

Professional Learning Communities' role in high school
teachers' professional learning at a private school in the
Western Cape



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DECLARATION OF ORIGINALITY

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Date: March 2017

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ABSTRACT

Education is seen by most governments as an area that must be highly regulated and prescribed to serve national interests. Consequently, top-down professional development programmes have become the norm. This highly prescriptive environment threatens to diminish teacher professionalism, and at the same time, struggles to deliver effective career-long teacher professional learning or improved learner achievement because uniformity of knowledge is assumed when the aim is the transmission or transfer of knowledge and internalization. Such a situation does not serve the multifarious contexts and needs that exist in our schools today.

Career-long professional learning is commonly advocated for in-service teachers and this case study intended to show that Professional Learning Communities (PLCs), as seen through the lens of activity theory, could serve those learning needs well. Teachers' classroom practice and professionalism have regularly been mentioned in publications since 1990 and the literature suggests that professional learning through participation plays a crucial role in both of these. The objective of this research study was thus to explore how the participants learn and to discover the gap between current learning practices and the potential for professional learning in a Professional Learning Community.

Positioned within qualitative research, this single case study design viewed Professional Development in Education through the lens of Y. Engeström's (1987) activity theory, which propounds a cultural historical approach to learning in which teachers see themselves as one, constantly transforming point of an integrated system of learning. A constructivist paradigm thus guided data collection and analysis.

Seven teachers who had exhibited an active interest in independent professional learning and development were selected through purposive sampling. Data were collected through semi-structured interviews, a focus group discussion and four questionnaires. Data were analysed by coding themes, which formed the basis of this case study's findings and recommendations. Prior to theme development, the definitions of key terms were clarified to reflect the constructivist paradigm of this case study

The following key findings were revealed by the data.

- There was paradigmatic dissonance between the three educational activity systems, namely the national government DBE, the provincial WCED and the school.

- The learning community within which the participants learnt professionally qualified as a Professional Learning Community, even though they did not call themselves so.
- The Professional Learning Community had a distinct culture which allowed the participants to communicate effectively. However, it also had a limiting effect on professional learning because layered development had resulted in several shared horizons.
- The Professional Learning Community played a positive role in collegial support because the participants saw themselves as a community. However, if the Professional Learning Community were to mature, it would need long-term support.
- The participants learnt formally and informally, although the role of reflection and collaboration in their learning could be further developed.
- The participants took collective responsibility for their learners' learning.

The implication for teachers' professional learning lies in establishing and fostering a culture of engaging in Professional Learning Communities. The revitalised professional rigour that goes with professional learning and development leads to the development of teacher agency which in turn facilitates professional decision-making, effective classroom practice and enhanced learner achievement. Adaptability is one of the key characteristics of a modern teacher; the modern classroom is such a complex environment in which teachers must operate effectively that they have to be able to construct knowledge flexibly.

Keywords: professional learning; professional learning communities; activity theory

OPSOMMING

Onderwys word deur die meeste regerings beskou as 'n gebied wat op die hoogste vlak gereguleer en voorgeskryf moet word om nasionale belange te dien. Bo-na-onder- professionele ontwikkelingsprogramme het gevolglik die norm geword. Hierdie hoogs voorskriftelike omgewing hou 'n bedreiging in om onderwysers se professionalisme te verlaag, en terselfdertyd slaag dit nie daarin om doeltreffende professionele loopbaanlange leer vir onderwysers of verbeterde leerderprestasies te lewer nie. Hierdie situasie maak nie voorsiening vir die veelvuldige kontekste en behoeftes in ons skole van vandag nie.

Loopbaanlange professionele leer word algemeen vir indiens-onderwysers voorgestaan, en hierdie gevallestudie was daarop gemik om te toon dat professionele leergemeenskappe, soos deur die lens van aktiwiteitsteorie gesien, goed in hierdie leerbehoefte kan voorsien. In publikasies sedert 1990 is gereeld verwys na onderwysers se klaskamerpraktyk en professionalisme en die literatuur doen aan die hand dat professionele leer deur deelname 'n uiters belangrike rol in albei speel. Die doel van hierdie navorsingstudie was dus om ondersoek in te stel na die manier waarop die deelnemers leer en om die gaping tussen huidige leerpraktyke en die potensiaal vir professionele leer in 'n professionele leergemeenskap uit te lig.

Hierdie studie, geposisioneer in kwalitatiewe navorsing en met 'n eengevallestudie-ontwerp, het 'n ondersoek na professionele ontwikkeling in die onderwys deur die lens van Engeström se aktiwiteitsteorie behels, wat 'n kultureel-historiese benadering tot leer voorstaan waarin onderwysers hulself as een, deurlopend transformerende punt van 'n geïntegreerde leerstelsel beskou. 'n Konstruktivistiese paradigma het dus die data-insameling en -ontleding gerig.

Sewe onderwysers wat 'n aktiewe belangstelling in onafhanklike professionele leer en ontwikkeling getoon het, is deur doelbewuste steekproefneming gekies. Data is deur semigestruktureerde onderhoude, 'n fokusgroepgesprek en vier vraelyste ingesamel. Die data is deur kodering ontleed. Kodes is gebruik om temas te bepaal wat die grondslag van hierdie studie se bevindinge en aanbevelings gevorm het.

Die volgende vernaamste bevindinge is deur die data aan die lig gebring:

- Daar is paradigmatische onversoenbaarheid tussen drie onderwysaktiwiteitstelsels, naamlik die nasionale Departement van Basiese Onderwys, die provinsiale Wes-Kaapse Onderwysdepartement en die skool.
- Die leergemeenskap waarin die deelnemers leer, kan as 'n professionele leergemeenskap beskou word.
- Die professionele leergemeenskap het 'n bepaalde kultuur wat die deelnemers in staat stel om doeltreffend te kommunikeer, maar dit het egter ook 'n beperkende uitwerking op professionele leer weens gedeelde horisonne.
- Die professionele leergemeenskap speel 'n positiewe rol in kollegiale ondersteuning omdat die deelnemers hulself as 'n gemeenskap beskou. Die professionele leeromgewing verg egter langtermynondersteuning om verder te groei.
- Die deelnemers leer formeel en informeel, maar die rol van besinning en samewerking in hul leer moet egter ontwikkel word.
- Die deelnemers aanvaar gesamentlike verantwoordelikheid vir hul leerders se leer.

Die implikasie vir onderwysers se professionele leer lê in die vestiging en kweking van 'n kultuur van deelname in professionele leergemeenskappe. Die hernude professionele nougesetheid wat met professionele leer en ontwikkeling gepaard gaan, lei tot die ontwikkeling van onderwysers se werksaamheid, wat weer professionele besluitneming, doeltreffende klaskamerpraktyk en bevorderde leerderprestasie in die hand werk. Aanpasbaarheid is een van die sleuteleienskappe van 'n moderne onderwyser; die moderne klaskamer is so 'n komplekse omgewing waarin onderwysers doeltreffend moet funksioneer dat hulle in staat moet wees om kennis op 'n buigsame manier saam te stel.

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LIST OF ACRONYMS

AT	Activity theory
CHAT	Cultural-historical activity theory
CPTD	Continuous Professional Teacher Development
DBE	Department of Basic Education
ECD	Early childhood development
IDZ	Intermental development zone
NSC	National Senior Certificate
PD	Professional development
PL	Professional learning
PLC	Professional Learning Community
PLP	Professional life phase
SACE	South African Council of Educators
WCED	Western Cape Education Department
ZPD	Zone of proximal development

CHAPTER 1

CONTEXTUALISATION AND ORIENTATION OF THE STUDY

1.1 INTRODUCTION

Career-long professional learning (Boud & Walker, 1991; Edwards, Gilroy, & Hartley, 2002; Hadar & Brody, 2010) is commonly advocated for in-service teachers. This research study intended to investigate how Professional Learning Communities (PLCs) could serve those learning needs (Edwards et al., 2002; Hadar & Brody, 2010; Joyce & Calhoun, 2010; Lieberman & Miller, 2008c; Little, 2002). Teachers' classroom practice and professionalism have regularly been mentioned in the literature since 1990 (Armour & Makopoulou, 2012; Clausen, Aquino, & Wideman, 2009; Edwards et al., 2002; Hadar & Brody, 2010; Hargreaves, 2009; Hargreaves & Fullan, 2012; Joyce & Calhoun, 2010; Lieberman & Miller, 2008a; Little, 2002; Priestley, 2014; Wenger, 1998). It suggests that professional learning plays a crucial role in both these elements of teaching. At the same time, education is seen by most governments (Biesta, Priestley & Robinson, 2015; Cameron, Mulholland, & Branson, 2013; Day, 2012; Priestley, 2014) as an area that has to be highly regulated and prescribed to serve national interests, thus national curricula are found in most countries of the world in "the quest for certainty" (Webster-Wright, 2009, p.717). National philosophies of education are tied to the economic and developmental goals of those countries (Biesta, 2012). Consequently, top-down professional development programmes have become the norm. This highly prescriptive environment threatens to diminish teacher professionalism (Hamilton, 2002; Hargreaves & Fullan, 2012; Priestley, 2014). At the same time, it struggles to deliver effective career-long teacher professional learning or improved learner achievement (Clausen et al., 2009) in part, I believe, because current professional development programmes do not address "an unstable, fragile society, and an increasingly insecure individual" working in "an extraordinarily flexible, productive economy" (Carnoy & Castells, 1997, cited in Edwards et al., 2002, p.4). Dissonance pervades the current education system because the flexibility necessary to address uncertainty is being replaced with regulation, rigidity and predictability. Furthermore, dissonance emanates from dissimilar cultures because the curriculum and syllabi are developed in a general national educational culture but executed in a particular school with its own culture (Brown, Collins, & Duguid, 1989).

This case study is situated in the field of professional learning in education. In my reading, I initially looked at two germane elements within the very broad field of professional development, namely mentoring (Awaya, McEwan, Heyler, Linsky, Lum, & Wakukawa, 2003; Norman & Feiman-Nemser, 2005) and communities of practice (Wenger, 1998; Wenger-Trayner, E. & Wenger-Trayner, B., n.d.). However, both are substantial areas of investigation, therefore I decided to select only one, namely communities of practice to attain some depth and avoid a broad, superficial study. Furthermore, I decided to be even more specific and focus my study on Professional Learning Communities (Edwards et al., 2002; Hadar & Brody, 2010; Hord, 1997; Joyce & Calhoun, 2010; Lieberman & Miller, 2008a; Little, 2002), as I considered Wenger's (1998) concept of communities of practice to be too generic, while Professional Learning Communities are specific and relevant to my intended research study of the in-service learning of a sample of teachers teaching in the private education sector in the Western Cape.

Because teachers are faced with the dilemma of meeting complex demands in their classrooms, while concurrently adapting their practice and enhancing their professionalism, this case study examined how a sample of teachers undertook professional learning as part of their professional development, bearing in mind Alexander's (2008) warning that "learning and development are not synonymous, as in the heyday of progressivism they tended to be regarded" (p. 1). Much of the recent literature on professional, career-long learning recognises not only that such learning is essential, but also that traditional forms of professional development have not met the needs of teachers and learners in the classroom (Cameron et al., 2013; Diaz-Maggioli, 2004; Armour & Makopoulou, 2012). In addition, several authors see an erosion of professionalism (Hargreaves & Fullan, 2012; Edwards et al., 2002; Priestley, 2014). They link career-long professional learning and development to revitalised professional rigour among teachers. They see Professional Learning Communities and the concomitant development of professional capital (Hargreaves & Fullan, 2012) as avenues to the facilitation of career-long professional learning and development.

This case study aimed to add to the body of research knowledge about the effectiveness of Professional Learning Communities. Ideally this should have been a longitudinal study, tracing the changes in attitudes towards Professional Learning Communities among the participants and tracking the effectiveness of Professional Learning Communities in their professional learning and classroom practice. However, the scope of this research study was restricted by time-constraints and thus examined only current professional learning practice. A longitudinal study could be the subject of further research.

1.2 PROBLEM STATEMENT

Maxwell (2013) recommends the formulation of the research problem as part of the theoretical framework “because it identifies something that is going on in the world, something that is itself problematic or that has consequences that are problematic” (p. 40).

In-service teachers have faced and will face changes in their classroom practice, as circumstances change. In addition, they deal with syllabus and curriculum changes as education policies are re-evaluated by governments and examining bodies (Jurasaitė-Harbison & Rex, 2010). The ubiquitous use of various professional development instruments in in-service teacher learning is an attempt to ensure that teachers have the necessary knowledge and professionalism to teach every learner effectively. Research findings (Darling-Hammond & McLaughlin, 1995, cited in Webster-Wright, 2009; Hargreaves, 2003; Hargreaves & Fullan, 2012; Lieberman, 1995), however, point to a failure of well-established, extraction-style training in which teachers are sporadically removed from their classes for one or more consecutive days. In-service training (INSET) days normally involve a mixture of lecturing, group work and tasks, facilitated or directed by specialists, where teachers are taught by those experts how to manage scenarios that might arise in practice. In my own experience as head of a small independent high school, and substantiated by literature, this largely generic training does not translate into lasting or effective learning. Once back in their schools, teachers become increasingly unsure of themselves, doubt their own effectiveness and revert to their old practice as they struggle with unfamiliar concepts, irrelevant scenario exemplars, or forget certain parts of the implementation (Armour & Makopoulou, 2012; Bransford, Brown, & Cocking (Eds.), 2000; Van den Bergh, Ros & Beijaard, 2015; Webster-Wright, 2009).

Instead of espousing such expert-driven, transmission-style learning, this research viewed learning through the lens of Y. Engeström’s (1987) activity theory, which propounds a cultural historical approach to learning in which teachers see themselves as one, constantly transforming node (Engeström, Y. & Sannino, 2010) in an integrated system of learning (Engeström, Y., Engeström, R., & Kärkkäinen, 1995). This model of learning is congruent with the learning that takes place in Professional Learning Communities. Furthermore, this case study aimed to show that it is when teachers regularly and professionally (Hargreaves & Fullan, 2012) meet with other teachers to discuss classroom practice and learner learning that more durable and meaningful changes are made to their own learning and effective classroom practice. Such learning also meets the description of professional learning, which is:

“continuing, active, social, and related to practice” (Garet et al., 2001 and Wilson & Berne, 1999, cited in Webster-Wright, 2009, p. 703).

1.2.1 Research question and sub-questions

This case study examined the in-service professional learning of a group of teachers. The main research question that guided this research was formulated as: “Does a Professional Learning Community play a role in the professional learning of high school teachers at a private school in the Western Cape?”

This question was answered by exploring five sub-questions:

- What is professional learning?
- What are Professional Learning Communities?
- How do teachers learn in Professional Learning Communities?
- How do the teachers in the research sample learn?
- How does the practice of learning in the school community differ from the theory of professional learning in a Professional Learning Community?

These questions supplied the main strands of the interview questions which, in turn, were designed to supply sufficient data to satisfy the requirement that the researcher describe “the context within which the phenomenon is occurring as well as the phenomenon itself” (Baxter & Jack, 2008: 555).

1.2.2 Research objectives

The objectives of this research study were to describe how teachers learn, to discover the gap between current learning practices and professional learning as proposed by several authors (Hargreaves, 2015; Hargreaves & Fullan, 2012; Shulman, 2004) and to explore how Professional Learning Communities could facilitate such learning to address that gap. Furthermore, it was my aim to report on the results of the study in such a way that other teachers and school leaders would find it interesting enough to identify the gap in teacher professional learning in their own schools, and to work towards improving the effectiveness of their teaching through professional learning in Professional Learning Communities.

This case study also aimed to offer recommendations to narrow the gap between the Professional Learning Community as found in the school, and theoretical Professional Learning Communities.

1.3 THEORETICAL FRAMEWORK

This research was conducted within a cultural-historical activity theory (CHAT) framework, and specifically within the framework of Yrjö Engeström's activity theory (Engeström, Y., 1987; Engeström, Y., Engeström, R. & Kärkkäinen, 1995; Engeström, Y. & Sannino, 2010; Sannino, Daniels & Gutiérrez, 2009). Cultural-historical activity theory, a term coined by Michael Cole (1988), has its origins in the constructivist learning theory of a group of Russian psychologists, most notably Vygotsky, Leont'ev and Luria. CHAT postulates that meaning is constructed jointly and that all learning occurs within a community and is shaped by the cultural influences to which that community is exposed, while the community is constantly transforming over time (Sannino et al., 2009). Y. Engeström's (1987) activity theory recognises the constructivist elements suggested by the Russian forerunners of CHAT in that "learning is seen as a matter of participation in a social process of knowledge construction rather than as an individual endeavour" (Kumpulainen & Lipponen, 2010, p. 50). Y. Engeström (1987; Engeström, Y. & Sannino, 2010; Sannino et al., 2009) recognises three generations of activity theory, each addressing an increasingly more complex learning situation. This research study used Y. Engeström's (1987) second generation activity theory because it studied a single system of learning (Engeström, Y. et al., 1995). In such a system, Y. Engeström extends activity theory to include not only the original nodes of activity (the subject, object and artefacts) represented as a triangle of activity in the first generation of activity theory, but the additional nodes of rules, communities and division of labour as well, thereby recognising the vital influence of cultural community in learning. His second generation activity theory emphasises the multidirectional appropriation and use of artefacts (tools and signs). He advocates an analytical framework that recognises not only individual action and functional operations, but also the societal/community aspects of collective activity in order to achieve an outcome (Engeström, Y., 1987; Engeström, Y. & Sannino, 2010). Second generation activity theory proposes analysis of the interactions between the elements or nodes of activity and recognises that "contradictions" (Engeström, Y., 2001, p.137; Engeström, Y. & Sannino, 2010, p. 7) supply the impetus to transform and develop. Engeström warns that contradictions, which are structural in nature, must not be confused with conflict, which is short-term and often arises from the "multi-voicedness" (Bakhtin, 1982, cited in Engeström, Y. & Sannino, 2010) of dialogue.

1.3.1 Conceptual framework

To bridge the conceptual gap between the elements contained in the research question in this thesis, it is necessary to explain this case study's understanding of the main elements, namely Professional Learning Communities and professional learning.

Community is a pivotal concept in second generation activity theory and once Hord (1997) had coined the term Professional Learning Community, several other authors (Botha, 2012; Lieberman & Mace, 2009; Lieberman & Miller, 2005; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006; Tan & Caleon, 2016; Yap, 2015) contributed to an understanding of learning in such a community. Professional Learning Communities require members to engage one another dialogically on issues concerning their teaching practice “in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way” (Mitchell & Sackney, 2000; Toole & Louis, 2002, cited in Stoll et al. 2006, p. 223). Professional Learning Communities are characterised by an ongoing willingness of their members to reflect on their practice and discuss dialogically the issues that arise. Professional Learning Communities are inclusive; everyone has a voice in a Professional Learning Community. They seek to foster and facilitate career-long learning and professional development. In Professional Learning Communities, teachers not only learn dialogically but also aim to produce artefacts that can stand professional scrutiny and contribute to the body of knowledge in their sphere (Shulman, 2004).

1.4 RESEARCH PARADIGM

Guba and Lincoln (1994) posited their view of paradigms as “the basic belief system or worldview that guides the investigator, not only in choices of method but in *ontologically and epistemologically fundamental ways*” (my emphasis) (p.105). A valid explanation of worldview is that it defines “for its holder, the nature of the ‘world’, the individual’s place in it, and the range of possible relationships to that world and its parts” (Guba & Lincoln, 1994, p. 106). The choices I made about research methods were determined by my worldview, which led me to situate this case study within the body of qualitative research and present it as a text-rich thesis.

Guba and Lincoln (1994) and Lincoln and Guba (2000) have highlighted the debate about the hegemony and validity of quantitative versus qualitative research. However, this case study accepts Rule, Davey, and Balfour’s (2011) finding that qualitative research within education offers a valid paradigm. The reasoning employed in qualitative research is often inductive in that the point of departure in qualitative research is not the testing of a hypothesis or theory. On the contrary, a qualitative study’s research question identifies a narrow scope of study of a specific subject (Gabriel, 2013).

Maxwell (2013) ascribes the concept and use of research paradigms to the foundational work of Thomas Kuhn (1962, 1970, 1996) in which he sees a paradigm, in a sociological sense, as representing “the entire constellation of beliefs, values, techniques, and so on, shared by the members of a given community” (Kuhn, 1970, p. 175). In the social sciences, “paradigm” has, thus, come to focus more on philosophical beliefs (Guba and Lincoln, 1994; Lincoln and Guba, 2000; Mertens, 2012) of ontology and epistemology. Ontology, in this context, is taken to refer to reality and epistemology to the way knowledge is gained about what reality is understood to be. In addition to the stances described above, this case study viewed the ontology of professional learning through the lens of critical realism as proposed by Krauss (2005) and Maxwell (2013) because according to that stance, a teacher need not know the theory about Professional Learning Communities for professional learning to take place. As for the epistemological stance, I identified with a constructivist paradigm, as my own professional learning experience as a teacher meant that it resonated well with me and my research goals. I found that I had always learnt best whenever I drew on my historical experiences (Kolb, A. and Kolb, D., 2005), my context and the input of my colleagues and learners. In addition, the complexity that I knew teachers to encounter in their classrooms further led me to adopt Y. Engeström’s activity theory as a lens through which to examine learning in and through practice. I acknowledge the dangers of making my own experiences part of my selection of research paradigm. “Critical subjectivity” (Reason, 1988, cited in Maxwell 2013, p. 45) was employed in that I used my consciousness of my own experiences “as part of the inquiry process” (Reason, 1988, cited in Maxwell, 2013, p. 45). The participants’ learning was viewed through the refined lens of situated learning (Lave, 1991, 2009) because I recognised that the school at which I conducted my research represented a unique learning and cultural environment. This is congruent with constructivist learning in general and learning through participation within an activity system (Yap, 2015) in a cultural-historical context, in particular.

This case study was conducted within a constructivist paradigm because I believed that as learners in their own right, teachers create their own meaning of any learning experiences. My ethical stance was naturalist as I described the processes and actions as they occur in the teachers’ natural context of the school in which they teach.

1.5 RESEARCH DESIGN

The research participants’ account of their learning and knowledge making lies at the heart of this case study, and for such a qualitative study, conducted through interviews, a focus group discussion and

questionnaires, and interpreted subjectively, a qualitative study was well-suited (Guba and Lincoln, 1994; Lincoln and Guba, 2000, Maxwell, 2013).

Because I examined learning as it occurs in a Professional Learning Community, a case study design was chosen, in keeping with Miles and Huberman's (1994) description of a case as being "a phenomenon of some sort occurring in a bounded context" (p. 25). As they point out, a case is essentially the study's unit of analysis, so the study was designed as a single case study (Hancock and Algozzine, 2006; Stake, 1995; Yazan, 2015; Yin, 2004) as this case study focused on the professional learning of only the group of participants in the sample. Even though the case study was designed as a descriptive case study (Yin, 2004; Yin, 2003, cited in Baxter and Jack, 2008), there are some explanatory (Yin, 2004) elements of how the participants learn dialogically within their learning environment.

A single case study design (Baxter and Jack, 2008) was also appropriate for the purposes of the study because of the aim of studying a small sample in depth, rather than a large sample in general, as well as the boundaries which limited time set on this case study. However, I did not discount in my case design that I might discover that teachers at different phases of their careers or with different contexts might learn differently (Diaz-Maggioli, 2004). If such differences were to appear in my data analysis, my design would allow me to compare them, but those differences would not be regarded as originating in embedded units within the school.

1.6 RESEARCH METHODOLOGY

1.6.1 Sampling

"Purposive sampling" (Yin, 2011, p.88) allowed me to seek purposefully the richest sources of data. I selected eight staff members after being given access to their professional development profiles. The purposive sampling process did not take into consideration the subjects the teachers taught or any other biographical information. Those factors were not important as no attempt was made to generalise the findings of this research study. The sample of teachers was thus chosen to supply as rich as possible a source of data about only the professional learning experiences of those teachers. Not all the selected participants chose to take part in the research and the study proceeded with seven participants.

1.6.2 Data collection

Data collection was interactive and used graphical answer sheet, semi-structured interviews, a focus-group discussion and four short questionnaires (See Appendices A – J). Originally, the participants were requested to keep a month-long diary about their learning experiences. From the start, teachers reported difficulty complying with the diary keeping. The freestyle diary was replaced by a tick-list diary of learning activities. The participants also found this diary difficult to keep. Consequently, four questionnaires, each covering an aspect of learning or community, were introduced to augment the case study's data gathering. The primary data-collection instrument was the semi-structured interviews in which the guiding questions were informed by the research question and literature. An interview schedule of questions, as well as a graphic response sheet, was prepared to guide the interview (Appendix B and C). The research participants were requested to answer the biographical questions in writing before the interview. The biographical data sheet (see Appendix A) was sent as an attachment to a password-protected email address. It was returned via the same route, or in person prior to the commencement of the interview. The interviews took place in quiet venues of the participants' choice so that they felt comfortable and private. An interview was chosen because it is an instrument that affords "direct access to 'experience'" (Silverman, 2013, p. 47). Learning experience can more effectively be conveyed through personal responses than observation (Silverman, 2013). The interviews were scheduled for one hour and lasted between 35 minutes and 50 minutes. They were audio recorded with the written permission of the participants. During the scheduled hour appointment, the requirements for the diary were explained to each participant and they had an opportunity to ask questions to clarify expectations. Participants had an opportunity either to write freestyle continuous writing diaries or to use a dated tick list of conversation topics (Appendices D and E).

Triangulation strengthens the reliability of qualitative research findings, through "the principles of idea convergence and the confirmation of findings" (Knafl and Breitmayer, 1989, cited in Baxter and Jack, 2008, p. 556). Therefore, a focus group discussion was conducted once the last interview had been completed. Because the participants were reporting that they found the diary writing too onerous and they could not keep them as requested, four questionnaires, in addition to a number of discussion questions, were developed. The questionnaires were administered when the group of participants convened for the focus group discussion. Each participant responded individually and confidentially to the questionnaires and then the discussion commenced. The focus group discussion was also semi-structured (Appendix J) in that themes identified during the coding of the interview responses informed questions that were formulated to probe some issues. The focus-group discussion thus had elements of a stimulated-recall

discussion. The focus group discussion was audio- and video-recorded with the written permission of the participants.

1.6.3 Data analysis

Data analysis took place soon after the start of data collection. As the interviews were being transcribed, initial coding took place. The convergence of data sources: interviews, questionnaires and focus group responses, ensured that the various sources did not become separate nodes of findings and reporting. Coding was used to find themes which formed the basis of this case study's findings and recommendations.

Following Yin's (2009, p. 128) advice, coding was initially guided by the research sub-questions stated previously. Those questions informed the choice of words and phrases that were coded. The coded words and phrases were then gathered into themes, which in turn provided evidence for the questions. During the coding process, pseudonyms were assigned to the research participants. The evidence allowed some preliminary conclusions to be drawn. I kept notes on my own thinking and discovery trail to form the framework of my report; my logic being that if I reflected my process of discovery in my report, readers would be able to assess my findings more easily. To avoid the pitfall of ending up with fractured findings on all the smaller questions and not presenting a cohesive report, I graphically plotted the interconnectedness of the themes and built up to the increasingly complex questions until I was able to answer the research question.

1.6.4 Reporting

Once the findings had been established through data analysis, they were reported as a description of the participants' experience of their professional learning. Baxter and Jack's (2008) suggestion to compare this case study's research finding with findings reported in literature in order for me to better understand the significance of the findings, and to situate this specific case study's findings in the broader literature about learning in Professional Learning Communities gave me a starting point and informed the structure of the first part of the thesis.

Situating this case study's findings within a body of published literature enhanced their validity but it also made them retrospective, looking back at what had already been found. I, however, wanted the research findings also to spark action. A challenge was thus to contemplate the contribution that this case study

could make. Once complete, would other teachers find it “Compelling? Useful for investigating similar changes in another” school? (Yin, 2009, p. 144). Consequently, I aimed to report the study’s findings in a lively way that would draw the reader in and allow them to relate to the context and process; to convey the findings by using a mixture of reporting and narrative. Even though the findings of this qualitative case study were not to be generalised, I aimed for the report to allow readers to compare – and contrast – their personal experiences with those of the participants in the research sample. The larger goal of this research study was to provide a discussion piece that would encourage teachers to explore and pursue their own professional learning.

This thesis holds true to the fundamental rules of argumentative writing, namely that the position of the writer must be clear, well substantiated and the reader must be able to follow the logic of the argument. Any opposing points were acknowledged and it was shown why they were not valid in this particular instance. The audience who might find this research study of interest was recognised before writing commenced; they are: teachers, principals and district officials. Furthermore, I selected a narrative style of reporting because it served my research design well.

This research report forms part of a thesis in part-fulfilment of the requirements for a Master’s degree. It could also be made available to academia and other interested parties through a conference paper and an article published in a scholarly journal. The participating school received a copy of the thesis.

1.7 VALIDITY AND RELIABILITY

Even though I did not enter this case study with a set of propositions, the literature and my own experience suggests that there was something to discover and these suspicions played a part in the formulation of my research question.

Reliability refers to the extent to which another researcher replicating the research design would find the same results. Validity refers to the extent to which the research will answer the research question and sub-questions set at the beginning. Burton, Brundrett and Jones (2008) warn that the rigorous demands of true reliability and validity would be “difficult, if not impossible, to fulfil by qualitative researchers undertaking small-scale investigations” (p. 168). Therefore, I aimed to ensure that “the evidence which the research offers can bear the weight of the interpretation that is put on it” (Sapsford and Jupp, 1996 quoted in Bell, 2005, p. 117-118), thereby enhancing the validity of this case study.

To ensure validity and reliability, I followed systematic data collection and management strategies as the literature (Baxter and Jack, 2008; Burton et al., 2008; Hancock and Algozzine, 2006; Stake, 1995; Yin, 2009) suggests, and I employed triangulation, idea convergence, coding and theme development in the data analysis. Triangulation was accomplished by using three methods of data collection, namely semi-structured interviews, questionnaires and a semi-structured focus-group discussion. During data analysis, in order to ensure validity and reliability, I constantly referred to the research question to ensure that the data analysis addressed the question and its sub-questions. Validity of data analysis and findings were thus closely tied to the vigilant answering of the research question, as suggested by Burton et al. (2008). Furthermore, because data analysis of all the sources occurred as soon as they become available, the consistent coding of themes was facilitated, and consistent coding contributes to validity (Burton et al., 2008; Silverman, 2013). Some codes were suggested by the literature, while open codes emerged from the data.

1.8 ETHICAL CONSIDERATIONS

Once the research proposal had been screened and approved by the relevant university ethics committees, I requested a meeting with the principal of the selected private school in the Western Cape. I had been employed as a teacher at that school eight years ago but had not had contact with the teachers or management in the interim. At the initial meeting, the principal of the school was briefed in full on how the collection of research data would affect the staff and school. The data collection was restricted to teachers; classes were not visited, nor were any learners be involved in the research study. I sought written permission from the principal to interview a purposely selected group of eight teachers who would be the study's research participants. The selection of potential research participants was informed by the teachers' interest in furthering their professional learning. The selected teachers were contacted and invited to a briefing about the research study. At the briefing, they received their University of Stellenbosch-compiled informed consent forms in separate envelopes so that they were able to return their forms confidentially. When the teachers responded to the invitation, only seven of the eight selected participants chose to be part of the study. At the information briefing, it was explained to the prospective participants that their privacy and anonymity would be protected. In the thesis, all identifiable features, such as the teachers' names, the specific subjects they teach, the school's name and its location were anonymised in all material and reports that were made public. The anonymization was achieved by using codes for the participants and by using a generic reference to the school, as well as assigning a pseudonym to it. No direct reference to any subject was made. The research participants were also pointed to the section in the informed consent form where the recording of interviews was discussed; they

were reassured that their consent would be required for the interviews and guided focus group discussion to be audio and video recorded. Only the guided focus group discussion was video-recorded; permission in writing to do so was covered in the initial consent form but the participants were verbally reminded that a video would be made and they were given an opportunity to object to such video recording.

All prospective research participants were made aware that they would be under no obligation to participate in the study, and that they would be allowed to withdraw at any stage. They were also informed that there was no remuneration for participation in the study. The research question was explained to the prospective participants and they had ample opportunity to ask questions and to express any opinions about the research. The security measures that were to be taken by the researcher were explained. All recordings of interviews, transcripts and all products of the study were kept on a computer with an access password, known only to the researcher, to ensure confidentiality. The interviews were recorded on a Dictaphone. Once the recording had been transferred to the researcher's computer and checked for clarity and it had been confirmed that the whole interview or focus group discussion had been captured, the Dictaphone recording was erased. To ensure that the raw data could not be lost, the computer recording was also stored in password-protected cloud storage. Electronic copies of the raw data will be kept for five years.

1.9 CONCEPT CLARIFICATIONS

This thesis refers to many concepts that are widely used in literature and in practice. The paradigmatic lens through which the case study was viewed required that they be clarified to reflect the theoretical stance of this research study.

1.9.1 Professional Learning Community

There is no universal definition of a Professional Learning Community. The term was coined by Hord (1997) but has been applied to diverse communities. This case study saw a Professional Learning Community as being a group of teacher professionals who learn constructively, collaboratively and dialogically within an activity system. Their shared aim is the improved learning of their learners.

1.9.2 Activity system

“An activity system is a complex and relatively enduring ‘community of practice’ that often takes the shape of an institution” (Engeström, Y., Engeström, R, and Kärkkäinen,1995, p.320)

1.9.3 Professional learning

Professional learning in this case study was seen as part of an in-service teacher’s professional development. Professional learning is continuous, long-term, planned and spontaneous learning through reflection and dialogue within a community in a supportive learning environment.

1.10 CHAPTER DIVISIONS

Chapter 1: Contextualisation and orientation of the study

This chapter gives an overview of the reasons for and theoretical orientation of the case study. The methodology of the study is briefly described and key concepts are explained.

Chapter 2: Literature review

Three models of professional learning are present in this case study, namely, Professional Learning Communities, activity theory and situated learning. The literature review gives an overview of the body of literature that elucidates these concepts. It reveals the compatibility of the three models of learning which allows them to be included within one case study.

Chapter 3: Research design and methodology

This chapter discusses in detail the methodology that was used to gather the data of this case study. The congruency of the theoretical framework, research design and methodology are revealed and measures to ensure validity and reliability are discussed.

Chapter 4: Presentation and discussion of research findings

This chapter presents the data discovered in this case study and the findings that they revealed. Concepts crucial to this case study are clarified and the findings, grouped as themes and sub-themes, are discussed to show to what extent this case study answers the research question.

Chapter 5: Interpretation of findings

This is a qualitative study and the findings are interpreted subjectively. Chapter 5 relates the experiences of the participants to the development of their Professional Learning Community. It examines important

theoretical elements of Professional Learning Communities in terms of the participants' perceptions and experiences.

Chapter 6: Limitations and discussions

This chapter fulfils one of the aims of this thesis, namely to show the potential of Professional Learning Communities in the forward-looking professional development of South African teachers.

1.11 CONCLUSION

Chapter 1 offers a synopsis of this thesis. By following its pared-down content, the various elements that underpin, orient, inform and flow from the case study can be viewed in a condensed format. In the chapters that follow, a more detailed version of its various elements can be found.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Professional learning is regarded as essential for teachers to meet the complex demands encountered in their classrooms and to enhance their professionalism (Edwards, Gilroy, and Hartley, 2002; Hargreaves and Fullan, 2012). Since the 1990's, Professional Learning Communities have been increasingly recognised in the literature (Edwards et al., 2002; Hadar and Brody, 2010; Joyce and Calhoun, 2010; Lieberman and Miller, 2008a; Little, 2002) as creating a learning environment where such professional learning can take place. Professional Learning Communities are associated with situated learning or learning by participating (Lave, 1991, 2009). The creative thinking and flexibility (Day, 2012) demanded of workers in the digital age means that teachers must be able to adapt their learning and Y. Engeström's activity theory (1987, 2001, 2011) with its emphasis on a durable, transformative activity system, and learning focused on the unknown, offers teachers a valid model of learning.

The literature connects learning, development and knowledge but varies greatly on the types and effectiveness of learning, how learning is connected to development and how knowledge results and is employed. Because this literature review is designed to elucidate some of the theory and research informing the elements of the study that have been highlighted above, it sets out to offer work that underpins the description of the teacher learning practices of the participants in this case study. The theory of Professional Learning Communities and some elements of activity theory have been included because the research report will make recommendations about future action.

2.2 LEARNING

Formal, structured education with a national curriculum is, in terms of human society, a very recent development. Despite rigorous and scientific approaches to education, however, there is a growing recognition of the bad fit between education structures and the demands and needs of society (Hamilton, 2002). The technological and democratic demands (Edwards et al., 2002) of the twenty-first century represent a paradigm shift from the mechanical and industrial demands born of the Industrial Era (Clausen, Aquino, and Wideman, 2009). Part of the reason education systems are not adapting to the demands and needs of a post-industrial society is that education is notoriously retrospective (Edwards et al. 2002). The things that worked in the past draw practitioners to replicate tried and tested methods

(Hargreaves, 2015). In addition, governments have become the guardians of national education and their fiduciary duties towards their citizens result in moderate changes, related to and building on what has gone before rather than meeting the unknown needs of the future (Edwards et al., 2002; Hargreaves, 2009). Consequently, this literature review seeks to show the possibilities of increased professionalism and flexibility that Professional Learning Communities afford teachers as they search to meet the needs and demands of their society in order to prevent education from becoming mere schooling (Hamilton, 2002). Y. Engeström rejects “subject-producing” (Engeström, Y. and Sannino, 2010, p. 4; Engeström, Y., 2011, p. 88) traditional schooling in favour of object-directed activity which transforms the whole system of activity, subject and object included. (Engeström, Y. and Sannino, 2010; Engeström, Y., 2011).

Lave (2009) warns against decontextualizing learning and emphasises that all learning, whether by teachers or learners, is contextual, and that mind and environment cannot be separated in the learning process. She qualifies situated learning as emphasizing the “relational interdependency of agent and (socially constructed) world, activity, meaning, cognition, learning, and knowing” (Lave, 2009, p. 67; my addition in brackets). While Quay (2003) sees situated learning as providing “a more tangible application” (p. 107) of learning theories. This literature review thus foregrounds applied situated learning rather than abstract constructions of learning theory – thereby deserving Y. Engeström’s (2011) criticism that “Participation-based approaches are commonly suspicious if not hostile toward the formation of theoretical concepts” (p. 86).

The attributes of situated learning are that it is holistic, integral to learning through participation, influenced by and influential in cultural and historical contexts, and instrumental in transformation. Sometimes, however, when teachers are introduced to a new concept, instruction-style conveying of information is an effective method of starting the learning process (Ertmer and Newby, 2013; Postholm, 2012). However, very soon after that, if the teacher wants to make meaning of the information, reflection on and use of the newfound information will be required to transform that information to knowledge. Knowledge derived from situated learning emanates from a constructed reality and is contextual (Brown, Collins, and Duguid, 1989; Lave, 1991, 2009). Furthermore, initially the teacher might prefer to contemplate and explore the new information individually (Hargreaves and Fullan, 2012; Hargreaves, 2015), but the reality for teachers is that they work in communities and the effective use of knowledge will involve another person or persons (Postholm, 2012). This case study thus does not adopt a purist stance towards collaborative learning. It recognises, pragmatically, a range of learning scenarios in the teacher’s situated learning, as Benner, Tanner and Chesla (1996, cited in Tsui, 2007) recognise, being situated means that certain things are available to the teacher learner, and others not. However, every situation offers “situated possibilities”

(Benner et al., 1996, cited in Tsui, 2007, p. 1063) to the teachers which, if fully exploited, offers opportunities for learning.

Every in-service teacher will have a personal learning pattern determined by the interrelationship of four elements: “learning activities, regulation of learning, beliefs on learning about teaching and learning motivations” (Vermunt and Endedijk, 2011, p. 299). In addition, some authors suggest that teachers not only have preferential patterns of learning, they also have different patterns of learning depending on the stage of their career (Vermunt and Endedijk, 2011; Day, 2012; Huberman, 1995). Vermunt and Endedijk (2011) suggest that external feedback plays a part in less experienced teachers’ learning, while experienced teachers rarely receive feedback. However, they often give it, and keeping in mind the principle of mutual transformation, senior teachers learn through this feedback.

It is in its lack of overt discussion about the broader aims of career-long professional learning that this literature review might deserve Biesta’s (2009) criticism that very little of educational research about teacher learning addresses what changes and improvements such learning is intended to effect. He warns that authors are in danger of “learnification” (Biesta, 2009, p. 36-37; Biesta, 2012, p. 12) and also of equating change and improvement (Biesta, 2012). He describes “learnification” as using the term learning without referring to the content and purpose of that learning. Biesta, Priestley and Robinson (2015) cite a study by Priestley and Biesta (2013) that found that teachers do not always understand why or to what extent a change in their practice improves it – if indeed it does. I want to add to the stated danger the risk that teachers see their own professional learning as a tool only to improve the achievement of their learners (Biesta, 2010, cited in Biesta et al., 2015), and neglect the broader aspects of their own and their learners’ education. This danger is one of the reasons activity theory’s learning by expanding is adopted in this case study; its learning focus on the unknown or not-yet-discovered, and the transformation principle of collective activity (Engeström, Y. and Sannino, 2010; Engeström, Y., 2011) broadens the teachers’ awareness of learning that occurs in the personal, professional, practice and academic areas of their lives.

Each Professional Learning Community must have great clarity about the learning goals of that community. Contrary to the instructionist view of providing teachers with knowledge to transmit, or transmitting knowledge to teachers in professional development programmes (Davis, Sumara, and Luce-Kapler, 2000; Papert, 1991; Webster-Wright, 2009), Professional Learning Communities provide teachers with a contextual view of their learning. But I concur with Amin and Roberts’ (2008) warning that Professional Learning Communities, which initially were meant to offer an alternative to seeing the

“alchemy of different knowledge inputs”, now are being used as the learning norm, irrespective of learning context. Amin and Roberts (2008) point out that community-learning has become the victim of its own success. It is being indiscriminately applied to all contexts. As the demanded results of collaboration by means of “contrived collegiality” (Hargreaves and Fullan, 2012, p. 119) are becoming more unambiguously defined, learning, learning outcomes and outputs within a community are being formulated and prescribed. However, the original proponents of communities of practice saw such communities as allowing for the development of an “effective learning *environment*” (Lea, 2005, p. 194, my emphasis). They proposed retaining the “frequently idiosyncratic and always performative nature of learning” (Amin and Roberts, 2008, p. 354). Some well-respected researchers, for example, Huberman (1993, cited in Talbert and McLaughlin, 2002), assert that collaboration can limit teacher learning, effectiveness and professionalism. However, the preponderance of work reviewed for this chapter advocates collaboration (Bolam, McMahon, Stoll, Thomas, and Wallace, 2005; Day, Stobart, Sammons, Kington, Gu, et al., 2005; Hargreaves and Fullan, 2012), albeit with recommendations for more research (Cameron, Mulholland, and Branson, 2013; Clausen et al., 2009; Ning, Lee, D., and Lee, W.O., 2016).

Cradock, O’Halloran, McPherson and Hean (2013) assert that social constructivism is made evident, at a macro level, in communities of practice. Teachers within a Professional Learning Community develop knowledge through use, which is necessary if the teachers are to develop their agency (Priestley, Biesta, Philippou & Robinson, 2015). In Professional Learning Communities, teachers engage in action research and such research is supported by Watkins (1994, cited in Louis, 2010) who equates “daily efforts to solve classroom problems with research” (p. 6). The South African Council of Educators (SACE, n.d.), for example, recognises such action research undertaken by teachers in their own classroom as a Type 1 activity, eligible for continuous professional development points (p. 2). And lastly, teachers in a Professional Learning Community exhibit long-term commitment to developing knowledge through collaboration (Lieberman and Mace, 2009).

Within a Professional Learning Community, Y. Engeström’s activity theory (Sannino et al. 2009) can supply a systematic framework that facilitates the effective functioning of the Professional Learning Community. Within the activity theory model (Daniels, 2004; Sannino et al., 2009), the teachers in the Professional Learning Community are the subjects. The teachers use tools to address the object, which is a gap or problem. In this case study, focus is placed on dialogue is a tool which is used to address the object in order to achieve an outcome. According to Vygotsky (1978, cited in Engeström, Y., 1987, p. 78) a tool is directed outwardly to achieve transformation. Furthermore, Y. Engeström’s activity theory (1987) models collective learning, a cornerstone of Professional Learning Communities; it reflects teacher

subjects having to implement collective learning while facing the unique set of circumstances that make up a lesson on any given day. The overarching notions of ambiguity and complexity are pivotal to the appreciation of the paradigm change that activity theory introduces in professional learning.

Y. Engeström (2001) asks four cogent questions concerning learning:

- (1) Who are the subjects of learning, how are they defined and located?
- (2) Why do they learn, what makes them make the effort?
- (3) What do they learn, what are the contents and outcomes of learning?
- (4) How do they learn, what are the key actions or processes of learning? (p. 133)

Brown et al. (1989) postulated that enculturation is an inevitable part of learning within a community because subjects use cultural tools that are developed within their community. Activity theory goes further because not only does it acknowledge the fundamental and historical influence of culture, it postulates that the aim of an activity system is the *creation* of culture (Engeström, Y. and Sannino, 2010; Engeström, Y., 2011) as the subjects address the unknown and create knowledge. Activity theory is focused on the unknown, on discovering the gap, and the activity that is collectively exercised to address that gap.

2.2.1 Learning through dialogue

While various aspects of collaboration receive attention (Dirckinck-Holmfeld, 2006; Hargreaves and Fullan, 2012; Horn and Little, 2010; Lai, 2011) this case study regards dialogue as a vital core aspect of a Professional Learning Community. Hord (1997) confirms that teacher conversations are the bedrock on which collaboration is built, through the participants' acceptance of the mores and values of conversation as practised in an organisation (Horn and Little, 2010). Many authors agree on the broad interpretation of dialogue. However, they often isolate only one aspect of dialogue and focus on that. Even two fundamental authors like Bakhtin (1986) and Vygotsky (1987) theorise about two different aspects of dialogue, namely the very nature of an utterance and the resultant elucidating dialogic relation (Bakhtin, 1986) and the instrumentality of dialogue in which communication is used as a tool (Vygotsky, 1987; Vygotsky, 1987, cited in Wegerif, 2008). The theoretical stance of this research study is that utterances which form dialogue are contextual (Engeström, Y., 2014), occur on a continuum (Bakhtin, 1986) and develop information as the dialogue passes among speakers (Bakhtin, 1986; Carlile, 2004). When considering the complexity in any conversation, an investigator has to bear in mind that there are a range of dimensions, aspects and arrangements at play simultaneously. Lefstein (2010) comments on some of these and recognises the "ideational, interpersonal, metacommunicative and aesthetic" (p. 171)

dimensions of dialogue, a number of which are at play while the speakers are engaged in one of four types of dialogue, namely “conversation, inquiry, debate and instruction” (Burbules, 1993, cited in Lefstein, 2006, p. 7).

Some authors see one element of dialogue – the nature of the gap between speakers – as the space where dialogic relations allow genuine and critical reflection to take place, so that understanding is developed (Arendt, 1958; Bakhtin, 1986b ; Taylor, 2009, cited in Duncan and Ridley-Duff, 2014), with Wegerif (2007, cited in Scott, Ametller, Mortimer and Emberton, 2010) asserting that “dialogic space opens up when two or more perspectives are held together in tension” (p. 290) and that dialogue is “more like a spark across difference than like a tool in a social context” (Wegerif, 2010, p. 309). While others view the gap as a fundamentally, structurally conflictual space (Daniels, Cole, and Wertsch, 2007; Engeström, Y., 1989; Lefstein, 2010) which forces reconsideration and from that reconsideration, understanding is developed. Scott et al. (2010) describe dialogue as signalling “the bringing together of different ideas in a process of personal sensemaking” (p. 289). Bakhtin (1986b) also addresses understanding or sensemaking and emphasises the dialogic nature of understanding, which is further elucidated by Volosinov (1973) when he claims that “Any genuine kind of understanding will be active and will constitute the germ of a response” (p.102).

Structural conflict arises from mutual transformation because of the state of flux of the relevant nodes, subject, object, artefact, rules, community and/or division of labour (Engeström, Y. and Sannino, 2010). There is, however, also conflict inherent in open, professional discussions (Akkerman and Meijer, 2011). The latter is essential because a failure to critique current practice means that Professional Learning Community members limit the possibilities for growth. Y. Engeström (2001) views conflict as the result of the polyphony (Bakhtin, 1986b, p.151) or multivoicedness (Engeström, 2001, 2011; Engeström Y. and Sannino, 2010). Tan and Caleon (2016) identify the formulation of the problem or gap as one of the shortfalls in current Professional Learning Community practice. Effective problem formulation invites examination of particular issues, the selection of appropriate tools, as well as the description of the aim and methods to achieve the desired goal. All of these require wisdom and understanding and without critical, dialogical engagement among members on all facets of the task, the rigour required to produce a robust outcome will be lacking (Tan and Caleon, 2016). Politeness must not be confused with respect. Respectful engagement that allows deep and probing discussion in Professional Learning Communities is frequently mentioned in the literature (Hadar and Brody, 2010; Hargreaves and Fullan, 2012; Owen, 2015; Putnam and Borko, 2000; Tan and Caleon, 2016). Respectful engagement helps teachers to build

new understanding; politeness, on the other hand, hinders rigorous discussion (Ball, 1994; Zembylas, 2010).

Even though learning does not have a set of success conditions unique to adults, deep learning which champions teachers' ownership of their own professional learning (Bolam et al., 2005; Charteris and Sardon, 2015; Fullan and Langworthy, 2014; Kolb, A and Kolb, D, 2005), as well as participation, are two of several avenues that will optimize dialogic learning in a Professional Learning Community. Participation and learning have been linked by a number of authors (Lave, 2009; Lefstein, 2010; Priestley, M., Edwards, Priestley, R., Miller, 2012; Wenger, McDermott, and Snyder, 2002). To achieve full and free participation, teachers must

- participate without coercion and crippling levels of anxiety
- have comprehensive information
- be able to reflect critically on assumptions
- participate as equals in discourse
- be able to test and revise the validity of judgements discursively (Habermas, 1981, cited in Mezirow, 2009).

Yet, Hargreaves (2015) concedes that arranged collaboration, or nudges, might be required to start teachers' participation.

Professional Learning Communities can both broaden and deepen dialogue. Exposing the members of the Professional Learning Community to related examples broadens the discussion; it does not add to the complexity of the considerations. Deepening occurs when teachers evaluate and question (Mezirow, 1990) their assumptions and their holy cows – those things the teachers believe to be inviolable. Gadamer (1998, cited in Lefstein, 2010) uses the metaphor of a horizon in his explanation of deepening dialogue. He asserts that horizons are the result of our socio-cultural history which has allowed the development of “assumptions, prejudices, expectations and ideas” (Gadamer, 1998, cited in Lefstein, 2010, p. 175). These concepts are akin to the “differences and dependencies” identified by Dirckinck-Holmfeld (2006, p. 1) in his definition of collaborative learning cited later in this chapter. These limit the interlocutors' field of vision and they cannot see beyond them. In that sense their cultural influences limit their understanding. However, in the sense that dialogic engagement foregrounds the interlocutors' cultural traditions as they are uttered either directly or as part of the logic or thinking underpinning the utterance (Bakhtin, 1986b), the interlocutors can assess the validity of their firmly held views and thereby recognise and address their limitations. Bakhtin (1986b), Morris (2003) and Shotter (2010) postulate that understanding is dialogic and in engaging with their own firmly held beliefs, interlocutors learn self-understanding, if nothing else. The

fragility and volatility of dialogue is likely to become apparent when during deepening, horizons or cultural traditions are challenged by fellow interlocutors' utterances. It might be of value to note here that utterances that challenge beliefs do not have to come from interpersonal utterances. Teachers who engage in a literature review may find that the utterances contained in the literature also challenge the assumptions that underpin their teaching practice. Duncan and Ridley-Duff (2014) cite Taylor's (2009) assertion that "critical reflection" (p.120) is initiated by an awareness of "conflicting thoughts, feelings and actions [which] at times can lead to perspective transformation" (p. 120). Such conflicting utterances are seen by Dirckinck-Holmfeld (2006) and Carlile (2002, 2004) as boundary objects and the meeting of these objects is seen as a potential source for the development of knowledge. Horizons, as described by Gadamer (2004), can be seen as fixed and delimiting while boundary objects (Dirckinck-Holmfeld, 2006) are generative and expansive. Horizons are the sources of difference and boundaries are the zones where the horizons meet and from where new knowledge can be created dialogically. Mezirow's (2009) transformative learning addresses similar concepts and he asserts that in communicative or discursive learning, in order to transform deeply held habits of mind, critical reflection can be used to examine and question assumptions and suppositions.

Those authors who see tension or conflict as inherent in dialogue (Burbules, 2000; Engeström, Y., 1987, Russell, 2009; Taylor, 2009) acknowledge that conflict is also structural. There are conflicting forces of con- and divergence (Carlile, 2004), inclusion and critical examination as people with opposing views seek consensus (Burbules, 1993, cited in Lefstein, 2010, footnote 7, p.7). Once consensus is reached, however, should there be no other further disagreement, the reason for dialogue disappears. The implications for Professional Learning Communities is that if teachers cease to hold opposing views, the mechanism that drives Professional Learning Communities: dialogue, disappears, and without dialogue, the reason for the Professional Learning Community's existence is undermined. Continuous problem identification and formulation sustains the Professional Learning Community.

2.2.1.1 Dialogue in practice

In this section, dialogue in practice will be examined, rather than the theoretical or philosophical aspects of dialogue. Seen through a socio-cultural lens, meaning-making is not individual but social; dialogue plays a pivotal part in meaning-making and results in learning and knowledge (Bruner, 1997). Freire (2000) draws our attention to the fundamentally social nature of knowing and learning and is quite unequivocal that "dialogue characterizes an epistemological relationship" (p. 17). Duncan and Ridley-Duff (2013) also view the dialogical relationship as epistemological and advocate that interlocutors perceive dialogue

affectively, as well as logically, so that the “logical and emotional dimensions of the human mind are used to produce new and critical knowledge” (p. 7). This stance is in keeping with Dall’Alba and Barnacle’s (2005, cited in Webster-Wright, 2009) view of “embodied knowing” (p. 717) which propounds that the whole person is involved and engaged in learning and knowing in practice.

I agree with Burbules (1993, cited in Cuenca, 2011) that dialogue is an “activity directed towards discovery and new understanding” (p. 45). My understanding that all teaching-related conversation is dialogical is supported by the examples of “real dialogue” which Bakhtin (1986) supplies, namely “daily conversation, scientific discussion, political debate, and so forth” (p. 124). What seems to an outsider as a casual chat about an educational issue, foregrounded among many occurrences in the teachers’ day, over a cup of tea at break, is the most rudimentary form of real dialogue in a Professional Learning Community. Hargreaves and Fullan (2012) cite Little (1990) as identifying the following continuum of collaborative dialogue:

- scanning and storytelling – exchanging ideas, anecdotes and gossip;
- help and assistance – usually when asked;
- sharing – of materials and teaching strategies;
- joint work – where teachers teach, plan and inquire into teaching together (p.112).

Informal dialogue is not sufficient to develop professional communities of practice, but without those highly personal interactions, it is unlikely that formal collaboration can be sustained (Hargreaves and Fullan, 2012). Informal dialogic collaboration forms an indispensable part of the building up of social capital which formal collaboration requires to gain and sustain momentum (Hargreaves and Fullan, 2012). Even in its rudimentary forms, the complexity of “real dialogue” is illustrated in Barker and Givón’s (2005) explanation that dialogue possesses “not only the situational aspects of the interaction – speaker and hearer, time and place – but also the current states of knowledge and intention in the mind of each interlocutor at any given moment” (p. 223). But, Freire (2000) warns that “practice ungrounded in theory” (p. 19) will fail in its epistemological potential and suggests, “one must have an epistemological curiosity—a curiosity that is often missing in dialogue as conversation” (Freire, 2000, p. 19). This position is borne out by Dirckinck-Holmfeld’s (2006) assertion that literature, which provides “frameworks, concepts, models” (p. 3) is indispensable in professional dialogue.

Furthermore, when Yap (2015) identifies “shared values and vision” (p. 536) as a foundational orientation in Professional Learning Communities and Benhabib (1996) echoes that in her assumption of “universal

moral respect” (p. 78) and “egalitarian reciprocity” (p. 78). For example, “to ask for reflection about the presuppositions of the conversation”, in “practical discourses” (Benhabib, 1996, p. 78), they (Benhabib, 1996; Yap, 2015) identify the most important tenets on which successful Professional Learning Communities are based. Teachers engaging in professional dialogue in a Professional Learning Community engage each other in a shared zone that is initially not a zone of common understanding or agreement (Carlile, 2002, 2004). However, their goal is to engage in a collegial, dialogic relation in a manner that will ultimately make it possible to “finally come to some agreement” (Arendt, 1961, cited in Benhabib, 1994, p. 175). In a Professional Learning Community, even unpleasant conversations should be hallmarked by “reflection, understanding, trust and mutual respect” (Yap, 2015, p. 536). The dialogic space between interlocutors is akin to a zone of proximal development (ZPD) because it is where intersubjectivity enters Vygotsky’s constructivism (Bruner, 1997). Teachers will move into the space as their socially constructed dialogue develops (Carlile, 2002). Much as the ZPD represents the cognitive area within which cognitive development will take place, something akin to what Mercer (2000, cited in Wegerif, 2010) styles as a “more open and multidirectional ‘intermental development zone’ (IDZ) where ‘interthinking’ can occur between peers without the assumption of a teacher leading a learner” (p. 310). I agree with Gurevitch (2000, cited in Lefstein, 2006), though, that one must guard against a simplified understanding of the nature and outcome of dialogue because there is an “instability and threat inherent” (Gurevitch, 2000, cited in Lefstein, 2006, p. 2) in genuine dialogue.

The energy, goodwill and commitment required to continue dialogue in a potentially conflict-prone environment could threaten (Stoll et al., 2006) the existence of a Professional Learning Community. However, Burbules’ (2000) three principles of dialogue: “participation” (p. 256), “commitment” (p. 271) and “reciprocity” (p. 251) (also Burbules, 1993, cited in Lefstein, 2010, p. 174) and Lefstein’s (2010) more generic guidelines of dialogue having to be purposeful and cumulative, as well as critical and meaningful, supply teachers participating in a Professional Learning Community with guidelines that can be adapted to acknowledge the culture of the school. Professional Learning Communities demand mutual respect and professionalism so that all can benefit.

Professional Learning Communities offer rich possibilities for teacher learning, because according to Arendt (1998), interaction within the “web of relationships” (p. 183) means that each person is capable of action and initiating something novel and that the results of this interaction cannot be predicted: neither theories nor single individuals can predict the outcome because when there are many solutions to a problem or dilemma, the chosen solution is “subject to the agreement of many” (Arendt, 1998, p. 5). Despite its rich promise, paradoxically, the web of human relationships can scupper a Professional

Learning Community in that “action almost never achieves its full purpose” (Arendt, 1998, p. 184) because, as Bakhtin (1986) pointed out, utterances have no beginning or end – they exist on a continuum; so too do the relationships that give rise to the utterances. As a member of a Professional Learning Community thus enters the “web of human relationships” (Arendt, 1998, p. 183) that exists within and beyond the Professional Learning Community, “innumerable, conflicting wills and intentions” (Arendt, 1998, p. 184) already reside there. A dialectical methodology which invites critical thinking and critical enquiry would question the assumptions and beliefs underlying those wills and intentions, and thereby stimulate learning and understanding. The methods of inquiry in a Professional Learning Community could be conciliatory or conflictual and the cultural/historical context of the school will play an important role in choosing the method that the Professional Learning Community will use.

2.2.1.2. Reflection as part of dialogue

Elsewhere in this literature review, the dialogical transformation of the perspective of a member of a Professional Learning Community during interpersonal discussion is addressed. Transformation, however, is not only restricted to vocal exchanges of perspectives between members of a Professional Learning Community, critical reflection (Mezirow, 1990), an important instrument in self-directed adult learning, is “often prompted in response to an awareness of conflicting thoughts, feelings and actions” (Taylor, 2009, cited in Duncan and Ridley-Duff, 2014, p. 120). Reflection and reflective practices could be treated as a study of its own, as Schön’s (1983) work shows. This research study will, however, examine reflection as an integral part of meaning making through dialogue. Mezirow (1990) sees learning as a process wherein experiences or observations are reflected upon, leading to meaning-making or interpretation and when that interpretation is used to determine practice, learning has occurred. As a particular self-regulated activity, Mezirow’s reflective practice can lead to learning. Vermunt and Endedijk (2011) postulate that self-regulated in-service teacher learning includes “analysing, diagnosing, critical processing and reflection on events” (p.296). However, researchers have shown that teachers do not generally learn in an ordered, self-regulated, linear way (Vermunt and Endedijk, 2011; Day et al., 2006). Their learning is “discontinuous” (Huberman, 1993, cited in Day et al., 2006, p. 21), “planned (self-regulated) ... nonlinear (both external and self-regulated) or spontaneous (externally regulated)” (Vermunt and Endedijk, 2011, p. 297).

Reflection could suggest a solitary exercise and hence the presence of only one voice – that of the person reflecting on an event or their practice. According to Bakhtin (1986b), however, utterances are imbued with the voices of all who have pronounced on a topic and a single utterance is one on a continuum of

utterances. Thus, even when solitary, the reflections of a person are part of a polyphonous (multi-voiced) continuum of utterances (Bakhtin, 1986b; Koschmann, 1999). Furthermore, because of this case study's cultural-historical activity theory stance, reflection is seen to take place within a cultural and historical context. The latter can never be replicated identically because the person reflecting, as well as the object on which they are reflecting, are transformed during, and as a result of, reflection. Furthermore, the polyphony of reflection is enhanced by the complexity which thought possesses. Speakers and authors can give utterance to or capture in writing only one thought at a time whereas the mind can hold a complexity of thoughts simultaneously.

Teachers have to make decisions about pedagogical dilemmas in their classrooms throughout the teaching day. Several authors emphasise complexity (Biesta et al. 2015; Huberman, 2002; Shotter, 2005), made up of "the immediacy, the instability, the variability, the fundamentally indefinable qualities", (Huberman, 2002, p. 259) of decision-making in teaching practice. Schulman (2004), by contrast, focuses on teachers' "judgment under uncertainty" (p. 462) rather than their ability to manage complexity. When teachers want to reflect on their practice of a particular day, I agree with Schulman that for them to choose what material will become the "object of reflection" (Schulman, 2004, p. 464) is no trivial task because they are faced with a range of "unique, only once occurring, first-time events" (Shotter, 2010, p. 151) from which to choose. Add to this interplay, the "multi-dimensionality of educational purpose" (Biesta 2012) that should underpin all goal formulations and the complexity of teaching becomes even more apparent. However, during the selection process, as well as during reflection itself, the polyphony of utterances within their field can inform, underpin and direct a teacher's reflection (Duncan and Ridley-Duff, 2014).

Reflective practice is advocated as fundamental to the professionalism of a teacher (Finlay, 2008). Teachers have to think through the reasons for their practice, contemplate the effectiveness of the instruments they have chosen to use, and assess the outcomes of their practice. Their actions and reactions in their daily contact with their learners are also conscious (Schön, 1983, 1987). Reflection acts as "a process that orients subjects toward enacting a physical activity" (Yamagata-Lynch, 2010, p. 22) within a specific context.

Teachers at high school level are not required, nor are they accustomed, to keep daily case notes. At present, school leadership also does not make provision for the time required to do such tasks, or reflection, daily. Case notes so routinely compiled and updated in medical and legal practices are unknown in high schools. Teachers thus perceive themselves as executors of teaching policy rather than as professional practitioners, yet Finlay (2008) points out that professional reflection is not only desirable,

it is vital for teachers “to cope” (p. 3). Reflection provides the “what” in Professional Learning Communities. It is through reflection that teachers discover what their discussions should be about; at what their actions and activity should be directed. Professional Learning Communities follow cycles of reflection and discussion; research and reference to theory; selection of responses and deciding on best-fit options; implementation in practice; action research; assessment and reflection. Calderhead and Gates (1993, cited in Reed, Davis and Nyabanyaba, 2002), however, warn against the intuitive assumption that reflection will benefit teacher practice and learning. They assert that “such claims have rarely been subjected to detailed scrutiny” (Calderhead and Gates, 1993, cited in Reed et al., 2002, p. 119). The gap between what people know to be true or beneficial and what they choose to do about that knowledge in practice is the main challenge to the assumed benefits of reflection. Not translating knowledge or awareness into practice is not uncommon. People, at times, know, for example, what is best for their health, but will fail to act appropriately or effectively on that knowledge.

2.2.2 Learning in activity systems

Y. Engeström, R. Engeström, and Kärkkäinen, (1995) postulate in cultural-historical activity theory that “an activity system is a complex and relatively enduring ‘community of practice’ that often takes the shape of an institution” (p. 320). As teachers step into a Professional Learning Community, they bring with them their attitudes, affective state, understanding, misconceptions, gaps in their knowledge, practical experience – their whole historical-socio-cultural learning. Viewed through a constructivist, socio-cultural lens, their learning is founded on and transformed by previous learning. Its philosophical point of departure is that people do not learn in a contextual vacuum; what people already know, which skills they already possess, what they already believe influences what a person will observe, and how they will interpret it. (Cobb, 1994; Piaget, 1952, 1973a, b, 1977, 1978; Vygotsky, 1962, 1978, cited in Bransford, Brown, and Cocking, 2000). There are some fundamental elements of cultural-historical activity theory (CHAT) that resonate with Professional Learning Communities, namely CHAT’s cultural and historical lens, its orientation of subject, object and outcome interplaying with community, rules and division of labour, as well as its recognition of an organic, complex whole (Quay, 2003).

Activity theory allows teachers to target the object, which Y. Engeström (1999, cited in Russell, 2009) defines as “an enduring, constantly reproduced purpose of a collective activity system that motivates and defines ... possible goals and actions” (p. 45), to work towards a desired outcome. But, because of the transformation principle accepted in this case study, the whole activity system – including all the nodes – will be transformed as a result of collective activity. Sannino et al. (2009) assert that activity theory is set

apart from other sociocultural theories by its “practice-based” and “historical and future-orientated” (p. 3) nature. In terms of teaching, it recognizes the subject, which can be the individual teacher and/or the Professional Learning Community, operating within a division of labour, in a broader community, and under a set of rules, using tools to address an object. Even within the structure of Y. Engeström’s (1987) activity theory model, teachers still need to develop their skills for determining the object by applying problem finding techniques (Tan and Caleon, 2016). Teachers address the object on any one or more planes of activity, namely outcome-directed activity, short-lived, goal-directed action, and routine operations. Tan and Caleon (2016), however, warn that little is known about how teachers select the problems that will form the focus of their efforts in the Professional Learning Community.

Activity theory, furthermore, supports the role of the teacher as a change agent. Agency is often mentioned in the literature (Edwards, 2009; Kumpulainen and Lipponen, 2010; Priestley et al., 2012; Biesta et al., 2015), and even though Biesta et al. (2015) point out the paucity of work specifically on teacher agency – as opposed to agency in other contexts – there are some common aspects of agency given by the authors. The active, cognitive participation of the teacher in their selection of responses in an educational context is one of them (Priestley et al., 2012; Priestley, 2014). Taylor (1977, cited in Edwards, 2009), for example, describes agency in terms of goal setting and the ability to evaluate the achievement of those goals, whereas Greeno (2006 cited in Kumpulainen and Lipponen, 2010) ties agency to learning in that the teacher feels sufficiently in control of what they have learnt to be able to employ that knowledge contextually. Edwards et al. (2002) and Charteris and Smardon (2015) go so far as to suggest that agentic teachers have an ethical, social responsibility to lead educational thinking and development. Taylor (1985, cited in Edwards et al., 2002) sees people as deciding what is important to themselves and thus each experienced teacher will decide what to bring to the fore, and what to relegate or ignore as they make meaning throughout their day. Because each teacher will prioritise the significance of elements differently, depending on their “goals or standards” (Taylor, 1985, quoted in Edwards et al., 2002, p. 103) each experience will be personal and individual for each teacher. Taylor (1985, cited in Edwards et al., 2002) broadened his view of the agentic teacher away from a narrow “individualistic constructivist version of being an interpreting and reinterpreting person” to include the effect of the “common values and shared commitment to socially oriented goals constructed within and sustained by the social practices of the communities” (p. 104). Biesta et al. (2015) also foreground environment in their description of agency by asserting that agentic teachers act “*by means* of their environment rather than simply *in* their environment” (p.626; emphasis in original) by which they mean the “interplay of individual efforts, available resources and contextual and structural factors as they come together in particular and, in a sense, always unique situations” (Biesta and Tedder, 2007, cited in Biesta et al. 2015, p. 626). Biesta et al.’s (2015) succinct

statement that agency is “not something that people can *have* – as a property, capacity or competence – but is something that people *do*” (p. 626; emphasis in original) is in keeping with the stance of this case study in that in activity theory, a teacher directs activity towards an object to achieve an outcome; they *do* something. In line with Emirbayer and Mische’s (1998, cited in Charteris and Smardon, 2015) work on agency, Biesta et al. (2015) propose an ecological, situated view of agency as a dynamic, contextual interplay between purpose, learnt routines and the exercise of judgement within a “chordal triad” (Emirbayer and Mische, 1998, cited in Charteris and Smardon, 2015, p. 116) of past, future and present. Edwards et al. (2002) describe teacher agency “or capacity for individual responsible action”, as lying “in the extent to which they are able to interpret and respond in ways which ensure that they are dealing with what is significant for them” (p. 103). And I fully agree with Edwards et al.’s (2002) observation that “where teachers’ actions are heavily circumscribed, their agency is restricted” (p. 103). The culture of prescription and regulation that currently pervades South African education thus works against professional teacher agency.

Constructivist professional learning differs fundamentally from the previous instructionist model of professional development where “experts outside the classroom develop, teachers implement, and students receive” (Short and Burke, 1991, cited in Clausen et al., 2009, p. 444) knowledge. Imparting the same theory and information to teachers will not deliver uniform practice or learning; each teacher will interpret or reinterpret inputs in terms of their own reality (Reed et al., 2002; Lave, 2009). Hence, I support Edwards et al. (2002) in their assertion that “Educational knowledge is unlikely to be used in predictable ways by practitioners” (p. 103) if teachers are expected to deliver a set of tightly prescribed and monitored educational policies for implementation. Such policies rely on an “easily transferable knowledge-base” (Edwards et al., 2002, p. 103). However, in a constructivist paradigm, practising teachers will not use the knowledge as uniformly as the authors of the policies had intended because they will be making meaning of their unique reality.

Multi-dimensionality in education is strongly advocated by Biesta (2012) to alert teachers to keep in mind always their educational duty to nurture three dimensions in themselves and their learners, namely qualification, socialization and subjectification, because “competence, the ability to do things, is in itself never enough” (Biesta, 2012, p. 13-14). Any of the three could form the core of the object in an activity system (Engeström, Y. et al., 1995). But, because of the interrelatedness of the dimensions, not one of them in isolation would form the core of an object. And because there is overlap, there is the possibility for contradiction (how to satisfy one without doing an injustice to the rest), which is in keeping with Y. Engeström’s (2000, 2001, 2009, 2011) recognition of contradiction being an integral aspect of an activity

system. The multi-dimensionality of a teacher's work is further illustrated by Bronfenbrenner's (1986) historically changing bio-ecological levels that make up each person's micro, meso and macro environments in which the teacher chooses to act on any of three planes: activity, action or operation. Cultural-historical activity theory (CHAT) does not see the individual and the environment as two separate units of analysis; CHAT sees them as a holistic unit (Yamagata-Lynch, 2010).

Within a Professional Learning Community, activity is transformative because as it is exercised, the subject and object will transform each other, which will concomitantly transform their relationship and context (Yamagata-Lynch, 2010). Members of the Professional Learning Community will find that as their activity addresses a gap or need (object), that gap or need will transform, and consequently their agency will transform to meet the altered gap. In that transformation lies some of the learning that drives the Professional Learning Community.

2.3 PROFESSIONAL LEARNING COMMUNITY AS A GENERATOR AND DISTRIBUTOR OF KNOWLEDGE

The current trend in professional learning is to champion Professional Learning Communities. However, what not all authors state is that a Professional Learning Community takes many years to develop and that there are structural threats to its existence. In a results-driven society where there is frequent reference to "the business of schooling" (Davis et al., 2000), as well as calls for measurable performance, all coupled with the realities of budgetary demands, time becomes a luxury. Schedules need to be freed to give time for meaningful collaboration, and the commitment to structural reforms needs to be long-lasting if Professional Learning Community time is not to be reduced to "just another meeting" (DuFour and Reeves, 2015).

Even though learning itself is well-described and learning processes are well-researched and documented, it has to be acknowledged that why and how in-service teachers learn in a community requires further research (Cameron et al., 2013; Talbert and McLaughlin, 2002; Vermunt and Endedijk, 2011). In addition, Owen (2015) recognises the need for further research of Professional Learning Communities and acknowledges the challenges in such research. However, she (Owen, 2015) highlights that her study has shown affective benefits of Professional Learning Communities; they foster "teacher and student well-being, reinvigorating teacher passion for working with students and their learning" (p. 72). She also points out that learner achievement should not be the only measure of success of a Professional Learning Community because the creativity and flexibility demanded of teachers and

learners today means that those skills should also be part of the success criteria of a Professional Learning Community (Owen, 2015).

The term Professional Learning Community is not one which one encounters frequently in literature on education in South Africa, although Botha (2012) and Brodie (2013), for example, have addressed Professional Learning Communities' role in teacher professional learning in South Africa. Professional Learning Communities represent innovation, and as with all innovations, it will be adopted at various speeds and its practices will experience the full range of adopters, namely early adopters, middle majorities, sceptics and laggards (Wenger et al., 2002). Furthermore, making time available in and of itself does not foster Professional Learning Community adoption (Hargreaves and Fullan, 2012). Bolam et al. (2005) draw on the research of Seashore and Colleagues (2003), as well as Toole (2001), to observe that Professional Learning Communities might not be as effective as some authors suggest and that teachers tend to draw on their mental orientation to change when deciding to accept Professional Learning Communities or not.

As the dates of most of the seminal works in this literature review reveal, many of the fundamental concepts underpinning this case study have taken decades (Barton and Hamilton, 2005) to be tested and adopted in practice. The consequence of this slow change is that under such circumstances, knowledge about teaching practice tends to accumulate. There is a residue of previous practice remnant in new practice, so practice tends to layer, rather than transform. Addressing the problem of accumulation, Edwards et al. (2002) cite Kozulin's (1996) advocacy of revisiting the problem (instead of comparing previous solutions) when introducing new teaching practice. Y. Engeström (1987) also warns that development must be viewed as "partially destructive" (p. 7) of what has gone before and that learning by expanding in an activity system should be viewed as a collective, rather than individual, transformation, achieving a broadening, as well as deepening, of learning.

If teachers layer practice, they are referring to past practice; current practice is expressed in terms of past practice. Edwards et al. (2002) point out that this means that every so-called innovation then becomes "retrospective", not "prospective" (p. 102). Biesta et al. (2015) also warn against relying on findings from the past to plot a course for the future. Their observation is reminiscent of an often-used analogy which illustrates the dilemma. Thinking retrospectively is like driving a car while looking in the rear-view mirror. One's points of reference will be what has passed, not what lies ahead. Teacher learning should make provision for an anticipation of what is to come in terms of demands and resources and to work according to those. Hargreaves and Fullan (2012) address the related issues of best and next practice, while

Hargreaves (2009) and Biesta et al. (2015) warn that teachers must guard against a focus on the current to the exclusion of the foreseeable. Their position is that teachers could stagnate into using only current best practice, and not grow as professionals. Their supposition that best coupled with next practice is required to encourage the sort of innovation that engenders career-long professional learning is based on the premise that best practice can point out the elements of next practice that are not sound, while next practice can identify the failed elements of best practice. They perceive next practice as being drawn from the practices of the relevant teachers and their peers, and informed by theories and literature on those practices. In drawing on current practice to springboard next practice, Hargreaves and Fullan's (2012) thinking about professional development is at odds with that of Kozulin's (1996, cited in Edwards et al., 2002) in his advocacy to "return to the beginning" when he recommends that teachers return to the problem, instead of layering solutions from least to most recent. To further illustrate the dilemma of striking the optimal balance between retrospective and prospective stances, Hargreaves and Goodson (2006) warn that educational change can only be sustained by appropriate change theories, and that theorists would be best served to take note of past change when developing their theories to counteract near-sighted drives for change that would serve only short-term purposes. Sustainable educational change must ensure that the chances of success of future generations' efforts must not be impeded by changes made at any given time (Hargreaves and Goodson, 2006).

2.3.1 Knowledge

The development of professional knowledge involves

- self-reflection and evaluation
- developing subject matter knowledge and skills of teaching
- expanding (one's) knowledge base about research, teaching theories and principles (my addition)
- taking different roles and responsibilities like supervisor, mentor teacher, teacher researcher, or materials writer (Thomas, 2005, cited in Usha Rani, 2012, p. 36)

This is in keeping with the Department of Higher Education and Training's (2011) emphasis on "integrated and applied knowledge" (p. 7) which is "explicitly placing knowledge, reflection, connection, synthesis and research in the foreground" (p. 7) and "gives renewed emphasis to *what* is to be learned and *how* it is to be learnt" (p. 7, emphasis in original). Bransford et al. (2000), cite the work of Chase and Simon (1973), Chi et al. (1981) and deGroot (1965), when they link knowledge and the ability to solve complex problems within specific subject areas. Coffin and O'Halloran (2008) echo this in their assertion that "complex-problem-solving is viewed as central to knowledge building with new knowledge derived from the

argumentation process being integrated into existing cognitive structures” (p. 220). Teachers possess expert knowledge which, according to Bransford et al. (2000), has three characteristics: It

- is connected and organised around important concepts
- is “conditionalized” to specify the contexts in which it is applicable
- supports understanding and transfer (to other contexts) rather than only the ability to remember (p. 9) (My addition in brackets).

During problem formulation, the participants in a Professional Learning Community will encounter two broad groups of knowledge that Dirckinck-Holmfeld (2006) calls “assimilating knowledge” or “learning about” (p. 2) and “transforming knowledge” (p. 2). The former is typically what teachers need to understand the nature and working of a Professional Learning Community. The ontology, epistemology and methodology underpinning the Professional Learning Community needs to be introduced and interrogated because a dialogical, CHAT-based Professional Learning Community would represent a novel paradigm to many participants. They would need to assimilate some knowledge about the Professional Learning Community. Once operational, and in keeping with the principles of dialogic learning, they and their knowledge would be constantly transformed. Not only would the participants individually experience transformation, but, according to Y. Engeström (2011) and others (Engeström, Y. and Sannino, 2010; Russell, 2009; So, 2013), the conflict generated by different views that come into play during short-term action will drive the group forward to develop an agreed-upon outcome through the long-term activity that the Professional Learning Community espouses (Dirckinck-Holmfeld, 2006; Engeström, Y., 2011; Engeström, Y. and Sannino, 2010).

2.3.2 Professional development

Little (2002) cites Achinstein (2002), Grossman, Wineburg, and Woolworth, (2001), Gutierrez (1996), King and Newmann, (1999), Little (1990, 1999), Louis and Kruse (1995), McLaughlin and Talbert (2001), Stokes (2001), Talbert (1995), Westheimer (1998) and Witziers, Sleegers and Imants (1999) that professional communities aid four aspects of teaching practice of particular interest to this case study, namely the dialectical examination of old and new practice, generation of knowledge, dialogic engagement of different and conflicting viewpoints, and professional development.

As part of their professional development, teachers self-monitor (Bransford et al., 2000; Edwards et al., 2002; Hattie, 2012). The literature reveals that self-monitoring has many interpretations. Authors such as Bransford et al (2000) see self-monitoring as a higher cognitive process vital for learning – something akin

to Vermunt and Endedijk's (2011) self-regulation; Hattie (2012) cites Lavery (2008) who places it second last on a list of nine strategies that facilitate learning while Edwards et al. (2002) use self-monitoring to describe teachers checking themselves for adherence to predetermined lesson-plans and other mechanistic elements of their practice. When addressing teacher learning in Professional Learning Communities this case study will use self-monitoring in the cognitive sense where teachers engage actively with their own practice, making choices about their actions, reactions, pedagogy, reflection and research. This approach to self-monitoring is also adopted by Usha Rani (2012).

2.3.3 Professional Learning Communities

The coining of the term Professional Learning Community is attributed to Shirley Hord (1997) and she cites the work previously done by Astuto, et al. (1993). Since 1997 so many diverse groupings have called themselves learning communities that there is no universal definition of a Professional Learning Community (Bolam et al., 2005; Stoll et al., 2006). This case study, however, accepts as valid the following two descriptions of Professional Learning Communities: Graves' description of a Professional Learning Community as being "an inherently cooperative, cohesive and self-reflective group entity whose members work toward common goals while respecting a variety of perspectives, values and life styles" (Graves, 1992, cited in Clausen et al., 2009, p. 445). Stoll et al. (2006) draw on several authors in their description of a Professional Learning Community as being "a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way (Mitchell and Sackney, 2000; Toole and Louis, 2002), operating as a collective enterprise (King and Newmann, 2001)" (p. 223). In addition to the term, Professional Learning Community, Hord also suggested a more descriptive phrase, namely "communities of continuous inquiry and improvement". (Hord, 1997, p. 6; Stoll et al., 2006, p. 223). Which resonates well with the description by Clausen et al. (2009, informed by the work of Garmston and Wellman, 1995; Hancock, 1997; Harada, 2001), that in Professional Learning Communities, primarily, "all participants actively construct their reality and are active in the learning process, rather than simply acquiring knowledge" (p. 446).

A Professional Learning Community is often established within a specific academic "arena" (Nardi, 1996, p. 34), for example a school or an academic department, because it represents a "stable institutional framework" (Nardi, 1996, p. 34) and a "shared domain" (Orey, 2010, p. 321) where there is "a sense of accountability to a body of knowledge and, therefore, to a development of practice" (Orey, 2010, p. 321). Orey (2010), furthermore insists that "A domain it (sic.) not an abstract area of interest, but consists of key issues, problems or interests that members commonly experience" (p. 321).

2.3.3.1 A PROFESSIONAL LEARNING COMMUNITY AS A POOL OF PROFESSIONAL CAPITAL

In the literature, an ability to function effectively in a specific field is at times attributed to the possession of the required resources. Hargreaves and Fullan (2012) use a metaphor of capital for such teacher resources. They see professional capital as the convergence of human, social and decisional capital which increases with collaboration. However, they caution that collaboration does not automatically lead to an increase in professional capital. Their assertion that “Professional capital is about communities of teachers using best and next practice together” (p. 51) is salient when developing Professional Learning Communities. Such a prospective stance is in keeping with those of Edwards et al. (2002). advocacy of “professionals who are informed by and inform a shared understanding of pedagogies which meet the current and foreseeable needs of learners and their worlds” (p. 102).

A crucial part of professional capital is decisional capital, required in “circumstances where there is no fixed rule or piece of incontrovertible evidence to guide” (Hargreaves and Fullan, 2012, p. 94) the decision-maker. This is also relevant to Schön’s (1987) advocacy of “reflection-in-action” (p.32) and “professional artistry” (p. 35) in the face of the complexity of teaching discussed earlier in this chapter. Shotter (2010) coined the phrase “dialogically-structured behaviour” (p. 155) to distinguish it from behaviour that is the result of cause-and-effect, or arrived at logically, and to capture the complexity of responses originating from within the teacher. Because learning is a dialogical process in a Professional Learning Community, social capital and its relationship to decisional capital is of interest. Teachers use social capital (Hargreaves and Fullan, 2012) to develop the web of relationships and trust necessary to share knowledge and experience, which augments a teacher’s decisional capital. Social capital is thus both the gateway to, as well as an integral part of, decisional capital. Hargreaves and Fullan (2012) postulate that decisional capital is built up over time, as teachers are allowed to make considered, informed judgements and to collaborate with colleagues. Within a Professional Learning Community social capital is of special importance because high social capital augments the members’ “senses of expectation, obligation, and trust; and how far they are likely to adhere to the same norms or codes of behaviour” (Hargreaves and Fullan, 2012, p. 90).

Mezirow’s (2009) theory of transformative learning is relevant to the development of social capital. In a community where such contradictory, and at times centripetal, forces such as trust, individual horizons, and open and respectful dialogue all work together, it is useful for teachers to be aware of their “habits of mind” (p. 92) or “meaning perspectives” (p. 93) and “resultant points of view” (p. 92). Mezirow (2009)

posits that habits of mind are fixed by cultural and language structures, and once fixed, are difficult to change. He defines habits of mind as “broad, abstract, orienting, habitual ways of thinking, feeling and acting, influenced by assumptions that constitute a set of codes” (Mezirow, 2009, p. 92). Points of view are less fixed and may be altered through discourse or experience. A teacher’s point of view, and the resultant prejudice or bias toward a fellow teacher might stem from a habit of mind; an experience with that person might change the teacher’s point of view, but might not change their deeply held habit of mind. Changing habits of mind requires deep, critical reflection (Mezirow, 2009). This has implications for the establishment, adoption and development of a Professional Learning Community. Toole (2001, cited in Bolam et al., 2005) postulated that Professional Learning Communities might be less successful than the literature claims as “teachers’ individual mental models – the ‘schemas’ or maps they draw on to guide their professional practice – determine whether individual teachers are actually ready to change” (p. 10) and adopt more collaborative practices.

2.3.3.2 CREATION, STRUCTURING AND SUSTAINING OF A PROFESSIONAL LEARNING COMMUNITY

Hargreaves (2015) and Hargreaves and Fullan (2012) address each of the three elements in a Professional Learning Community. They and others (Stoll et al., 2006) see a community not as transient but as a long-term grouping of staff members who share the same educational aim. In addition, members of a Professional Learning Community espouse collective responsibility for improving their classroom practice in order to achieve that aim. At the same time, they foster a healthy, caring community spirit which recognises and respects each member as a person and a professional (Bolam et al., 2005; Graves, 1992, cited in Clausen et al., 2009; Hargreaves and Fullan, 2012; Stoll et al., 2006). Even though the context of the professional community is not exactly as Freire (2000) described his communities, two elements that the functioning of a Professional Learning Community and a Freirean community have in common is the respecting of each members’ voice and contribution, and praxis – that process of reflection that gives meaning to each member’s experience.

One of the first questions that leaders might ask when contemplating the establishment of a Professional Learning Community in their schools might be about the optimal size of a Professional Learning Community. Should it be the whole school or large sections of the school, or would small groups serve the Professional Learning Community best? In the literature review conducted by Hord (1997), she cites McMullan (1996) and Peterson, McCarthy and Elmore (1996) as finding that whole school or

departmental communities are optimal. However, no matter how large or small the community, the individuals within those communities must be seen as vital because “individuals change systems, acting separately and together” (Fullan, 1994, cited in Hord, 1997, p. 8).

Wenger et al. (2002) remind us that “Cultivating communities takes place in an organizational or interorganizational context” (p. 190). But Fullan (2000, cited in Clausen et al., 2009) warns that little is known about the creation and maintenance of learning communities. “Cultivating” implies a process of planting and nurturing. Professional Learning Communities do not develop spontaneously, neither do they grow and flourish without the required care and attention. Some authors warn that the learning and knowledge-creation related to Professional Learning Communities could be seen as burdensome additions (Biesta et al., 2015; Carlile, 2002; 2004; Dirckinck-Holmfeld, 2006; Jurasaitė-Harbison and Rex, 2010; Talbert and McLaughlin, 2002) that detract time and attention from perceived vital tasks, without aiding the effectiveness of those tasks. However, Hamilton (2002) mitigates that fear by asserting that “Practice is never pure” (p. 142) because it always takes place within a cultural, historical context that has the potential to help or to hinder effective practice. Teachers’ perception of practice is thus shaped by the time available to them and whether, for example, their school values bureaucracy or innovation (Bolam et al., 2005).

Some organizations are structured around collective operations, but in teaching, much of the work occurs when individual teachers are isolated in their classrooms. Individualism is thus common in teaching because Hargreaves and Fullan (2012), for example, recognise that individualism “is rooted in the very conditions and contexts of teachers’ work – time, buildings, feedback systems, and so on” (p. 111). Yet, in his more recent work, Hargreaves (2015) sees the growing trend towards transparency and review in teaching as contributing to the decline in individualism. Change must, however, be managed carefully. Hargreaves and Fullan (2012), for example, warn that “imposed and repetitive change can also exacerbate individualism in teaching” (p. 110). Constant change results in a number of reactions that work against the collaboration required to foster a well-functioning Professional Learning Community. It could, paradoxically, deprive teachers of the necessary time to collaborate (Hargreaves and Fullan, 2012). Hargreaves and Fullan (2012) also suggest that individualism could become a defence mechanism. They cite Dan Lortie’s (1975) view that “teacher individualism is ‘not cocky and assured: it is hesitant and uneasy’” (p. 108). When teachers find themselves overburdened and defensive, they avoid the more challenging issues regarding the deepening and broadening of teaching practice because of what Hargreaves (2009) calls the “conservatism of ends” and “conservatism of hurried and unreflective means” (p. 151). The former focuses on simply improving the marks learners attain, while the latter hinders or

inhibits reflective practice, research and contemplation. Just as too much change can cause teachers to withdraw into their individual cocoons, so a lack of perceived challenge can result in what Rosenholtz (1989, cited in Hargreaves and Fullan, 2012) calls “stuck” schools (p.111). In such schools, “Teachers thought teaching was technically easy, they usually worked alone, and they rarely asked for help” (p. 111). Individualism thus remained the dominant culture in those schools. However, individual learning is not always the only learning preference of a teacher, nor is it always the result of too much or too little change. Vermunt and Endedijk (2011), for example, found that the teachers in their research study tended to investigate and initiate learning opportunities individually, but collaborated with colleagues in their informal professional learning.

Considering the long history of individualism (Hargreaves, 2009, 2015) in teaching, the benefit that can be derived from Professional Learning Communities and whether they are worth the effort of establishing and nurturing in schools has been discussed by several authors (Bolam et al., 2005; Clausen et al., 2009; Hargreaves and Fullan, 2012; Talbert and McLaughlin, 2002). Until relatively recently, the individual teacher was seen as the norm (Clausen et al., 2009; Hargreaves, 2015; Talbert and McLaughlin, 2002) and now Professional Learning Communities seem to be disturbing the status quo; some would believe without much evidence of benefit (Lin, 2003; Vermunt and Endedijk, 2009). However, Hargreaves (2015) cites the findings of Hargreaves (1994), Hord (1997), Newmann and Wehlage (1995), and McLaughlin and Talbert (2001) that collaboration “produces better (student) learning outcomes, improves teacher retention and brings about more successful implementation of change” (p. 120). Owen (2015) also finds that Professional Learning Communities have affective advantages for teachers because they put “people back in contact with why they want to be teachers. Because (they)’re talking about learning, talking about teaching” (Leader Interview 1 quoted in Owen, 2015, p. 72; my word in brackets).

Hargreaves and Fullan (2012) recognises that not all collaboration is equally desirable or useful and recognise a structure of four types of association that become progressively more collaborative:

- Balkanism: characterised by insulated cliques (Hargreaves and Fullan, 2012, term it “Balkanization”, p. 115.)
- arranged or “contrived collegiality” (p. 117): characterised as a mediating stage toward full collaboration
- “Professional Learning Communities” (p. 127): characterised by respectful collaboration
- “clusters, networks and federations” (p. 136)

Clusters, networks or federations are akin to Y. Engeström’s (2001) third generation activity systems.

In practice, Balkanism is especially evident in high schools because their academic structure is often fragmented and built around subject-focused groups (Horn and Little, 2010). Balkanism can, however, be the result not of subject cliques, but of teachers who see themselves as progressive, or successful (Huberman, 1993, cited in Talbert and McLaughlin, 2002), or conservative, and who find collaboration with like-minded teachers beneficial to themselves. Because collaboration might not be part of the organisation's current structure or culture, and because it takes time to develop, true collaboration might require some form of scaffolding or engineering in the form of "arranged" (Hargreaves and Fullan, 2012, p. 117; Hargreaves, 2015, p.121) collaboration. Arranged collegiality might have a place in schools where there is little or no collaboration (Clausen et al., 2009), just to start breaking down a culture of individualism (Hargreaves, 2015; Putnam and Borko, 2000) and Balkanism (Hargreaves and Fullan, 2012), or when new theories or approaches, gained from sources beyond the school, are introduced to the members of the Professional Learning Community. Arranged collegiality can be seen as socially constructed scaffolding to facilitate teachers' increased collaboration. Hord's (1997) literature review of learning communities suggests that arranged collaboration is an essential step in the development of Professional Learning Communities and this assertion is partly supported by Clausen et al. (2009) and Owen's (2015) research findings but both warn of caveats. Push and pull factors are at play in any innovation. Even though teachers might at first have to be nudged or pushed into a Professional Learning Communities by the school's leadership (Clausen et al. 2009, Hargreaves, 2015), over time they may experience that the benefits of dialogical learning become significant enough for them to be pulled towards participation (Wenger et al., 2002).

The advocacy of a balanced approach to the structuring and motivation required to establish and grow Professional Learning Communities appears in Hord (1997), Hargreaves and Fullan (2012), as well as Hargreaves (2015). In the latter, Hargreaves (2015) identifies "nudges" (p.119) mid-way between push and pull forces in arranged collegiality. He distinguishes between "normative" (p.124) and structural nudges. Normative nudges are grounded in the language and expectations of the school. Language can play a significant role in leading the school's culture in a certain direction. Regularly placing certain words or phrases in the foreground influences what teachers think about. Language is a mediating tool in the creation of the Professional Learning Community's culture in that specific words come to mean specific things within that context (Barton and Hamilton, 2005). However, Biesta et al. (2015) warn that teachers seem to parrot the language used in policy documents but there is little literature on whether they espouse the full meaning of the words they use. Structural nudges consist of engineered choices where the environment – both physical and organisational – steer staff in a direction which the leadership of the

school has chosen (Clausen et al. 2009; Hargreaves, 2015). Clausen et al. (2009) found that management at the school in their study used “rather heavy-handed techniques” (p. 451) to positive effect but include a warning that elsewhere such an approach had a negative effect. How to achieve a balance between pull and push to achieve mature collaboration (Hargreaves, 2015) could be the topic of future research.

Hargreaves and Fullan (2012) concede that the adoption of a scaffolding approach to collaboration could help the school’s leaders to recognise some of the arrangements that would facilitate collaboration. For example, without teachers being released from some of their current commitments to allow time for Professional Learning Community meetings with colleagues, meetings are bound to remain informal interactions in the staffroom, or “just another meeting” (DuFour and Reeves, 2015, par. 6). Leaders should, however, not allow arranged collegiality to become the norm in their school, or to use it to control collaboration. Hargreaves and Fullan (2012) warn that “when arranged collegiality turns into contrived collegiality” by becoming entrenched “it can become a slick administrative surrogate for collaborative teacher cultures” (p. 119). On the sliding scale of collaboration, mentioned previously in this chapter, contrived collaboration will seldom deliver collaboration beyond its own notch, and mature Professional Learning Communities will not be able to develop. Hargreaves (2015) revisits contrived collegiality because the increasing focus on evidence-based learning has brought with it greater control of professional development, and a restraint on the principles of Professional Learning Communities (Amin and Roberts, 2008). Hord (1997) cites Floden, Goertz and O’Day’s (1995) assertion that, for professional practice to change meaningfully, “time for discussion, observation and reflection (activities of learning communities)” (p. 50) has to be supplied by the school to change the “dispositions and view of self” (p. 50) of the teachers involved. Several authors address the view teachers have of themselves, and even though this case study is not studying identity formation, reflection and reflexive practice are seen to play a very important part in teachers’ identity formation (Akkerman and Meijer, 2011; Bakhtin, 1986; Duncan and Ridley-Duff, 2014; Mezirow, 2009).

Greater regulation and standardisation have eroded teachers’ professionalism (Talbert, 2010, p. 560). Hargreaves and Fullan (2012) see uncertainty as the “parent of professionalism and the enemy of standardization” (p. 107). If, as the literature (Biesta, 2015; Priestley et al., 2012) suggests, there is a resurgence of interest in the re-establishment of teachers’ professionalism, a complex web of considerations come into play. This case study acknowledges that it is artificial to extract only a few elements from that web and support only those in this literature review. However, it is done to maintain focus on the elements that are seen as particularly salient to facilitate the cogency of this case study. When teachers’ story-telling is incorporated in the informal phase of Professional Learning Communities,

it is important to understand this as story-telling in the Freirean mode. Story-telling as addressed by Freire (2000), Benhabib (1994, 1996), Duncan and Ridley-Duff (2014) is about empowerment, about rising to claim identity. Story-telling in Professional Learning Communities is not idle chit-chat or telling anecdotes for the sake of entertainment; it is a form of reification – producing products of teaching. It is part of the process of establishing teacher identity (subjectivity) and power, and those two elements in turn form an important part of teacher agency. Kumpulainen and Lipponen (2010) hypothesize that identity “is continually negotiated and re-negotiated in the processes of participation, and is closely related to the development of agency” (p. 49).

A Professional Learning Community is informed; members take cognisance of cogent evidence to inform and support their practice. It is directed and guided by the experienced, collective judgement of its members. And it has impetus; it advances through mature, challenging conversations about practice among its members.

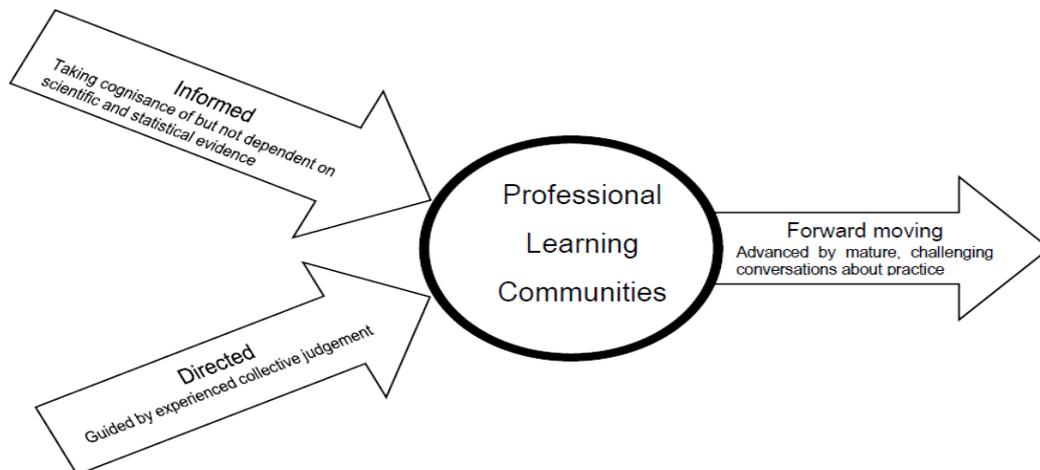


Figure 2.0.1 Qualities of a Professional Learning Community (Hargreaves and Fullan, 2012, p. 128)

Many teachers in South Africa have become accustomed to the thought that they do not lead; they follow. They do not initiate or innovate; they implement. Reed et al. (2002) cite Walker (1993; 1994) and Adler (1997) who in their studies of teachers as researchers found that “the majority of teachers in South Africa ... are more used to following the prescriptions of education authorities than to working reflectively” (p. 122). Instilling in their teaching staff a new mindset of leading their own learning to stay current and to develop their practice, learning and professionalism will require a clear sense of purpose and plan of action from teachers who are committed to developing Professional Learning Communities in their schools. When discussing communities of practice, Wenger et al. (2002) reiterate that such communities are “not only about organizing groups but also about transforming organizations” (p. 190).

The starting point for nurturing a Professional Learning Community in a school is to set aside time. Time is one of the most precious commodities in a school, so it needs to be rearranged; Professional Learning Community members need time for reflection, discussion, research and writing. The physical and policy structures to support that needs to be put in place (Yap, 2015). Practices not currently routinely part of a high school teacher's day will become essential if the fundamental demands of effective Professional Learning Communities are to be satisfied. Hargreaves and Fullan (2012) issue several warnings about developing deep, broad and probing collaboration, namely that it is time-consuming and cannot be rushed and that the informal aspects of collaboration play a vital role in sustaining and deepening the required trust relationships. Yet, collaboration cannot be left to develop spontaneously. There is a delicate balance required to initiate, nurture (Finlay, 2015; Jurasaitė-Harbison and Rex, 2010; Bolam et al. 2005) and sustain collaborative communities in which relationships play such a vital role. Hargreaves and Fullan (2012), however, draw Professional Learning Community developers' attention to their findings that time, without formally facilitated collaboration, will not deliver the depth of discussion, collaboration or professional capital that the Professional Learning Community aims to engender. In addition, Carlile (2002) points out that teachers are "invested in their knowledge as hard-won outcome" (p. 445) and they might not willingly want to invest more time and effort in a new course of knowledge acquisition delivered, instructional style, by an outside expert. Informal, situated learning occurs as the teachers practice their profession and discuss their work with their colleagues, thereby reducing the potential dissonance the teacher might feel towards professional learning. Carlile (2004) suggests that with each discussion, teachers find more common ground and "they improve at collectively developing more adequate common lexicon, meaning, and interests" (p. 563). The danger of informal learning, however, is that it could broaden the teacher's knowledge, but not deepen it. It appears that deepening involves moving beyond practice into theory at some point. Irrespective of learning scenario, commitment to career-long professional learning requires resilience because it requires the "personal and professional investment of intellectual energy" (Day et al., 2006, p. 32).

A learning community's educational aim is learner centred. The members of the community are committed to the learning of their learners, their progress and their holistic well-being. Problems and shortcomings in the classroom are not addressed by uncritically reverting to formulaic responses, doing in their classrooms what the teachers had observed as learners themselves, grabbing "best practice" or uncontextualised solutions taught to them in workshops. Learning community members' evolving and improving practice grows from informed dialogue, drawing on recent and valid theory, conversing with colleagues about their professional experience and examining learners' learning through artefacts and

observation. Here a transient element might be acceptable in the form of multi-disciplinary team members joining the community for a specific time because they might be able to offer insights or information unavailable to the teachers (Hargreaves and Fullan, 2012). The onus, however, continues to rest on the community members to develop professional and effective responses to their classroom demands. Charteris and Smardon (2015) cite Priestley, Biesta and Robinson's (2013) work to show how dialogic engagement with their learners supplies teachers with evidence of learning, which in turn supplies the data which they take to the Professional Learning Community to decide collaboratively on effective classroom practice. Dialogic feedback, teacher agency, teacher learning and professional development are thus related (Charteris and Smardon, 2015).

Arranged collegiality can be seen as socially constructed scaffolding to facilitate teachers' increased collaboration which could serve to move the school through a zone of proximal development. Y. Engeström (1987) defines as "the distance or difference between the present actions of individuals and the historically new forms of activity, which can be collectively generated as solutions to the double bind potentially inscribed in everyday actions" (p. 164). "Double bind" in this instance refers to Bateson's (1972, cited in Engeström, Y., 2001, p. 138) concept of Learning II, where new forms of activity develop to overcome the contradictions present in situations where, for example, the teacher is learning, acquiring the rules of behaviour and adapting to being a member of a specific Professional Learning Community with its own culture and history while at the same time participating in the learning goal of the Professional Learning Community. Lave (2009) also addresses such situated learning and notes that at times learners will "cross a boundary in order to discover the appropriate limits of the design" (Keller and Keller, 1993, cited in Lave, 2009, p. 204) through trial and error. Carlile's (2002, 2004) work on boundaries also illuminates how teachers can produce new knowledge in Professional Learning Communities. Some of the literature to date (Clausen et al., 2009; Hargreaves, 2015; Hargreaves and Fullan, 2012; Hord, 1997) suggests the necessity for trust, but not how to achieve it

Professional Learning Communities are fundamentally different to existing extraction-style professional development programmes, and consequently should not be seen, or used, as an add-on. Current in-service training (INSET) programmes are outside-in, top-down in nature; Professional Learning Communities are inside-out in orientation. Teachers themselves decide on their needs and agendas, timeframes and implementation. There is the danger that a Professional Learning Community can be seen as optional add-on, therefore, it requires a change of mindset. It demands a change of paradigm from viewing teachers as recipient-implementers to viewing teachers as innovator/initiator-implementers. Learning and knowledge will not come from outsiders looking in, but from insiders looking out.

Two principles that are required for the effective functioning of Professional Learning Communities is universal respect for each member as having a valid point of view and contribution to make, and that all members of the Professional Learning Community are equal. However, Duncan and Ridley-Duff (2014) argue that power is experienced at all levels of society and through every human interaction. This means the vertical hierarchy within the school is not the only expression of power and that even with every attempt at a power-neutral structure within a Professional Learning Community, power imbalances are still possible. Taylor (2009, cited in Sannino et al., 2009) posits that the very existence of a community “firmly tie subjects in coorientational relationships that inevitably involve authority” (p. xix) and that “The existence of authority is an inconvenience we have to live with, as a condition of civilized society” (Taylor, 2009, p. 237). Lave (2009), who also recognises the heterogeneity of the elements that comprise learning in a Professional Learning Community, posits that “interdependencies, conflicts, and relations of power” (p. 205) are the result of “considerations aesthetic, stylistic, functional, procedural, financial, and academic as well as conceptions of self and other, and material conditions of work” (Keller and Keller, 1993, quoted in Lave, 2009, p. 205). The challenge in Professional Learning Communities thus seems to be not how to avoid power and authority, but how to manage it in an ideally egalitarian group. The problem with assuming a power-neutral position in an unknown structure is that there will be no one in the group who can guide the participants into a discovery and understanding of how a Professional Learning Community functions as a learning centre. At first thus, there might have to be an expert who facilitates and guides, and a leader who structures the time, place and opportunity to facilitate teachers in their learning about their Professional Learning Community. Once all are initiated and understand the dialectical and dialogical nature of the Professional Learning Community, a flatter structure can be adopted because adults are self-directed learners (Vermunt and Endedijk, 2011) and the more constrained by authority, the less effective teachers are as independent professional learners and decision-makers (Biesta et al., 2015; Hargreaves, 2015; Ning et al., 2016).

2.4 CONCLUSION

This literature review presented the ideal and theoretical aspects of the informal professional learning of in-service teachers in a Professional Learning Community, as orientated by activity theory. It showed that there is a growing understanding of the value of situated learning in learning communities, and Professional Learning Communities are increasingly being used to advance teacher informal professional learning. At the same time, far from declining as had been predicted (Engeström, Y., 2008, 2009), activity theory has become more widely accepted and offered a valid lens through which to view learning and

some structural elements of Professional Learning Communities. The next chapter will be offering a concise description of the research design and methodology of this case study.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

In the “complex ecology” (Davis, Sumara, & Luce-Kapler, 2000) that makes up the teaching and learning environment in schools, teaching is represented as “engaged, participatory, and organic” (Davis et al., 2000) and teacher professionalism is seen as important to practising effectively in such a complex environment. Professional learning enhances teacher professionalism (Biesta, Priestly, & Robinson, 2015; Hargreaves & Fullan, 2015; Priestly, 2014) and it is possible for such learning to take place effectively in a Professional Learning Community (Bolam, McMahon, Stoll, Thomas, & Wallace, 2005; DuFour, 2004; Feger & Arruda, 2008; Horn & Little, 2010; Little, 2002; Owen, 2015). To contribute to the dialogue about teacher learning, this case study explored the professional learning of a group of teachers at a private high school in the Western Cape.

3.2 RESEARCH AIMS

The objective of this research study was to describe how teachers learn professionally and to discover the gap between current learning practices and professional learning in a Professional Learning Community as proposed by several authors (Hargreaves & Fullan, 2012; Hargreaves, 2015; Shulman, 2004). Because I ascribe to Bakhtin’s (1986) theory on the continuity of utterances, I saw this case study as adding to the dialogue about professional learning through situated learning and learning by expanding in Professional Learning Communities. South African teachers are mostly unaware of the specific requirements of a Professional Learning Community, yet many learn collaboratively and experience a strong sense of community in their schools, and are thus already learning within a rudimentary Professional Learning Community. A critical realism approach was thus followed which did not require teachers to know the theory of a Professional Learning Community before they could describe their collaborative learning experiences. Furthermore, this case study viewed the professional learning of the participants through the lens of a Professional Learning Community as a learning environment, not as a structure regulated by set requirements.

It was my aim to report on the results of the study in such a way that other teachers and school leaders would find it interesting enough to identify the gap in their own teachers' professional learning and to suggest ways of addressing that gap.

3.3 RESEARCH QUESTION

This case study examined the in-service professional learning of a group of teachers. The main research question that guided this research was: "Does a Professional Learning Community play a role in the professional learning of high school teachers at a private school in the Western Cape?"

This question was answered by exploring five sub-questions:

- What is professional learning?
- What are Professional Learning Communities?
- How do teachers learn in Professional Learning Communities?
- How do the teachers in the research sample learn?
- How does the practice of learning in the school community differ from the theory of professional learning in a Professional Learning Community?

These questions supplied the main strands for the interview questions which, in turn, were designed to supply sufficient data to satisfy the requirement that the researcher describe "the context within which the phenomenon is occurring as well as the phenomenon itself" (Baxter & Jack, 2008, p. 555).

3.4 THEORETICAL FRAMEWORK

Theory "supports the articulation, reflection and potential reinterpretation of existing practices, providing a tool with which we can engage in second-order reflection" (Cradock, O'Halloran, McPherson & Hean, 2013). From the first time that I read about communities of practice, the concept resonated with me. However, it posed a problem: I was a teacher of many years' experience; I had completed several formal professional development courses and was in the process of completing another, and yet had never been introduced to the concept of a Professional Learning Community. It was not part of the vocabulary of my profession. At the same time, the more I read about Professional Learning Communities, the more I recognised that I and some of my colleagues exhibited traits of members of a Professional Learning Community and had undertaken collaborative learning. Much like Huberman (1993, cited in Talbert & McLaughlin, 2002) had found, however, we were working in an isolated cluster within our school – a few

teachers among many, drawn together by like-mindedness. This realisation piqued my interest. Spurred on by the knowledge that about a decade ago, most school leaders and teachers in the UK were also not using the term Professional Learning Community (Bolam et al. 2005), I decided to examine the professional learning of a small group of teachers in the Western Cape. Several theoretically orientating decisions were evident from the start: I wanted to discover the teachers' experience of learning as professionals and explore that learning in their normal work environment of the school. To accomplish that, I wanted to exercise purposive sampling. The sampling applied not only to the participants I would interview, but to the selection of the school itself. I selected a school where the staff already exhibited a shared sense of purpose and identity because a strong sense of community is fundamental to a Professional Learning Community. To ensure that the intended study was consistent and would produce useful data, I plotted the theoretical framework as a reminder of the parameters within which I had decided to work.

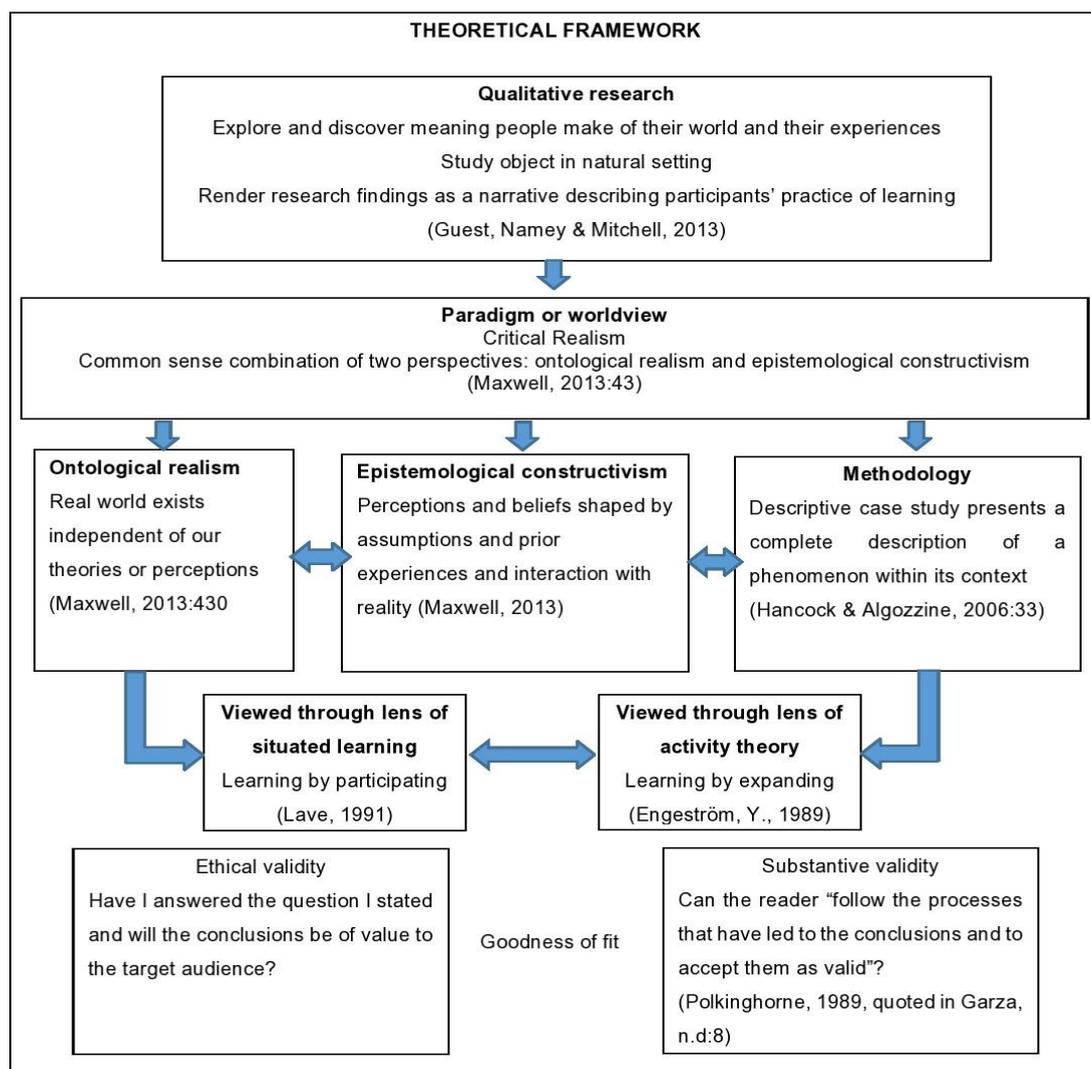


Figure 3.0.1 Theoretical framework of this case study

Problematizing the reality of the participants' learning within a concept that they were not necessarily aware of confirmed that I was working within the paradigm of critical realism. Maxwell (2013) describes critical realism as "two common-sense perspectives (ontological realism and epistemological constructivism) that have often been seen as logically incompatible" (p. 43, my addition in brackets). Ontological realism is a belief that "there is a real world that exists independently of our perceptions and theories" (Maxwell, 2013, p. 43). Yet, an epistemological constructivist view of meaning-making is that perceptions and beliefs influence our understanding of reality. This research was thus conducted within dual realist and constructivist frameworks of learning when viewing situated learning (Lave, 1991) and learning by expanding (Engeström, Y., 1987, 2001).

Even though there are a number of theoretical influences in this case study, they all fall under the constructivist umbrella and are not mutually exclusive but complement each other. A constructivist stance (Edwards, Gilroy & Hartley, 2002; Ertmer & Newby, 2013; Mezirow, 2009; Tennant, 2009; Wenger, 2009) views education not as inevitable, but as a social construct. Societies value certain qualities and skills and educate their members accordingly (Taber, 2011). Lave and McDermott (1993, cited in Lave, 2009) understand learning as "changing participation in the culturally designed settings of everyday life" (p. 201). Edwards et al. (2002), Ertmer and Newby (2013), Mezirow (2009), Tennant (2009) and Wenger (2009) postulate that the participants make meaning of their experiences. In that meaning-making process, they develop knowledge which is relevant to their specific context. Constructivists assert that "Learning occurs as the co-construction (or reconstruction) of social meanings from within the parameters of emergent, socially negotiated, and discursive activity" (Hicks, 1996a, cited in Koschmann, 1999, p. 309). However, Y. Engeström (2011) postulates that learning should not be viewed through the lens of acquisition or participation but should be seen as expansive in that the "learners learn something that is not yet there. In other words, the learners construct a new object and concept for their collective activity, and implement this new object and concept in practice" (p. 86). Furthermore, learning in this case study is not seen as a purely mental process which occurs within the mind of distinct individuals, but as a process of meaning making, informed by a cultural, historical, social context; learning is thus without, between and among, as well as within. Situated learning in a Professional Learning Community is seen as "the increasingly *effective* participation of an individual in the *activities of a system*" (Greeno, 1997, cited in Edwards et al., 2002, p. 108, my emphasis). Learning in this case study is viewed through dual lenses. The participants' current learning practices are viewed through the lens of situated learning. The heightened degree of professionalism, and concomitant new identity and culture that is possible in a Professional Learning Community, is viewed through the lens of Y. Engeström's (1987, 2001) learning by expanding. That

identity and culture then replace the participants' current view of themselves as implementers with one in which they view themselves as professionals with the learning and agency that go with that identity. A Professional Learning Community provides the learning environment within which professional learning takes place, while activity theory provides the orientation of professional learning that is both theoretical and real.

3.4.1 Research paradigm

Maxwell (2013) ascribes the concept and use of research paradigms to the foundational work of Thomas Kuhn (1970, cited in Maxwell, 2013) in which he sees a paradigm as representing "the entire constellation of beliefs, values, techniques, and so on, shared by the members of a given community" (p. 42). And thus, in order to answer the question on how an investigator can go about finding what can be found (Guba & Lincoln, 1994), some authors (Guba & Lincoln, 1994; Lincoln & Guba, 2000; Maxwell, 2013; Mertens, 2012) point back to Thomas Kuhn's (1962) work, *The Structure of Scientific Revolutions*, in which Kuhn introduces the term "paradigm" as used in scientific enquiry. Kuhn's (1962) application of "paradigm" is captured in his statement that "Men whose research is based on shared paradigms are committed to the same rules and standards for scientific practice" (p. 11). Kuhn (1962) understands paradigms "to be universally recognized scientific achievements that *for a time* provide model problems and solutions to a community of practitioners" (p. viii; my emphasis). Thus, Kuhn's understanding of "paradigm" is that it is a transitory embodiment of the "beliefs of scientists" (Mertens, 2012, p. 255) that will be held for a time and then replaced by another. If this is so, then H. A. Alexander (2006) points out that qualitative methods should have invalidated and replaced earlier quantitative methods, instead of the positivist, non-positivist debate raging, especially since 2001 when the *No Child Left Behind* policy was introduced in the USA. Bakhtin (1986b) sees the mutability of scientific trends as being essential to their development, as it is in the "border zones" (p. 136) between paradigms where "new trends and disciplines usually originate" (p. 137). Kuhn (1962) also proposes that scientists with different paradigms cannot understand each other because their very understanding of reality and the ways of discovering that reality are incompatible. However, Kuhn revises his position in 1996 when he asserts "there are circumstances, though I think them rare, under which two paradigms can coexist peacefully in the later period" (p. xi). In 1994, Guba and Lincoln (1994) posit their view of a paradigm as being "the basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways" (p. 105), and consequently, that a worldview defines "for its holder, the nature of the 'world', the individual's place in it, and the range of possible relationships to that world and its parts" (p. 106).

In the social sciences, “paradigm” has, however, come to focus more on philosophical beliefs of ontology and epistemology. Ontology, in this context, is taken to refer to reality and epistemology to the way we gain knowledge about what we understand to be reality. Several authors (Guba & Lincoln, 1994; Lincoln & Guba, 2000; Mason, 2002; Yin, 2011) have highlighted the debate about the hegemony and validity of quantitative versus qualitative research paradigms. This case study accepts Rule, Davey and Balfour’s (2011) finding that qualitative research within education offers a valid paradigm. The reasoning employed in qualitative research is often inductive in that the point of departure in qualitative research is not the testing of a hypothesis or theory, on the contrary, a qualitative study’s research question identifies a narrow scope of study of a specific subject (Gabriel, 2013).

This case study was conducted within a constructivist paradigm because as learners in their own right, teachers create their own meaning of any learning experiences. The constructivist paradigm of the case study’s epistemological stance resonated well with me and my research goals because of my own professional learning experience as a teacher. I found that I had always learnt best whenever I drew on my historical experiences (Kolb, A. & Kolb, D., 2005), my context and the input of my colleagues and peers. I acknowledge the dangers of making my own experiences part of my selection of research paradigm, however, I used what Reason (1988, cited in Maxwell, 2013) terms “critical subjectivity” (p. 45). I used my consciousness of my own experiences “as part of the inquiry process” (Reason, 1988, cited in Maxwell, 2013, p. 45).

3.5 RESEARCH CONTEXT

This section presents in greater detail the specific “system of concepts, assumptions, expectations, beliefs, and theories that supports and informs” (Maxwell, 2013, p. 39) this research study. A number of concepts are concurrently present in this case study and need to be elucidated and placed in context. The study falls within the field of professional development. Some authors describe professional development in terms of the discredited approach of sporadic, decontextualized, often transmission-style, workshops. However, this thesis uses professional development “as a process, not an event, ...that the process in (sic.) intentional...and is a systematic effort to bring about positive change or improvement” (Guskey, 1994, cited in Broad & Evans, 2006, p. 6). Furthermore, this case study espouses informal, professional learning as a route to accomplishing such development (Webster-Wright, 2009). Effective professional learning “continues over the long term and is best situated in a community that supports learning” (Webster-Wright, 2009, p. 703). Informal learning is understood to occur “in interactions among

teachers and their reflections upon their practice, sometimes planned and often happenstance” (Jurasaite-Harbison & Rex, 2010, p. 267). Such interactions and reflection are seen to occur during “participation in social communities” and that such participation “shapes our experience, and it also shapes those communities; the transformative potential goes both ways” (Wenger, 1998, p. 56-57). In this case study, learning by expanding in an activity system is seen as complementing situated learning (learning by participating) in a Professional Learning Community because situated learning addresses both the deepening and broadening of knowledge, while learning by expanding provides the orientation of such learning, namely that the learning is focused beyond the subjects on the object and outcome. The learning that this case study seeks to discover in the group of participants is problem-directed and generative, with them constructing knowledge as they address a gap or problem.

A Professional Learning Community is a long-term grouping of staff members who hold in common the same intentions and share collective responsibility to improve their classroom practice in order to achieve their aims. They fostering a healthy, caring community spirit which recognises and esteems each member as a person and a professional (Hargreaves & Fullan, 2012). Hord (1997) coined the term “Professional Learning Community” and a number of other authors (Bolam et al., 2005; Botha, 2012; Hargreaves, 2015; Hargreaves & Fullan, 2012; Lieberman & Mace, 2009; Lieberman & Miller 2008; Stoll et al., 2006; Tan & Caleon, 2016; Yap, 2015) have contributed to an understanding of learning in such a community. Professional Learning Communities require members to engage one another dialogically on issues concerning their teaching practice “in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way” (Mitchell & Sackney, 2000 and Toole & Louis, 2002, cited in Stoll et al. 2006, p. 223). Professional Learning Communities are characterised by an ongoing willingness of their members to reflect on their practice and discuss dialogically the issues that arise (Hargreaves & Fullan, 2012). Professional Learning Communities are inclusive; everyone has a voice in a Professional Learning Community; they seek to foster and facilitate career-long learning and professional development. In Professional Learning Communities, teachers not only learn dialogically but also aim to produce research artefacts that can stand professional scrutiny and contribute to the body of knowledge in their sphere (Shulman, 2004).

The third pivotal element in this case study is Y. Engeström’s activity theory (1987), despite some authors not seeing activity theory as a true learning theory. Yap (2015) cites Kaptelinin et al.’s (1995) assertion that activity theory supplies “a general conceptual system” (p. 536) and is seen as a model rather than a theory. Notwithstanding this criticism, activity theory has endured (Engeström, Y., 2009) and is regarded as a valid theoretical framework for this case study. Cultural-historical activity theory (CHAT), a term

coined by Michael Cole (1988), has its origins in the constructivist learning theory of a group of Russian psychologists, most notably, Leont'ev (sometimes rendered as Leontiev in the literature), Vygotsky and Luria. CHAT postulates that meaning is constructed jointly and that all learning occurs within a community and is shaped by the cultural influences to which individuals are exposed, while those individuals are constantly transforming over time (Cradock, O'Halloran, McPherson, Hean, & Hammick, 2013). Yrjö Engeström (1987, 2001), one of the early proponents of cultural historical activity theory in the West, developed Vygotsky's work on the use of language as a tool and postulated his second generation activity theory. Y. Engeström's theory (1989, 2001, 2011) recognises the constructivist elements suggested by the Russian forerunners of CHAT in that "learning is seen as a matter of participation in a social process of knowledge construction rather than as an individual endeavour" (Kumpulainen & Lipponen, 2010, p. 50). Y. Engeström went on to develop further generations of activity theory (Engeström, Y., 2001), each addressing an increasingly complex learning scenario. This research study used Y. Engeström's second generation activity theory because it studied a single system of learning. Y. Engeström et al. view an activity system as "a complex and relatively enduring 'community of practice' that often takes the shape of an institution" (Engeström, Y., Engeström, R., & Kärkkäinen, 1995, 320). In such a system, Y. Engeström extends activity theory to include not only the original nodes of activity (the subject, object and artefacts) represented as a triangle of activity in the first generation of activity theory, but the additional nodes of rules, communities and division of labour as well, thereby recognising the vital influence of cultural community in learning.

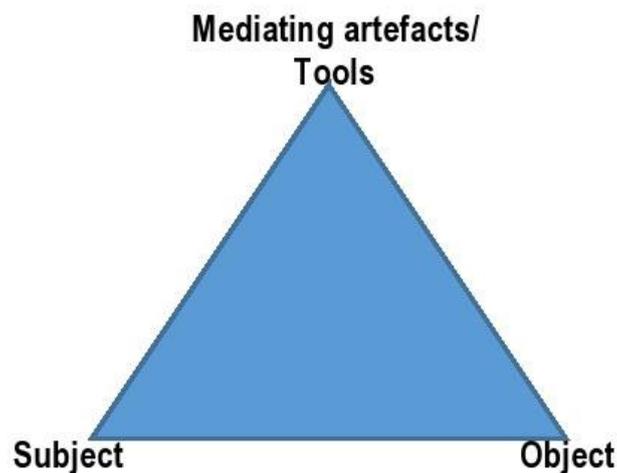


Figure 3.0.2 A first generation activity system inspired by Vygotsky

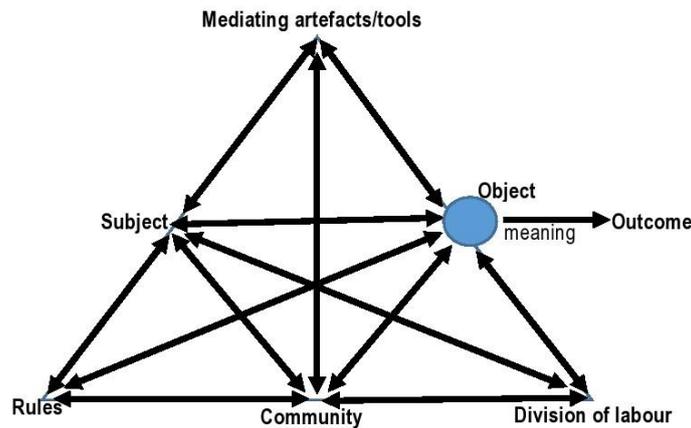


Figure 3.0.3 A second generation activity system (Engeström, Y., 1987, p. 78)

His second generation activity theory emphasises the multidirectional appropriation and use of artefacts (tools and signs), and he advocates an analytical framework that recognises not only individual action and functional operations, but also the societal/community aspects of collective activity in order to achieve an outcome (Engeström, Y., 1987). Second generation activity theory proposes analysis of the interactions between the elements or nodes of activity. It recognises that “contradictions” (Engeström, Y., 2001, p. 137) supply the impetus to transform and develop. However, it also warns that conflict, which stems from dialogue and discourse, must not be confused with contradictions, which result from structural changes (Engeström, Y., 2001, 2011; Engeström, Y. & Sannino, 2010). Activity theory informs two elements of this case study: its unit of analysis, namely a learning community in a school in the Western Cape, and a view of learning that is outward-looking. Learning by expanding focuses on the object and discovers what is unknown; teachers “learn something that is not yet there. In other words, the learners construct a new object and concept for their collective activity, and implement this new object and concept in practice” (Engeström, Y. & Sannino, 2010, p. 2).

In this case study, Y. Engeström’s second generation activity theory (AT) (1987) was used because his third generation AT explores the complex interaction of a number of activity systems (Engeström, Y. & Sannino, 2010). In an ideal inclusive scenario in education, this would be the valid model, however, a model based on second generation activity theory offers a good fit for the development of a single Professional Learning Community. It can be represented as the complex, transformative, interactive system of subject, object, tools, rules, community and division of labour. It is this integrated social system that makes activity theory a suitable lens through which to observe a Professional Learning Community

because as Edwards et al. (2002) point out “Teacher professionalism and pupils' learning are both networked, socially distributed processes” (p. 128).

Activity theory uses three concepts also commonly used in layman's terms to identify three planes of activity within an activity system. They are: operation, action and activity (Y. Engeström, 1987). Each represents an increased level of complexity. Operations refer to the individual, routine operations that a teacher performs daily. Actions are also carried out individually and would involve the actions a teacher takes daily to address the needs and decisions that arise in the course of their classroom practice. They would employ tools purposefully to achieve effects. Activity is enduring, collaborative action and is aimed at addressing an assessed gap to achieve a desired outcome. Y. Engeström (1987) sees the outcome as lying beyond the subject and object. When considering the organic complexity (Baxter & Jack, 2008) of a teacher's practice, activity theory with its flexibility allows for both the collaborative decision-making found in Professional Learning Communities, as well as the reality of a teacher's daily practice in their classrooms. Teachers have to employ operations or actions to achieve the activity decided upon by the Professional Learning Community. Teachers in a Professional Learning Community have the collective professional autonomy (Stewart, 2014) to decide how effectively to deal with situations as they arise.

Activity is transformative because as it is exercised, the subject and object transform each other, which concomitantly transforms their relationship and context (Yamagata-Lynch, 2010). Members of the Professional Learning Community find that as they act in upon the object with tools, so all nodes of subject, tools, object, rules, community and division of labour are transformed. Transformation is directly linked to learning (Edwards, 2002). They also find that contradictions are present in transformation and that drives the Professional Learning Community forward as it addresses those contradictions.

The teachers within a Professional Learning Community represent the subject of an activity system. All subjects come from and work within a cultural, historical environment; their tools are culturally mediated tools and the object they identify is seen through a cultural, historical lens. Tools affect identity formation because a teacher chooses to use tools that are appropriate to their field of work. In education, culturally situated dialogue (Engeström, R., 1995) is seen as an essential tool in this case study. The teacher is embedded in a broader system – comprised of object, tools, rules, community and division of labour – while practising as an individual within their classroom and as part of a group in the Professional Learning Community.

The Professional Learning Community identifies the gap or dilemma that represents the object of their activity. Activity results in teacher professional learning as the teachers go through the cycle of problem identification and formulation, research to address the gap/problem, action planning, implementation and assessment of the outcome. Once their cycle of activity is complete, the teachers making up the Professional Learning Community assess the effectiveness of their activity, record the cycle of activity and decide on another or a further cycle of activity (Engeström, Y. & Sannino, 2010).

An object is “an enduring, constantly reproduced purpose of a collective activity system that motivates and defines ... possible goals and actions” (Engeström, Y., 1999, quoted in Russell, 2009, p. 45), thus problem identification and formulation are fundamental and vital to the identification of the object. In classroom practice, learners themselves are not the objects of activity, some aspect of their learning is. Even though this case study has elected to restrict itself to seeing activity through the lens of second generation activity theory, the ecological complexity (Bronfenbrenner, 1994) of a school illustrates the shortcomings of such a restriction because in order to address the gap effectively, subjects will - in many instances - interact with other activity systems (Engeström, Y. & Sannino, 2010), e.g. colleagues at other schools, other educational professionals, their or other education district offices, or parents.

“Rules refer to the explicit and implicit regulations, norms and conventions that constrain actions and interactions within the activity system” (Engeström, Y., 1993, cited in Yap, 2015, p. 536; Engeström & Sannino, 2010, p. 6). They are always culturally generated and often are devised to regulate historical scenarios. Rules regulate the working of the activity system. However, they pose a dilemma in a Professional Learning Community because the more regulated the Professional Learning Community, the more constrained the dialogue and actions will be in a scenario that requires openness and an acceptance of ambiguity (Talbert, 2010, cited in Lieberman & Miller, 2011). Organisations need ordering regulations (Taylor, 2009). However, in a collaborative, organisation like a Professional Learning Community, the rules would have to be arrived at collectively. Rules always elicit questions about authority and power. They would thus have to be adopted willingly for the type of trust (Bolam et al. 2005; Broad & Evans, 2006; Hargreaves, 2015; Hargreaves & Fullan, 2012; Hord, 1997, 2009; Stoll et al., 2006; Owen, 2015) necessary for the functioning of a Professional Learning Community to develop.

3.6 RESEARCH DESIGN

A research design is informed by the paradigm within which the researcher chooses to work, which includes their view of how meaning is made. My constructivist stance led me to choose a case study

because it gave me the opportunity to construct a study to uncover the learning experiences of a small group of specifically selected teachers in their natural teaching environment. Miles and Huberman (1994) describe a case as being, abstractly, “a phenomenon of sorts occurring in a bounded context” (p. 25). Merriam (2009) subscribes to their definition but refines it by describing the product of a case study, as well as exemplifying it. She defines a case as “an intensive, holistic description and analysis of a bounded phenomenon such as a program, an institution, a person, a process, or a social unit” (p. x). To achieve the research aims, I chose a descriptive case study, which according to Hancock and Algozzine (2006) attempts “to present a complete description of a phenomenon within its context” (p. 33). Furthermore, Yin (2003, cited in Baxter & Jack, 2008) describes a descriptive case study as being “used to describe an intervention or phenomenon and the real-life context in which it occurred” (p. 548). The case study questions are “what” questions which produce answers that can be incorporated in a text rich description of what was found. By quoting the participants, I can reveal directly their experiences to the reader, who can then use those utterances to validate the study’s findings.

The research participants’ account of their learning and knowledge making lies at the heart of this case study. A qualitative case study was well-suited for a naturalist study, conducted through semi-structured interviews, a focus group discussion and questionnaires, and interpreted subjectively. Baxter and Jack (2008) point out that case studies allow the investigator to collect data from a number of sources in a complex, organic context. That assertion is borne out by Hancock and Algozzine’s (2006) view that a case study lends “itself to in-depth analysis in a natural context using multiple sources of information” (p. 16).

The study was designed as a holistic, single (Yin, 2004; Yin, 2003 cited in Baxter & Jack, 2008), descriptive case study (Hancock & Algozzine, 2006; Stake, 1995; Yazan, 2015; Yin, 2004) which focused on only the professional learning of a group of participants. It did not seek to develop new theory or generalise the findings. A single case study design was appropriate for the purposes of this research study because it was bounded by size and time. A small sample was studied in depth (Hancock & Algozzine, 2006) and the data were collected within a limited timeframe (Yin, 2004). However, I did not discount in the case design that I might discover that teachers at different phases of their careers or with different contexts might learn differently, as Day (2012), Day, Stobart, Sammons, Kington, Gu, Smees, et al., (2006), Diaz-Maggioli (2004), and Talbert and McLaughlin (2002) suggest. Those differences would not be regarded as originating in separate embedded units within the school, each representing a different case.

3.7 RESEARCH METHODS

3.7.1 Sampling

Purposive sampling (Merriam, 2009) allowed me to seek the richest sources of data to satisfy the demands of the research design. I selected eight participants after being given access to their professional development profiles. The participants were chosen to supply as rich as possible a source of data about only their professional learning experiences. Not all the selected participants chose to take part in the research and the study proceeded with seven participants. Even though experience was not a factor in the initial selection process, the data revealed that the majority had more than 10 years' experience and thus fell within what Day, 2012 and Day et al. (2006) term their middle professional life phase.

3.7.2 Data collection

Five data gathering instruments were developed during the course of this case study to satisfy the requirement that data gathered in a case study should be from "multiple sources of information" (Hancock & Algozzine, 2006, p. 16). Data collection was interactive and used semi-structured interviews, a focus-group discussion and four short questionnaires (See Appendices A – J). In addition, three participants chose to return partial diary responses.

The research participants were requested to answer the biographical questions in writing before the interview and that information was collected and added to the data. The biographical data sheet (see Appendix A) was sent as an attachment to a password-protected email address. It was returned via the same route, or in person prior to the commencement of the interview. Subsequently, a question on the length of service of each teacher at the school was added because in the literature review, some authors propose that the learning of long-term colleagues benefits from lengthy collegial association.

The primary data-collection instrument was the semi-structured interview in which the guiding questions were informed by the research question and literature. The five research sub-questions provided the framework that ensured that all aspects of the research question were probed. An interview schedule of questions, as well as a graphic response sheet, was prepared to guide the interview (Appendix B and C). The questions were open-ended and elicited responses about the participants' personal experiences and understanding. Because the report would be a text-rich description of the participants' professional learning experiences, the questions were structured to elicit descriptions of personal views, simple recall

of phrases, analysis and enunciation of what the participants found successful practice. The first two questions were aimed at discovering the participants' understanding of what it means to be a professional (Armour & Makopoulou, 2012; Beijsaard, Meijer & Verloop, 2004; Hargreaves, 2015; Webster-Wright, 2009). These were followed by questions aimed at professional learning within a specific high school's context because such learning is the focus of this case study (Lave, 1991, 2009; Lea, 2005; Lieberman & Miller, 2011) while collaboration (Lai, 2011), a cornerstone of Professional Learning Communities (Owen, 2015; Vermunt & Endedijk, 2011) and activity theory (Engeström, R., 2014; Engeström, Y., 1989, 2001, 2011; Engeström, Y. & Sannino, 2010), were also probed. The interview questions also solicited responses on discourse (Bakhtin, 1986b; Engeström, R, 1995) and conflict (Handley, Sturdy, Fincham, & Clark, 2006; Lai, 2011). Both are fundamental elements of activity theory (Engeström, Y. & Sannino, 2010) and Professional Learning Communities (Bambino, 2009; Bolam et al., 2005; Dooner, Mandzuk, & Clifton, 2008; Stoll et al., 2006). Lastly, the questions addressed opportunities for collaborative learning (DuFour & Reeves, 2015; Hargreaves & Fullan, 2012), the stance of teachers towards learner achievement (Bambino, 2009; Biesta, Priestley & Robinson, 2015; Priestley, M., Edwards, Priestley, A., & Miller, 2012) and how the products of teacher learning are recorded (Shulman, 2004). I was aware throughout the case study that I was approaching the data subjectively. Thus, when developing the semi-structured questions, and especially during the interviews, care was taken not to lead the participants' answers. An interview was chosen because it is an instrument that affords "direct access to 'experience'" (Silverman, 2013, p. 47) and learning experience could more effectively be conveyed through personal responses than observation. It also enhanced validity because participants had an opportunity to ask for clarification if they did not understand the question, and they were able to revisit their answers, if they so wished. The interviews were scheduled for one hour and lasted between 35 minutes and 50 minutes. They took place in quiet venues of the participants' choice so that they felt comfortable and private. They were audio recorded with the written permission of the participants. Once complete, the audio recordings were transcribed and a copy of the transcription was given to the participants for comment.

Originally, the participants were requested to keep a month-long diary about their learning experiences. The participants had been told about the diary when the research topic was explained to them prior to them agreeing to participate in the study. Each participant was introduced to the criteria required for the entries once their interview had been concluded, and they had an opportunity to ask questions to clarify expectations. Participants were requested to write free-form diaries (Appendix D). They were requested to start keeping their reflective learning diary for a month immediately after the interview. The focus of the diaries was intended to be conversation and educational dialogue. However, from the start, teachers reported difficulty complying with the diary keeping because of time constraints and work pressures. All

but one of the participants reported that they were forgetting to keep the diary because it was not a focus of their day, or that they had more pressing work that needed to be done. The primary sources for the diary questions were Bakhtin's work on utterances (1986b), and Hargreaves' (2009, 2015), Hargreaves and Fullan's (2012), and Lieberman and Miller's (2008a) work on conversation and discussion in learning communities.

A point-form tick-list about teacher learning was provided (Appendix E) to replace the diaries because of the participants' reported difficulties with the diary-keeping. The categories of learning were largely derived from research done by Mansvelder-Longayroux, Verloop, Beijaard, and Vermunt (2007) cited in Vermunt and Endedijk (2011). The teachers found it no easier to complete than the free-form written diaries. Only two incomplete free-form diaries and one partial tick-list were returned. It was clear by the time a month had elapsed after the last interview had been conducted that the diaries would not supply much information. The diaries' contribution to the triangulation of the data had already been diluted by the different focuses of the original guidelines and the tick-list. The decision to move away from the reporting of conversations was taken because during the interviews, it became apparent that the teachers were not particularly focused on their unscheduled work-day discussions. The clear majority of conversations which the teachers referred to were rushed conversations over a cup of coffee at break. The tick-list diary thus focused on learning through various activities. Some, like "remembering" and "evaluating" (Vermunt & Endedijk, 2011) were associated with everyday teaching practice but "analysing, critical processing, diagnosing, and reflecting" (Vermunt & Endedijk, 2011) required the teacher to take a step back and contemplate their teaching. The actions were included not only to discover the learning actions of teachers in their daily practice but also to discover their awareness of their own learning activities and patterns. To this original list were added activities suggested by Kwakman (2004) cited in Vermunt and Endedijk (2011), namely "reading, experimenting" and "co-operating". The specific activities' descriptions as on the tick-list were informed by the literature on professional learning in general.

It was decided not to explain the diary requirements too closely, or to have the teachers start the diaries ahead of their interviews, because I did not want their reflection on their communication to skew the interview responses. In hindsight, those fears were not valid. Contemplation of language would have improved their responses to the language-focused questions because almost all the participants asked for clarification during the interviews and a number indicated that they could not think of examples on the spot. I believe that a study with educational discourse as the unit of analysis (Engeström, R., 2014) would be a valid research endeavour. My experience suggests that it would be best conducted through observation as the primary research tool.

To augment the data-gathering, four questionnaires were developed (Appendices F - I). They were informed by the literature and focused on community and how the teacher's real lives affected their learning. The questionnaires were developed quite late in the data-gathering process as almost a month had elapsed before it was apparent that the tick-list diary was also not going to be completed by most of the participants. They were administered just prior to the focus group discussion. Even though the participants were not initially familiar with the term Professional Learning Community, the study proceeded from the point of view that the participants do not have to know the term in order to learn within a community. A simple questionnaire (Appendix F) was administered using a five-point scale to establish whether the teachers saw their school as a learning community. The ten criteria were taken from Clausen, Aquino, & Wideman (2009, p. 445) who had constructed the list of common criteria from pertinent literature.

The questions on the level of collaboration at the school (Appendix G) supplied the Professional Learning Community's development profile. The participants' personal perceptions of their school as a community were probed. Appendix G was a slight modification of Bolam et al.'s (2005, p. 154) Professional Learning Community development profile. For this questionnaire (Appendix G), the participants were asked to indicate where, on a sliding scale from high to low, they believed their school rated in practice, if they measured it against what it had the potential to be. Both sets of responses to Appendices F and G were subjective and based on the participants' experiences.

The questionnaire on the factors that affect professional careers (Appendix H) was inspired by the work of Cameron et al. (2013), Day (2012), Day et al. (2006), Huberman (1993) cited in Talbert and McLaughlin (2002), and Tsui (2007) to discover the balance of "personal", "professional" and "environmental or situated" (Day et al., 2006; Cameron et al., 2013) influences on the participants' learning because teachers learn not only *in* their bio-ecological, historical, cultural environment but "*by means of*" (Biesta & Tedder, 2007, quoted in Biesta et al. 2015, p. 626, emphasis in Biesta et al., 2015) their bio-ecological, historical, cultural environment (Biesta et al. 2015; Engeström, Y. & Sannino, 2010; Tsui, 2008). I also included questions on the beliefs of the teachers because those beliefs could form horizons which affect teacher learning either by bounding what they learn or by reflecting their prejudices and assumptions back to them, triggering an examination of those beliefs and values which could then be changed (Biesta et al. 2015; Gadamer, 2004; Lefstein 2010).

The final questionnaire was a general questionnaire (Appendix I) that probed the participants' experience of collaborative learning on a five-point scale. The questions were inspired by the literature and aimed to discover information for triangulation about the participants' perception of their school as a community.

Triangulation strengthens the reliability of qualitative research findings. A focus group discussion was conducted a month after the last interview had been completed. Because the participants were reporting that they found the diary writing too onerous and they could not keep them as requested, four questionnaires, in addition to a number of discussion questions, were developed. The questionnaires were administered when the group of participants convened for the focus group discussion. Each participant responded individually and confidentially to the questionnaires and then the discussion commenced. The focus group discussion was also semi-structured (Appendix J) in that themes identified during the coding of the interview responses informed questions that were formulated to probe some issues. The focus-group discussion thus had elements of a stimulated-recall discussion. The focus group discussion was audio-recorded with the written permission of the participants.

3.8 VALIDITY AND RELIABILITY

Even though I did not enter this case study with a set of propositions, the literature and my own experience suggested that there was something to discover and these suspicions played a part in the formulation of the research question.

Reliability refers to the extent to which another researcher replicating the research design would find the same results. Validity refers to the extent to which the research will answer the research question and sub-questions set at the beginning. Burton, Brundett, & Jones (2008) warn that the rigorous demands of true reliability and validity would be "difficult, if not impossible, to fulfil by qualitative researchers undertaking small-scale investigations" (p. 168). Therefore, I aimed to ensure that "the evidence which the research offers can bear the weight of the interpretation that is put on it" (Sapsford & Jupp, 1996 quoted in Bell, 2005, p. 117-118), thereby enhancing the validity of this case study. Guest, Namey and Mitchell (2013) claim that the use of an interview augments validity because, should a participant not understand the question, they may ask and receive clarification.

To ensure validity and reliability, I followed systematic data collection and management strategies as the literature (Baxter & Jack, 2008; Burton et al., 2008; Hancock & Algozzine, 2006; Stake, 1995; Yin, 2009) suggests, and I employed triangulation, idea convergence, coding and theme development in the data

analysis. Triangulation was accomplished using three methods of data collection, namely semi-structured interviews, questionnaires and a semi-structured focus-group discussion. During data analysis, to ensure validity and reliability, I constantly referred to the research question to ensure that the data analysis addressed the question and its sub-questions. Validity of data analysis and findings was thus closely tied to the vigilant answering of the research question, as suggested by Burton et al. (2008). Furthermore, because data analysis of all the sources occurred as soon as they become available, the consistent coding of themes was facilitated, and consistent coding is mentioned in the literature (Burton et al., 2008; Silverman, 2013) as contributing to validity. Some codes were suggested by the literature, while open codes emerged from the data.

3.9 ETHICAL CONSIDERATIONS

Once the research proposal had been screened and approved by the relevant university ethics committees, I requested a meeting with the principal of the selected private school in the Western Cape. I had been employed as a teacher at that school eight years ago but had not had contact with the teachers or management in the interim. At the initial meeting, the principal of the school was briefed in full on how the collection of research data would affect the staff and school. The data collection was restricted to teachers; classes were not visited, nor were any learners involved in the research study. I sought written permission from the principal to interview a purposely selected group of eight teachers who would be the study's research participants. The selection of potential research participants was informed by the teachers' interest in furthering their professional learning. I selected the teachers who were most likely to deliver the richest data for the study. These teachers were contacted and invited to a briefing about the research study. At the briefing, they received their University of Stellenbosch-compiled informed consent forms in separate envelopes so that they could return their forms anonymously. When the teachers responded to the invitation, only seven of the eight selected participants chose to be part of the study. At the information briefing, it was explained to the prospective participants that their privacy and anonymity would be protected. In the thesis, all identifiable features, such as the teachers' names, the specific subjects they teach, the school's name and its location were anonymised. The anonymization was achieved by using code names for any personal names and by using a generic reference to the school, e.g. the school in this case study, as well as assigning a pseudonym to it. Gender references were chosen randomly. No reference was made to specific subjects. The research participants were also pointed to the section in the informed consent form where the recording of interviews was discussed. They were reassured that their consent would be required for the interviews and guided focus group discussion to be audio recorded.

All prospective research participants were made aware that they would be under no obligation to participate in the study, and that they would be allowed to withdraw at any stage. They were also informed that there was no remuneration for participation in the study. The research question was explained to the prospective participants and they had ample opportunity to ask questions and to express any opinions about the research. The security measures that were to be taken by the researcher were explained. All recordings of interviews, transcripts and all products of the study were kept on a computer with an access password, known only to the researcher, to ensure confidentiality. The interviews were recorded on a Dictaphone. Once the recording had been transferred to the researcher's computer and checked for clarity and it had been confirmed that the whole interview or focus group discussion had been captured, the Dictaphone recording was erased. To ensure that the raw data could not be lost, the computer recording was also stored in password-protected cloud storage. Electronic copies of the raw data will be kept for five years.

3.10 CONCLUSION

Congruency and consistency are essential if a qualitative study is to answer the research question it posed, gather relevant and sufficient data and present its findings in a reliable way. Developing a theoretical framework is the first step in ensuring the validity and reliability of a study. I found that my personal worldview led me to adopt a broad constructivist stance. However, this case study posed a particular dilemma: how do I show whether a Professional Learning Community plays a role in the professional learning of the participants if they do not know much about Professional Learning Communities? Critical realism confirmed that such a study would be valid. While developing the theoretical framework, sometimes the theory led the decisions, for example, the writing of a text-rich description of the findings, and at other times the realities of professional learning in a defined environment led the choice of a research method. I found that the literature review helped me understand and appreciate the theory, while the theory helped sift the literature into relevant and irrelevant elements, helped foreground certain elements, while showing how some literature represents contrasting views to the ones congruent with this case study's theoretical framework, research aim and question. Literature based on a deficiency model where teachers engage in professional learning to remedy some defective or missing knowledge was not in keeping with either situated learning or learning by expanding, for example.

The data that were gathered during the study were guided by the research question and the aim was to gather sufficient data “to replicate the study (O’Reilly & Parker, 2012 and Walker, 2012 cited in Fusch & Ness, 2015). However, sheer volume of information would not necessarily allow the research question to be answered, so the data gathering instruments needed not only to ensure theoretical congruency, but were also developed with triangulation of data in mind.

The next chapter will present the data that have been analysed, grouped and interpreted meaningfully.

CHAPTER 4

PRESENTATION AND DISCUSSION OF RESEARCH FINDINGS

4.1 INTRODUCTION

Chapter 3 outlined how a research product that has integrity and is trustworthy, useful and interesting is created. The elements of a study had to be congruent and its orientation and methodology consistent if it were to be able to fulfil its purpose of capturing and representing “the views and perspectives of the participants in a study” (Yin, 2011, p. 8). Chapters 3 and 4 offer two sides of Guba and Lincoln’s (1994) question: “How can the investigator go about finding what can be found?” (p. 108). Chapter 3 guided the discovery of as “rich” (Fusch & Ness, 2015, p. 1409) a source of information as possible. Chapter 4 will present the analysis and grouping of this raw information to create useful data that offers valid findings. Sapsford and Jupp (1996, cited in Bell, 2005) take valid to mean that the design of the research provides “credible conclusions” and that the “evidence which the research offers can bear the weight of the interpretation that is put on it” (p. 117-118).

The personal interviews, focus group discussion and other data sources provided data that were used to elucidate, corroborate and substantiate the findings and comments made in this case study. To ensure anonymity, each participant was assigned the code T, followed by a unique number, e.g. T1, T2 etc. Furthermore, in the data analysis, when a participant was quoted, a prefix code was used to indicated the source of the information.

Prefix Code	Source
PI	Personal Interview
FG	Focus Group
BI	Biographical Information
DE	Diary Entry

Table 4.1 Prefix codes

4.2 EXAMINING KEY ELEMENTS OF THE CASE

The concepts “Professional Learning Community” and “professional learning” played a pivotal role in this case study. It was thus important to establish whether the school was a learning community and if the

teacher learning that took place at the school was professional learning. Once that has been confirmed, the role of the Professional Learning Community in that learning could validly be described.

4.2.1 Professional Learning Community

When I started this case study, I feared that the unfamiliarity of South African teachers with Professional Learning Communities would be an impediment that would scupper the study's validity, despite the study's ontological stance of critical realism that postulates that a Professional Learning Community can exist without members calling it a Professional Learning Community. Bolam, McMahon, Stoll, Thomas and Wallace (2005) offer this working definition of a Professional Learning Community:

An effective Professional Learning Community has the capacity to promote and sustain the learning of all professionals in the school community with the collective purpose of enhancing pupil learning (p. iii).

This definition further contributed to the possibility of a valid discovery of a Professional Learning Community at the school, despite the school not identifying itself as such.

To establish whether the school could be considered a Professional Learning Community, I listed the salient characteristics that authoritative authors (Bolam et al., 2005; Hord, 1997; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006) have attributed to Professional Learning Communities. Those characteristics were then used to establish whether the school could validly be called a Professional Learning Community. The questionnaires (Appendices F – I), interview and focus group transcriptions were scrutinised and the results triangulated. Only the responses that were unequivocal were counted as positive responses. The Professional Learning Community criteria derived from the authors (Bolam et al., 2005; Hord, 1997; Stoll et al., 2006) were:

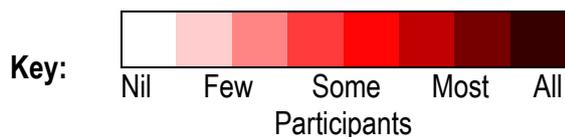
- Focus on teacher learning
- Focus on learner learning
- Collaboration and collective learning
- Shared practice
- Dialogue
- Community regarded as broader than just the school
- Environment conducive to professional learning
- Mutual trust and respect

- Shared leadership and support
- Shared beliefs
- School views teachers' lives holistically
- Reflection

The data revealed that all the participants were focused on learner and teacher learning, and had a broad view of community. Almost all saw collaboration and collective learning, shared practice and dialogue as important. Most recognised that there was an environment of professional learning, mutual trust and respect, shared leadership and support present at their school. And some agreed that teachers were viewed holistically, held shared beliefs and engaged in reflective practices.

Characteristic of a Professional Learning Community	Recognised characteristic
Collaboration and collective learning	All
Community broader than just the school	Most
Creating environment for professional learning	Some
Dialogue	Most
Focus on learner learning	Most
Focus on teacher learning	Most
Mutual trust and respect	Some
Reflection	Some
School views teachers' lives holistically	Some
Shared beliefs	Some
Shared leadership and support	Some
Shared practice	All

Table 4.2 Participants' perception of their Professional Learning Community



Two questionnaires (Addendices F and G) were especially helpful in corroborating data derived from the interviews and the focus group discussion to confirm the school's status as a Professional Learning

Community. Appendix F stated eleven characteristics of Professional Learning Communities compiled by Clausen, Aquino, Wideman (2009, p. 445) from literature. The participants were asked to rate their agreement with the statements on a five-point scale. Their responses were represented as Table 4.3.

Progress High School: a learning community

Professional Learning Community criteria	Fully agree	Somewhat agree	Undecided	Somewhat disagree	Fully disagree
There is a Progress approach to learning, and the staff sees Progress High School as having a distinct character.					
Teachers make meaning of their reality and do not only receive and dispense knowledge.					
The educational staff is driven by a shared goal or purpose.					
Informal power is shared amongst community stakeholders.					
Flexibility is created within the organizational structure to allow for professional learning.					
Through a balance of support and pressure, formal leaders show long-term commitment to promoting learning among staff.					
There is an open communication channel among all staff.					
There is a group memory pertaining to this school.					
Some outsourced support to facilitate teacher professional learning is used, but there is a movement to greater internally provided support.					
Teachers think in collegial terms.					
A culture of trust and respect exists among stakeholders					

Table 4.3 Progress High School: a learning community

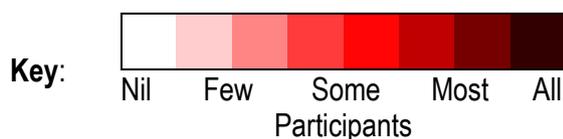


Table 4.4 represents the positions where the participants placed their school on a sliding scale of development. Reading individual rows horizontally, each X represents a participant's view of how far Progress High School had progressed towards developing a specific aspect of a Professional Learning Community.

Professional Learning Community Development Profile for Progress High School

	High	Low
Shared values and vision	X X XX XX X	
Collective responsibility for pupils' learning	X XXXX XX	
Collaboration focused on learning	XX X XX X X	
Professional learning: individual and collective	X XX XX X X	
Reflective professional enquiry	XX XX X XX	
Openness, networks and partnerships	X XX XX X X	
Inclusive membership	X XX XX X X	
Mutual trust, respect and support	X XXX X X X	
Optimising resources and structures to promote the PLC	X XX X X X X	
Promoting professional learning: individual and collective	X XX XX X X	
Evaluating and sustaining the Professional Learning Community	XXX X X X X	
<i>(Bolam et al., 2005, p. 154</i>		

Table 4.4 Development profile of Progress High School

Even though the questionnaire (Appendix G) supplied information about the school's development as a learning community at present (Bolam et al., 2005), it could also be re-administered for a number of years to come to track the school's development path and reveal the aspects that progress and those that stall.

Bolam et al. (2005) and Clausen et al. (2009) point out that the characteristics for professional learning communities are not universal or fixed at certain points of development. Bolam et al. (2005) developed their developmental profile because a simple classification of the developmental stage (starter, developer, mature) of a Professional Learning Community was unsatisfactory and did not reflect which dimensions of the institution's development were mature and which were in the beginning stages. Descriptions of "plateaux, discontinuities, regressions, spurts, and dead ends" (Huberman, 1995 cited in Day, 2012) used to describe teachers' career paths could also be applied to the development paths of Professional Learning Communities because Bolam et al. (2005) point out that Professional Learning Communities can progress or regress across any of the dimensions. Clausen et al. (2009) further reassure that "the characteristics found at any of these fragile, newborn communities will probably not 'measure up' to the ideal set by the literature" (p. 451). As this case study was only a single short-term snap-shot of the school's development process, poorly rated dimensions in the various data collection instruments were not enough to keep the learning environment from being described as a Professional Learning Community, or from the Professional Learning Community being studied as such. It was thus confirmed that the participants at Progress High School practice in a Professional Learning Community.

Because the findings of the role of the Professional Learning Community in the professional learning of the teachers will be reported on extensively later in this chapter, there will not be an in-depth discussion of the trends indicated in Tables 4.3 and 4.4 at this point.

4.2.2 Informal vs. formal learning

As this case study progressed, the data revealed that the participants' view of professional learning differed from that of this case study. The participants' responses revealed that they equated professional learning with professional development and professional development with formal courses or tertiary studies, and that they did not consider their collegial conversations, planning discussions, reviews of teaching methods etc. as learning. It was thus essential to define "professional learning" as part of the data collection. A search of the literature revealed that even though the term was used in a plethora of articles and books, few authors had defined the term (Gravani, 2007). Instead, they relied on their readers' intuitive understanding of "professional learning". Some authors, however, set out some characteristics of professional learning, and these were used to elucidate the term. One of the most decisive descriptions is, by Gravani's (2007) own admission, only a "pragmatic definition", namely that "Teachers' learning is strongly connected to professional goals which demand teachers to strive for continuous improvement of their teaching practices" (p. 689). Putnam and Borko (2000, cited in Webster-Wright, 2009) offer an epistemological perspective which recognises that "Educational researchers currently support the notion that PL is active, situated, social, and constructed" (p. 720). In Gravani's (2007) definition, there is no distinction between formal or informal learning, deficit or expansive models or planned and spontaneous learning. These distinctions depend on the paradigm espoused by a particular author. The subjective and convenient distinction in this case study between professional learning and professional development, even though supported by authors like Putnam and Borko (2000) and Webster-Wright (2009), had no basis in Gravani's formal definition. If authors distinguished between professional learning and professional development, it was because they espoused a particular epistemology. The terms are thus generally poorly defined in the literature and in their article on professional learning, Cameron, Mulholland, and Branson (2013), for example, use "professional learning" and "professional development" interchangeably.

As with professional learning, the term informal or non-formal learning is very widely used, almost exclusively without the author having offered a clear definition of their use of the term. I thought it important to define "formal" and "informal" learning opportunities for the sake of clarity and discussion. Richter, Kunter, Klusmann, Lüdtke and Baumert (2011) offered two useful and well-substantiated definitions.

“Formal opportunities are defined as structured learning environments with a *specified curriculum* (my emphasis), such as graduate courses or mandated staff development (Feiman-Nemser, 2001). They represent a main component of the “training model” (Little, 1993, p.129), also known as the “traditional view” (Lieberman, 1995, p. 591) on professional development. The training model assumes that teachers update their knowledge and skills by means of workshops and courses. These are generally full- or half-day activities in which experts disseminate information that can be applied in the workplace (Feiman-Nemser, 2001) (Richter et al., 2011, p. 116-117).

In the discussion of this case study, “formal learning programmes” include not only those courses that have a specified curriculum, but also those where the course content is determined by the outside expert, and not by the teachers themselves. The other components of the definition pertaining to the model, aim and method were all aligned with the participants’ experience of their professional development opportunities.

Informal learning opportunities, in contrast, do not follow a specified curriculum and are not restricted to certain environments (Desimone, 2009). They include individual activities such as reading books and classroom observations as well as collaborative activities such as conversations with colleagues and parents, mentoring activities, teacher networks and study groups (Desimone, 2009; Mesler & Spillane, 2009). Participation in these activities is generally *not mandatory* (my emphasis) (Eurydice, 2008; NASDTEC, 2004), but is at teachers’ *own initiative* (my emphasis). As such, teachers are not merely recipients of knowledge. Rather, they organise the learning process and determine their learning goals and strategies independently. Moreover, informal learning opportunities are often embedded in the classroom or school context, which allows teachers to reflect on their practice and to learn from their colleagues (Putnam & Borko, 2000) (Richter et al, 2011, p. 117).

The definition of informal learning opportunities captures many of the elements evident in the data of this case study. There is only one cautionary note; “mentor” in the school in question has a very specific connotation of a teacher looking after the holistic well-being of a small group of designated learners. “Mentoring” as used in the definition pertains to peer mentoring among teachers. Furthermore, even

though the South African Council of Educators (SACE) does not require participation in a Professional Learning Community, the school can make such participation mandatory.

The data revealed that the participants' professional learning bore many characteristics of generic adult learning. An adult learner:

- has an independent self-concept and can direct his or her own learning
- has accumulated a reservoir of life experiences that is a rich resource for learning
- has learning needs closely related to changing social roles
- is problem-centered and interested in immediate application of knowledge
- is motivated to learn by internal rather than external factors (Knowles, 1980, cited in Merriam, 2000, p. 5).

Despite being generic characteristics of adult learning, they reflect the agency espoused by activity theory and Professional Learning Communities.

4.2.3 The meaning of professional

The designation "professional" can be assigned to teachers who comply with statutory requirements and the qualifications framework for teachers in South Africa has been set out in Appendix Q. The participants in the study are all recognised as professional teachers by virtue of being members in good standing, registered with the South African Council of Educators (SACE). All thus comply with the "academic, professional and occupational requirements as described in the national policy document Norms and Standards for Educators, Department of Education" (DBE, 2000, p. 8).

When the literature refers to "professional", however, it does not refer to statutory compliance but to elevated levels of agency (Bietsa, Priestley & Robinson, 2015; Charteris & Sardon, 2015; Edwards et al., 2002; Priestley, M., Edwards, Priestley, A., & Miller, 2012), knowledge (Beattie, 1997; Eraut, 2000; Hadar & Brody, 2010; Webster-Wright, 2009) and responsibility (Hord, 2009). The growth of professional learning communities is partly due to attempts to re-professionalise education (Biesta et al., 2015). Decades of greater control by central policy makers (Biesta et al., 2015; Cameron, Mulholland, & Branson, 2013; Day, 2012; Priestley, 2014) and a perception that teacher professionals are not worthy of special status have led to doubt in some quarters that teacher professionals are making a meaningful contribution in a socio-cultural environment that values measurable performance (Davis, Sumara, & Luce-Kapler, 2000; Biesta et al., 2015; Schön, 1983). This doubt has led to a loss of standing. Schön (1983) postulates that the loss of face and faith "seems to be rooted in a growing skepticism about professional effectiveness

in the larger sense, a skeptical reassessment of the professionals' actual contribution to society's well-being through the delivery of competent services based on special knowledge" (p. 13). Consequently, "teaching is usually recognised as a profession even though it is not always accorded the same status as some other professions" (Armour & Makopoulou, 2012, p. 336).

Hord (2009), one of the progenitors of the Professional Learning Community concept, describes professionals as

those individuals who are responsible and accountable for delivering an effective instructional program to students so that they each learn well. Professionals show up with a passionate commitment to their own learning and that of students, and share responsibility to this purpose (p. 41).

The participants' understanding of a professional was in line with Hord's. They saw a professional as:

PIT1: belonging to a community that they say is self-regulated, and so that means to say that the people within that community work at developing that profession.

PIT2: aspiring to develop him- or herself in his particular subject field, so there ... should be an individual or personal goal towards developing oneself.

PIT3: in most professions, you want to grow and you want to learn and move with the times and technology and whatever is happening.

PIT4: most importantly to be accountable for what you are providing and doing ... it's not just about the subject knowledge.

PIT5: an expert in your field... Our parents are relying on the fact that we as teachers know what we are doing.

PIT6: being an example to the children, but you must not be so haughty that you create distance between you and the students.

PIT7: someone who's highly skilled in a particular area and not just in the knowledge about that area.

4.2.4 The meaning of professional development, professional learning and professional growth

The literature is replete with references to professional development, learning and growth, and quickly reveals a range of understanding and criticism of those terms. *Development* has been criticised for giving the impression that something is *being done to* the teacher, rather than the teacher *doing* something (Ridley, 2011). Professional development is seen as directed at competence (Biesta, 2012), which emphasises skills, rather than at the development of professional decision-making. Such decision-making might be intuitive (Schön, 1987), but must always be informed and defensible. Professional *learning*, in turn, has been criticised for being too vague. Biesta (2012) warns of “learnification” (p. 12) and focuses attention on *what* teachers are learning (Biesta, 2012; Biesta et al., 2015). In addition,

under a performative focus, professional learning serves as a form of external accountability, and the usefulness of the learning is related to the extent to which it can be seen to satisfy externally imposed accountability measures, often associated with system-wide reform priorities (Kennedy, 2015, p. 1).

While *growth* can be constructivist and can be “all about stretching and developing ability” (Davis & Sumara, 2012, p. 35), many professional growth (PRO-GRO) sessions have been plagued by the same deficit paradigm that has blighted the perception of professional development. One of the participants’ professional learning included:

BIT7: Once per term, PRO-GRO sessions, various topics – usually outside presenters

This case study adopts the stance that it is not the terms development, learning or growth, per se, that are at issue but rather:

- paradigm: deficit vs. expansive models
- formal vs. informal learning
- spontaneous (imposed) vs. planned (self-directed or self-initiated) learning

In the analysis, I will mostly refer to professional learning because this case study focuses on professional learning as viewed through the lenses of situated learning and learning by expanding, and I use development when referring to formalised courses but no inherent criticism of the terms development or growth must be read into this use because learning, development and growth are seen as a web of

transformation in this case study. This view is supported by Opfer and Pedder (2011): “Teacher learning must be conceptualized as a complex system rather than as an event” (p. 378).

4.3 RESEARCH FINDINGS

This research study is designed as a qualitative, descriptive, single case study directed at describing the role of a Professional Learning Community in the participants’ professional learning, and is situated in a constructivist, socio-cultural historical paradigm which views a Professional Learning Community as an interactive social system as modelled in Y. Engeström’s second generation activity theory (1987, 2001, 2011).

This case study was sparked by a curiosity about the role Professional Learning Communities play in creating a learning environment in which teachers can participate in career-long professional learning so that they can address, in a very complex environment, the many demands and challenges that face them in their classrooms today. The question I thus asked was, “Does a Professional Learning Community play a role in the professional learning of high school teachers at a private school in the Western Cape?”

This question was answered by exploring five sub-questions:

- What is professional learning?
- What are Professional Learning Communities?
- How do teachers learn in Professional Learning Communities?
- How do the teachers in the research sample learn?
- How does the practice of learning in the school community differ from the theory of professional learning in a Professional Learning Community?

4.3.1 Paradigmatic dissonance discovered

This case study revealed paradigmatic dissonance at three levels. The Department of Basic Education focuses on standardisation and measurable performance, with the concomitant loss of professionalism and agency (Biesta et al., 2015) by teachers. By contrast, the South African Council of Educators (SACE, n.d.) is encouraging greater professionalism via their Continuous Professional Teacher Development (CPTD) programme (p. 5) – albeit through regulation. On the South African Government 2016 website (www.gov.za, 2016, par.13), the Department of Basic Education’s action plan, starting in 2014 and aimed at 2025 is summarised as:

Action Plan 2014: Towards the realisation of Schooling 2025

This action plan explains the 27 national goals that lie at the heart of the plan. The future of basic education is informed by the [Action Plan to 2014: Towards the Realisation of Schooling 2025](#).

Medium to long-term interventions focus on:

- improving the quality of teaching and learning, with an emphasis on strengthening numeracy and literacy
- undertaking regular assessments to track progress
- improving ECD
- ensuring a credible outcomes-focused planning and accountability system.

The last bullet point is of interest in this discussion. Webster-Wright (2009) cite Garet, Porter, Desimone, Birman and Yoon (2001), and Penz and Bassendowski (2006) that “across professions ...there are increasing pressures toward the pursuit of more effective, efficient, and evidence-based practices that deliver improved outcomes for clients” (p. 702). The jargon: “system requirements”, “effective”, “efficient”, “evidence-based practices” and “clients”, has its origins in for-profit business. The danger of such “evidence-based and data-driven approaches” (Biesta et al., 2015, p. 624) to education as described above is that – just as the name “Action Plan 2014: Towards the realisation of *Schooling* (my emphasis) 2025” says – education is reduced to “schooling” (Hamilton, 2002, p. 144), and “the business of schooling” (Davis et al., 2000, p. 12). Davis et al. (2000) postulate that in such a paradigm

learners are cast as consumers or clients, education is a product, teachers are labor resources, and knowledge is a commodity (while) ... the roles of the school in the making of culture and in the formation of learners’ identities are ignored. Moreover, knowledge is frozen into a thing and teaching is reduced to transmission (p. 12) (My addition in brackets).

Ridley’s (2011) finding, in response to a UK Pricewaterhousecooper education study conducted in 2007, that “it is clear that teachers’ individual development needs ... are seen as subordinate to system requirements” (p. 7), is valid in this case also. Participant 5 indicated this in the focus group discussion.

FGT5: Let’s face it, the boxes and the ticking and the admin gets more and more every year.

The evidence-model above clashes with the efforts of the South African Council of Educators (SACE). Participant 5 (PIT5) observed:

The reality is we are all just trying to get on top of the department's requirements for CAPS and their statistics. It's so contradictory and irrational to how we as educators feel, that it is really taking an extraordinary amount of energy and effort just to make sense of it. Then to convince my colleagues to get on board ...

The SACE CPTD Management System Handbook (2013) states their position:

Professional Development

Like all professionals, teachers need to grow their knowledge and skills throughout their careers. Like all professions, teaching requires deep knowledge which is continuously updated and widened, and it involves complex skills that need to be continually adapted to new circumstances.

Because teachers are entrusted by parents with profound responsibilities, teachers need to continuously strengthen their capacity to help children along the path of learning, understanding and development.

Teachers need to continuously renew their commitment to their profession, to express their pride in its ideals of service, their dedication to our children's development and their determination to contribute to a just and thriving nation.

That is professional development.

One of SACE's main functions is to promote and facilitate the professional development of teachers, in particular the CPTD Management System.

"If your ship doesn't come in, swim out to it." CPTD stands for Continuing Professional Teacher Development. The CPTD Management System is a new system for encouraging and recognising teachers' professional development (p. 4).

The control paradigm of the DBE is at odds with the development paradigm of SACE. The former strips teachers of agency and professionalism, the other allows participation in Professional Learning Communities, action research (SACE, n.d., p. 1) and other agentic activities to develop their professionalism. However, SACE does not yet encourage learning-by-expanding in their CPTD points allocation. In terms of SACE's CPTD points, research may contribute only 20 points per annum (SACE, Educator's Guide, n.d., p. 14) towards the teacher's CPTD points, however, attending school-arranged workshops may contribute 42 points per annum (SACE, Educator's Guide, n.d., p. 16). Despite participation in a Professional Learning Community being mentioned in SACE Brochure A, there is no

points allocation or description of participating in a Professional Learning Community in their Educator's Guide. It thus seems that professional learning, even at SACE level, is skewed away from informal, situated and expansive learning towards formalised learning, where the attendance of only four school-based workshops per semester can earn teachers 21 points. It will thus take a very dedicated, self-motivated and idealistic group of teachers to embark on the pursuit of informal learning in a Professional Learning Community when the structure of professional development is against such learning.

The second dimension of dissonance discovered was between the provincial model of collaboration and learning, and the participants'. The Western Cape Education Department (WCED) that administers the National Senior Certificate examinations dictates very closely how certain core subjects should be delivered at schools under their control. When referring to the collaboration surrounding the standardised examinations that those subjects have to write in September of Grade 12, one participant observed:

PIT5: It's not so much collaboration as here's the exam. Do it this way.

The participants who work in the affected subjects reported encountering a very different learning culture from their own when they attended cluster meetings and compulsory workshops. Cluster meetings are scheduled meeting where teachers who teach a specific subject in schools within a demarcated area meet once or twice a term to discuss issues of common interest. Cluster meetings were introduced as opportunities to meet and learn collaboratively. The participants, however, felt themselves at odds with the prevailing culture of cluster meetings. Most participants elected not to attend them but some did. Their experiences of cluster meetings and WCED workshops were:

PIT2: WCED workshops: One generally attends to make up the points; information and documents handed out can be very useful for one's own development and teaching practice; networking amongst teachers from different schools is also made possible in this way; speakers are often times laborious and ineffective; sometimes speakers are not well-versed in the topics being addressed.

PIT5: ... a disorganised disaster. I have a principal subject adviser and a departmental subject adviser and they contradict one another. The school principal has received contradictory emails. Their approach is prescriptive and dictatorial. Few questions are answered and the tone is frequently condescending. The entire debacle is driven by an

obsession with statistics and ensuring that stats meet National Department's expectation regardless of reality.

PIT7: I like collaboration but I think that ... when there are people in the group who are: "This is the way". Cluster meetings come to mind because open-mindedness is not always there.

The participants thus found that the national and provincial academic environment in which they worked and learned professionally to be at odds with their own culture of professional learning.

The DBE instituted changes to the curriculum and syllabuses as part of democratising education and creating an equal opportunity for every child to be educated. WCED-led workshops and cluster meetings were often initiated to facilitate these changes. The participants experienced the changes to the curriculum as too frequent and some of the changes to terminology as meaningless. This caused further dissonance between the learning priorities of the Department of Basic Education (DBE) and the Western Cape Education Department (WCED) on the one hand, and the participants on the other. The participants expressed a disillusionment that

PIT5: The mountain travailed and brought forth a mouse*.
(*A lot of labour has produced something meaningless.)

PIT4: (There have been) three curriculum changes and OBE actually led to despecification of actual terminology. I always tell them (my students) that the CAPS curriculum has incorporated all of that stuff (challenging components of the syllabus) back in and taken out quite a bit of easy stuff. They took that out and then they chucked in all the stuff they're (the students) not used to. (My additions in brackets)

PIT3: ... the terminology has been passed down – from the cluster meetings, from the education department – what we're supposed to do. CAPS, or you know the new one which was OBE. We learn from them and then we're told what to do and then to do it. I don't think it has always made me change my wording and things but you hear them (new terms). You learn them and you go with the terminology that's sort of presented. (My additions in brackets)

PIT7: Think of something like pupil or learner. Now that one makes you think because there's a couple (of terms) that have been key to changing that, but whether we talk about the matric exemption or endorsement or a Bachelor's pass or CAPS curriculum; there's quite a lot, and the department loves that sort of terminology which to me hasn't affected practice. (My addition in brackets)

Biesta et al. (2015) offer an explanation why change often does not produce the learning hoped for, but produces dissonance and frustration instead. The participants see waves of change, imposed holus bolus. They take what they can and layer new knowledge on their existing knowledge frameworks, "leading to incremental change without the development of a clear philosophy of education to underpin the changes in question" (Biesta et al., 2015, p. 636). In this instance, Kozulin's (1996, cited in Edwards, 2002) advocacy of returning to the problem to avoid an accumulation of practice would have benefited the participants. They would have been able to understand the paradigm and the accompanying vocabulary of the defunct deficit models, so that when the inclusive, democratisation model, with its vocabulary was introduced, the changes would have been meaningful. Biesta et al. (2015) cite Fullan's (1993) dictum that "change requires reculturing as well as restructuring".

A third dimension of dissonance was experienced at case study level. This case study viewed learning through the lenses of situated learning and learning by expanding. It accepted these as two models of learning that were well aligned with Professional Learning Communities. In addition, data in this case study revealed that such learning was translated into a positive change of practice. There was thus dissonance between the expansive, transformation model compatible with situated learning (Edward et al. 2002; Lave, 1991, 2009; Wenger, 2009), activity theory (Engeström, Y, 1987, 2001, 2009, 2011) and professional learning communities (Bolam et al., 2005; Hargreaves & Fullan, 2012; Stoll et al. 2006), and the hybrid deficit learning model evident in a number of participants' responses. The data for this hybrid model are presented elsewhere in this chapter.

4.3.2 Participants and their context

Activity theory (Engeström, Y., 1987) introduced an understanding that teachers' learning cannot be studied divorced from their environment. Their learning must be viewed holistically; the teachers and their environment must be viewed as a single unit of analysis in activity theory (Engeström, Y., 2000). Thus, this case study focuses on teacher professional learning within a specific context.

Progress High School (a pseudonym) is a private high school in the Western Cape which teaches the national curriculum. The participants were selected by means of purposive sampling, using only one criterion: evidence of ongoing professional learning. The participants consisted of teachers who had voluntarily embarked on further career-related study beyond the school, and teachers who had expressed a keen interest, but contextual factors kept them from doing so. When the demographic information was tabulated, it revealed the additional, unintended feature that the participants all had considerable experience. Reference is made in Table 4.5 to a “professional life phase” (Day, 2012, p. 11). The phase allocation was derived from total years of experience and the sub-group was deduced from the participants’ interviews, their responses during the focus group discussion, as well as their written responses. Professional life phase (PLP) and sub-groups were included because Day (2012) propounds that PLP plays a role in in-service teachers’ on-going professional learning.

	Total years of teaching experience	Years of experience at Progress* High School	Years of tertiary education	SACE registered	Additional career-related study	Professional life phase (PLP)**	PLP sub-group**
T1	33	6 months	5	Yes	Yes (I/P)	6	a
T2	27	11	4	Yes	No	5	a
T3	22	15	4	Yes	No	4	c
T4	23	13	6	Yes	Yes	4	b
T5	18	15	5	Yes	No	4	c
T6	32	15	5	Yes	Yes	6	a
T7	25	14	4	Yes	Yes (I/P)	5	a

*Progress High School is a pseudonym

**Source: Day, 2012

I/P – in progress

Table 4.5 Demographic information of participants

KEY:

Professional Life Phases (PLP)

Professional Life Phase 4

16-23 years’ teaching experience – Work-life tensions: challenges to motivation and commitment

Sub-groups

- a) Further career advancement and good results have led to increased motivation/

commitment

- b) Sustained motivation, commitment and effectiveness
- c) Workload/managing competing tensions/ career stagnation have placed strain on one or more of: motivation, commitment and effectiveness

Professional Life Phase 5

24-30 years' teaching experience – Challenges to sustaining motivation

Sub-groups

- a) Sustained a strong sense of motivation and commitment
- b) Holding on but losing motivation

Professional Life Phase 6

31+ years' teaching experience – Sustaining/declining motivation, ability to cope with change, looking to retire

Sub-groups

- a) Maintaining commitment, embarking on new avenues of development
- b) Tired and trapped

Adapted from Day (2012)

4.4 THEMATIC DISCUSSION OF RESEARCH FINDINGS

Progress High School had the characteristics of a Professional Learning Community and was recognised as such in this case study. Some dissonance was found between the theoretical stance of this case study and the hybrid learning model employed by the participants, however, the case was sufficiently aligned to allow findings to be made on the role of a Professional Learning Community in the professional learning of the participants. The data revealed the influence of the Professional Learning Community in a number of dimensions of learning that were grouped into four themes and two sub-themes.

The themes revealed the role of the Professional Learning Community in the creation of a learning environment that

- developed the learning culture of the school
- supported the participants' learning efforts
- fostered formal and informal professional learning through
 - collaboration

- reflection
- focused on learner learning

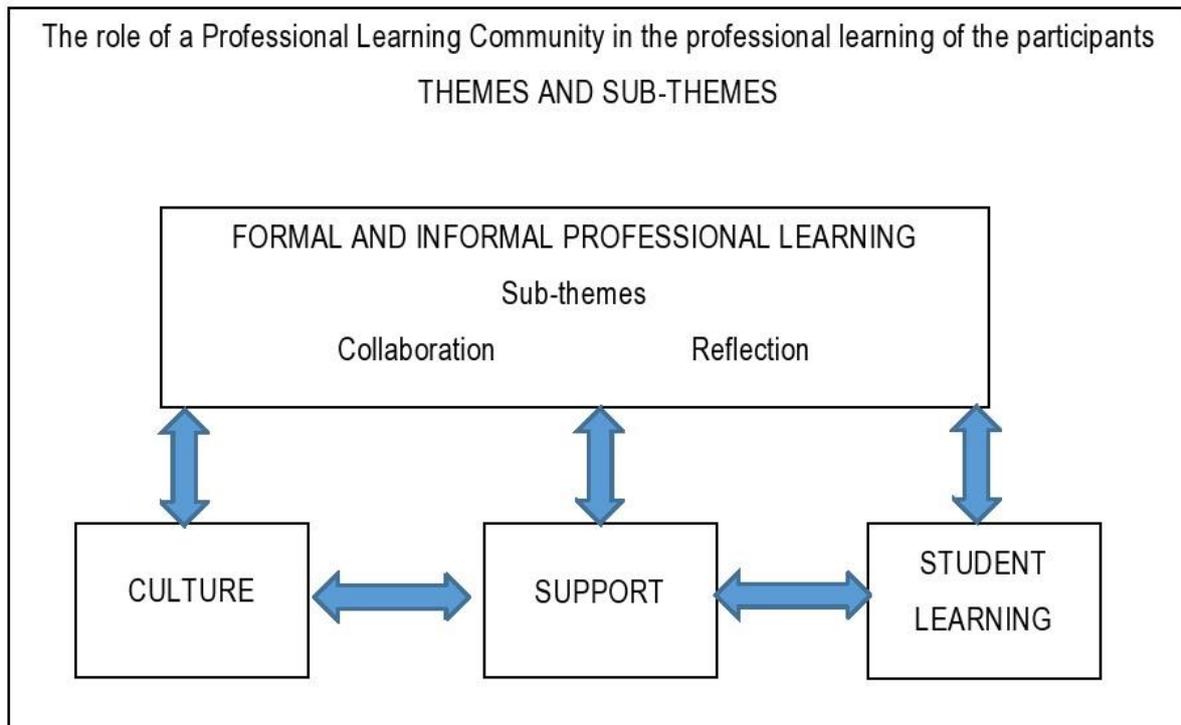


Figure 4.0.1 Themes and sub-themes

The theme divisions were artificial and demanded interpretation of the data to decide how to group them to create mutually exclusive themes. I decided to establish fewer but broader themes, acknowledging sub-themes where they developed, rather than creating a fractured structure with numerous narrow themes. Fewer, broader themes also reduced the repetition of boundary elements that could be included in more than one theme.

4.5 THEME 1: CULTURE

Most participants agreed, a few with some reservation (refer to Table 4.3), that their school had a distinct “approach to learning” and “a distinct character”, and that there was “a group memory pertaining to this campus”. Newcomers to the school found, in place, a distinct learning culture. Participant 2 (PIT2) recognised that

especially amongst our new staff members who come from the government school setup, they’re struggling to get along with our systems and the way we go.

The data recognised this group of participants as a “collaborative teacher team” (Scribner, Sawyer, Watson, & Myers, 2007, cited in Tan & Caleon, 2016, p. 128), as opposed to a “problem solving team” (Gregory, 2010, cited in Tan & Caleon, 2016, p. 128) or an “inquiry community” (Levine, 2010, cited in Tan & Caleon, 2016, p. 128). This collaborative teacher team’s ethos developed within the culture and requirements of the school.

The socio-cultural stance of constructivism recognises that tools are socially mediated and in education, one of the most pervasive tools is language. Brown, Collins and Duguid (1989) observe that “given the chance to observe and practice *in situ* the behaviour of members of a culture, people pick up relevant jargon, imitate behavior, and gradually start to act in accordance with its norms” (p. 43). Participant 1 illustrated this.

PIT1: It was a question of listening to what older teachers are saying, and so the vocabulary was to a large extent mimicking what you heard other people talking about.

Participants were transformed by the culture of their environment, and, in keeping with the concept of transformation, the participants transformed the culture of the learning community. Two questions in Appendix I probed the participants’ experience of their Professional Learning Community’s culture. Most agreed that the school encultured them more than their departmental colleagues did. Some felt that their subject department also had an important cultural influence on their practice. Hargreaves (2015) and Hargreaves and Fullan (2012) recognise that culture can be affected by the normative nudges of placing certain language in the foreground. The participants used several terms in common. They all referred to “mark readings” and “effort scores”; they spoke of their “mentees” and saw themselves as “mentors”, and their usage revealed a uniform understanding of the terms. All of these reflect the school’s culture of foregrounding their learners’ holistic well-being and of the participants seeing themselves as more than just dispensers of knowledge.

DET5: We discussed analysing our mentees’ exam results and their goals for mentoring purposes.

PIT6: I think the person who does help me with understanding the kids and how to handle them is the psychologist; just for being a good mentor; I like to become a good mentor – a better mentor – and being aware of things. It’s nice to talk to her. I learn a lot from her.

FGT7: A young man got full effort scores; I actually called in him today. Oh, my word, it's those moments where a person that you thought there was no hope for. Just suddenly you think, yes, after all of this effort something has worked.

When asked to quote the typical terms or words that they would use to describe their learners, the participants answered within a hybrid paradigm. All participants listed deficit-model expressions like: "highly motivated"; "good work ethic"; "students just don't study"; "not working", "lazy", for example, but when they discussed their practice at length, an inclusive culture emerged:

PIT2: We had a student here who couldn't even see - almost totally blind, but the way of students can accommodate such a person and respect them and really make them feel at home; it's great. In our environment, it is becoming more and more something that we are aware of. Education can't just be one-dimensional; it has to be inclusive considering everything else. I mean, we are dealing with huge diversity in our set-up here.

PIT7: I think we've all have become more politically correct and try and avoid that (labelling). I think we're so aware of it (barriers to learning) so what it's done is made us think a lot more; analyse a lot more carefully about reasons for non-performance. We sit for a long time and we look at could there be a learning barrier but that learning barrier may be an emotional learning barrier. There's far more investigative action following our discussions and assessment meeting. (My explanations in brackets.)

PIT3: I think a lot of the time we talk about laziness, school being not a priority in their life. So, I find we talk a lot about their social lives being so much more important than academic work. Sometimes it's not very general; it's more of a personal nature because here we talk a lot about students and we might be reciting a home background as something someone is having a difficulty in and then it's very individual. We might all know the student for years and we're talking specifically about something; how to help someone or they're going through a bad time. So, I think we are very caring and individualistic in that way. So, there is the general we talk but often we address individuals because we know them.

PIT5: The one thing I love about where I work is that you do get individual insight which does help in how you approach the learner. So, I do find that the mark reading meetings we have, you do pick up useful information about learning disabilities. Perhaps there are issues at home: substance abuse. You might have assumed that the kid is not as limited as they are and they've just being lazy or vice versa. You discover he's an A-candidate in this subject but he's doing nothing in yours. So, that is one thing I love about the place I work because I don't think there are many schools where they have the time or opportunity to do that.

Real-life learning models are messy. The participants identified that their school had a distinct identity and way of doing things (Table 4.3 and Appendix I), and that they shared a common educational memory. The latter has had a negative effect because they have experienced the same changes, and have developed a layered or hybrid model of the learning changes they have experienced. They spoke the same language. In the focus groups discussion, all the participants understood not only the literal statements, but the connotation of those statements as well. And because they all saw their teaching model from the same perspective, they did not notice the discrepancies and contradictions. Opfer and Pedder (2011) found that "the relationships between beliefs and practice enacted at the individual teacher level *reenact themselves at the school level* (my emphasis), creating *joint* or *socially produced* (my emphasis) conditions for teacher learning" (p. 393).

Culture thus played both a positive and a negative role in the participants' learning. Their communication was facilitated through their strong sense of a common culture. However, their shared history and culture created common horizons that hid the need for the dialectical examination of their beliefs.

4.6 THEME 2: SUPPORT

Most participants agreed, a few with reservation, (refer to Table 4.3) that their learning community supported the following dimensions of their practice:

- informal power was shared amongst community stakeholders
- flexibility was created within the organisation to allow for professional learning
- through a balance of support and pressure, the leadership showed commitment to promoting learning among the staff

- some outsourced support was used, but that there was a movement to greater internally provided support

Hargreaves' article *Push, pull, nudge: the future of teaching and educational change* (2015) spells out what many school leaders see as their options for developing professional learning at their schools. Clausen et al. (2009) indicated that in some instances pushing produced the desired collaborative learning community, however, success of such a "heavy-handed" (p. 451) approach was tied to the participants' willingness to accept it. In this learning community, it would be rejected.

FGT1: In the past a lot of the stuff that's been sent teachers' way has just totally not been relevant and has not been practical but that is what has been decided by the powers that be and now it gets filtered down and eventually shoved down your throat.

PIT1: I think it might lean on this autocratic thing. If you get a senior participant in a collaborative group who comes in with a preconceived idea of how things should be and not allow the participants the leeway and the freedom to develop the discussion in collaboration naturally but where it gets forced in a certain direction.

Similar sentiments were echoed by other participants elsewhere in this chapter. However, participants reported receiving support from all staff members and there was a network of support evident at the school.

PIT 4: I came to Progress and what I learnt from Teacher H in three months I'd never learnt in the last seven years prior to that; just the way that he worked with me; I won't even say treated me. The way that he mentored me was just incredible. He gave me the hardest task to do with guidance all the way. That expectation, those high expectations, which obviously, I knew I could do but he had absolute faith in me and he was totally committed.

PIT5: Different individuals help and support me in different ways. Ironically these days, if it's technology, the go-to person is the youngest person on the staff. If it's a complex issue dealing with families and that sort of thing, I'll go to the principal; if it's a logistical kind of school management/ department thing, I'll go to the deputy. If it's a concern about

a child, I'll go to the psychologist. If it's a concern about the subject or what we're doing, I'll chat to my colleagues.

PIT4: I mean Principal Z is just so human and non-judgemental; I feel that I could go to her with anything: academic, professional, personal – anything – and just say “Principal Z just help me; how do I deal with this?”

Support, from the data above, was thus seen in the availability of collegial resources. The environment for learning was enhanced. Simultaneously, however, within the hybrid learning model of the school, the leadership planned formal learning support in the form of outside speakers and organised workshops. Participant 7 (BIT7) listed some of these and their benefit:

- once a year, three-day conference – always very enriching and enlightening
- once a year, enrichment day – always guest speaker
- once a year, focus day – specifically planned according to staff development needs
- once per term – PRO-GRO sessions – varied topics, usually outside presenters
- other courses – usually centrally organised – e.g. conflict management, situational leadership

Participant 4 felt that the learning support which these formal sessions offered could be improved to support the needs of the participants:

PIT4: I think a little more thought needs to go into that. For the last two years or so it's been OK but I think there needs to be more depth. I just think a little bit more thought needs to go into it. It needs to be not as rushed. I think we also are just overloaded so possibly that's a reason but I think in the past it used to be a lot more thought-provoking and a lot more, I think, informative.

“Teachers are pulled into something they find energizing, that they are given time for, and that respects their collective (not individual) professional autonomy and discretion” (Hargreaves, 2015, p. 138) and it is in respecting the participants' professional autonomy and discretion that arranged, formalised learning sessions fail to supply the desired learning support. However, Participant 3 drew attention to the affective support that formal learning opportunities offered, and that there was place for such support in their Professional Learning Community.

PIT3: We do have a nice focus day ... You get inspired ... I do think there is room for inspiring and uplifting and encouraging teachers as well.

Support can be short-term and used to initiate a desired change, or long-term to support learning community activities (Bolam et al., 2005; Day, 1999; Stoll et al., 2006). Considering that Professional Learning Communities are ideally long-term ventures – in keeping with the theory of activity in activity theory – the realistic options would be to start with short-term, arranged support (Hargreaves & Fullan, 2012) to establish the learning culture, followed by support that can be sustained. Short-term support could be timetable changes or a re-arrangement of duties to allow for Professional Learning Community meetings.

FGT5: If I think about a little example: We looked at our results and we saw that their X marks were low and that was a weak spot. So, we sat together as a department and we said what we were going to do when we had this great idea. Because Teacher Y has managed to somehow get them to twig, he was volunteering and he was happy to do a kind of workshop; he was on the ball. All we have to do is find the gap. There's no gap. There's no gap! So, that's our part of the struggle as well.

But Hargreaves and Fullan (2012) warn that creating time in and of itself, does not support learning. Participant 7 recognised the danger of having unstructured, arranged meeting times in a Professional Learning Community.

FGT7: So if we say for example every Friday we're sending the children home early and from 1pm to 3 pm that's your Professional Learning Community moment, we would have to resist the urge to mark because even though you provide that time, I think everybody feels so pressured to do stuff, especially if there's no set agenda and you don't have to give an answer or send minutes through by Monday morning it will be very difficult because you've got to get into a completely different way of thinking, don't you? To say we're shutting all those things out of this room; your to-do list is going to wait till Monday and now let's think of a problem to solve. It's a way of thinking I think we are quite far from. I think where sometimes we get it wrong, it gets decided what the PRO-GRO session is going to be on and people don't always feel that it was a good use of time. Ja, we're still very much on a mission to tick off things than rather sit back and say, "Let's go".

If agendas or report-back evidence were required, the participants were confident that opportunities to collaborate would not be seen as “just another meeting”. But, because of competing demands, the participants would find time allocated to Professional Learning Community discussions difficult to manage. Participant 7 voiced concerns echoed in the literature (Hargreaves & Fullan, 2012). The data thus shows that the participants would welcome a combination of pressure and support (Hargreaves, 2015; Hargreaves & Goodson, 2006).

One of the reported time pressures was the completion of the syllabus. When participants found that their students' learning was not progressing as expected, or that the next deadline was looming, some reported reverting to lecture-style lessons, as this extract from the focus group discussion showed:

FGT7: If we're pressed for time (T2 indicates assent), a lot of us would go lecture style.

(General assent)

FGT5: And I think with matric that is often so. (T7 indicates assent). I know with me, it really is essentially me lecturing because there just isn't time.

FGT7: Unfortunately, ja.

Their Professional Learning Community could have played a role in supporting more effective teaching methods, as Mulford (2009) points out: “schools must learn how to lose time in order to gain time” (p. 198). “How to support transformative learning remains poorly understood” (Webster-Wright, 2009, p. 723). However, where transformative learning is supported, learner learning improves (Feger & Arruda, 2008; Owen, 2015). There are teachers who see their current knowledge as “hard-won” (Carlile, 2002, p. 445) and they need to be reassured “that learning is important to their present as well as to their future and they need to have confidence in the supportive nature of their work environment” (Cameron et al., 2013, p. 391).

Cameron et al., (2013) point out that teachers' learning is affected by multiple dimensions of their lives. Their view is shared by Day (2012) and Webster-Wright (2009). A Professional Learning Community that supports its members grows in strength because the teachers who “experience sustained support, both personally outside and professionally inside their workplace, they are able not only to cope with but also positively manage adverse circumstances—in other words, to be resilient” (Day, 2012, p. 11). The participants rated key factors within each dimension that shaped their professional learning by applying a 5-point rating scale to the following: situated factors (Day et al., 2006, p. 85) which included their

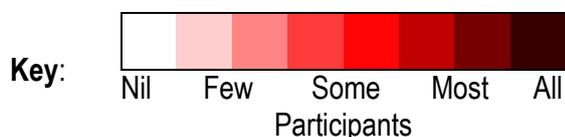
experience of collegiality, encouragement from leadership to learn and learner characteristics; professional factors (Day et al., 2006, p. 85) such as their role-related responsibilities and expectations from role players – including learner mentoring, workload, leadership positions etc.; personal factors (Day et al., 2006, p. 85) such as family responsibility, health concerns etc. (Day et al., 2006, p. 85); and their learning beliefs and knowledge (Tsui, 2008).

The data showed that the participants' professional learning was affected by supportive situated factors, such as their experience of collegiality, encouragement from leadership to learn and learner characteristics. Participant 7 (FGT7), after recounting the recognition given to a learner who had worked particularly diligently, felt

it's those moments where you suddenly feel that something we've been doing has worked, so after you've felt despondent or tired or thinking this is just a drudge then you get those moments.

Factors that affect professional learning	Translates desire for professional learning into action	Contributes to professional learning	Positives and negatives evenly balanced/neutral effect	Preponderance of negative influences hinder professional learning	Active barrier to effective professional learning
Situating factors (Day et al., 2006, p. 85) which include your experience of collegiality, encouragement from leadership to learn, student characteristics etc.	Light red	Dark red	Light red	White	White
Professional factors (Day et al., 2006, p. 85) such as your role-related responsibilities and expectations from role players – including mentoring, workload, leadership positions etc.	Dark red	Light red	Light red	Light red	White
Personal factors (Day et al., 2006, p. 85) such as family responsibility, health concerns, age of children, marital status etc.	Light red	Light red	Light red	Light red	White
Learning beliefs and knowledge – belief in what is familiar and modelled by others (tried and tested) vs. natural curiosity and love of innovation (Tsui, 2008), also how you develop knowledge	White	Dark red	Dark red	White	White

Table 4.6 Influence of factors that affect professional learning



Other participants felt that professional factors in their learning community supported their learning:

FGT6: Knowledge of my subject, something that gives you confidence – and you don't know everything. There was a brilliant oke here last year who after a class would tell me that things don't work exactly like they do in my text book but he was always very polite; he always told me after class but normally they're not all that brilliant so then it helps me to keep confident, the fact that I mostly know what I'm talking about.

FGT5: My time in the classroom – the moment I step out of that classroom things stop making sense and get very hectic but when I am teaching, that is when it makes sense. I know I said the classroom time, but underlying that is my agenda which is also linked to faith and how I want the world to be and trying to create an environment where I am setting the example. You know of how I would like the world to be.

FGT2: Just being afforded the opportunity to develop, form, build – whatever you want to call it – a human being in society, a people. That's what just keeps me going. I think it's just such a wonderful opportunity to invest in other human beings.

Other participants found that personal factors supported their professional leaning the most.

FGT4: For me personally it would be having a sound mind, based on what I believe in obviously: my faith and a stable home life because if that is not intact, everything else kind of just falls by the wayside and then when we are here ... I mean just making a difference and knowing that you are impacting these learners in ways that you'll never know and just trying to be that example to them. For me that's really important, that they can actually see something in you that they could also do.

FGT3: My faith keeps me centred in what I believe and that's got to come through in everything I do, so if I grasp onto anything, it's got to be that and then my class time and my experience and my inspirational moments which do (emphasis in original) come and go, but they are amazing. But it's got to be who I am and why I'm here and what I'm doing and that's centred around God and my faith.

FGT1: I will also start with my faith but it's also my family time and then only (emphasis in original) coming to school. And then, in the school environment, it's a lot of what you (addressing the rest of the group) said but it's not necessarily subject related but where you look into the soul of the learner and the lights go on. (My additions in brackets.)

Some described factors in their personal lives that have influenced their professional learning and knowledge.

PIT3: I think a close relative of mine plays a pivotal role; she's like a mom to me. She's a psychologist and she was a teacher, lecturer, everything and she's got her own business and she's the one who says to me sometimes it's time to move or think about this or wouldn't you want to do this?

PIT3: I think stage of life is also important because from before being married, you handle things in a certain way. After you're married, having kids, everything changes your perspective and how you deal with people and what you thought at twenty is different from how you view things at forty. I also found when I learnt how my own children start learning, it's interesting seeing how they best learn, as well and what to do in scenarios for them.

PIT4: For me, at the moment, I'm quite occupied with a little toddler, but prior to that I did two post-graduate degrees part time.

PIT3: So, I am a reader, so I think I would (read educational material) and now when we're also at a stage when your babies are – when your kids are older, you can find the time to do it a little bit more. (My addition in brackets.)

During the focus group discussion, the participants considered what support they would need for them to espouse a Professional Learning Community in its full theoretical sense. Participant 6 was excited by the prospect of something new.

FGT6: I love learning new things; I'm enthusiastic about change.

But Participant 5 voiced the concerns of the rest of the group:

FGT5: It's the time factor. I have an intense desire to grow and improve and if you're exhausted and kind of running on empty and then they come along and say "OK let's have a look at this problem". Ja, it's not that the spirit isn't willing, but sometimes you just are so exhausted, you can't even think of an idea, let alone a kind of plan.

Day (2012) advocates special support for experienced teachers. The participants voiced their concerns and positive experiences in this regard. Their love of learning and their desire to learn professionally were clear in their responses. They form part of a web of support and their Professional Learning Community played a large role to support and nurture that attitude.

4.7 THEME 3: PROFESSIONAL LEARNING

Stoll et al. (2006) advocate that building "a PLC should be to underline the importance of workplace learning and reflective practice" (p. 233) where workplace learning is considered to be learning "more informally through day-to-day work with students and peers" (Stoll et al., 2006, p. 233). Stewart (2014) confirms that "Appropriate conditions and characteristics of PD augment the potential for depth of understanding that leads to change in teaching practice (p. 28). From the perspective of methodology, professional learning can be divided into formal and informal learning and in much of the literature review in Chapter 2, this thesis focused on situated learning and learning-by-expanding as examples of informal learning. The data in this section, however, revealed that the participants' understanding of the term professional learning was skewed towards formal learning opportunities, and that they saw informal learning actions, like observation, dialogic conversation and reflection, not as informal learning but as isolated acts.

PIT1: (Professional learning) I don't think it happens daily – but in the term, in time nodes or something, where you suddenly get a concentration of stuff happening. It could be that the school has decided that there's going to be a staff meeting or we are dealing through issues of something and then you start concentrating on that thing more and the conversation increases in the staff room. Then somebody goes off and reads something and brings that idea in. It would be normally in times where conversation around a specific topic increases. (My addition in brackets.)

PIT2: I see it especially taking place when we have our staff conferences and our own in-house staff development workshops.

The data revealed a discrepancy between the perception of Participant 2 that professional learning took place in discrete blocks of time and what he saw as professional learning.

PIT2: To me the interaction between educators, the interaction between professionals – going broader than just education, educators. I think that should at all times be almost life-long learning ... So, ja, interaction with other professionals.

The data revealed that other participants shared the view about professional learning that Participant 2 holds.

PIT3: I think for me, if I really think, a lot of my professional learning would probably be taking place in little pieces with colleagues, often one on one whether that is in break time or in the classroom, talking. Things like that.

The participants indicated a range of sources of informal learning beyond their school:

PIT1: ... also where other staff members, other teachers meet in your own field, but elsewhere in the world also and share their experiences or their insights.

PIT6: I usually hear things on the radio, interesting things on the radio. Internet, sometimes people put things even on Facebook that can inspire you to read a little bit more about the subject. I've now also started to read an Afrikaans news website. So, if something interesting happens then they have little thingies that you can choose to read about it.

PIT3: Once or twice when we're on a theme, I Googled some stuff about education and teaching in schools today.

A number principles are evident in the data above: transformation, the continuity of utterances, broad versus deep learning and horizons. The participants in a Professional Learning Community are transformed by their, and the broader, community (Stoll et al., 2006), and because of the transformation

principle, they transform the community in return. All utterances about a field of knowledge are part of a continuous stream of utterances; teachers draw from, and add to the stream each time they utter a statement, reflect on material or engage in dialogue within that field. The data shows that the participants use the information gained from other sources dialogically.

The emphasis that Professional Learning Community theory puts on informal learning creates a dilemma. Teaching is an art and the participants reported learning much from their colleagues. Several authors use metaphors to illustrate or exemplify the art of teaching. Huberman (1993, cited in Talbert & McLaughlin, 2002) compares expert teachers to jazz musicians; Miller (1978, cited in Bransford, Brown & Cocking, 2000) compares mastering the art of teaching to practicing to be a “virtuoso” (p. 45) and Schön (1983) refers to of “professional artistry” (p. 22). Huberman speaks of “artisan knowledge” (1993, cited in Talbert & McLaughlin, 2002). However, for such knowledge not to be only craft knowledge, developed through practice and observation, teachers must ground their knowledge on a firm understanding of the theory of education and teaching (Edwards, Gilroy, & Hartley, 2002). Professional Learning Communities aim not only for the broadening of teacher knowledge, but also a deepening thereof. Participant 1 thus touched on a valid point when he recognised the importance of

reading robust journal articles which are intended to develop people ... beyond what is expected within the curriculum. Just to get those really deep roots which will give you a really good foundation to bring your subject to your students (PIT1).

Participant 3, also, in recognised the dangers of learning from others without taking active steps to deepen knowledge and challenge horizons (Gadamer, 2004).

PIT3: We've been talking a lot this year about the future because I've been thinking with these CPD points we're going to have to do that (read articles) and I think it is a good thing, because you do feel a bit stagnant sometimes because you're only talking sometimes with the same colleagues, the same ideas and you're not maybe pushed to change your thought or grow more. (My addition in brackets.)

All the participants in this case study reported that they learn most from colleagues. In-service teachers learn holistically and complexly through their interaction with their colleagues and learners (Cameron et al., 2013). Teachers report that they learn much from their colleagues, however, the tendency is to ask

high-performing teachers to act as mentors to their colleagues, at the risk of time and opportunity to further their own learning (Cameron et al., 2013).

PIT5: I've got a new teacher who is teaching matrices this year, so there's been – I've had to give a lot of input just regarding the materials, the tests, the spreadsheets, just that sort of thing. So, there has been all of that but because of the change in the departmental prescriptive instructions regarding statistics there's been a lot of emphasis on explaining the CAPS, the agendas, the stats, what the goal is.

Ridley, 2011 points out that when development programmes essentially see teachers as lacking in skills or knowledge and an expert source is needed to supply the necessary training to correct that shortfall, a deficit model of development is used. The deficit model gives little or no consideration to teachers' "prior knowledge or experience" (Dadds, 2001, cited in Ridley, 2011, p. 5). Someone other than the teachers themselves will decide what they need and set the agenda. Furthermore, deficit thinking is often characterised by transmission-style presentations, and the audience spends varying amounts of time passively listening to the presenter. Constructivist, expansive model thinking, on the other hand, is congruent with the informal, self-directed learning advocated in Professional Learning Communities. Teachers identify the object of their activity themselves and direct their actions toward that object in order to achieve a goal. Hargreaves (2007, cited in Ridley, 2011) suggests that teachers are revitalised and invigorated by such learning, whereas deficit-model development can cause frustration. However, the data of this case study did not support such a clean dichotomy, nor did the data reflect a negative impression about formalised professional development presentations and programmes. The participants described their experience and expectations of professional learning as:

PIT1: We are now seeming to be entering into a time where inside the profession the need or the responsibility is being realised and is being picked up and that we are growing into a place where teachers are doing that professional thing and that is to develop themselves. I've come to the conclusion that there's a two-pronged approach that teachers should, after their initial training, work towards a formal academic improvement of their qualification which could arguably boil down to aiming to a master's qualification halfway into their professional life; so, that's the formal part, but the informal part is reading. And by that I mean reading robust journal articles which are intended to develop people.

PIT2: ... the interaction between educators, the interaction between professionals – going broader than just education, educators. I think that should at all times be almost life-long learning; I don't think we should ever get to a point where we feel satisfied that we know it all. How can we ever know it all when there is constant change in the world? So, ja, interaction with other professionals.

PIT3: ... not only learning through institutions. You're learning from the people around you, from the students you teach. You're learning and growing and changing your perspective.

PIT4: ... your learning needs to be continuous and if you look at what our students are exposed to ... you can't be stuck in archaic methods of presenting things. You really do need to be on top of your game and ahead of them (the students) and to keep them motivated. It keeps them interested as well and even in a subject like (mine) where the fundamentals will never change and everything is the same as it was when I was at school, I think it is important to just look at new ways of presenting things to them. (My additions in brackets.)

PIT5: ... continuous. You don't stop learning. You shouldn't. You start stagnating, you're going to be left behind, especially in this day and age with how things are developing, evolving so quickly.

PIT6: You have to keep up with whatever is changing in your profession and a lot is changing all the time and it's changing faster and faster, so there's a lot of keeping up to be done and it should be lifelong, otherwise you just fall out and the kids know more than you do, so you need to keep up.

Some also volunteered their motives for pursuing professional learning via several avenues: some formal, some informal.

PIT7: We have had some wonderful conferences. There have been some brilliant conferences that have been very stimulating and obviously it challenges. You come away from there with all these brilliant ideas and I've been working quite hard at making sure that when I'm inspired, I make a change.

PIT7: It's been quite interesting for me over the past couple of years balancing learning a new role with making sure I'm still doing my professional learning in terms of improving my teaching skills, so ... I think I am still on a big learning curve.

PIT6: I like to learn.

FGT6: I love learning new things. I was even considering maybe to do the Pokémon Go thing.

FGT5: To enhance my teaching.

FGT5: ... I love knowledge. It's one of the two reasons I became a teacher; it's because I love acquiring knowledge and I want to inspire others to acquire knowledge.

FGT4: It would be a very personal thing - to enrich myself with knowledge. A sense of satisfaction, that I perceive as a challenge. So, in most cases it really is not to further my career but it is just to enhance what is there already.

FGT3: I'd love to study more but not right now and I think it's personal satisfaction and then by-product is enhancing in the classroom but we do (emphasis in original) do things here and go on conferences where it does already enhance our teaching and subject teaching specifically, so I think that's a direct influence but sometimes personal stuff is also for ourselves, I think.

FGT2: I think it is also important in terms of being at the cutting edge of developments within one's own expertise and subject area.

FGT1: If we think in fact what it was like when we started and where we are now and to keep up with those changes, that is not just an evolutionary thing. You have to go back and engage with the philosophy of education to understand where we are. Why we are here and possibly to look at where we are going.

The data also revealed that some participants' interests led them towards formal professional learning.

PIT3: I think I have always wanted to study further and my passion at the moment seems to be more into educational psychology.

PIT4: I'd like to do is a literacy programme, you know just in my own private capacity so for me that would definitely be kind of professional development until I'm at a point where I can actually teach it.

PIT7: I recently completed a short management course to further my career.

Contrary to negative criticism of discrete, training-model, intermittent professional development sessions, "no matter how flexible or well designed" (Lieberman, 1995, cited in Webster-Wright, 2009, p. 703) in some literature, the participants spoke positively about formalised professional development courses offered by the school and outside institutions. Putnam and Borko (2000) suggest that teachers perceive benefit from such transmission-style workshops, because they are freed from the concern of teaching and learners for a time, and can focus on something they find enriching. Three participants reported clear benefit from formalised deficit-model (Clayton & Elliot, 2010; Ridley, 2011) workshops, two of whom mentioned affective benefits.

PIT3: We do have a nice focus day where we get a whole day where we are taken away and we do a theme – often that is very challenging to do at (school) – and we think about it and discuss it for that whole day. So, it's often like providing a long opportunity to discuss a thing and work through it. And depending on the topic, you either learn more or less. So, that is helpful. You get inspired but I don't know how much of the real stuff comes back; you implement what you can. You're so much more inspired when you're there and it's interesting but I do think there is room for inspiring and uplifting and encouraging teachers as well. Putting it in the classroom is sometimes difficult because of the constraints of syllabus and time and things like that. (My addition in brackets.)

PIT6: Workshops at the experiential centre are VERY useful. The university also had a wonderful hands-on- course; I attended all the sessions and found it very interesting and useful. There was a bloke there who told us about websites that we can use, handy websites, and he introduced us to a lot of things and I learnt a lot there and it's very useful in teaching.

PIT7: Definitely exposure to inspiring presentations, courses. They make a huge difference to me just having someone coming in and showing you a completely different idea. Ja, I think that's important

Despite the affective benefit the participants experienced, they clearly indicated that formal, organised workshops did not change their practice and hence made no direct difference to their students' learning. Furthermore, when outside speakers did not take cognisance of the participants' context, the perceived benefits diminished even further. Whereas, when the context was relevant, or when the participant initiated the learning, the outcome improved.

PIT2: There have been many occasions where I really felt so inspired when leaving a workshop or conference because of something new that I've learnt that I can implement but it's so soon forgotten because of the daunting task of being an educator in this environment. We have mark reading on top of mark reading, so many assessments, so before you know it, all the thoughts and ideas are gone and you're not actually implementing it.

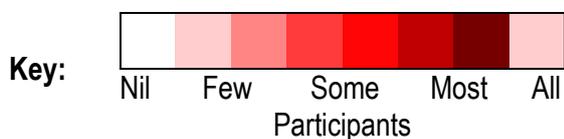
PIT6: There was a man and he helped set up the syllabus and the syllabus was overloaded and he then explained some of the more difficult things to us, but the syllabus time thing says 15 minutes for this, 15 for this. He took the whole morning to explain it. So how on earth can you teach Grade 10s that 15 minutes this and this and this and he took the whole morning? I can't remember his name but that was a useless morning. Then there were other (emphasis in original) people, for instance a man from the centre itself, he did practical (emphasis in original) things and showed us this and this and this you can do to get kids interested and so on.

PIT5: You get the lady who comes along with learning disabilities. Interesting. Utterly impractical. You discover that the suggestions are not feasible in a classroom. In a class environment, you can't because we've been told, "Oh, if a kid rocks on his chair there is research that shows it's helping him focus", but it keeps distracting ten others and I can't think about what I'm supposed to be saying. It's not feasible. So, there is a lot of that where there is a massive discrepancy between: it's fascinating; it makes sense; you get more empathy and that sort of thing, but the reality is if you provide that for that child,

you actually are being a disservice to the majority of the class and there are just too many to accommodate and get through a syllabus. So, what I often do; I'll go to the counsellor. I just go directly to the counsellor. She's great. She's given us reading materials.

Professional learning characteristic	Agree fully	Agree	Undecided	Disagree	Disagree fully
We share knowledge	Agree fully	Agree	Undecided	Disagree	Disagree fully
We critique each other's work	Agree fully	Agree	Undecided	Disagree	Disagree fully
We invent or use new practice as a department	Agree fully	Agree	Undecided	Disagree	Disagree fully
We evaluate new practice together and we decide on a new course of action together	Agree fully	Agree	Undecided	Disagree	Disagree fully
We craft a "repertoire of practice" (Talbert & McLaughlin, 2002, p. 336; Tickle, 1987, p. 43) together	Agree fully	Agree	Undecided	Disagree	Disagree fully
We visit each other's classes to learn as a community	Agree fully	Agree	Undecided	Disagree	Disagree fully
I would describe my way of teaching as primarily individualistic – I spot problems, find and implement solutions to problems on my own (Mangrum, 2004, p. 5)	Agree fully	Agree	Undecided	Disagree	Disagree fully
If I were to collaborate with my colleagues on all aspects of syllabus teaching and classroom practice, my teaching would improve	Agree fully	Agree	Undecided	Disagree	Disagree fully
If my colleagues and I were to identify problems together, find, implement and evaluate solutions together, my teaching would improve	Agree fully	Agree	Undecided	Disagree	Disagree fully
I find informal professional learning through collaboration with my colleagues more appealing than formal professional learning because of time constraints	Agree fully	Agree	Undecided	Disagree	Disagree fully
Given sufficient time during work hours, I would find formal professional learning more effective than collaborative learning with my colleagues	Agree fully	Agree	Undecided	Disagree	Disagree fully
Much of my professional learning here at Progress is context-based and I would not carry it over to another school	Agree fully	Agree	Undecided	Disagree	Disagree fully
When I see a colleague teaching very effectively, it lifts my own practice	Agree fully	Agree	Undecided	Disagree	Disagree fully
Even though I've been teaching at Progress High School for a number of years, I've had to change my teaching practice as the learner body has changed	Agree fully	Agree	Undecided	Disagree	Disagree fully
I enjoy working at Progress High School (Beijaard et al., 2004; Day et al, 2006; Iqbal et al., 2016)	Agree fully	Agree	Undecided	Disagree	Disagree fully
I am proud of my department (Bolam et al., 2005; Stoll et al., 2006)	Agree fully	Agree	Undecided	Disagree	Disagree fully
When I see a colleague engaging in professional learning, I translate my desire to learn into practice	Agree fully	Agree	Undecided	Disagree	Disagree fully

Table 4.7 Professional Learning at Progress High School



The participants' professional learning experiences were thus not completely aligned with the constructivist, expansive model of this case study. They were, however, crucially aligned in the aspect that the professional learning that they *did* find improved their teaching practice and learner learning was constructivist and situated, and led to transformation. Table 4.7 represents the participants' experience of informal professional learning at Progress High School.

The participants described their experiences of observation as an informal learning opportunity. Some examples were conventional classroom observations, but the data revealed some impactful, informal observation as well.

PIT7: Observing others has really, really broadened my thinking of different ways of doing things. We've done quite a lot of peer observation this year more than any other year, so I've found that to be extremely helpful.

PIT4: I'd come into class and I would be as lovely as possible with everybody and I teach but there was always that professional barrier which is important and then a few years ago – I think it could be about seven or eight years ago at our prize giving – there were all these lovely girls that I taught and I saw them chatting to a colleague of mine and I just saw how they were chatting and I thought to myself, "Do you know what? It's OK to give a little bit more of yourself. You could just relax a bit more. You can chat a little bit more because in the classroom you tend to be just quite focused and I need to get through this work and 'Have you done your homework?'" I've tried to cultivate that over the past few years and with wonderful benefits.

PIT7: I visited a colleague's class, and this was a long time ago, who was very much into allowing the students to – it was like a flipped classroom – and it actually blew my mind because it was so different from my old keep quiet and put up your hand approach and I've gradually allowed more and more of that and the experience and the rewarding nature of doing that has obviously encouraged me to do that some more. I think I have evolved from an information giver and a bit of a control freak. When I started teaching, I think I was very much in charge. I think it also comes with confidence; when you believe in yourself, you don't have to hold the reins so tightly.

Crucially, however, despite not labelling their informal learning activities as learning, the participants revealed that they engage in all the informal learning activities listed by Hoekstra et al. (2009), namely

- asking for peer feedback
- reflecting in a meaning-oriented way
- trying out new materials together with colleagues
- scanning the environment for new ideas (p. 672)

Points 1, 3 and 4 were described under the sub-heading Collaboration; and point 2 was described under the sub-heading Reflection in this chapter.

Informal learning through reading played an important part in this learning community. Refer to Appendix P. Participants in conversation with others, engaged in self-reflection or involved in a literature review on a specific aspect were all drawing from and contributing to a multi-voiced, dialogical discourse. This discourse equipped the teachers with the historically and culturally developed tools to address the problem or gap that they had identified. In that sense, this case study extended its understanding of community to teachers, support staff and education authors beyond the school.

PIT1: Reading, in an informal kind of a way just broadens your field. I think that something like a journal club, subject based, in a school can make a huge amount of sense and can motivate teachers to do that informal reading but just sort of centralise it to give it some kind of a direction.

PIT5: The counsellor's given us reading materials and I've got a file that I've accumulated over the years.

The participants needed time when they could discuss the materials that they had gathered in response to problems and questions. Participant 7, when contemplating the possibility of a blank slate that would become occupied by the problem, activity and outcome for a Professional Learning Community, spoke for the group:

FGT7: It will be very difficult because you've got to get into a completely different way of thinking, don't you? To say we're shutting all those things out of this room; your to-do list is going to wait till Monday and now let's think of a problem to solve. It's a way of thinking

I think we are quite far from. ... Ja, we're still very much on a mission to tick off things than rather sit back and say, "Well, let's go".

Professional Learning Community-style learning represented a paradigm change for the participants. James (2009) warns that "Educational change may well alter defensive routines and the order they give and may also involve the loss of an attachment to a "much loved" way of working" (p. 51). Such defences may work against the participants learning within a Professional Learning Community; they could adopt defence mechanisms "to protect themselves against unacceptable feelings that may imperil their senses of identity, legitimacy and value" (James, 2010, p. 48).

PIT7 It's very much linked with your attitude and your mindset of wanting to always learn to do your job better. And I think in our profession no one day or one year is never going to be the same; the demands are going to be different and escalating and I think your career-long learning involves bettering yourself, becoming wise and trying new things. I think it would work if we all got in the right frame of mind, just thinking of those staff focus days we have. You are away from everything else and when we get in the mood, I think we do allow ourselves to go that way.

Iqbal et al., (2016), cite studies by Chen and Silverthorne (2008), and Zimmerman and Todd (2009) that found a correlation between job satisfaction and performance. Most participants indicated in the questionnaire (Appendix I), which has been edited and rendered as Table 4.7, that they enjoyed working at Progress High School. This declaration was confirmed by data triangulation. Their commitment to learning within their community was demonstrated in their interviews, focus group discussion and questionnaires and have been reflected throughout this chapter.

4.7.1 Collaborative learning

Collaboration in this case study "concerns staff involvement in developmental activities with consequences for several people, going *beyond superficial* exchanges of help, support, or assistance (Louis et al., 1995, cited in Stoll et al., 2006, p. 227; my emphasis).

Culture and nomenclature again played a part in the participants' understanding of "collaboration". When the focus group was asked whether collaborative professional learning was core to good teaching, or an imposition that took attention away from their core functions, Participant 7 responded:

FGT7: I do not think it (collaborative professional learning) is core; I think it enhances it (core functions) but I don't think that it takes away from it (core functions). (My additions in brackets)

Participant 1 saw collaborative professional learning and its part in good teaching

on a continuum and I think that that continually changes, depending on circumstances (FGP1).

Both teachers gave valid answers, but the data revealed collaboration taking place intermittently. Even though their Professional Learning Community is still developing, and cooperation and collaborative learning with it, the teachers *do* learn from each other, mostly within subject departments but occasionally across subject areas. Many regard any teaching action or operation that breaks their isolation as collaboration.

PGT6: For me and Teacher T, every first break, we quickly have a one-minute meeting to catch up to where we are, what we're maybe going to leave out, what's important and so on.

The data revealed that collaborative learning experiences that held great perceived personal benefit were highly valued by the teachers. In some instances, it was collaboration beyond the school community.

PIT1: I get the most benefit from marking matric papers and getting insight into the people who have been setting those papers and reading and understanding the memorandum and in the discussion that goes on around that marking.

PIT6: When we mark matric papers then I learn a lot and the people there are all focused in our subject – and you get different meanings. I didn't think there were people who don't collaborate, but I do think people who are very stuck in their ways and don't want to learn new things – they're difficult to work with. There are no people like that at the

marking. You learn. The main bigwigs they listen to what you say and we discuss it with each other, so it feels to me as if they are open for new ideas and so on.

The participants had a common language and history because they and their colleagues at the school have been working together for many years. What would pass for very scant conversation among strangers carried a lot of meaning in this particular context. The participants and their colleagues were able to speak in curtailed subject codes that conveyed much more meaning than the actual words would suggest. Contained in a short exchange of where to slow down and where to speed up their syllabus delivery, the teachers concerned would have evaluated the implications of a particular pacing and estimated its consequences in terms of their work for the term, and year. Objection from one or the other in the conversation would elicit further evaluation. However, because they, in a manner of speaking, spoke the same language, the polyphony characteristic of dialogue was lost to some extent. Instead of speaking with many voices, the participants were speaking with one.

PIT4: Teacher P is the pace-setter and every day I actually liaise with her; the work is tough and I need to know exactly what she did in her lesson, at what pace - every single day. I need to know the order in which she did it because I've been doing it (the work) for many years but every group is different and it's just to refine your time, so I see her every single day. The goal posts shift all the time; nothing is cast in stone, so I go to her and ask, "How did you present this? I need to do this in a short time. Do you think I need to spend this amount of time?" So, we guide each other all the time. (My addition in brackets)

The data revealed that collaboration meant sharing insights and understanding to some participants.

FGT7: At our subject meetings, we look at results - everyone in the department; what can we see in terms of trends and why. And now we're putting a completely different method in place which involves more doing than watching. And that came out of sitting there saying does this seem to work? Because you show them (the learners) one day exactly how to do something, and they're just passive and the next day they have no idea how to do it. (My addition in brackets)

FGT5: I must say we also collaborate a lot; we're constantly checking with each other, where are we, what are we doing. And we do share how we go about it. Teacher Q will

often share what she's doing in class; she's young and enthusiastic and it's often inspiring; she's got some wonderful ideas and it's actually great having her because having been here for all these years, I realise more and more as I speak, my teaching has become kind of results, exams orientated and how to get the best out of them (the learners) in the end. Marking – we moderate a lot of each other's stuff; share a lot. If we're not sure what mark to give, we'll share the marking and numerous people will look at it and say this is what I would give and why. Just today we had a lot of chatting just to sort things out for moderation so there's a lot of talking about that but I think we all are constantly collaborating especially if you're a group, a department together. (My addition in brackets.)

During their personal interviews, the participants indicated on a graphic response sheet (Appendix C) their perceptions about collaboration and individualism and this data were triangulated with their verbal – auditory and written – responses. The data did not present a simple result and required interpretation based on all the data sources. Even though the participants rated the school quite highly for “Collective responsibility for pupils' learning” and “Collaboration focused on learning” (Table 4.4), most of the participants only “somewhat” agreed with the statement that the “Teachers think in collegial terms” (Table 4.3), and the a few were undecided. When they indicated their preferred method of finding solutions to questions or problems (Appendix C, question 5, and Appendix P), some responded that they would turn to a colleague for help, while some preferred trying to find the answers individually by reading various sources. On a sliding scale from highly individualistic to highly collaborative, Figure 4.2 represents the participants' perception of the teacher learning culture at Progress High School.

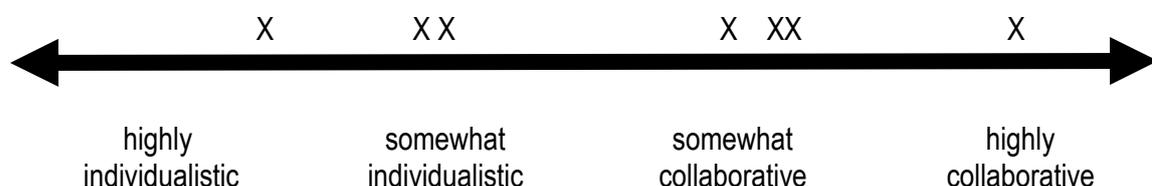


Figure 4.0.2 Teacher learning culture

This stated preference for individual learning was not fully borne out by the descriptions of practice in the interviews and focus group discussion, and as rendered in the quotations in this chapter. However, some participants found that formally arranged opportunities for collaboration did, at times, not work to plan.

PIT5: This is my experience. I haven't had very successful experiences. I think it actually depends on the individual. Unfortunately, in the past, I have found it very frustrating because people are generally not as punctual or as reliable. I will arrange a baby sitter to have a meeting with you; you will postpone it. You and I collaborating on an exam paper – that exam is supposed to be in the safe – I still have not seen it. It arrives the day before the exam and it's a mess. So, in fact, often, I actually have found that collaborating with others stressful. I find it easier to do it myself.

PIT6: My colleague does not like to stay for things, so I would love to discuss some things other than at first break or so quickly. Even our subject meetings sometimes get neglected, so it is a little difficult. I think that mostly depends on who you are working with and I understand he has other responsibilities, but sometimes there's a meeting on our calendar and then... (Participant did not finish the sentence but gestured despair.)

PIT7: Collaboration is wonderful if people are open to hearing, listening, and not feeling threatened. It's got to be done very respectfully and considerately. I mean, to me, professionalism – and I believe we are treated like professionals in this particular place – part of it for me is trust. I have had a situation where working together with a colleague we do disagree but then you both have to have the respect and the trust to work it through in discussion. People are prickly. It's not always easy.

The data showed that the participants learn effectively individually, as well as collectively.

PIT4: And that's my challenge every day. It's important to be on top of your game and ahead of your game. To find out stuff from other people, what are they're doing, you know, and share.

All the participants in this case study reported workplace pressures that meant there was little time to spend with colleagues. The time pressures on the participants meant that brief contact at break-time was the most frequent collaborative learning contact reported. All expressed a desire for more time to work collaboratively but also identified stumbling blocks like a very full school calendar, personal commitments and differing perceptions of the usefulness of collaboration as being some of the reasons why they did not see sufficient collaborative time being available in the foreseeable future.

PIT2: In our particular environment, the cramped nature of our assessments just makes it so difficult sometimes to collaborate because you are just hopping and that's why the most of our collaboration's happening over a cup of tea at break time. There's just no time to set aside. And then also sometimes I think personalities within subject departments or within the school, and not necessarily in subject departments but within the school – intransigence amongst different personalities I think also sometimes hinders collaboration. Sometimes it's great to learn from somebody else but then there's a personality clash and sometimes it's just not great.

PIT7: If our collaborative moments can count around the photocopying machine, at the tea pot, along the corridor, via email then, yes, that is encouraged. Well, I feel free to do that. Obviously time to say let's go and sit around the table now and discuss that one issue for the next few hours, those are limited moments but we discuss and I think we're encouraged to discuss and share.

Hargreaves and Fullan (2012) developed a scale of collaborative conversation (Appendices C and P). At the most social end, colleagues exchange "ideas, anecdotes and gossip". One level up, and they render "help and assistance when asked". Very few of the participants in this case study placed their conversation at that level. Despite the participants all speaking about the brevity of their daily collegial conversations, many felt that their conversations enabled them to share "resources, understanding and teaching strategies". Very few placed their conversation at the level of "joint work where you and a number of colleagues plan and inquire into teaching together". These ratings were subjective and the participants knew how they perceived their conversations. However, the literature is clear that challenging collegial conversations generate conflict, and yet no participants described how they resolved conflict in their conversations. A number reported that they "agree to disagree".

PIT1: We tend to be pretty staid on our ways in that one. And you know colleagues, I suppose myself as well, that this the road you travel; this is the way you do it and it works for me, so leave me alone.

PIT2: A great deal of effort is placed into trying to come up with a solution but then again, it is dependent on personalities. Some people would agree to disagree and to find common ground moving forward and hence students will benefit; other people are just

black and white. If they don't agree with you, they don't agree with you. There's no point. There's no way you're going to get anywhere with them.

PIT3: Often they're just happy to disagree and leave it at that – have their own opinions. Sometimes you can change someone's ideas on something when you talk it through a little bit but often I think we are quite stubborn and we all have our own ideas and it's very hard to change that perspective sometimes, so someone must then agree to disagree and work our own way in our own subject. I think that is what happens a lot of the time; it's not like you convert someone to your way of thinking quickly.

PIT6: I think they will talk about it, mostly. Some people sometimes totally disagree, then – a new phrase but it's an Afrikaans one – *trek hulle kuite styf*. There is one chap, he will, for example, when he does not agree, then you will hear there is endless discussion but I trust they reach consensus in the end.

PIT7: Conflict, disagreements – now not everybody is happy with a disagreement because a disagreement involves talking something fully through and if you are in a situation where you don't have the opportunity to finish talking it through, it can result in the hackles rising and so we've had meetings before – let's take a general staff meeting. If there's a lot of people and there are differing opinions, it's not the right forum necessarily unless you've got the whole day to collaborate on the disagreement. So sometimes in an open forum, it lends itself to disagreement and people feeling threatened. I've now learnt to try and follow through after that and continue the discussion.

Peck (1987, cited in Mulford, 2010) states that a community is a group that “fights gracefully” (p. 190). The participants indicated in Table 4.7 that they critique each other's work. But there was little evidence of this in the interviews or focus group discussion. The participants of this Professional Learning Community need to develop the robustness of their discussion because “teacher collegiality that is based on politeness and avoidance of conflict may end up subverting the reform effort because the real issues are not addressed” (Zembylas & Barker, 2007, cited in Zembylas, 2010, p. 232). All the participants touched indirectly on one of the contradictions that Y. Engeström (1987) recognises in all activity systems. Collective professional autonomy implies that professionals form and hold strong, informed views on their profession, yet Professional Learning Communities advocate rigorous professional discussion, aimed at

challenging horizons and reaching consensus. Bolam et al. (2005); Hargreaves (2015); Hargreaves and Fullan (2012); and Stoll et al., (2006) point out the necessity for reflective dialogue. The data gathered from the participants indicate that they learn informally through conversation, but their responses do not indicate dialogue as envisaged in the theory on Professional Learning Communities.

4.7.2 Reflection

Since Schön's seminal work on reflection in 1983, numerous authors have offered refinement and other classifications (Sellars, 2014). "Reflection is very broadly able to be defined as the deliberate, purposeful, metacognitive thinking and/or action in which educators engage in order to improve their professional practice" (Sellars, 2014, p. 2). Table 4.4 shows that the participants rated reflective professional enquiry quite highly, with many participants ranking it higher than the midpoint.

Of the four types of teacher reflective practice that Gore and Zeichner (1991, cited in Sellars, 2014, p. 6) identify, the participants revealed academic and social efficacy reflection in their responses.

PIT4: We do whatever we need to: reflect on maybe the previous day's work or badly written test. We reflect on everything that we do; we try and improve it; we try and see where the problem is at this point; we see that we have a very, very, very weak grade group of Grade 12s and it almost seems like nothing that we're doing is working. So, we reflect on what we do.

PIT7: I had a wonderful conversation with one of the teachers ... because on discussing her issue it made me think and it helped me to understand how I would do it.

PIT7: I do a daily reflection on how I've handled things during the day but that would affect my growth as a person. But if we're talking about learning how to be a better educator, although that's part of my day, I think to look deeper at new theories, new ideas, new approaches; it happens through significant events as much as a visit to a colleague, a class, or we have a staff meeting which focuses on whether it be inclusive education or dealing with learning barriers. So, our professional growth workshops that we have change my action in the classroom and then obviously there's times of the year when you have time – I find the end of the year and the beginning of a new year – there

is time for that because what you don't want is just to repeat what you've just done last year. So, in planning a new year, a new approach – that's probably the main time for me taking what I've done last year, let us say courses I've been on or theories that I've learnt and haven't had a chance to put them into action, that is when I plan differently and try and make sure that I'm not just a hamster in a wheel.

Some participants revealed experimentation without the accompanying reflection. That led to little, if any, teacher learning because the same instrument that had or had not worked was being applied to different groups, without any reflection. Deficit-model thinking formed a horizon beyond which the relevant participants could not see. Consequently, reflection on action was not used and their Professional Learning Community played no role in their learning by reflection in these instances.

FGT5: I tried something with the kids; I had done it before with the matric group and they did a phenomenal job. I tried the same thing with this year's Grade 11s and it was a spectacular flop but I will try again.

FGT3: I think it is also different groups; you try it with one group and then you try it with another group or grade and it actually works – and it's the students, the responses and just it works or it doesn't work but not that you ever throw it out. You might try again with a new group.

Reflection does not always have to have profound triggers. Something as mundane as a broken car radio – and a long trip home – facilitated this participant's reflection.

FGT7: I know I quite like the fact that it takes me a long time to get home in the afternoons and that my radio is broken in my car because it allows me time to think about the day and what could have worked better or how I could have handled something better. There isn't often time during the day; you just have to think on your feet.

4.8 THEME 4: LEARNER LEARNING

Sometimes truisms are spoken in the simplest of terms. When asked "Do you think teachers need to learn professionally to improve their students' marks" one of the participants responded "*Children* learn to

improve their marks". True as that might be, teachers needed to know how to improve learner learning. However, Biesta (2012) objects to what he calls "learnification" (p. 12). He points out that learning cannot be objected to because it sounds so laudable, but the "what" of learning must not be subordinated to the "how".

The section on reflection in this chapter showed clearly that the participants in this case study were focused on their learners' learning. It was taken as a given. When asked in the focus discussion why they did not connect their reasons for professional learning with their learners' learning, the participants responded:

FGT1: Wouldn't that be a by-product though?

FGT2: I always tend to think that it would be because if the individual is geared to improving their knowledge and expertise in their field; it will naturally have a spin-off on the students that we are teaching.

FGT7: How do we judge if we've improved? Are they less bored? Does our class look better? Do we go away more excited or are their marks better? I would hope that it was all of them. If we can say our teaching has improved but their marks haven't improved, then there is something wrong there.

Participant 7 touched on two salient points in the literature: the weak proven link between teacher learning as such and improved learner achievement, and teachers' weak ability to judge whether their teaching had truly improved when they have changed certain practices (Biesta, 2012). The participants used their learners' test and examinations results to measure whether their altered practice was an improvement. Marks are, however, only one measure of learning and they are dependent on many other factors as well, for example, familiarity with the assessment instrument.

Iqbal et al. (2016) point to several studies that have shown that a good teacher-learner relationship has a positive effect on learner achievement. Some participants reported improved achievement because of an improved teacher/learner relationship.

PIT4: We have a student here and only at a parent meeting did I hear that she'd been in so many clinics. I thought this was such a weak matric student. I thought gosh, I'm not

sure why she is doing my subject but we just kept on. And she's a bit older, so you treat every student differently and she's here for a purpose. Only once we had our first parent meeting did I hear she was at the best clinics and nothing worked and her parents asked me to call her in the afternoon and just give her extra encouragement and work. This child is flourishing; she asks for extra work; she comes with pointed specific questions and she just wants to work and get done and what a difference it has made.

Learner learning was not only confined to subject content. The participants viewed their learners holistically; they instilled “the habits of mind, the skills and the capacities” (Beattie, 1997, p. 114) to be active and productive members of society.

FGT3: There's also a lot of immeasurables in teaching because if you look at the students that come back and talk to you and what they learnt out of your classes was not necessarily what you were teaching. Your personality and how you do things and what motivates you and drives you: values, morals – all those things. The way we do it; we pass it on and what we instil in them is important, I think, and how do you measure all of that? What they've changed or got involved in because of things that you did?

PIT4: Students need to vocalise what they are thinking about what we're doing. Me saying, come on what do you think? How? What is going through your mind? Cause ultimately that's what they need to do.

The participants reflected on their practice and made changes. They engaged in action research because together with their colleagues, they considered why their learners were not achieving their - the learners' and/or the departments' – goals. (In the school in the study, the learners declared to their mentors what they were aiming to achieve in every subject.) The department then decided on a new course of action and after a period of time assessed if the experiment had achieved the goals that the teachers had set for themselves.

FGT7: Just a very practical example. In our department our method used to be do a demonstration where they (the students) would sit and watch and then the next day they must go and do it, and most of the time they couldn't do it. In other words, they were sitting and enjoying a show but it wasn't translating into “Now I understand exactly how to do that task”. So, we've actually done away with the demonstration and that came out

of a discussion between everyone in the department and now we're putting a completely different method in place which involves more doing than watching. (My addition in brackets.)

Teachers co-constructed innovations with their learners. This is well-aligned with activity theory and mutual transformation. The participants adapted their practice in response to their learners, who then in turn adapted *their* practice, transforming the affective quality of a class or the way a particular participant taught their lessons.

PIT4: I love learning from them. Some of them are so rich and some of them are so knowledgeable and wise.

PIT5: It is trial and error and experience. I used to do it very much like I would like to be taught. I'm like sit where you like, unless you abuse the privilege, you sit where you want. If someone wants to stick up something skew on my wall, doesn't bother me at all. Then I discovered that some of them actually would want to be put in alphabetical order and they want to be in little squares and in fact those things stress me (emphasis in original) out; but I learnt; I realised that I've got to find a more moderate approach. So, although I don't put them in alphabetical order, I have introduced more structure and I am more aware that just like if you throw a thing at me that's out of my comfort zone, I get stressed out. That's one thing I really learnt and that was from the kids: I picked up that I was stressing kids out without knowing it.

PIT7: I've 100% learnt probably more from the students than from anybody else in certain examples. It's made my experience of being a teacher so much more rewarding and in fact, that's where this institution and this community has also been instrumental in the whole thing because of the personal nature of the interaction with students. You get to know them well and it allows you to tailor your approach because you know where they are at.

Teachers cannot create their own context. A part of the complexity of a teacher's environment is the curriculum within which they teach, and the significance of and the methods of assessing learner achievement. To all teachers of Grade 12, the matric results have great consequence. The matric examinations and tertiary admission form a big part of every high school teacher's thinking. Because

many matric teachers teach learners who aspire to college or university, and because they themselves have graduated, they are aware of what learners need to succeed beyond school. They thus expect their professional learning to enable them to teach more effectively and to deliver improved learner achievement. The performance-orientation of the DBE and the way Grade 12 results are reported in the media undermine teacher and learner learning. Furthermore, the data also revealed “learnification” (Biesta, 2012, p.12) at times. The participants were learning; they were learning informally and collaboratively, all as promoted in the literature on Professional Learning Communities. However, they were learning how to get the best *marks* for their learners.

FGT5: The long and the short of it is that a lot of the reason the kids are here and their parents have sent them here is to get good results or better results and I’m very aware of that and that it is our responsibility. But it’s also a time factor. You’re zoning in on what you know is going to produce marks so a lot of the enrichment that you would like to do, a lot of the kind of discussing and the stuff that you actually consider to be of educational value goes out the window and you’re kind of focusing on getting them prepared for what they’re going to be examined on.

Several participants were external sub-examiners in their subjects and spoke about the benefits they derived from the collaboration among examiners and sub-examiners during external marking sessions. But they were less convinced that their learning in that forum benefited their practice in class.

FGT1: An approach is possibly where one can say (to the learners) pay attention to this kind of thing; we’ve seen now that in the papers this is the kind of thing that comes up the whole time. It doesn’t necessarily have to be a question but a way of asking or something like that. I think that’s what helps. (My addition in brackets.)

FGT2: I must say, from my experience of external marking, it hugely affected the way I teach in class – to the extent that it improves the learners’ results. The negative thing, granted, I think, is because the results would appear in the newspaper and it doesn’t help then to go deeper into a subject – which may not be tested in the finals – but give the students then a broader understanding of a concept, so you just steer away from that because you’re just moving towards this target. So, it’s more an improvement in marks than an improvement in learning.

FGT5: Even though the questions change, the skills that they are looking for are exactly the same, so if you go through the last three or four years of papers there's a definite pattern and I do rather shamelessly train my students because a lot of it is technique in the way they answer. They don't have that academic technique, and if they can click and get how this (emphasis in original) is the answer, they're going to get the marks. If we take Student M, for example, he's really clicked the technique of answering questions and how to do it and how to spoon-feed the marker and, ja, his marks have shot up but a lot of students really struggle with it and we are spending more and more time emphasising technique.

Such learning, even though falling fully within the realm of schooling, and much less so of education, is well-aligned with one of the five criteria of adult learning cited by Merriam (2011), namely that it "is problem-centered and interested in immediate application of knowledge". The teacher learning informing this kind of learner learning was collaborative and informal, but it was misaligned with the spirit of learning in a Professional Learning Community.

Sometimes, the focus was not only on improved results, and the participants could use their learning to improve their own awareness and practice.

FGT4: When you're marking, your knowledge of where the problem areas are is just distilled. You know exactly where the problem areas are and you can bring that across in class and I find that my teaching is also more thorough. You know exactly and you can just guide them a little bit better than not having marked.

Some learners' learning benefited from teachers who shared their knowledge with the participants.

FGT3: If I don't mark matrices or I don't teach it, I'll go to Teacher P or Teacher E because we work together in Grade 9 and I'll ask how do they mark this and am I marking correctly; should we give a mark or not? So, then their knowledge of matric marking and how they mark there will influence how we mark in Grade 9, so it filters down but I don't necessarily have to mark to know, if I can talk to my colleagues.

The data thus showed that the teachers learned professionally in their learning community, and sometimes in their broader communities, to improve their teaching and their learners' learning.

PIT4: I got a lovely video clip that brings in Usain Bolt, because I've been interesting them (the learners) all the time, just giving them tidbits of information like, oh, he tried to date Rihanna but she's not interested or he ran against our van Niekerk and they competed together, interesting stuff but at the same time incorporating that information into our lessons. So, it is important. It takes doing. It takes some doing, to do the bits of research but it's interesting and it keeps you on your toes as well. And the students always say, "Don't you get bored? You're teaching the same thing every single day, all the time" and I tell them, "But do you know what? The challenge is at this point, did you understand what I said today?" Because yesterday they might have understood, but did this (emphasis in original) class understand? And that's my challenge every day. It's important to be on top of your game and ahead of your game. To find out stuff from other people, what are they doing, you know, and share.

4.9 CONCLUSION

Having thoroughly examined the data, and despite some constraints, I found that the participants at Progress High School were members of a Professional Learning Community, which created a learning environment in which they inquired together into the improvement of their practice in areas of importance to them. They collaborated with colleagues to implement what they had learned (Hargreaves & Fullan, 2012), while they maintained an undeviating focus on learner learning (Louis & Kruse, 1995, cited in Hord 1997).

The data revealed that despite paradigmatic dissonance at national, provincial, local and case study level, the Professional Learning Community at Progress High School facilitated the professional learning of the participants in these key dimensions: culture, support, formal and informal learning, and a focus on learner learning. The Professional Learning Community fostered teacher learning through collaboration, shared practice, dialogue and learner learning. As advocated in the literature, the participants saw their community as extending beyond the confines of their school. However, the participants felt that their community could improve on the development of their professional learning environment. The discrepancy between their satisfaction with the community's role in teacher learning, but not professional learning, stemmed from their view that professional learning was delivered through formal courses and workshops. Mutual trust and respect, a cornerstone of dialogue in a Professional Learning Community also needed development, as did professional, reflective dialogue itself. The culture at the school in this case study

welcomed collaborative nudges from leadership, however, because there already was a healthy sense of community, the nudges would *develop* their collaboration, not initiate it (Hargreaves 2015). The participants' misgivings about shared beliefs were not borne out by the interview and focus-group data. By contrast, there was indeed little evidence of the community viewing the teachers' learning holistically. However, some of the disappointment expressed by participants was due to their misunderstanding of the informal, ongoing, agentic nature of professional learning. Very few participants reported that reflection played a role in their professional learning, however, many reported reflective activity even though they did not recognise it as reflection. Nomenclature and misunderstanding thus seemed to have played a negative part in the teachers' rating of their Professional Learning Community.

Professional learning in the Professional Learning Community of this case study did not match all the ideals postulated in theory. Such differences between theory and practice, reflected in a growing number of studies (Clausen et al., 2009; Tsui, 2007), have prompted authoritative authors to observe that each Professional Learning Community would follow its own course of development and that there was no prescribed pathway that could ensure its ultimate success in practice. "To some extent, each group must build its own model and develop local ownership through its own process" (Fullan, 2000, cited in Clausen et al, 2009, p. 451), which was what the data revealed for this Professional Learning Community.

Chapter 5 will comment on the findings of this chapter, elaborating on the role the Professional Learning Community played in a few important aspects of the participants' professional learning.

CHAPTER 5

INTERPRETATION OF THE FINDINGS

The underpinnings of teaching ... were uncertain. They benefited little from the scientific procedures of medicine or the case precedents of law. And the outcomes were unclear. Unlike lawyers, teachers did not know whether they had won or lost. Nor could teaching tell them whether their students were cured or not. So teachers' rewards became personal, emotional, or "psychic," as Lortie put it—resting on exceptional cases of child rescue in the present and deferred praise from returning students far into the future (Hargreaves, 2009, p. 145).

5.1 INTRODUCTION

This thesis examined the role a Professional Learning Community in the professional learning of a group of educators. Its aim was to describe the part played by an agentic teacher learning model, the Professional Learning Community, in the learning of a group of in-service teachers, and in doing so, to depict an alternative to the control paradigm currently dominating education in South Africa. Activity theory formed an important part of this case study's theoretical framework. It can be represented as the complex, transformative, interactive system of subject, object, tools, rules, community and division of labour and it is this integrated social system that makes activity theory a suitable lens through which to observe a Professional Learning Community. As Edwards et al. (2002) point out, "Teacher professionalism and pupils' learning are both networked, socially distributed processes" (p. 128). Activity theory, with its roots in a cultural-historical ontology, offers a view of learning that is well-aligned with South African culture. The significance of this case study lies not only in describing what *is*, but also in showing the potential of a Professional Learning Community. This chapter will discuss the Professional Learning Community as I found it in my case study.

5.2 DILEMMAS PRODUCED BY PROFESSIONAL LEARNING COMMUNITY IN CASE STUDY

Professional Learning Communities could generate some dilemmas that would challenge the culture of a school or broader academic community.

5.2.1 Dissonance

Chapter 4 pointed out that the study had discovered paradigmatic dissonance at many levels, but the one of interest in this chapter is the dissonance between the paradigm on which the study was constructed and the ontological stance of the participants. The participants' view of both teacher and learner learning were influenced by deficit models. Their deficit paradigm viewed participants as lacking in certain skills and knowledge, and the remedy was to transmit knowledge to them. If this case study had adopted Kuhn's (1962) stance that two worldviews could not exist simultaneously in one study, it would not have been able to deliver valid findings. But such an absolute stance had been challenged by H. A. Alexander (2006) and I accepted Bakhtin's (1986b) concept that in the border zone between paradigms new understanding could be developed. I used dissonance rather than division at the start of this statement because elements of the deficit models co-existed with constructivist elements in the participants' hybrid learning model.

The participants consistently spoke of professional learning in terms of arranged programmes that were delivered to them. They welcomed the affective benefits of the programmes – and that benefit should not be discounted in terms holistic well-being. However, they reported that such transmission-style programmes had had no effect on their teaching practice. Yet, at the same time, when contemplating Professional Learning Community-style self-discovery of problems and formulation of action plans, the participants found the prospect daunting and readily acknowledged needing some “nudges” (Hargreaves, 2015). However, contrary to their own perception, several participants already engaged in action research (as recommended in SACE CPTD Management System Brochure A) to an extent. They did not, however, call or recognise it as such or record the reasons for or the findings of their research. During their interviews, several participants mentioned workplace pressures, time constraints, family responsibilities and tiredness as hampering their self-directed professional leaning. These factors might have contributed to their aversion to taking on what they perceived as additional work. However, “social defences” (James, 2010, p. 49) could also be responsible. Social defences “are the behaviours that individuals and groups adopt to protect themselves against unacceptable feelings that may imperil their senses of identity, legitimacy and value” (James, 2010, p. 49). The formalisation of a Professional Learning Community at their school would require several “much loved” (James, 2010, p. 51) practices to be abandoned or radically altered. The “arranged collegiality” (Hargreaves, 2015, p. 121; Hargreaves & Fullan, 2012, p.118) that might be required to trigger the next level of Professional Learning Community development could be perceived as threats to the identity or status of the participants. Such developments might trigger social defences. Another possibility is proffered by Carlile (2002, 2004). He addresses the reticence of

teachers to abandon practice or knowledge because they are “hard-won” (Carlile, 2002, p. 445) and the demands of new knowledge construction, especially about practice, is layered on top of ongoing syllabus and administrative demands.

The participants benefitted from a long association and communication thus was facilitated. However, together, they had developed the culture of their community over many years. Their practice had shaped the culture, and the culture in return had shaped their practice. As changes were introduced over many years, the participants layered knowledge from each innovation on the old, without questioning deeply what the change truly constituted. With deep, dialogic interrogation and understanding of each change “that which is known benefits the knower and informs the knowledge base of teacher education, of teacher development, and of school restructuring and educational reform” (Beattie, 1997, p. 125). Merriam (2011) also points out that adults learn best if they can draw on what is familiar and build on that. However, without the requisite depth of understanding, the parts that were immediately useful were taken into practice, without ensuring compatibility with retained practice. The result was that the participants did not recognise their hybrid learning model as such. It must, however, be noted that despite this hybrid model, the participants clearly showed professional learning. Vermunt and Endedijk (2011) cite the work of Vermunt and Vermetten (2004) in which various qualitative differences are recognised between reproduction-, meaning- and application-directed learning. This case study found that teachers engaged in all three: every time the syllabus changed, they needed to learn content. They needed to engage dialogically with the material to make meaning of it. They also needed to know how to best convey the material to their learners. The latter was the learning where the participants reported most collaboration. All three types of learning took place individually and collectively, and all three involved situated activity.

5.2.2 Dialogue

Dialogue is described in the literature on Professional Learning Communities, and advocated by Clausen et al. (2009), Hargreaves (2015), Hargreaves and Fullan (2012), and Webster-Wright (2009). The authors see rigorous academic dialogue as an essential part of collaboration and learning. An essential first step in that discussion is good problem formulation. Tan and Caleon (2016) also see the importance of asking the right questions and therefore advocate problematizing the activity system’s object to formulate the appropriate question to address it. None of the participants reported any attention being paid to question formulation to guide their collaborative efforts and this, coupled with their descriptions of numerous, short discussions mainly to speak about the pacing of the delivery of the syllabus, suggested that they did not

engage in rigorous, academic discussion. This would hamper attempts to develop their collaborative learning. For such rigorous debate to be sustained, the authors cited earlier advocate trust and respect but admit that there is no guaranteed method of the establishing such trust and respect. The interviews and focus group discussion also revealed that there was a prevailing culture of allowing colleagues to agree to disagree because the theoretical discussions as described in Chapter 2 would be difficult to achieve and sustain (Hargreaves & Fullan, 2012), despite their purported benefits. This case study's finding supported the fine balance between development and independence. An analogy of a federal state came to mind because a federal state willingly cedes control of certain functions that require central control to the federal government, while retaining control of those functions that give the state its unique character. Every school has a culture or ethos, and teachers who collaborate on those issues might accept that they would have to collaborate with a large group to find common ground. Discussion would have to produce agreement about their long-term activity but when in their own classrooms, their individual, professional judgement would determine their actions. Professionalism demands autonomy, but individual autonomy can lead to individualism, while collective autonomy means that teachers have to cede some decision-making to the group.

A dimension of discourse that extends beyond the teachers' collaborative learning is discourse in the Freirean tradition where conversations are not just about issues but also about power, about learners' voices being part of the educational discourse in classrooms. It is about learners struggling with a subject because of the language in which it is conveyed, or because they cannot see the relevance of it in their lives. It is because race or culture alienate the teachers from their learners. Professional Learning Communities must be able to confront, discuss (Bambino, 2009) and address through activity those barriers. The participants in this case study *did* report the school's entry into such discourse among the staff and that greater awareness among the staff of their own diversity and the barriers they had faced as individuals had sensitised them to the barriers their learners might have experienced in their classes. Gadamer (2009) reminds his readers that "Because of their biological and cultural backgrounds, personal histories, and idiosyncratic experiences, students do not arrive in school as blank slates, nor as individuals who can be aligned unidimensionally along a single axis of intellectual accomplishment" (p. 106).

It might be the topic of research in the future to study whether Professional Learning Communities, which initially stem from business, might be trying to impose an environment that is not optimal for high school education. Perhaps a conflictual environment, very strongly advocated by the proponents of Professional Learning Communities as the driving force of the Professional Learning Community, might detract so much energy from what teachers see as their primary focus, and might cut across what teachers see as

their individual patterns of learning (Vermunt & Endedijk, 2011) and their professional autonomy that the energy-reward balance is too far out of kilter to be realistically expected practice. The experience of Ellen Key Ballock (2007, cited in Bambino, 2009) gives her real-life perspective on robust, collaborative dialogue: "I felt affirmed in this space where both my questions and expertise counted, amazed by the potential learning from a long, deep, collaborative discussion of just one piece of student or teacher work. ...However, once the novelty began to wear off... dissatisfaction grew" (p. 5).

5.2.3 Products of research

Shulman (2004) advocated that Professional Learning Communities should engage in research and the research products should be able to stand the scrutiny of academic peers. Such research is not part of high school practice and the participants' responses showed that they were very far from contemplating the production of such reports. Also of interest, in the light of the DBE control paradigm that became evident during this case study, the research products of such communities might become part of an evidence-based stance to teacher effectiveness, in which case it would have to be more strictly regulated so that teacher performance at schools within a given environment, e.g. teachers teaching the national curriculum, can be measured and compared. In such a case, the idiosyncratic learning which was observed by researchers (Amin & Roberts, 2008; Brown, Collins & Duguid, 1989; Cameron, Mulholland & Branson, 2013; Engeström, Y., & Sannino, 2010; Huberman, 1993, cited in Talbert & McLaughlin, 2002; Tsui, 2007), and which maintains the flexibility and relevance of informal learning in a Professional Learning Community, will be side-lined for a more systematic stance towards professional learning.

5.2.4 Rules

"Rules refer to the explicit and implicit regulations, norms and conventions that constrain actions and interactions within the activity system" (Engeström, Y., 1993, quoted in Yap, 2015, p.536; Engeström & Sannino, 2010, p. 6). They are always culturally generated and often are devised to regulate historical scenarios. Rules regulate the working of the activity system. However, they pose a dilemma in a Professional Learning Community because the more regulated the Professional Learning Community, the more constrained the dialogue and actions will be in a scenario that requires openness and an acceptance of ambiguity (Talbert, 2010, cited in Lieberman & Miller, 2011). Organisations need some kind of ordering regulations but in a highly egalitarian, yet collaborative, organisation like a Professional Learning Community, the rules would have to be arrived at collectively and would have to be adopted willingly for the type of trust necessary for the functioning of a Professional Learning Community to work to exist

because rules always elicit questions about authority and power. As discussed in Chapter 2, Taylor (2009) suggests that “The existence of authority is an inconvenience we have to live with, as a condition of civilized society” (p. 237). The responses of the participants show that they would accept “nudges” (Hargreaves, 2015) of authority but that a heavy-handed imposition of rules would negatively impact the development of their Professional Learning Community.

5.3 STAGE OF DEVELOPMENT OF PROFESSIONAL LEARNING COMMUNITY IN CASE STUDY

The Professional Learning Community in this case study has some of the characteristics of a young Professional Learning Community. As Clausen et al. (2009) point out, there is no single route to the development of a Professional Learning Community, each institution has to build on what it has, and this Professional Learning Community has

- a dynamic leadership whose vision will lead the staff members
- a high degree of collegiality to foster collaboration
- trust among staff members and
- a love of learning and education

An important influence on participants’ learning was the learning environment created by the Professional Learning Community. However, personal factors also played an important part in the participants’ learning orientation. This was mentioned by a number in the interviews. They felt that they were encouraged to learn but that time and personal circumstances played a regulating role which kept participants from research-based learning. Even though this case study did not set out to develop any theories or generalise its findings, it says much about the complexities and dilemmas that all teachers face in common that Vermunt and Endedijk (2011) identified four trends from their study which are valid for these participants also. The trends are

- adopting survival approaches to learning to teach
- experiencing friction between expectations and actual events
- struggling not to revert to old ways of teaching
- avoiding learning (p. 300)

I would like to add another, namely the cost of professional learning. Here I do not only refer to the financial cost but also the personal investment a teacher has to make while learning. In a change-rich environment

like South African teaching, teachers, for example might wait for proposed innovations to be well-established before they invest more time into adapting their practice. Time was mentioned by all participants as being a constraint on their self-directed professional learning. Time is, however, not a global or a neutral concept. Conversely, time is non-discretionary when it is a slot on a timetable where the teachers have no option but to be in their classroom; time is discretionary when the teacher can choose which activity to prioritise. Priorities were sometimes dictated by deadlines, and sometimes by personal preference. However, there was a feeling among the participants that no matter how they prioritised their activities, they would not be able to accommodate additional high importance, high demand activities as described in most Professional Learning Community literature.

5.5. CONCLUSION

The group of participants in this case study provided a useful description of their learning in Chapter Four. This chapter commented on the interesting aspects of their learning that highlight some of the dilemmas this real-life Professional Learning Community faces as it progresses along its unique course to maturity. Chapter 6 will make recommendations based on what Professional Learning Communities have to offer South African education as an alternative model for future teacher professional development.

CHAPTER 6

LIMITATIONS AND RECOMMENDATIONS

The definition of insanity is doing something over and over again and expecting a different result. (Albert Einstein)

6.1 INTRODUCTION

This case study set out to describe why, how and what teachers learn. The literature review in Chapter 2 clearly indicated the interconnectedness of four key concepts: learning, agency, action and professionalism. Learning takes place through action and professionalism is enhanced when the agentic teacher makes informed, effective, defensible decisions and engages in actions and activities to carry them out while also acting as the collegial expert to their colleagues (Charteris & Smarden, 2013).

Every year when the Grade 12 results are published, the nation holds its breath. Valid or not, Grade 12 results are the thermometer of the nation's educational health. Every year the patient is declared malaised but recovering. The remedy of greater control is prescribed by the BDE, only for the next year's examination to produce the same result, and more of the same remedy. The problem is all too patent. However, the solution is elusive, given the scale and complexity of national education, situated in an uncertain world where what worked relatively recently now stubbornly refuses to yield the desired results. Teachers no longer work in an environment of trust; their professionalism and agency are questioned and constrained, not only by policies and procedures, but by society at large.

Educational paradigms are contentious because they address the very touchstones of a society. Do we celebrate the past? Do we make it an active and direction-bearing part of our educational policy? Do we, as the cultural-historical social theorists do, see it as informing and underpinning all our meaning-making and tool-production? Do we acknowledge that the very language in which this thesis is written is the outcome of all that has been said about education? Do we take what is known and build on it? Or do we start anew, building afresh, not allowing a layering of knowledge?

There is danger in layering; imperfect foundations will not support much development. There is danger in allowing culture and history to inform all we do; we will be travelling into the future by steadfastly looking

at the past. There is danger in starting afresh and denying what has gone before; our very DNA remonstrates against such an approach. So, where to from here?

Because effective teaching is more than the sum of its parts, the learning that takes place in a Professional Learning Community is “always collective; embedded in, enabled by, and constrained by the social phenomenon of language; caught up in the layers of history and tradition; confined by well-established boundaries of acceptability” (Davis et al., 2000, p. 67). Yet, it could be claimed that one of the aims of a Professional Learning Community is the disruption of “habitual responses” and the production of “new insights and learning” (Varela, 1999, cited in Butler, Storey, & Robson, 2012, p. 18).

6.2 WHY CHOOSE A PROFESSIONAL LEARNING COMMUNITY?

Professional Learning Communities offer a credible alternative to the current *de facto* paradigm of prescription and control that governs South African education. The theory of Professional Learning Communities is well established. Its theoretical background developed about twenty years ago with Hord’s (1997) seminal work. Many authors (Bolam, McMahon, Stoll, Thomas, & Wallace, 2005; Day, 2012; DuFour & Reeves, 2006; Hargreaves, 2015; Hargreaves & Fullan, 2012; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006) have addressed the development of Professional Learning Communities in the past two decades. Numerous others have discussed the implementation and potential of Professional Learning Communities (Botha, 2012; Hord, 2009; Lieberman & Mace, 2009; Ning & Lee, 2016; Owen, 2015; Tan & Caleon, 2016; Yap, 2015). Professional Learning Communities thus have a sound basis in theory, but at the same time they are of the twenty-first century. The wide-spread implementation of Professional Learning Communities would represent an innovation in South Africa because its holistic approach to teacher learning would promote the re-professionalisation of teachers by strengthening their agency. The rationale for this suggestion is briefly discussed below.

6.2.1 Professional Learning Communities: a valid alternative model for teacher development

There is much merit in Professional Learning Communities in the South African context.

- Professional Learning Communities are inherently democratic. Respect and equality (Bolam et al., 2005; Hargreaves & Fullan, 2012; Stoll et al., 2006) are two foundational concepts in Professional Learning Communities. Every member of the community

makes an equal contribution. This results in the “multi-voicedness” (Bakhtin, 1982, cited in Engeström, Y. & Sannino, 2010), and what I will call the “even-voicedness”, of a Professional Learning Community. This confluence of respect, equality and multi-voicedness allows Professional Learning Communities to challenge horizons within and between members to allow the community to develop. Y. Engeström’s (2000, cited in Engeström, Y., & Sannino, 2010) concept of a Zone of Proximal Development “as the space for expansive transition from actions to activity” (p. 4) recognises the long-term vision that such a change of horizons (Gadamer, 2004) requires. Contradictions would drive the Professional Learning Community forward through transformation. Short-term actions would be performed with horizons in place, while at the same time long-term activities would be working towards outcomes, one of which would be the changing of those horizons. Such transformation takes time. However, learning in the community expands by making new meaning and knowledge across its current boundaries (Carlile, 2004), and in that way, Professional Learning Communities counter stagnation, conservatism and traditionalism.

- Professional Learning Communities allow collective autonomy.
Members of a Professional Learning Community take collective responsibility (Bolam et al., 2005; Stoll et al., 2006; Hord, 2009) for their learners’ achievement, but with that they also have collective autonomy (Hargreaves, 2015; Hargreaves & Fullan, 2012; Lieberman & Miller, 2008). Professional autonomy (Bolam et al. 2005, Hargreaves, 2015; Stoll et al., 2006; Talbert & McLaughlin, 2002) is often associated with individualism, and Hargreaves warns that “professional autonomy can no longer be reducible to individual classroom autonomy, collective responsibility should be a key goal in building professional learning communities” (2015:140). Collective autonomy is advocated for Professional Learning Communities in South Africa because it will increase teacher professionalism and agency.
- Teacher agency
Collective autonomy leads to teacher agency. Edwards et al., 2002 sees agency as a capacity to act responsibly (and I want to add, responsively). Biesta et al. (2015), on the other hand maintain that agency is not a capacity teachers *have*, it is something they *do*. Agency unleashes teachers’ potential to act and, through the transformation principle, frees the contribution that thousands of professionals can make to their communities, as they themselves learn and develop. The metaphor of “unleashing” was used deliberately because at present teachers are bound in red tape and compliance.

- Collective autonomy allows flexible, responsive teacher learning.

I have included two diagrams to illustrate the potential complexity that the agentic teacher incorporates into their synchronous view of teaching. There is synchronous transformation of teacher, learner and lesson material, as the teacher responds in the moment to the unique - never to be repeated – set of circumstances in their classroom. Before the teacher entered the classroom, the syllabus would have been used as a guide, adapted to suit the context of the lesson, to plan a lesson that was flexible in its implementation.

Collective autonomy allows teachers within a specific context – in high schools that would typically be subject departments – to assess and adapt their syllabus content or pacing to suit their context. If, for example, the entire class is struggling with an aspect of work, the teachers in the Professional Learning Community (the subject department) could use “historical-genetic” and “actual-empirical” (Engeström, Y., & Sannino, 2010, p. 7; Engeström, Y., 2011, p. 91) analysis to investigate the factors that could have impacted negatively on the learners’ learning, resulting in their poor achievement. There could be a number of discoveries made during such analysis. An example would be the identification of an arrangement of material in a syllabus that teachers believed was hampering, rather than facilitating, understanding. Such a method of identification would be termed “actual-empirical” analysis (Engeström, Y. & Sannino, 2010). The object would be the gap in the logical arrangement of material, and the teachers would decide to act in upon the arrangement of material to facilitate the logical presentation of their subject over a number of grades or years. The outcome would be improved learner understanding of their subject and improved achievement. Such activity would also result in teacher professional learning as the teachers went through the cycle of problem identification and statement, research to address the gap, action plan development, plan implementation and assessment of the outcome.

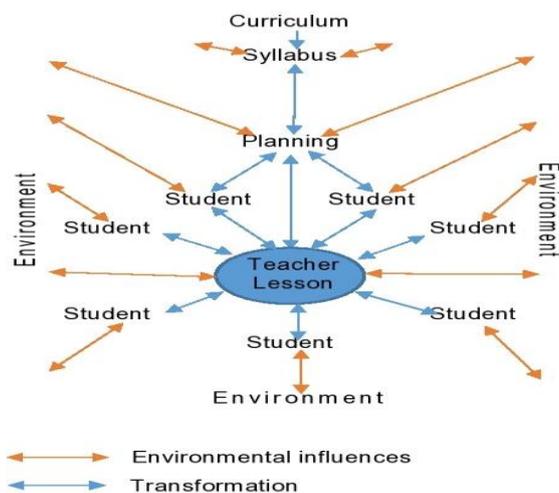


Figure 6.0.1 A synchronous view of teaching

Experienced teachers without undue restraint of time or compliance will adapt their teaching to suit the circumstances of each lesson. “Uncertainty and complexity ... have been highlighted as the crux of difficulties professionals face” (Barnett, 2004, cited in Webster-Wright, 2009, p. 719). Schön (1987) addresses the decision-making a teacher needs to make in synchronous teaching and refers to the “artistry” (p. 35) of teaching. Unlike experienced teachers, inexperienced teachers often lack the confidence or intuition to adapt their practice on the spot. Tochon and Munby (1993, cited in Edwards et al., 2002) postulate that inexperienced teachers have a diachronic view of their work.

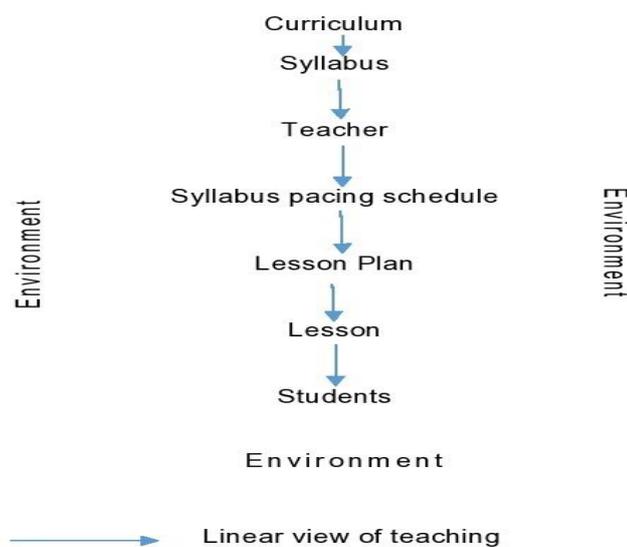


Figure 6.0.2 A diachronic view of teaching

Their teaching is linear. They would typically draw up and follow their lesson plans faithfully, not allowing themselves to deviate. They do not allow the syllabus, environment or the needs of their pupils to transform their practice or alter their lesson plan. They follow a mechanistic implementation of the syllabus. Alexander (2010, cited in Kershner, Pedder & Doddington, 2013) found that “Professional learning can be fundamentally stifled when external requirements for assessment, curriculum and pedagogy set limits on innovatory practice at school level” (p. 35). With inexperienced teachers, even suggestions are taken as directives. If they are teaching in isolation, their transition from a linear to a synchronous view of teaching will be retarded because they will be able to draw on only their own experience. A Professional Learning Community plays a crucial role in the development of a synchronic view of teaching because inexperienced teachers can learn from the more experienced teachers’ experiences during discussions on practice. “Experience counts; theory doesn’t” (Hargreaves & Fullan, 2012, p. 25).

- Learning material and methods can be relevant and interesting

A Professional Learning Community that espouses an activity theory model of learning, recognises the constructive role both culture and history play in learning. Activity theory has its roots in cultural-historical activity theory which acknowledges the social, constructivist nature of all learning. Because, in such a model, knowledge is not transmitted from a possessor of knowledge to learners in need of that knowledge, but is actively constructed – with the assistance of the teacher. The meaning that the learner makes is personal and relevant.

- Professional Learning Communities encourage deep learning

Learning by participating and learning by observing are well-established forms of learning. Situated learning or learning by participating has enjoyed considerable attention since Lave and Wenger propounded the concepts in the 1990s. However, a danger of such learning is that it could result in broad knowledge without an accompanying deepening of knowledge because it is focused on workplace learning. Deepening occurs when knowledge is discussed dialogically and dialectically. Such discussion challenges presuppositions and their resultant horizons (Gadamer, 2004), and leads to teachers developing a deeper understanding of their knowledge and worldview. Amin and Roberts (2008) and Cameron et al. (2013) warn, however, that like-minded teachers who work together to deepen their knowledge when the rest of the community espouses broadening become isolated silos of knowledge and the benefit of their deep learning does not spread to the broader community.

- Professional learning promotes informal learning

Informal learning has several advantages in the South African context.

- Situated learning ensures relevance.
- Learning by expanding focuses teachers' vision on a long-term goal and they work thoroughly and purposely towards it, not jeopardising the learning of their learners in years to come.
- There is a clear sense of progression as the short-term actions work towards the accomplishment of long-term outcomes.
- Informal learning acknowledges the priorities, motivations and methods of adult learners.
- Informal learning makes use of local resources, readily at hand, e.g. articles in print and on the internet, discussion forums and media sources.
- Informal learning encourages deep, reflective dialogue.

A Professional Learning Community is a resource-rich concept: it *takes* time when liberating teachers to participate in Professional Learning Community and it takes a long-term commitment; it requires access to theory. However, it *gives* resources back to education. It adds to the stream of utterances on education. It connects teachers in their local communities with teachers elsewhere.

- Professional Learning Communities can accommodate a variety of learning models.

A Professional Learning Community provides principles rather than a structure; it creates a learning environment; it is not a set of rules. However, it requires a worldview that supports idiosyncratic, contextual, collective professional learning. It should not be constrained by a control paradigm that seeks predictability, reproducibility and standardisation – possibly even uniformity. If Professional Learning Communities were to be part of a highly regulated and controlled environment, the mindset of learning to advance the profession of teaching would be jeopardised.

6.2.2 Recommended reculturing and restructuring

Y. Engeström's (1987) activity theory supplies the model for the paradigmatic changes that will be required for the development of an environment that is conducive to the effective functioning of Professional Learning Communities. I would propose that a future longitudinal study view professional learning in a Professional Learning Community through the lens of Engeström's third generation activity theory (2008, 2009). There are three immediate activity systems at play in South African education: the national Department of Basic Education, the provincial departments of education and the schools themselves. They each have a distinct identity, culture and paradigm, yet all three have a direct bearing on teacher professional learning. Engeström's third generation activity theory will allow the researcher to address the reculturing and restructuring that needs to occur for the reprofessionalisation of teacher learning and agency.

6.3 LIMITATIONS

All the participants willingly agreed to take part in the case study and expressed an interest in the topic when the study was first introduced to them. However, three personal factors became evident as the study progressed:

- workday pressures meant that they could not devote as much time to their participation as they would have liked
- their particular circumstances at the time influenced their responses to some questions
- their level of comfort expressing themselves influenced how much detail they would supply to responses.

Two further constraints became apparent:

- the short time allowed for the study
- the inexperience of the researcher

I am a novice researcher and not as proficient at interviewing or conducting focus group discussions as experienced researchers. The data analysis revealed that I would have been able to solicit more information from the participants if I had had greater experience. The effects of my lack of experience were exacerbated by time constraints both on the duration of the study, and the time the participants had available. Ideally a study of the role of a learning environment, like a Professional Learning Community, should be a longitudinal study because then the dynamic, complex influences of the many aspects of a Professional Learning Community could be examined in greater depth. Despite these short-comings, however, the case study delivered sufficient data to saturate key themes and arrive at a valid finding.

6.4 CONCLUSION

This case study has revealed that despite increasing control by central government and growing calls for teaching to be more business-like in its efficiencies and measurable, Professional Learning Communities as learning environments have the potential to transform the professional development of South African teachers. Professional learning develops teachers who are “skilful, knowledgeable, committed and resilient regardless of circumstance” (Day, 2012, p. 7). Furthermore, professionalism results from collective autonomy and enhanced agency and responsibility.

6.5 REFLECTION

I, having grappled with learning, dialogue, continuity of utterances, activity theory and learning communities, have come away without a distinct sense of having been in conversation with the authors I have read and contemplated. Some of their utterances resonated with me; some challenged me to clarify and justify some long-held beliefs; some inspired me to look closely at the learning of a small group of my fellow teachers; some revealed their learning and in their voices, some of their journey was apparent;

some reassured that teachers the world over are one community and that all face the uncertain complexity of educating young people, daily. Therefore, I trust this thesis has distilled the essence of the voices that have spoken and has captured the threads that have spun themselves into this fabric.

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Appendix A Biographical data sheet

Name:

Highest academic qualification:

Years of experience:

Subject or subjects taught:

If you are currently busy with further studies, sketch you reasons for embarking on that course:

Briefly describe your attendance of subject meetings, cluster meetings, Department of Education workshops and workshops or training arranged by the school.

Appendix B Semi-structured interview schedule

Research title

Professional Learning Communities' role in high school teachers' professional learning at a private school in the Western Cape

Research question

What role does a Professional Learning Community play in the professional learning of high school teachers at a private school in the Western Cape?

Biographical details

Biographical data supplied via a data collection sheet which each participant completed

Interview questions

1. What does it mean to be a professional?
2. Why, do you think, professionals are required to accumulate professional development points?
3. What would you consider career-long professional learning to be?
4. Indicate your selection on the graphics sheet. Where is your focus – for your own development – in your teaching practice?
5. Indicate your selection on the graphics sheet. Where or what do you learn from about effective ways to improve your teaching practice?
6. Where in your work day/term/year do you see professional learning taking place?
7. What – what learning, what participation, what action - do you see as indispensable in equipping you to be the teacher you want to be for the duration of your career?
8. Who – what role or function would the person perform/what would their relationship to you be - or what processes/institution/organisation do you see as assisting you with your career-long learning?
9. Where/from whom/by what means have you learnt your current classroom practice?
10. Describe the scenarios in which you find greatest benefit from collaboration with other teachers.
11. Describe the scenarios which you find hinders collaboration with other teachers.
12. What makes you sceptical of the benefits of collaboration?
13. Which expressions about education that you use have changed in the past few years? Where did/do you learn the new terms or expressions?
14. When using education terms in conversation, which terms or concepts do you find cause most misunderstanding?
15. When in discussion with your colleagues about educational matters, how does the discussion unfold?
16. When colleagues disagree about educational matters, in your experience, what happens?
17. Where, on a scale from superficially collaborative to deeply collaborative, would you place your professional conversations at school?
Please mark with a cross where you place your conversation
18. In the structure of the school, are you encouraged and do you have the opportunity to work collaboratively with colleagues most of the time, some of the time or not at all.
19. Is the teacher learning culture at your school highly individualistic, somewhat individualistic, somewhat collaborative, highly collaborative?
20. When you discuss pupils with colleagues, what are the ten most common words/expressions you use?
21. When you and your colleagues have investigated or decided something, who is responsible for writing up the findings?

Appendix C Graphic response sheet

Name:

Date:

4.



5.

Primarily by reading academic articles		Primarily by discussing issues with colleagues informally during breaks		Primarily by attending instructional workshops	
Primarily by reading materials produced by the Department of Education		Primarily by discussing issues with colleagues during subject meetings		Other (please specify):	
Primarily by working things out and finding solutions by myself		Primarily by discussing issues with colleagues during whole-school staff meetings			
		Primarily by discussing issues with colleagues at cluster meetings			

17.

Exchanging ideas, anecdotes and gossip (Hargreaves & Fullan, 2012:112)	Help and assistance when asked	Sharing resources, understanding and teaching strategies	Joint work where you and a number of colleagues plan and inquire into teaching together
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19.



Appendix D Diary-writing guidelines

Please keep a diary for one month in which you capture your actions and thoughts about your conversations with one or two colleagues with whom you work closely or with whom you regularly converse. In your entries, please address the following:

- *What were my conversations aimed at?* [Implementation? Planning? Student performance? (specify whether about a group of students or individual students) Individual students' psychological attitude, social circumstances? Larger socio-political factors influencing teaching? Or just social conversations?]
- *Was there a theme to my various conversations?* [Elaborate please]

Now focus only on **educational** conversations with colleagues you had today.

- *What have I learnt about the way I use professional language?*
- *Did my conversation(s) help to build mutual understanding or did my conversation(s) reveal a gap in perspectives that was not bridged during my conversation(s)?*
- *What reflection about the **teaching issue** did the conversation(s) spark in me?*

Feel free to add anything you would like to record about your communication with your colleagues. If there is a long-standing issue that has remained unresolved, you might want to record your thoughts on the discussion process around that issue.

For your last entry, please reflect on how you, your teaching practice and your communication with your colleagues have changed during your career. If there has been an influential colleague who has influenced your practice, feel free to reflect on the aspect(s) of their work that influenced you.

	In the past 6 months	Date																								
Experimenting – trying something new																										
Co-operating – getting new ideas from others or refining ideas with help of others																										
Preparing lessons with one or more colleagues																										
Preparing material with one or more colleagues																										
Preparing exams with one or more colleagues																										
Asking for feedback from students																										
Diagnosis																										
Reflecting on own practice																										

Based on research by Mansvelter-Longayroux, Verloop, Beijaard, & Vermunt (2007) and Kwakman (2003) cited in Vermunt & Endedijk (2011)

Appendix F Community questionnaire

Please tick the column that you feel most accurately describes the following features of Progress High School when you consider the school and its educational staff holistically.

Description	Fully agree	Somewhat agree	Undecided	Somewhat disagree	Fully disagree
There is a Progress approach to learning, and the staff sees Progress High School as having a distinct character.					
Teachers make meaning of their reality and do not only receive and dispense knowledge.					
The educational staff is driven by a shared goal or purpose.					
Informal power is shared amongst community stakeholders.					
Flexibility is created within the organizational structure to allow for professional learning.					
Through a balance of support and pressure, formal leaders show long-term commitment to promoting learning among staff.					
There is an open communication channel among all staff.					
There is a group memory pertaining to this school.					
Some outsourced support to facilitate teacher professional learning is used, but there is a movement to greater internally provided support.					
Teachers think in collegial terms.					
A culture of trust and respect exists among stakeholders.					
<i>Descriptions adapted from Clausen et al., 2009: 445</i>					

Appendix G Professional Learning Community development profile

Consider the collaborative groups at your school. Think about how they ARE and rate them against what they COULD BE for the following criteria. On a sliding scale from fully actualising their potential (High) to barely actualising their potential (Low) make a mark in the line opposite each description. The faint grey line indicates a mid-point between high and low.

	HIGH	LOW
Shared values and vision		
Collective responsibility for pupils' learning		
Collaboration focused on learning		
Professional learning: individual and collective		
Reflective professional enquiry		
Openness, networks and partnerships		
Inclusive membership		
Mutual trust, respect and support		
Optimising resources and structures to promote the PLC		
Promoting professional learning: individual and collective		
Evaluating and sustaining the PLC		
<i>Taken from Bolam et al., 2005:154</i>		

Appendix H Factors affecting professional learning

	Translates desire for professional learning into action	Contributes to professional learning	Positives and negatives evenly balanced/neutral effect	Preponderance of negative influences hinder professional learning	Active barrier to effective professional learning
Situated factors (Day et al., 2006:85) which include your experience of collegiality, encouragement from leadership to learn, student characteristics etc.					
Professional factors (Day et al., 2006:85) such as your role-related responsibilities and expectations from role players – including mentoring, workload, leadership positions etc.					
Personal factors (Day et al., 2006:85) such as family responsibility, health concerns, age of children, marital status etc.					
Learning beliefs and knowledge – belief in what is familiar and modelled by others (tried and tested) vs. natural curiosity and love of innovation (Tsui, 2008), also how you develop knowledge					

Appendix I Community and Collaboration Questionnaire

	Agree fully	Agree	Undecided	Disagree	Disagree fully
When I think of <i>my</i> academic community I think of my department rather than my school.					
There is an egalitarian structure in my community – each one has a voice and each voice counts the same.					
We share knowledge.					
We critique each other's work.					
We invent or use new practice as a department.					
We evaluate new practice together and we decide on a new course of action together.					
We craft a "repertoire of practice" (Talbert & McLaughlin, 2002:336; Tickle, 1987:43) together.					
We visit each other's classes to learn as a community.					
My departmental colleagues "enculturate" (Brown, Collins & Duguid, 1989:37; Putnam & Borko, 2000:9) me more than the school does. (Our department has a decided culture of its own.)					
The school enculturates me more than my departmental colleagues do. (The way I teach is more because of the Progress culture.)					
Opportunities for collaboration amount to "just another meeting" (DuFour & Reeves, 2015: Not "Just another meeting" section, para. 1).					
I would describe my way of teaching as primarily individualistic – I spot problems, find and implement solutions to problems on my own (Findlay, 2008; Mangrum, 2004 :5; Talbert & McLaughlin, 2002)					
If I were to collaborate with my colleagues on all aspects of syllabus teaching and classroom practice, my teaching would improve					
If my colleagues and I were to identify problems together, find, implement and evaluate solutions together, my teaching would improve					
I find informal professional learning through collaboration with my colleagues more appealing than formal professional learning because of time constraints					
Given sufficient time during work hours, I would find formal professional learning more effective than collaborative learning with my colleagues					

	Agree fully	Agree	Undecided	Disagree	Disagree fully
Much of my professional learning here at Progress is context-based and I would not carry it over to another school					
When I see a colleague teaching very effectively, it lifts my own practice					
Even though I've been teaching at Progress High School for a number of years, I've had to change my teaching practice as the learner body has changed					
I enjoy working at Progress High School (Beijaard et al., 2004; Day et al, 2006; Iqbal et al., 2016)					
I am proud of my department (Bolam et al., 2005; Stoll et al., 2006)					
When I see a colleague engaging in professional learning, I translate my desire to learn into practice					

Appendix J Focus group discussion 18 August 2016

Time	Questions
16:20	Is collaborative professional learning core to good teaching or an imposition that takes attention away from your core functions?
16:25	You mentioned some ways in which you learn – why do you learn? You did not mention your students' performance in your answers – why is that? Do you see your learning as unrelated to their learning? (Explore teachers' perception of the role their career-long learning in their classrooms and in their profession; explore their understanding of the purpose of career-long learning in terms of their students' learning and achievement.)
16:30	A number of you mentioned that when you mark matric papers you learn a lot. Does what you learn change your classroom practice – how you teach; and does it help to improve your students' results?
16:35	Actions: learning together during collaboration – sketch three real life scenarios. (Probe to see if it is only about teaching the syllabus)
16:40	Many of you reported that you try new methods in your classes but that you revert to previous practice under certain circumstances. What are the circumstances that trigger a return to previous practice and do you return only to effective practice or do you return to lecture-style/ chalk-and-talk style teaching? When that period of reversion is over, do you pick up the new practice you were trying or do you move on to something else?
16:45	Mental activities: reflection: what mental activities do you undertake that will lead to you changing your actions? During what scenarios do you find yourself having to “wrap your head” around a problem?
16:50	See yourself standing on the balancing board of modern education – your board is unstable and could move in any direction – you are standing on the only stable point which allows you to keep your balance. Consider everything that makes up your life as a teacher: professional, situated, personal and beliefs – what, for you, makes up that stable centre?
16:55	Explore rate of acceptance of Professional Learning Community – point out that this is a source of CPD points – note what will keep teachers back and what will attract them; what are paces of acceptance
17:00	Picking up from the interviews. The standards that the school set for Investors in People – does the school meet those standards, and could the selection and would the strategies to meet those standards be something the school could research within your Professional Learning Community?

Appendix K Participants' perception of their Professional Learning Community

Characteristic of a Professional Learning Community	Recognised characteristic
Collaboration and collective learning	2 3 4 5 6 7
Community broader than just the school	1 2 3 4 5 6 7
Creating environment for professional learning	1 3 4 6 7
Dialogue	2 3 4 5 6 7
Focus on student learning	1 2 3 4 5 6 7
Focus on teacher learning	1 2 3 4 5 6 7
Mutual trust and respect	2 3 4 7
Reflection	4 5 7
School views teachers' lives holistically	3 4 7
Shared beliefs	2 3 4 6
Shared leadership and support	3 4 6 7
Shared practice	2 3 4 5 6 7
Numbers represent participant codes, for example, 1 represents T1	

Appendix L Progress High School: a learning community

Professional Learning Community criteria	Fully agree	Somewhat agree	Undecided	Somewhat disagree	Fully disagree
There is a Progress approach to learning, and the staff sees Progress High School as having a distinct character.	2 3 4 5 6 7	1 5			
Teachers make meaning of their reality and do not only receive and dispense knowledge.	2 3 4 5 6	1 7			
The educational staff is driven by a shared goal or purpose.	2 4 6	1 3 5 7			
Informal power is shared amongst community stakeholders.	1 3 4 6	2 5 7			
Flexibility is created within the organizational structure to allow for professional learning.	1 6	2 3 4 5 7			
Through a balance of support and pressure, formal leaders show long-term commitment to promoting learning among staff.	2 5	1 3 6 7	4		
There is an open communication channel among all staff.	5 6	1 2 3 4 7			
There is a group memory pertaining to this school.	1 2 3 4 6 7	5			
Some outsourced support to facilitate teacher professional learning is used, but there is a movement to greater internally provided support.	2 5	3 4 6 7	1		
Teachers think in collegial terms.		2 3 4 5 6 7	1		
A culture of trust and respect exists among stakeholders.	2 3 6	1 4 5 7			
<i>Descriptions adapted from Clausen et al., 2009, p. 445</i>					
Numbers represent participant codes, for example, 1 represents T1					

Appendix M Professional Learning Community Development Profile for Progress High School

	HIGH	LOW
Shared values and vision	3 6 41 27 5	
Collective responsibility for pupils' learning	6 7153 24	
Collaboration focused on learning	67 3 21 5 4	
Professional learning: individual and collective	6 52 37 1 4	
Reflective professional enquiry	56 12 3 74	
Openness, networks and partnerships	6 1 3 7 2 5 4	
Inclusive membership	6 13 2 5 7 4	
Mutual trust, respect and support	6 213 7 5 4	
Optimising resources and structures to promote the PLC	6 2 3 1 5 4 7	
Promoting professional learning: individual and collective	6 51 3 2 7 4	
Evaluating and sustaining the PLC	651 2 3 7 4	
<i>Bolam et al., 2005, p. 154</i>		
Numbers represent participant codes, for example, 1 represents T1		

Appendix N Factors affecting professional learning

Factors that affect professional learning	Translates desire for professional learning into action	Contributes to professional learning	Positives and negatives evenly balanced/neutral effect	Preponderance of negative influences hinder professional learning	Active barrier to effective professional learning
Situated factors (Day et al., 2006, p. 85) which include your experience of collegiality, encouragement from leadership to learn, student characteristics etc.	6	1 2 3 7	4 5		
Professional factors (Day et al., 2006, p. 85) such as your role-related responsibilities and expectations from role players – including mentoring, workload, leadership positions etc.	2 6 7	1 3	4	5	
Personal factors (Day et al., 2006, p. 85) such as family responsibility, health concerns, age of children, marital status etc.	1	2 4	6 7	5 3	
Learning beliefs and knowledge – belief in what is familiar and modelled by others (tried and tested) vs. natural curiosity and love of innovation (Tsui, 2008), also how you develop knowledge		2 3 4 7	1 5 6		
Numbers represent participant codes, for example, 1 represents T1					

Appendix O Database for Professional Learning at Progress High School

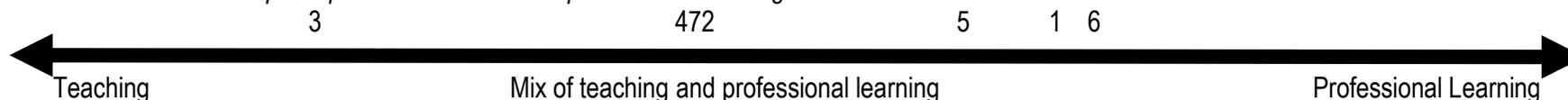
Professional learning characteristic	Agree fully	Agree	Undecided	Disagree	Disagree fully
When I think of my academic community I think of my department rather than my school	1 3	2		5 6 7	4
There is an egalitarian structure in my community – each one has a voice and each voice counts the same	3	6 4 1		2 5 7	
We share knowledge	3 5 6 7	2 4	1		
We critique each other's work		1 2 3 4 5 7	6		
We invent or use new practice as a department		4 5 6 7	1 2 3		
We evaluate new practice together and we decide on a new course of action together	7	3 4	1 6	2 5	
We craft a "repertoire of practice" (Talbert & McLaughlin, 2002, p. 336; Tickle, 1987, p. 43) together		3 4 7	1 5 6	2	
We visit each other's classes to learn as a community		2 4 6 7	1 5	3	
My departmental colleagues enculturate me more than the school does (Our department has a decided culture of its own)	5	1 2 7	3	4 6	
The school enculturates me more than my department colleagues do (The way I teach is more about the Progress culture)	2 5 6	3 7		1	4
Opportunities for collaboration amount to "just another meeting"		1		2 3 5 6 7	4
I would describe my way of teaching as primarily individualistic – I spot problems, find and implement solutions to problems on my own (Findlay, 2008; Mangrum, 2004, p. 5; Talbert & McLaughlin, 2002)		1 3 5 6 7		4	2
If I were to collaborate with my colleagues on all aspects of syllabus teaching and classroom practice, my teaching would improve	7	2 3	1 5 6	4	
If my colleagues and I were to identify problems together, find, implement and evaluate solutions together, my teaching would improve	3 7	2 4 5	1 6		
I find informal professional learning through collaboration with my colleagues more appealing than formal professional learning because of time constraints	2 3 4 5	7		1 6	

Professional learning characteristic	Agree fully	Agree	Undecided	Disagree	Disagree fully
Given sufficient time during work hours, I would find formal professional learning more effective than collaborative learning with my colleagues	1	6 7	2 3 4 5		
Much of my professional learning here at Progress is context-based and I would not carry it over to another school				1 3 5 6 7	2 4
When I see a colleague teaching very effectively, it lifts my own practice	1 6 7	2 3 4 5			
Even though I've been teaching at Progress High School for a number of years, I've had to change my teaching practice as the learner body has changed		1 2 3 5 6 7			4
I enjoy working at Progress High School (Beijaard et al., 2004; Day et al., 2006; Iqbal et al., 2016)	1 6	2 3 4 7	5		
I am proud of my department (Bolam et al., 2005; Stoll et al., 2006)	1 4	2 3 5 6 7			
When I see a colleague engaging in professional learning, I translate my desire to learn into practice		1 3 6	2 4 5 7		
Numbers represent participant codes, for example, 1 represents T1					

Appendix P Participants' responses to graphics response sheet

Numbers represent participant codes, for example, 1 represents T1

4. *Position of number reflects participant's current focus of professional learning*



Participants' preferred source of information about improving teaching practice

5. Primarily by reading academic articles	4	Primarily by discussing issues with colleagues informally during breaks	2 3	Primarily by attending instructional workshops	6
Primarily by reading materials produced by the Department of Education	5	Primarily by discussing issues with colleagues during subject meetings	7	Other (please specify):	
Primarily by working things out and finding solutions by myself	1	Primarily by discussing issues with colleagues during whole-school staff meetings			
		Primarily by discussing issues with colleagues at cluster meetings			

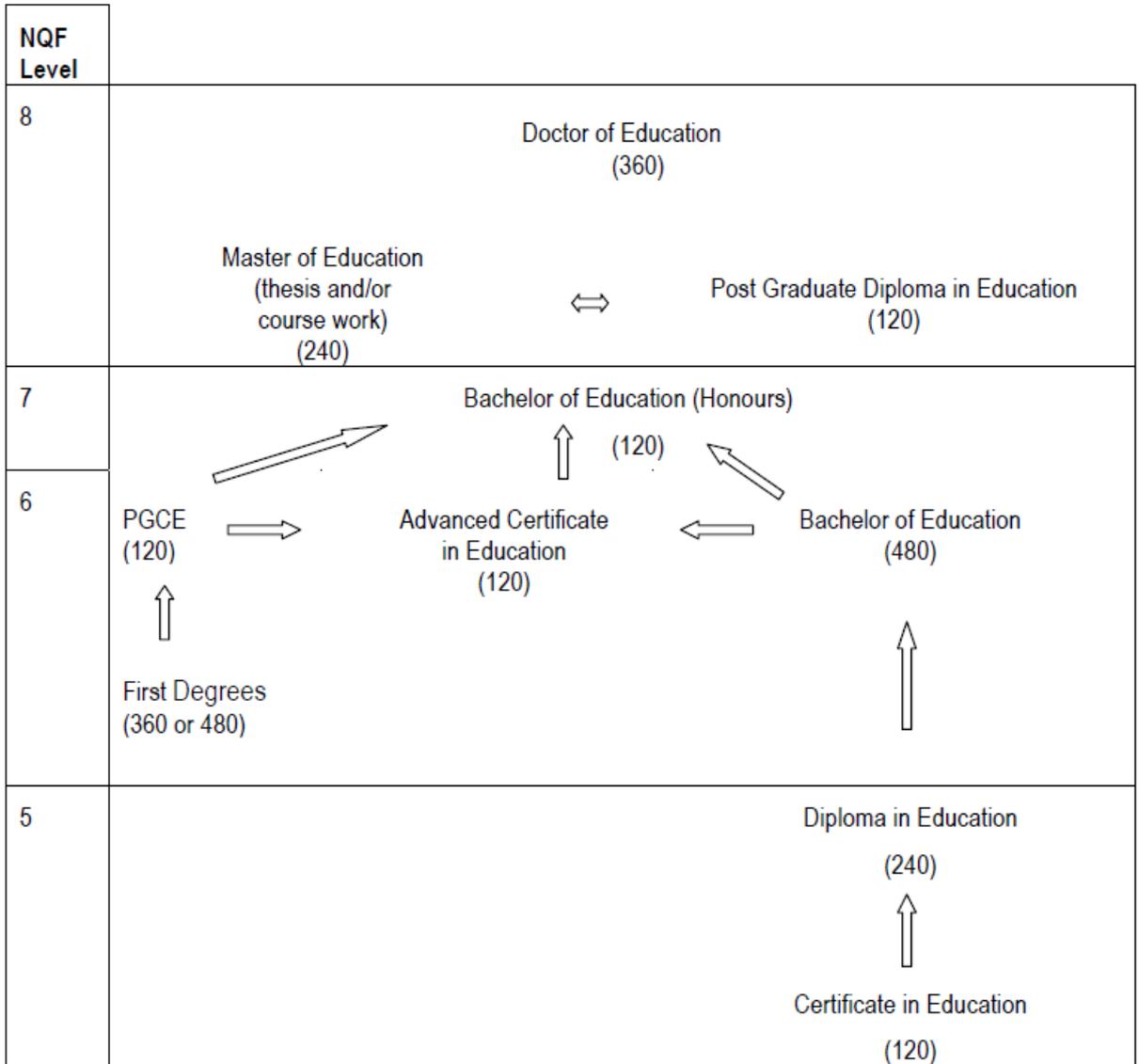
Participants' perception of their professional conversations at school

17. Exchanging ideas, anecdotes and gossip (Hargreaves & Fullan, 2012:112)	Help and assistance when asked	Sharing resources, understanding and teaching strategies	Joint work where you and a number of colleagues plan and inquire into teaching together
	1	2 3 4 5 6 7	

Participants' perception of the teacher learning culture at Progress High School

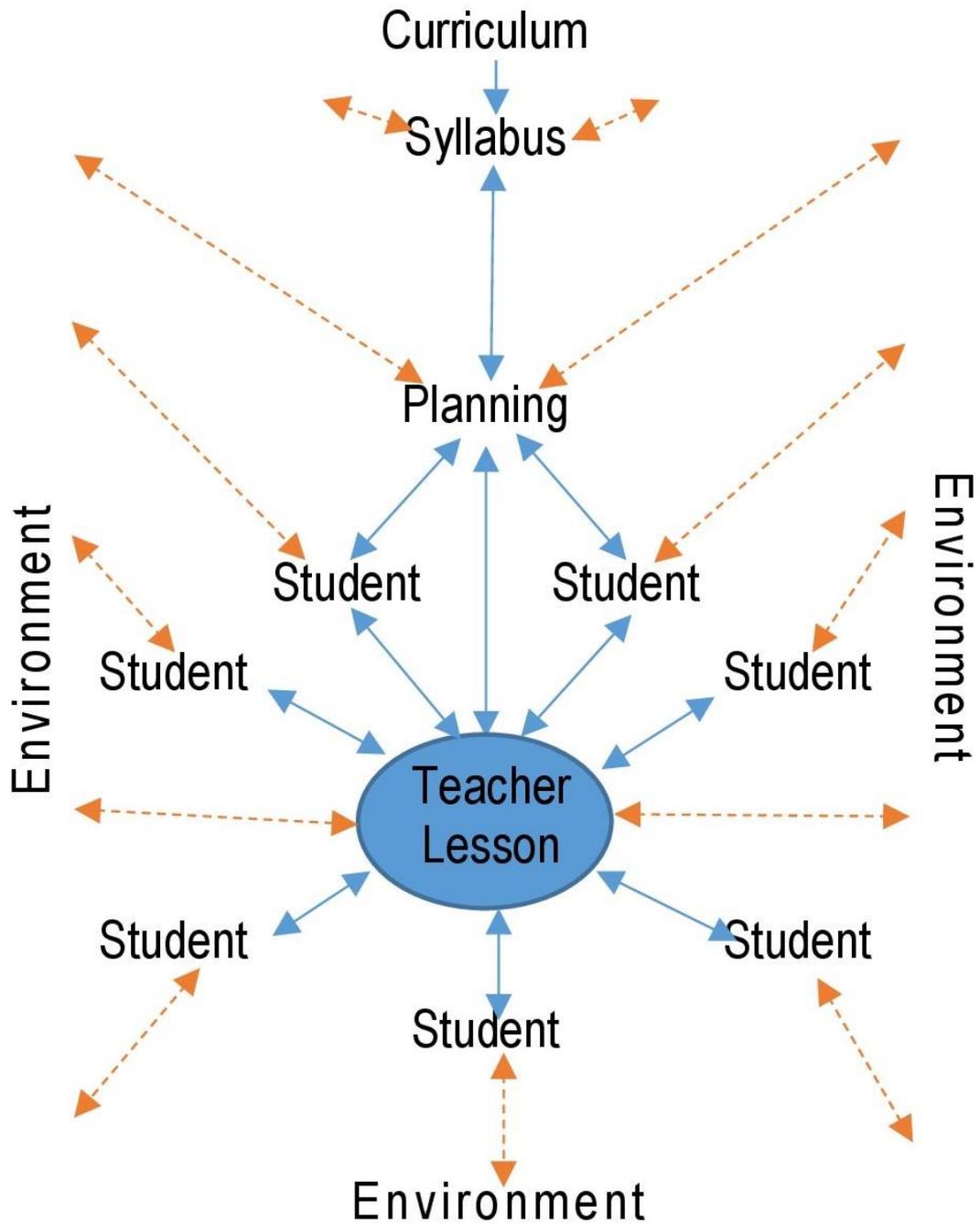


Appendix Q Qualifications framework for teachers in South Africa



Qualifications for Teachers in Schooling (DBE, 2000:17)

Appendix R Synchronous teaching



-  Environmental influences
-  Transformation

Appendix S Permission to conduct research



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jou kennisvenoot - your knowledge partner

Approval Notice New Application

14-Jun-2016
Snyders, Estelle EM

Proposal #: SU-HSD-002735

Title: Professional Learning Communities' role in high school teachers' professional learning at a private school in the Western Cape

Dear Ms Estelle Snyders,

Your New Application received on 23-May-2016, was reviewed
Please note the following information about your approved research proposal:

Proposal Approval Period: 14-Jun-2016 -13-Jun-2017

Please take note of the general Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

Please remember to use your proposal number (SU-HSD-002735) on any documents or correspondence with the REC concerning your research proposal.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Also note that a progress report should be submitted to the Committee before the approval period has expired if a continuation is required. The Committee will then consider the continuation of the project for a further year (if necessary).

This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki and the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health). Annually a number of projects may be selected randomly for an external audit.

National Health Research Ethics Committee (NHREC) registration number REC-050411-032.

We wish you the best as you conduct your research.

If you have any questions or need further help, please contact the REC office at 218089183.

Included Documents:

Appendix T Informed consent form

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jou kennisvennoot • your knowledge partner

**STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH**

Title of study: Professional Learning Communities' role in high school teachers' professional learning at a private school in the Western Cape

You are asked to participate in a research study conducted by the investigator, Estelle Snyders (BA Hons., HDE, ACE Barriers to Learning, Dip. Bus. Man.), student at the Department of Education, Educational Psychology, at the University of Stellenbosch. The results of this research study will be submitted as a thesis in partial fulfilment of the requirements for the degree of Master of Education in Educational Support. You were selected as a possible participant in this study because of your experience as a high school teacher.

1. PURPOSE OF THE STUDY

This study will examine how teachers at a private school in the Western Cape undertake professional learning within a Professional Learning Community.

2. PROCEDURES

If you volunteer to participate in this study, you would be asked to do the following things:

- Meet with the investigator (Estelle Snyders) to discuss how the study will be conducted. The aim of this meeting is for the investigator to explain the topic of the study and its aims, as well as the nature of the semi-structured interviews, as well as the focus group, that will be conducted, and the ethical rules governing this study. During this meeting you will be free to ask questions on any aspect of the proposed study.
- Sign the consent form should you be willing to be a participant.
 - Before you take part formally in the study, the investigator will explain the ethical rules governing this study in detail.
 - Your anonymity and the confidentiality of all information are guaranteed.
 - Once you are satisfied that you would like to participate in this study, you will be asked to sign this consent form. If, however, at any stage during the study you wish to withdraw, you will be free to do so.
- Discuss a convenient time for an interview with the investigator. The investigator will contact you to find a convenient time and place for an interview.
- Participate in an interview which will not exceed one hour.
 - The interview will be semi-structured, that is, there will be some questions drawn up beforehand by the investigator, but the interview will have some scope to pursue points that you raise.
 - The interview will be audio recorded, but any information that is obtained in connection with this study and that can be identified with you will remain confidential, according to the requirements of the University of Stellenbosch, and

will be disclosed only with your permission or as required by law. In the normal course of events, only the investigator will have access to the recordings.

- The anticipated length of the interview will not exceed one hour.
- Make yourself available for follow-up questions, if necessary.
Because the interview is semi-structured, questions that are sparked by later interviews might arise. If this should be the case, the investigator might contact you to ask you some follow-up questions. Your time commitment to these follow-up questions should not exceed one hour.
- Participate in a focus group discussion on professional learning.
 - There will be between 6 and 8 teachers participating in this study. Once the interviews have been concluded, the group will be asked to participate in a discussion on their professional learning experiences.
 - This discussion will be scheduled at a mutually convenient time and place.
 - The discussion will be scheduled to last no more than an hour.
 - The investigator will take notes during the discussion and it might be audio recorded. The notes and recording will be kept safe and confidential.
- Keep a learning diary for one month.

3. POTENTIAL RISKS AND DISCOMFORTS

- The investigator does not reasonably foresee any risk to the teachers or school participating in the study.
- All information will be anonymised and all original documents, notes and recordings will be kept confidential.
- None of the participants or the school will be able to be identified in the final report which will be published as a thesis in partial fulfilment of the requirements for the degree of Master of Education in Educational Support.
- No children will be participating in this study.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

- This study will add to the body of knowledge about teacher professional learning and will highlight Professional Learning Communities as one avenue that could promote such learning.
- Teachers who participate in the study will experience first-hand how an educational research study can be conducted and will in all likelihood find the experience enriching and stimulating.
- The school may request a copy of the thesis and might be able to use some of it in its staff development programmes.
- The general teaching community might find that the thesis stimulates discussion about professional learning and encourages teachers to consider their personal, career-long learning within a community.

5. PAYMENT FOR PARTICIPATION

There will be no payment to participants for taking part in this research study.

6. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential. Confidentiality in the published report will be maintained by anonymising teachers and the school. Where the study will benefit from the comparison or contrasting of the practice or experience of specific teachers, pseudonyms will be used so that the reader can follow the discussion, but the identity of specific a teacher cannot be recognised, and they cannot be connected to the subject they teach in practice.

Data obtained in the course of the study will be password protected. It will be shared with the investigator's (Estelle Snyders') academic supervisor (Dr Lorna Dreyer) and it might be necessary to quote from your interview and/or diary, as well as the forum discussion. If this is so, you are assured of your anonymity; you will not be identified by name, subject or school as that information will have been anonymised through the assigning of pseudonyms and codes.

The recordings and transcripts will be kept on a password-protected computer and in password-protected cloud storage and will be destroyed when it is no longer required for legitimate research purposes. The investigator might be required by law to surrender raw data to the relevant authorities.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

You will have the right to request to listen to the audio recording of your interview and read the transcription made from it. You may add to, delete or change statements made in the original interview.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact:

- Estelle Snyders by telephone at 0219133768 or 0843512668, or by e-mail at esnydersster@gmail.com.
- Dr Lorna Dreyer, Dept. Educational Psychology, Faculty of Education, Private Bag X1, Matieland 7602, Tel 021-808 3502, E-mail: lornadreyer@sun.ac.za.

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development at Stellenbosch University.

SIGNATURE OF RESEARCH SUBJECT

The information above was described to me by Estelle Snyders in English and I am in command of this language. I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent voluntarily to participate in this study. I have been given a copy of this form.

Name of Subject/Participant

Signature of Subject/Participant

Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ .
He/she was encouraged and given ample time to ask me any questions. This conversation was conducted in English and no translator was used.

Signature of Investigator

Date