the mere giving of information into a combined learning process between teachers and external experts. This would benefit teachers and enhance collaborative teacher learning in a PLC.

From these responses it is clearly evident that teachers gain assistance from subject advisors in terms of learning new methods and ensuring that teachers are on the right path. It is also clear that when teachers are in need of clarity these subject advisors are sometimes called upon for assistance since they have been successful in giving teachers direction. This strengthens the claim that they serve as a beneficial external agent which provides a rich source of teacher learning in a PLC.

II. Learning from Non-Governmental Organisations (NGO’s)

When teachers in the focus group interview were asked to describe some of the external agents they interact with, who assist with teacher learning in a PLC Mrs Canary from Birdpark Primary articulated that she learns different teaching and learning strategies from NGOs which her school is affiliated with.
NGO’s like CASME, if the NGO is working with the school in teaching maths, they also have Olympiads and workshop the teachers and they help with the methods of teaching and learning, different strategies of teaching Maths.

Although NGOs such as the one expressed by the teacher are significant in developing teaching practices, the positive potential that it has is not a source of learning that has been recognised by the three schools fully. The deputy principal of Birdpark Primary could not confirm this specific involvement with the NGO articulated by Mrs Canary but he does express the significance of NGO’s and the schools involvement with them.

NGO’s play an important part as well and they have come and conducted talks with learners and health talks. They also have come and conducted programmes at school but how does it benefit teaching and learning well there’s other dynamics you have to consider when teaching at for example, a disadvantaged community. Their health is important so if you get the right health professionals and NGOs to lend a hand in those aspects then it assists the child to be healthy and to learn in the classes.

These sentiments are echoed by Khupe, Balkwill, Osman and Cameron (2013) who add that barriers such as poverty and poor health which happens out of school need to be confronted by schools by connecting with NGOs, health and social services and research institutions in an attempt to promote whole school improvement and ensure value for money by promoting the different sector connectedness such as between the health and education sector.

4.4 SUMMARY
In this chapter I have presented data, analysed and discussed findings in relation to teacher learning in PLCs. From the data it emerged that teachers use various modes of learning within PLCs with dialogic practices being the most predominant mode of learning which occurs in a formal and informal capacity. Furthermore, it was established that the experiences of teacher learning within a PLC was mostly positive. Finally, learning from social agents such as subject advisors was favoured by teachers and the principals of the schools but one of the challenges that was revealed from the data was the lack of support from management for
teacher learning. The next chapter discusses the summary of the study, conclusions and implications of the study.
CHAPTER FIVE

SUMMARY OF THE STUDY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The preceding chapter focused on the presentation of data, findings and discussion. This chapter commences with a summary of the study. Thereafter, the conclusions of the study are presented, in relation to my key research questions namely:

- How do teachers learn within a Professional Learning Community?
- What are teachers’ experiences of learning within a Professional Learning Community?

Finally, the chapter is concluded with a discussion of the recommendations.

5.2 SUMMARY OF THE STUDY

The study was divided into five chapters.

I commenced chapter one by presenting the background and orientation to the study. In doing so I created a foundation for the significance of perpetual teacher learning based on national policy requirements. The need for teachers to be researchers, scholars and lifelong learners is mandatory since it is clearly encapsulated as the fourth role of an educator in the Norms and Standards for Educators (2000). I then proceeded to justify the need for this research based on two reasons. Firstly, from a professional stance I argued that from my observation as a teacher, I detected that teacher learning was somewhat restricted in my school, in the sense that it occurred when mandatory to do so and was mostly practiced in an individual capacity. I elucidated reasons for the need for institution based learning programmes to enhance teacher learning, such as PLCs which promote collaboration amongst teachers. Secondly, I strengthened the need for my study from a literature based perspective. I noted that although there were studies conducted on teacher learning there was a gap in South African literature on teacher learning in PLCs. Based on these justifications, the need for my study on teacher learning in PLCs was articulated as being a contributor to the current South African body of literature.
In chapter two I presented the theoretical framework and review of related literature. I specifically chose Wenger’s (1998) community of practice theory and Reid’s quadrants of teacher learning (Fraser et al., 2007) because the elements of Wenger’s (1998) social learning and Reid’s domains of individual, collaborative, incidental and planned learning which had a direct link to my key questions. In my review of related literature key debates emerged. Firstly, was the need for collaborative learning practices by teachers to enhance learner achievement in schools. Next, was that teachers needed to engage in reflective teacher learning practices in PLCs. It was further evident from literature that research on PLCs has proliferated over the years. This strengthened the need for such collaborative learning practices in schools.

In chapter three I discussed the research design and methodology that I employed in my study. I argued for this study being in the interpretive paradigm based on its ontological and epistemological assumptions. Ontologically, the premise of the existence of multiple realities was linked with understanding the interpretation of the realities of the teachers lived experiences of teacher learning in a PLC. Epistemologically, the assumption of socially constructed knowledge coincided with the collaborative nature of teacher learning in PLCs as depicted by the teachers in the study. In addition, the justification behind the choice of utilising a qualitative approach to my study was elaborated on. Furthermore, this chapter provided a discussion of the data generation methods that were used, which were namely focus group interviews with teachers who were the primary sources of data and semi-structured interviews with the principals of each school in order to triangulate the data obtained from teachers. This was followed by a brief outline of the data generation instruments: interview schedules and a discussion of the pilot study I embarked on. Subsequent to this was a description of: the sampling that was used, participants from the case study and the school in which I conducted my study. I then elaborated on content analysis which was the data analysis method that I chose to utilise in my study. The concluding issues of this chapter that I gave further details about were the three principles of ethical considerations: autonomy, nonmaleficence and beneficence which I took into cognisance when embarking on my research. I then expounded on the four principles of trustworthiness that was ensured in my study: credibility, transferability, dependability and conformability. Finally, a discussion of the limitations of my study concluded chapter three.
In chapter four I presented data and key findings. One of the key findings in relation to my key questions was that the teacher learning practices in PLCs is congruent with Reid’s (2007) quadrants of teacher learning. It emerged from the data that teachers engaged in formal and informal learning practices, as well as planned and incidental learning. Learning was also acknowledged to occur in a collaborative capacity. It was further established that teachers engaged in various modes of learning in a PLC. These included dialogue, mentoring, networking and through workshops. The mutual engagement of learning through these various modes were linked to the social participation of learning in a social system which coincided with the components of meaning, practice, community and identity, proposed by Wenger (1998). Lastly, the experiences of teachers learning in a PLC led me to categorise my understanding of the data into successes and challenges. From teachers’ successful learning experiences in a PLC, it was evident that interaction with other teachers and external social agents such as subject advisors and NGOs enhanced their development. Unfortunately challenges also surfaced from the data. It was acknowledged that time, work intensification, lack of support from school management and conflict were hindering factors to optimal teacher learning in a PLC.

5.3 CONCLUSIONS

In relation to my first aim of my study which was to investigate how teachers learn in a PLC my initial, constricted view of teachers’ learning in an individual capacity was transformed after the emergence of various modes of teacher learning from the data. Firstly, on an individual basis, teachers utilise the internet and engage with educational policy documents to enhance their teaching practices and to keep abreast of educational developments. Secondly, teachers engage in learning on a collaborative basis through various modes of learning, such as through dialogue, mentoring, workshops and networking. The most prevalent mode was learning through dialogic practices. The learning engagements which teachers encountered were categorised into formal and informal dialogue interactions. A distinguishing element of the informal dialogic practices was the *ad hoc* basis in which teachers interact. Conversations had no structure and engagement with peers occurred when they deemed it necessary to do so. Divergent to this was a more reflective learning practice which epitomised formal dialogic practices, such as during grade and staff meetings but this was not a frequent occurrence. The need for principals to model and promote dialogic interaction amongst teachers around
teaching and learning as a characterising factor of a PLC is argued by Hord and Sommers (2008). It emerged that this was not practiced by the school principals.

The next mode of teacher learning in a PLC that was beneficial and warrants discussion is networking in a formal and informal capacity. Creating platforms for teachers to network with teachers from other schools allows for teacher to experience a different perspective of interaction and also exchange ideas and resources. The level of networking that the schools in the study experienced is limited because there is no formal networking programme that allows all teachers to engage in learning with teachers outside their organisation. Another form of networking that surfaced from the findings of data and has proliferated in international literature is social networking. Based on its convenience factor in the sense that it is not time bound and allows for myriad of mutual interactions which need not be restricted to members within the organisation, this social networking has the potential to eradicate the barrier of time which was articulated as a hindrance to teacher learning in a PLC.

Teachers in the study also engaged in learning through mentoring. The dynamics of the mentoring process is not consistent in all three schools. A notable observation was the lack of significance that was given to mentoring in one of the schools thereby strengthening the need for a coherent mentoring policy in schools.

The final mode of learning which teachers engaged in was through workshops. This was confined to the workshops offered by the Department of Education, some of which were articulated as being unhelpful. The desire for assistance from workshops was clearly expressed by teachers. In addition it became apparent that schools were dependant on these workshops to cascade pertinent information to teachers.

All three schools in the study expressed different ways of learning and are awarded with different learning opportunities. A commonality that linked all three schools is the desire of teachers to learn which is why they take the onus upon themselves to engage in individual learning practices. The will to learn is evident, therefore credence should be given to enhance and support such learning. It was also apparent that support from management in respect to teachers learning is an issue that needs to be addressed accordingly in schools. Given the benefits of collaborative learning, platforms for teachers to learn together will surely benefit the organisation holistically by developing the shared value of perpetual teacher learning amongst teachers.
With regards to the second aim of my study which was to explore teachers’ experiences of professional learning in a PLC, I concluded that there were more challenges than successes that were endured by the teachers in the study. One of the successes that is significant to note was teachers experiences of interacting and learning with external social agents such as subject advisors and NGOs. This collaborative interaction serves as a resource for teacher learning since these agents have the potential to enhance teaching practices and aid in the process of teacher learning. Challenges of time and lack of support from management were negative experiences which restricted optimal teacher learning in a PLC. Teachers are of the view that they are bombarded with administrative work which leaves them with little time to interact with colleagues in a PLC. Unfortunately, management lacks creativity in creating platforms for teachers to engage in learning in a PLC. Time allocation for grade, phase and staff meetings were found to be restricted to year plans which are strategically adhered to in all three schools.

5.4 RECOMMENDATIONS

Majority of the teachers in this study are computer literate and therefore utilise the internet to engage in learning to develop teaching practices and engage in research. In addition, two of the three schools have been awarded technological resources (computers and the internet) by the Department of Education. Also taking the prevalence of social networking into cognisance, I therefore recommend that all these elements be intertwined for leaders in schools such as the ones in this study and others to develop virtual learning communities so that teachers can engage in effective learning with the platform to communicate with teachers within and outside their organisation. School management teams (SMT) can illustrate their creativity by creating this online podium through, teacher blogs or common social networking sites such as Whatsapp and Facebook, since they are responsible for creating a learning environment in school. This role is enunciated in the National Education Policy Act which clearly stipulates this. In doing so, not only are they adhering to their job description but they would also be demonstrating support for teacher learning and addressing the barrier of time which restricts teacher learning in a PLC.

With regards to how teachers learn in a PLC, I also recommend that the dialogic practices that teachers engage in be given more prominence in PLCs. As it is the most common mode
of teacher learning in PLCs and is a defining characterising of a PLC, I suggest that leaders promote reflective, critical dialogue amongst teachers by setting the precedence for conversations which revolve around learning on a frequent basis. In addition the conversation skills of teachers should be enhanced by providing relevant, practical workshops for teachers so that they can communicate effectively with peers in a PLC.

In terms of ensuring positive teacher learning experiences in a PLC, I propose that the SMT gets more involved in supporting teachers’ learning by providing ample support to them and driving the notion of life-long learning amongst all members. This can be achieved by adhering to the leadership principles of planning, organising, leading and controlling when systematically addressing the development of teacher learning in PLCs. Furthermore, teachers should be provided with the necessary resources to engage in reflective, meaningful learning with credence given to establishing collaborative learning opportunities for teachers with external agents such as subject advisors and NGOs and other teachers since they serve as a rich resource for teacher learning.

I further recommend that teachers envisage themselves as life-long learners and therefore act as leaders of their own learning by creating self-initiated learning experiences. This can be achieved by choosing their own platforms of learning such as networking with members outside their organisation, attending workshops besides the mandatory ones offered by department or furthering their tertiary studies to improve their development. In this way teachers will be able to produce an individual wealth of knowledge and skills on their own which will subsequently act as a resource of learning and thereby fostering shared repertoire amongst all members in a PLC.

5.5 SUMMARY
This final chapter set out to provide an outline of the study. Thereafter conclusions were drawn from the findings linked to the key research questions. Finally recommendations were made.
REFERENCES


APPENDIX A: LETTER GRANTING PERMISSION TO CONDUCT RESEARCH (1)

08.11.13

Roxanne Gounder
Student No. 205507084
School of Education

Research Title: Teacher learning in professional learning communities: A Study of Three Primary Schools in the Pinetown District of KZN.

It is with great pleasure that I grant you permission to conduct your research at Primary School. I hope that your study proves to be beneficial to the school.

Wishing you everything of the best with your study.

Yours Faithfully

[Signature]

Principal
APPENDIX B: LETTER GRANTING PERMISSION TO CONDUCT RESEARCH (2)

Primary School
P.O.Box
Nugina
3604

Tel/Fax:

6 November 2013

Roxanne Gounder
Student Number: 205507084
School of Education

Research Title: Teacher learning in professional learning communities: A study of three primary schools in the Pinetown district of KwaZulu-Natal.

It is with great pleasure that I grant you permission to conduct your research at Primary School. I hope that your research will make a positive contribution to this school. Kindly ensure that you provide the school with a copy of the study upon its completion.

Wishing you success with your study.

Yours faithfully

(Principal)
20 November 2013

Roxanne Gounder
Student Number: 205507084
School of Education

RE: Approval in Respect of Approval to Conduct Research

This letter serves to inform you that I have granted Roxanne Gounder (Student Number: 205507084), permission to her conduct research: Research Title: Teacher learning in professional learning communities. A study of three primary schools in the Pinetown district of KwaZulu-Natal at Primary School.

Wishing you success in your study and future endeavours.

Yours faithfully,

(Principal)
6 November 2013

The Principal
X Road
Nagina
3604

Dear Sir/Madam

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT YOUR SCHOOL

I, Miss R.Gounder (student no:205507084), currently an educator at Mariannpark Primary School request permission to conduct research at your school. As part of my professional development, I am presently enrolled for a Master in Education Degree at the University of KwaZulu-Natal. This programme is a two year degree which involves course work and dissertation. The dissertation would entail undertaking research in the area of leadership and management.

I therefore kindly seek permission from you to conduct research in your school. My topic is: **Teacher learning in professional learning communities: A study of three primary schools in Pinetown.** My research will focus on how teachers engage in professional learning in a professional learning community. In order to understand this I will be interpreting and understanding the experiences of teachers learning in professional learning communities. My intention is to also explore the resources required by teachers to ensure the effective professional learning of teachers in professional learning communities. Teachers are the primary source of data in this study and will therefore assist me in achieving the aims of my study by providing valuable insight into their professional learning experiences in a professional learning community. This study will also be beneficial to your school since it will allow teachers to improve their professional learning practices by reflecting on their professional learning experience in a professional learning community.
My study entails interviewing six teachers at your school simultaneously as part of a focus group interview. I also humbly request for permission to interview you as the leader of the school to be one of the participants in my research study. Interviews will be audio-recorded. The interview questions will be semi-structured to allow some flexibility and the entire interview process will occur once for the duration of approximately 30 minutes.

**PLEASE TAKE NOTE THAT:**

There will be no financial benefits that participants may accrue as a result of their participation in this research project.

Participants’ identities will not be revealed under any circumstances, during and after the reporting process.

All responses will be treated with strict confidentiality.

Fictitious names will be used to represent participants’ names.

Participation is voluntary which means participants are free to withdraw at any time they so wish without incurring any negative or undesirable consequences on their part.

The interviews shall be voice-recorded to assist me in concentrating on the actual interview.

Participants will be contacted in advance about the interviews dates and times.

If you have any concern about the study, please contact my supervisor or the research office whose contact details are provided below. I hope that you will consider my request favourably and grant me written consent to conduct my study at your school.

Thank you in advance for your time and consideration.

Yours faithfully

_________________________
Supervisor’s details:
Miss R.Gounder
Tel. No :039 973 2935
Fax :031 706 2353
Cell no :084 784 0888

Ms P.Ximba
HSSREC Research Office
Tel No: 031-2603587
Email: ximbap@ukzn.ac.za

86
APPENDIX E: LETTER REQUESTING PERMISSION FROM PRINCIPAL

REQUEST FOR PARTICIPATION IN STUDY (Principal)

5 Widham Drive
Umkomaas
4170
6 November 2013

The Principal
x Road
Nagina
3604

Dear Sir/Madam

RE: REQUEST FOR PARTICIPATION IN A RESEARCH PROJECT

I, Miss R. Gounder (student no: 205507084), currently an educator at Mariannpark Primary School am presently enrolled for a Master in Education Degree at the University of KwaZulu-Natal. As part of the requirements of my study I am conducting research on teacher learning in professional learning communities. I humbly request your permission to be a participant in this study. The title of my study is: **Teacher learning in professional learning communities: A study of three primary schools in Pinetown.** This study entails interviewing you once for the duration of approximately 30 minutes.

My research will focus on how teachers engage in professional learning in a professional learning community. In order to understand this I will be interpreting and understanding the experiences of teachers learning in professional learning communities. My intention is to also explore the resources required by teachers to ensure the effective professional learning of teachers in professional learning communities.

**PLEASE TAKE NOTE THAT:**

There will be no financial benefits that participants may accrue as a result of their participation in this research project.

Participants’ identities will not be revealed under any circumstances, during and after the reporting process.

All responses will be treated with strict confidentiality.
Fictitious names will be used to represent participants’ names.
Participation is voluntary which means participants are free to withdraw at any time they so wish without incurring any negative or undesirable consequences on their part.
The interviews shall be voice-recorded to assist me in concentrating on the actual interview.
You will be contacted in advance about the interviews dates and times.

If you have any concern about the study, please contact my supervisor or the research officer whose contact details are provided below. I hope that you will consider my request favourably and grant me permission to harness your participation for various aspects of the study.

Thank you in advance for your time and consideration.

Yours faithfully

_________________________
Miss R.Gounder
Tel. No :039 973 2935
Fax :031 706 2353
Cell no :084 784 0888

**Supervisor's details:**
Dr Inba Naicker
Faculty of Education
University of KwaZulu-Natal
School of Education
Edgewood Campus
Tel. No. 031-260 3461

**Research Office details**
Ms P.Ximba
HSSREC Research Office
Tel No: 031-2603587
Email: ximbap@ukzn.ac.za
APPENDIX F: LETTER REQUESTING PERMISSION FROM TEACHER

REQUEST FOR PARTICIPATION IN STUDY

5 Widham Drive
Umkomaas
4170

29 October 2013

The Educator
Birdpark Primary School
Mariannhill
3604

Dear Sir/Madam

RE: REQUEST FOR PARTICIPATION IN RESEARCH PROJECT

I, Miss R. Gounder (student no: 205507084), currently an educator at Mariannpark Primary School am presently enrolled for a Master in Education Degree at the University of KwaZulu-Natal. As part of the requirements of my study I am conducting research on teacher learning in professional learning communities. I humbly request your permission to be a participant in this study. The title of my study is: Teacher learning in professional learning communities: A study of three primary schools in Pinetown.

My research will focus on how teachers engage in professional learning in a professional learning community. In order to understand this I will be interpreting and understanding the experiences of teachers learning in professional learning communities. My intention is to also explore the resources required by teachers to ensure the effective professional learning of teachers in professional learning communities.

My study entails interviewing you and five other teachers simultaneously as part of a focus group interview. This interview process will occur once for a duration of approximately 30 minutes. Please be informed that I have gained the necessary permission in advance from your school principal to conduct research in the school.

PLEASE TAKE NOTE THAT:
There will be no financial benefits that participants may accrue as a result of their participation in this research project.
Participants’ identities will not be revealed under any circumstances, during and after the reporting process.

All responses will be treated with strict confidentiality.

Fictitious names will be used to represent participants’ names.

Participation is voluntary which means participants are free to withdraw at any time they so wish without incurring any negative or undesirable consequences on their part.

The interviews shall be voice-recorded to assist me in concentrating on the actual interview.

Participants will be contacted in advance about the interviews dates and times.

If you have any concern about the study, please contact Dr Naicker, my supervisor or Ms Ximba from the research office whose contact details are provided below. I hope that you will consider my request favourably and grant me permission to harness your participation for various aspects of the study.

Thank you in advance for your time and consideration.

Yours faithfully

Supervisor’s details:
Miss R Gounder
Tel. No: 039 973 2935
Fax: 031 706 2353
Cell no: 084 784 0888

Dr Inba Naicker
Faculty of Education
University of KwaZulu-Natal
School of Education
Edgewood Campus
Tel. No: 031-260 3461

Research Office details
Ms P Ximba
HSSREC Research Office
Tel No: 031-2603587
Email: ximbap@ukzn.ac.za
LETTER OF INFORMED CONSENT (TEACHERS)

SUBJECT: M.Ed Research
INSTITUTION: University of KwaZulu-Natal (UKZN)
RESEARCH TOPIC: Teacher learning in professional learning communities

I ………………………………………………………………………(Full name & surname of participant)
hereby confirm that I understand the contents of this document and the nature of the research. I consent to participating in the research by engaging in a semi-structured focus group interview. I also agree to the interview being audio-recorded.

I understand that I am free to withdraw from the project at any time, should I so desire and this will not result in any negative consequences.

……………………………………………………                                  ……………………………
SIGNATURE OF TEACHER PARTICIPANT                                                    DATE
....................................................................                                             ...............................................
WITNESS                                                                                 DATE

Thanking you in advance

Yours faithfully

Miss R.Gounder
Tel. No :039 973 2935
Fax    :031 706 2353
Cell no :084 784 0888

Supervisor’s details:
Dr Inba Naicker
Faculty of Education
University of KwaZulu-Natal
School of Education
Edgewood Campus
Tel. No. 031-260 3461

Research Office details
Ms P.Ximba
HSSREC Research Office
Tel No: 031-2603587
Email: ximbap@ukzn.ac.za
APPENDIX H

INTERVIEW SCHEDULE: FOCUS GROUP WITH TEACHERS

Section 1: Biographic details

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<thead>
<tr>
<th>Age:</th>
<th>Gender:</th>
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<tr>
<td>Educational qualifications:</td>
<td>Work Experience (Number of years in education, positions held):</td>
</tr>
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</table>

Section 2: How teachers learn within a PLC.

2.1. What methods of learning are employed to learn professionally in a PLC?
   (Probes: reflection, dialogue, mentoring, networking, critical friend)

2.2. In your school, when it comes to curriculum developments, does the principal, deputy or H.O.D come together with the staff to share information?
   (Probes: Yes- could you tell me a little more about how you learn in this group
   (No – Do you think it will work as a group? Why do you think it will work best?)

2.3. Does participation in a PLC enhance your professional development as a teacher?

Section 3: Teachers experiences of learning in a PLC

3.1 How would you describe the relationship between you and other teachers when you learn?

3.2 How often do teachers meet formally to engage in professional learning activities?
   (Probes: Do you think this is enough time?)

3.3 What restricts you from collaborating with your peers in a PLC?

3.4 In what ways does informal learning take place in your school?

Section 4: General

4.1. Do you think that school leadership is supportive of teacher learning?
   (Probes: Yes, how is the school succeeding in supporting your learning?
   (No, what do you recommend to be put in place to aid you development?)

4.2. Is there anything you would like to add about teacher learning in professional learning communities?
APPENDIX I

SEMI-STRUCTURED INTERVIEW SCHEDULE: PRINCIPAL

Section 1 Biographic details

<table>
<thead>
<tr>
<th>Age:</th>
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<td>Gender:</td>
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<td>Educational qualifications:</td>
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<td>Work Experience: (Number of years experience as principal)</td>
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</table>

Section 2: How teachers learn within a PLC

2.1. What structures or platforms have you created in your school that promote learning? (Probes: How exactly do these promote learning? Please elaborate)

2.2. How is knowledge and information disseminated to teachers in the school?
2.3. Do you think participation in a PLC enhances teachers professional development? Elaborate

Section 3: Learning experiences within a PLC?

3.1. What type of learning climate and school culture do you think is appropriate for teachers to learn from each other in a team?

3.2. How do you ensure that the instructional schedule is protected from a variety of interruptions? (Probes: workshops, external disruptions)

3.3. How have you created time for teacher learning to take place in PLCs in school?
3.4. How do you think supervision of teachers and learners work can enhance teacher learning in schools?

4. Section 4: General

4.1. Is there anything you would like to add about teacher learning in professional learning communities?
4.2. What do you do to develop staff? (Professional development, induction, mentoring, classroom visits?)
   What do you do to ensure quality teaching and learning in your school?
APPENDIX K: LANGUAGE CLEARANCE CERTIFICATE

Dr Saths Govender

14 NOVEMBER 2014

LANGUAGE CLEARANCE CERTIFICATE

TO WHOM IT MAY CONCERN

This serves to inform that I have read the final version of the dissertation titled:

TEACHER LEARNING IN PROFESSIONAL LEARNING COMMUNITIES: A STUDY OF THREE PRIMARY SCHOOLS IN THE PINETOWN DISTRICT OF KWAZULU-NATAL, by R. Gounder, student no. 205507084.

To the best of my knowledge, all the proposed amendments have been effected and the work is free of spelling and grammatical errors. I am of the view that the quality of language used meets generally accepted academic standards.

Yours faithfully

[Signature]

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