

**Teachers' Voices on Their Professional Learning and Learning
Opportunities in the South African Reform Context**

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Abstract

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This qualitative study sought to capture purposively selected teachers' views on the reform curriculum they are expected to teach, their content knowledge and pedagogical content knowledge implied by this curriculum, their accounts of the professional learning they experience, and the ways their professional learning experiences do and don't facilitate their learning. Drawing on various elements of case study research designs, the study focused on six teachers from different school settings in one of the provinces in South Africa. Through a cross-case analysis approach, the study indicated that teachers have a clear understanding of the reform curriculum they are to teach, and awareness of the knowledge base of their subjects. This awareness is largely influenced by the conditions that date back to the era before the education reform context. The study also showed views of teachers on the professional development programs that work or do not work to enhance their professional learning.

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Dedication

I dedicate this dissertation study to my late grandmother, MaNdlovu, as well as my late aunts, Ntonto, MaKhuzwayo, and Manози. They knew and told me that I will be Dr. Simangele someday. May their souls rest in peace.

Chapter 1

Introduction—Listening to South African Teachers’ Voices on Their Professional Learning and Learning Opportunities

When South Africa (SA) went through the major political transformation that marked the end of Apartheid – a term that refers to ‘separate development’ – in 1994, the nation’s education system had to undergo the process of transformation as well. A new curriculum policy initially known as Curriculum 2005 (C2005), later known as National Curriculum Standards (NCS), and recently revised to Curriculum Assessment and Policy Statements (CAPS), was adopted in 1996 as one of the first major education policy innovations under the then newly elected democratic government. This curriculum policy, that had its foundations in Outcomes-based Education, placed great emphasis on ambitious learning standards for students, those that would prepare learners for the challenges of 21st century society.

Consequently, there was an urgent need to change the existing teaching profession and develop one that would be able to meet the needs of a democratic South Africa in the 21st century (SA Department of Education, 2002). Stated another way, to be able to “produce a learner that is a thinking, competent, and responsible future citizen” (SA Department of Education, 2002, p. 11), teachers needed to develop specific new professional knowledge and skills to be able to fit within the new reform context. To achieve this, teachers needed to be re-trained and equipped with such competence (Mulaudzi, 2009). In the reformers’ original vision this would happen through engaging in professional development that introduced teachers to the new curriculum and made clear to them what was expected.

Clearly it was necessary to provide comprehensive, continuous professional development programs to re-skill the teachers in this context, many of whom displayed

inadequate content knowledge and pedagogical content knowledge (Mulaudzi, 2009; Smit, 2001; Botha, 2000; Jita & Ndlalane, 2009; Bantwini, 2010). Yet no one envisioned the depth of the new learning that was required, nor what it would mean for a teaching workforce brought up under a profoundly different set of assumptions, expectations, and conditions to embrace the new learning. It appears as if, when introducing the new curriculum, the reformers did not consider the existing realities on the ground (Maistry, 2007). The series of workshops that were the government's initial attempt to provide training support for professional development did not produce the desired results. Soon it became apparent that there was no change or improvement in these teachers' professional growth, even after being exposed to some re-training and professional development programs.

Among other things, the initial rounds of professional development workshops were delivered to teachers in a cascade model—in which a group of selected teachers are trained on a particular topic or aspect of teaching, and once proficient, this group become the trainers of other teachers (Griffin, 1999). Because of its cost-effectiveness, in that through the cascade model many teachers can be reached in a short period of time, many developing countries tend to prefer this model to develop their teachers. However, the cascade model did not seem to engage teachers deeply, nor were the training experiences constructed in ways that were particularly responsive to what teachers thought about their practice, or in some sense *needed to know*. Put another way, the *design* and *pedagogy* of these professional development experiences perpetuated the technocratic view of teaching where teachers were placed in a passive role. According to Maistry (2008, p.132) teachers were marginalized and relegated to the role of knowledge recipient. While there were many dynamics at work in this situation, it gradually became apparent that some important things had been left out. Among them, teachers had no voice in their professional learning.

As a result, education leaders and other education stakeholders such as teacher associations, teacher unions, scholars, and researchers who are experts in the professional learning field reached a unanimous agreement that it was time for teachers to also take responsibility for their professional development, by taking initiative and participating in planning their professional development programs (SA Education, 2010). This consensus reflects in part some of the scholarship on professional learning from the developed world that shows that high-quality professional development implies engaging teachers in their learning by promoting active involvement of teachers in their concrete learning tasks (Hawley & Valli, 1999; Garet et al., 2001). Furthermore, there is widespread agreement that teachers need to embrace a professional standard that displays continual learning, inquiring minds, and reflective skills (Leu, 2006; Darling-Hammond, 2006). This norm allows teachers to be self-cognizant of their professional knowledge and practice.

The recent *Integrated Strategic Planning Framework for Teacher Education and Planning in South Africa* (SA Education, 2010) takes a step in the direction of improved professional development opportunities and support for professional learning. It promises to link the curriculum content framework and assessment strategies with professional learning opportunities that are identified by teachers after reflecting on their own knowledge and practices and identifying their needs. This agreement marks a laudable effort by the national government to include teachers in designing their own development.

Yet for the government to take that next step, some crucial things are not well understood, and deserve a much closer look. To achieve the new expectations of the curriculum, teachers need to be competent in terms of their subject matter knowledge and the ways to teach that subject matter. If professional learning experiences are to engage teachers more deeply as learners, there is a need to understand better how teachers think about their practice and how they understand the reform curriculum they are to teach, and how they

grasp the underlying subject matter knowledge. There is a need to better understand how they approach professional learning itself. And as the interested parties do so, they need to be particularly sensitive to the fact that most of these teachers come from a profoundly oppressive background that subjected them to poor quality in both schooling and teacher education. Existing research from developed countries can give us some ideas about teachers' perceptions of their own learning, but it may not apply to the situation in developing worlds. Research in the South African context has yet to address the voices of teachers on their professional learning—that is, to understand from them, in their own terms, what they know and believe they need to know, to take their practice to the next level.

The purpose of this dissertation study is to explore what teachers know about their professional learning, how they experience professional learning opportunities, and how they approach professional learning challenges in front of them. More specifically, it seeks to provide these teachers with the opportunity to articulate their views on the reform curriculum they are expected to teach, their content knowledge and pedagogical content knowledge implied by this curriculum, their accounts of the professional learning they experience, and the ways their professional learning experiences do and don't facilitate their learning. Before teachers can be expected to take charge of their learning, it is critical for those who oversee their work and set the expectations to hear from them how they approach and view their learning and teaching practice. Arguably, no one can understand what truly happens in the classroom or hope to change it until the people who are doing the teaching articulate what they understand about it.

To begin the first chapter, I elaborate the nature of the research problem and set forth the argument for studying it. I set the background by providing a detailed discussion of the historical overview of the teacher professional learning and teacher professional learning opportunities of South African teachers, particularly those in township and rural schools.

With these teachers in mind, I present the focus of inquiry in this dissertation, and lay out the overarching research questions that will be addressed. Thereafter, I provide the rationale for undertaking this study.

Drawing from the relevant literature in South Africa and developed countries, the second chapter offers a conceptual framework on teacher professional learning and high-quality professional development, in a context of education reform and the local school-specific conditions that influence teachers' professional learning. These conditions include teachers' personal and professional background, school leadership support, and the school contexts. Within the literature on education reform, I will focus particularly on teacher professional learning in the climate of educational reform contexts. And the literature on local conditions will look at the influences of such conditions on teacher professional learning.

The third chapter will describe the design and methodological approaches that I used to conduct my research study. The fourth chapter will offer the main findings which comprise the discussion on teachers' understanding of their professional learning, what shaped that understanding, and what types of professional learning opportunities and supports these teachers need and believe they need. Finally, the fifth chapter provides concluding reflections about the findings, design, and contributions of the study to the existing scholarship and practice.

Historical Background: Context For Teacher Professional Learning in South Africa

In 2012, the population of South Africa was approximately 52 million, with Black Africans as the major racial group, and Whites, Asians, and Coloreds (people with mixed ancestry) being the minority. South Africa is ranked as one of the fast-developing countries in the continent of Africa. Ironically, it remains one of the countries that are overwhelmed by

poverty, particularly noted in urban fringes and rural areas. As if that is not enough, the HIV/AIDS pandemic is also greatly affecting many poor people of this country.

Prior to the new democracy that was won in 1994, non-White South Africans had suffered for many years under the Apartheid system that was installed in 1948 under the leadership of the White-dominated National Party. Without any doubt, the most damaging legislative act of Apartheid that wreaked havoc in the education of the non-White South Africans, especially Black people, was the Bantu (native) Education Act (No. 47) of 1953 by Hendrik Verwoerd, then Minister of Education. This act stipulated that Black South Africans should be exposed to the education designed to provide them with skills that were appropriate to serve their own people in Black ‘homelands’. Sadly, this ideology pervaded every aspect of schooling for non-White South Africans for almost four decades, including poor infrastructure and facilities, lack of proper resources, and inadequate training of teachers.

Most of the current practicing teachers received their entire school and professional education under the Apartheid system that was organized along racial and ethnic lines (SA Dept. of Education, 2006). Sadly, the majority are Black teachers who were subjected to the poorest quality of education. Most Black teachers were trained in Black teacher colleges and a few in Black universities, which provided a poor quality of education and with this quality of education, they were only seen as fit to teach in Black townships and rural areas. Consequently, most of these teachers have internalized an image, put into them during the Apartheid era, that they were not good enough to teach in suburban schools, serving White children and, anyway, they did not need to be, as their “proper” place was to be teaching in schools serving Black children, who were not thought to “need” as high-quality an education. Not surprisingly, teachers in township and rural schools, with few exceptions, were then and are still notorious for possessing poor subject matter knowledge and a lack of professionalism, as evident in their lack of concern about being absent from classrooms or

not preparing for their lessons, to mention just a few of the irregularities in these schools.

Apart from the complex circumstances that these teachers are faced with, they are also facing challenges that come with the education transformation context. The national curriculum model was chosen as the most likely method to address the issues of quality and inequality in South Africa. This model was underpinned by the belief that it would improve the quality of lives for disadvantaged societies by ensuring that “learner achievement showed that knowledge and skills they acquire enhances life-long learning” (SA Department of Education, 1997, p.8). While its intended goals are clearly to address the historical inequalities, what it asks of teachers poses huge challenges for them in that they are asked to change without clear support on how to do that.

Since teachers are considered to be the crucial drivers of education reform, it was necessary that they should be equipped with relevant knowledge and skills to deal with the transformation demands. Darling-Hammond (1997) cites evidence that, in order for teachers to elicit quality learner achievement, it is vital for them to have subject matter knowledge and knowledge of how to teach. For teachers to gain this professional knowledge, powerful forms of professional education, both for novice and practicing teachers, are crucial. Teachers need to engage in the ‘what they need to know’ and ‘how they learn to teach that’ in their teacher education as well as ‘what they actually know’ and ‘how they teach that’ in ongoing professional development programs. If not, by the time they reach their classrooms, they will find it hard to do what they are supposed to do there.

Professional Learning Opportunities in the Immediate

Pre-Democratic Era

Under Apartheid, the only form of professional learning opportunity for teachers in rural and township schools usually occurred in their initial teacher preparation program,

though these opportunities were not very rich, because those preparation programs were of poor quality. Even the literature that addresses teacher development prior to the democracy era, especially for teachers in township and rural schools, is very limited, if it exists at all; the professional learning of Black teachers was not considered a suitable topic for scholarship.

Take, for instance, my own personal experience as a teacher candidate in one of the universities that was specifically assigned for Black people during the Apartheid era. I undertook the best teacher education program that could be offered to me at the time. Regarding our subject specializations, the focus was mainly on the theory and less on the method of teaching that subject. Our teacher educators relied completely on chalk-board and textbook methods in their teaching while we, learners, copied notes of what they were saying. Upon the completion of that program, my career destiny was already set by the ruling powers. As a Black girl hailing from the deeper rural areas, I was ready to go out to a township or rural school to teach other Black people.

Looking back at the teacher education program then, first, teacher education institutions were divided along racial lines. Those that served Black people were further fragmented, for instance, in their curricula and the qualifications they expected of applicants. Most of Black South Africans who wanted to become teachers went to three-year teacher training colleges and graduated with a teaching diploma. Not many Black student teachers went to universities and graduated with a four-year teaching degree.

Second, the curricula were different in all these different teacher education institutions. Black student teachers who were in the universities during this era were exposed to a curriculum model that was based on the assumption that teachers “developed professionally by learning theory first, and applying it in practice later” (Samuel, 2001, p.402). For three out of four years, the focus of learning for student teachers at the

universities was on the understanding of the subject content rather than on practical methods on how to teach those subjects. It was only in the fourth year that these student teachers took the methodological courses that focused on the understanding of how to teach their subjects, yet these afforded little practical “pedagogical content knowledge.” In contrast, for those student teachers who were trained in the teacher colleges, the curriculum was focused on the methodology courses but had more opportunities for teaching practice than those students trained at the universities. Unlike in the universities, in a teacher college aspiring History teachers, for instance, were taught History as a methodology course and not just as a content subject, and they spent the whole three years learning how to teach that content subject, though with relatively little grounding in the subject matter.

Consequently, teachers who ended up in disenfranchised schools had different professional learning experiences, yet were equally ill-equipped for the task ahead of them. Some had theoretical knowledge of their content subject, but were not properly equipped to teach it, while others were equipped, in some way, to teach, but were really not competent in their subject matter. There was no solution to this dilemma since there were neither continuous professional learning opportunities nor district support provided to enhance the teachers’ professional knowledge.

Change in Learning Opportunities in the Post-Democratic Era

The shift to the post-democratic era brought the curriculum transformation whose foundations were outcomes-based and focused on a more ambitious set of learning goals for students. This shift demanded that South African teachers adapt their teaching practices, as it was clear that traditional methods of teaching, which were teacher-centered and emphasized rote-learning, would not work. The new era demanded new teaching practices that emphasized learner-centeredness, critical-thinking and problem-solving skills (SA

Department of Education, 1997). Needless to say, teachers needed to develop specific new professional knowledge and competencies to be able to fit. To achieve this, they needed to be trained and equipped with relevant knowledge and skills (Mulaudzi, 2009) that would only happen through engaging in professional development.

As already mentioned, during the curriculum transformation the approach to professional development was based on the 'cascade' model. This 'cascade' model of PD was a centralized, top-down approach of providing professional development to teachers. First, the national government trained a delegation of carefully selected education professionals who had to undergo intensive training on curriculum materials and training strategies. These national trainers would then train provincial trainers who would, in turn, train a number of selected high performing teachers, who would then go back and share information with teachers in their home schools.

Indisputably, the cascade model of professional development is mostly used in developing countries because it reaches a large percentage of teachers within a short period (Leu, 2004). It also allows training to take place in stages so that progress can be monitored. Whilst the cascade model is cost-effective, the reality is that it is widely criticized as inadequate for delivering effective training (Boyle, While, & Boyle, 2003). First, the passing of new information to other teachers is dependent on a small group of trainers. Second, the possibility of the information reaching other teachers in a diluted form is highly likely. Finally, these cascaded workshops are supposed to pass on information about new ways of teaching and learning, but they hardly engage teachers in active learning.

As eluded to earlier, the cascade approach initially used in the South African reform context had other shortcomings. Teachers often complained about the trainers that they did not always understand the new curriculum and they tended to misinterpret the information

(Fiske & Ladd, 2004; Ono & Ferreira, 2010). Also, it offered training but with less or no follow-up structures for teachers who have to deal with the implementation of the new curriculum (Robinson, 2002).

It was soon apparent that, more than re-training teachers for the new curriculum, there was also an urgent need for comprehensive, continuous professional development programs to re-skill many of the teachers who displayed inadequate subject content knowledge and pedagogical content knowledge. Lessing & De Wit (2007) cite scholarship that describes continuous professional development as activities that are planned to improve the professional growth of teachers through orientation and continuous training and support. A number of different professional development models were then implemented, that were comparable to professional development models and programs in developed countries (Kriek & Grayson, 2009). These included school-based professional development (Kriek & Grayson, 2009; Bantwini, 2010), district professional development models (Bantwini, 2009; Onwu & Mogari, 2004), systemic reform initiatives (Lessing & de Witt, 2007; Le Roux, 2005), and recently teacher clusters, usually known by outsiders as “professional learning communities” that are currently often used to replace the traditional approach to professional development (Jita & Ndlalane, 2009; Steyn, 2008; 2010).

The school-based professional development approach followed a variety of patterns, for example, a group of teachers from a single school or neighboring schools working together in clusters to improve their knowledge and practice (Leu, 2004). These groups are commonly referred to as “teacher clusters” in South Africa (Jita & Ndlalane, 2009). A district professional development model used a group of subject advisers (subject coaches) from each school district to train teachers in their school district (Bantwini, 2009). The systemic reform initiative involved different partners from different constituencies such as the provincial

department of education, higher education institutions within the province, and participating schools to carry out the teacher development programs (Onwu & Mogari, 2004).

Usually these continuous professional development programs consisted of a series of intensive workshops based on teachers' contextual needs, modelling from university faculty, and opportunities to engage with colleagues where they share experiences and solve problems together. They also displayed sustainable efforts to improve teacher practice through continued school visits and provision of support materials. Although research indicates that, through these various professional development approaches, some signs of improvement in teachers' professional knowledge were evident, it appears as if there are still missing links in the design and implementation of these professional development strategies (Jita & Ndlalane, 2009).

There are hints about what these missing links might entail. Sayed (2002) argues that, in developing continuous professional development in South Africa, it was necessary to acknowledge the history of the majority of its teachers and the ways that they were negatively impacted by the Apartheid era. At the same time, it was important to treat these teachers as professionals who were experienced and knowledgeable about their work and, thus, were capable of contributing towards their learning. However, a weakness in these professional development programs was that they regarded teachers as having deficits that needed to be fixed, and consequently, professional developers tended to use a training model that assumed training was to be delivered by an 'expert' and the teachers were placed in a passive role (Maistry, 2007). Teachers were not given the opportunities to engage actively in their learning and, in that way, assume responsibility for their own development.

Different education stakeholders in South Africa such as the national department of education, university faculty, teacher associations, and teacher unions recognized that, despite

all these efforts of various professional development approaches, teacher professional development remained a huge challenge within this country (S.A. Department of Education, 2006, 2010, 2011). They jointly declared that South African education system would only move forward if teachers assume crucial responsibility for their own development. This led to a development of a new teacher development framework plan, the *Integrated Strategic Planning Framework for Teacher Education and Planning in South Africa 2011 – 2025* (S.A. Department of Education, 2010). This framework places the teacher at the center of efforts to improve their professional development in that they have to engage in a self-evaluation activity where they list their strengths and weaknesses in their subject knowledge and classroom practice. Then, necessary intervention would be given to them by the school and district leaders.

This dissertation study acknowledges that, due to their past, most of these teachers might not even be in a position to identify what they know or do not know. Yet, it is necessary to determine what teachers think and know about their professional learning before education leaders can put their professional development programs together.

A Closer Look at the Research Problem

When the education transformation period started in South Africa, one might have expected that some form of effective professional development programs would be provided for teachers to enhance their subject matter knowledge and teaching strategies to make them relevant for the curriculum reform era. Unfortunately, it did not happen that way. The initial form of professional development programs provided for teachers during this stage were one-week workshops provided in a ‘cascade’ model, as explained above, which often reached schools in a ‘watered-down’ form (Fiske & Ladd, 2004). These workshops proved to be insufficient, especially for teachers in impoverished school settings including rural and

township schools, who had always been exposed to limited educational opportunities (Mulaudzi, 2009; Smit, 2001; Botha, 2002; Jita & Ndlalane, 2009; Bantwini, 2010). In short, these professional development strategies, grossly misjudged teachers' needs and capacity for engaging in ambitious professional learning.

While these different strategies made room for different forms of teacher participation in their professional learning, and even could enable them to exercise more initiative in it, these different strategies were still imposed in ways that ignored teachers' own perspectives on their growth as capable professional people. These most-promising approaches were structures that were created to target teachers within their contexts of practice. For instance, teacher clusters would allow teachers to collaborate on a specific subject matter issue, share and exchange ideas on their practice with their colleagues. However, it turned out that these clusters were not focused on developing teachers' knowledge. Instead they became the administrative structures for the Department of Education that they used to pass important information and official documents because they could reach many schools at once in these clusters. Another point that was of concern with these clusters was that the cluster facilitators merely passed the information and material resources to the teachers in the cluster without engaging them.

Research in South Africa on these or other professional development attempts still falls short of providing a clear and detailed picture of what teachers understand about their professional learning, and does not yet capture their own voices on what they believe they need to assist them in gaining competency such that they take good charge of their own professional development. Being explicit about one's practical knowledge includes: being able to articulate what one knows about professional practice, being able to reflect on and critique one's own practice so that further learning needs can be identified, and assuming the stance of a learner vis-à-vis one's own work.

Whether or not teachers are very articulate about these issues, current professional development strategies in this context make little or no effort to understand how teachers view and approach their professional learning. In addition to assessing their existing base of knowledge about teaching and learning in their subject matter, teachers are in a position to explain what shapes their response to professional development, and what motivates and guides their professional learning. They may not have offered such explanations in the past, nor have been asked to do so. But continuing to pursue professional development policies that do not seek a basis in teachers' own understanding of their professional learning treats them as less than professional people. And it is especially important to develop that understanding from the teachers' viewpoint.

Teachers' understanding of their learning is likely to take a particularly acute form in the South African context due to the legacy of Apartheid that largely influenced teachers' thinking, knowledge, and assumptions about their learning and capacities, especially among teachers in township and rural schools. Teachers in impoverished schools often are not properly qualified. Before they can be expected to take charge of their learning, it is critical to hear from them how they approach and view their learning. My research purports to do that.

Focus of Inquiry

There is no doubt that professional learning of teachers in South Africa is a concerning issue for education leaders and policymakers, as evident in, first, their continuous efforts to improve teacher professional development through implementing, reviewing and revising their policy frameworks on teacher development (SA Department of Education, 2006; 2010) and second, the involvement of other education stakeholders such as teacher associations, teacher unions, scholars, and researchers who are experts in the professional

learning field, to evaluate the policies and professional development programs offered and recommend how professional learning could be improved.

However, there are missing steps in this endeavor to improve teacher learning in this context. First, most of the teacher professional development opportunities still fail to address teachers' subject matter knowledge and their instructional practices (Ndlalane, 2006). Even though teachers increasingly engage in an array of professional learning opportunities, these opportunities still seem to focus on providing an overview and information about the new curriculum (Mokhele & Dichaba, 2012). Consequently, most teachers still struggle to apply the learned knowledge into their classroom practice (Bryan, 2010). When the education reforms were initiated in South Africa, much of the literature on this conception focused on the types of the professional development programs that would supposedly lead to effective professional learning of teachers in this context (Onwu & Mogari, 2004; Kriek & Grayson, 2009). Less was said on what and how teachers learn when they take advantage of these professional learning opportunities. Much less was said about learning in their work environments and the conditions that enhance this learning. It is only in most recent literature that indications on how teachers acquire learning through their work contexts are seen (Jita & Ndlalane, 2009; Bryan, 2011; Steyn, 2013).

Second, as with all the other issues in education system within the South African context, the main criticism in this context is that policy decisions about teacher professional development originated, and still do, from the top leadership and do not take into consideration what the teachers on the ground need and expect from their learning experiences (Le Roux, 2005; Bantwini, 2009; Robinson, 2009). Teachers are usually not involved in the planning and designing of their professional development experiences. The whole process is about teachers, but without teachers' input, self-assessment or other forms of engagement that communicate respect for teachers' professional status. Furthermore, less,

if at all, is known about what teachers understand about the reform curriculum, and their grasp of the underlying subject matter as well as how to teach it. It is not known whether they know what they should know, or if there are instances where they do not even know that they do not know. The insight gained from there, which is what this inquiry intends to do, may be useful in giving future direction towards the design of professional learning opportunities that may have an impact on this knowledge.

Thirdly, South African teachers needed to develop specific new professional knowledge and skills to be able to fit within their transformed education context (Jita, 2004). The inquiry argues that teachers' change in their knowledge and classroom practice is not entirely dependent on effective professional development initiatives but also on who these teachers are, where they come from, and how they view themselves both as learners and teachers. Spillane (2000) refers to this self-knowledge as teacher identity, which he defines as a teacher's sense of self and what teachers think about themselves regarding their work. This inquiry pays more attention to the transformed 'self', that is, the position when teachers are ready to learn new ideas in their subjects and to teach in new ways. I refer to that position as a "learning stance." Exploring how professional learning opportunities provided for South African teachers contribute towards creating this learning stance is one of this inquiry's focus.

Finally, the inquiry's focus is also on conditions and forces that are likely to foster or hinder the teachers' learning experiences. These may include conditions such as teachers' personal and professional background, the school environment, the lack of professional development opportunities, and the organizational leadership.

Research Questions

Developing a much more detailed picture of how teachers in the system view their professional learning will significantly inform further efforts to promote and support the learning of these teachers. To encourage teachers to articulate their understanding of their subject matter and professional knowledge, engage them in their professional learning process, and provide a basis for them to take responsibility for their own development, my research will attempt to answer the following questions:

1. *What does ‘professional learning’ mean for teachers in South African rural and township schools? What do they claim to know about the reform curriculum, the subject matter represented in it, and the classroom practice that they believe would make them more accomplished and successful teachers in today’s reform environment?*
2. *How, if at all, are their ideas about professional learning and their own “stance” towards themselves as learners shaped—and are currently being shaped—by their personal and professional backgrounds? By the contexts of their work? By their organizational leadership?*
3. *How do teachers perceive the professional learning programs that are provided for their learning, and what characteristics of these programs do teachers perceive as enhancing or hindering their learning?*
4. *What kinds of professional learning programs and supports can help these teachers assume a “learning stance”, from their point of view?*

Rationale for the Study

Contemporary education reform initiatives everywhere demand changes in the education system in order to help students experience the best quality of education. Practicing teachers are expected to have a sound knowledge of the subjects they teach and a deep understanding of how they teach those subjects (Freeman, 2002). Unfortunately, while facing that challenging process, teachers are often given less or no support to be able to do that. Thus far, even scholarship on what knowledge teachers possess about their subject matter and how they teach it is still limited, especially in the developing nations.

Faced with the on-going education transformation, South Africa is one of the countries currently focused on improving practicing teachers' knowledge base (SA Department of Education, 2006, 2010, 2011). However, research shows that the teachers' voices are seldom heard in issues pertaining to educational matters in this context (Smit, 2001). Teachers need to feel that they are respected for what they know and are able to do (Steyn, 2009). Countless explanations could be given for that inability among teachers to express what they know and can do about their teaching and learning. On one hand, it could be that they are not given the opportunities to do that. On another hand, it could be due to that internalized image that was instilled in them by the systems of Apartheid era that they were not good enough and, in that way, developed low self-esteem.

Research shows that the understanding of professional learning from the teachers' perspective in South African context is yet to be seen (Jita & Mokhele, 2012). From my personal experience as a former township teacher, both prior to and within the democratic era, I have no recollections of engaging in any professional learning programs that were specifically aimed at enhancing my subject knowledge and classroom practice during the pre-democratic era other than my pre-service teacher education program. I do not recall a time

where I had to reflect about my subject and teaching it, let alone articulating what I knew and need to know. Taking the responsibility for my own professional development would have been an unrealistic task for me.

This research study aimed to give teachers an opportunity to articulate what they know, how they acquire new knowledge, and the ways they are learning to do what they do in their classrooms. To bring about changes in teachers' knowledge, a sense of what teachers understand about their work should be made explicit by them, for them and others (Davies, 2002). Before teachers are required to take responsibility for their own learning, as the new curriculum policy in South Africa insists—or at least as an initial part of the responsibility-taking process—they should be given an opportunity to reveal what they understand about it. A critical feature of teachers' participation in their learning is that they should have a right to voice their opinions and be listened to (Lee, 2005). This research provided a context where teachers could reflect on and critique their prior and current knowledge.

The study also contributes towards an emerging body of research that considers the teachers' active participation in the creation of their professional development. In a reform context, the actual design of the professional development and its enhancement may take good account of the teachers who are the professional learners, or may simply make assumptions about who they are, what they know, and how they approach professional learning. So the ultimate questions about effective professional development design in the South African context have much to do with how sensitive it is to the professional people who are its target.

Chapter 2

A Conceptual Framework: Understanding Teacher Professional Learning in an Era of Education Reform

This dissertation study is premised on three key ideas, first, the imperative of teacher professional learning in an education reform context that demands teachers assume a new stance on their learning and teaching. They are required to teach in ways that induce critical thinking and problem solving skills and that require deeper subject matter knowledge and change in their teaching practices (Knapp, 2003). Within this premise, the inquiry will also focus on teachers' perceptions of their own knowledge and practice, as well as what they think they need to know in order to change their practices. Furthermore, the inquiry looks at this change that would be referred to as professional learning (Evans, 2002) where teachers learn new ways of working, and develop new beliefs and ideas about their practice.

Second, this inquiry is also premised on the idea that professional learning is a process that evolves after engaging in the event of professional development. Put another way, the professional learning they need to do in a reform context is ongoing, a part of their practice over time, not just what happens in a workshop or in a facilitated professional development session. To help teachers assume this new stance towards their professional learning, they need to participate in high-quality professional learning opportunities (Garret et al., 2001). Professional learning environments that have been proven to elicit changes in teachers' practices take into account the contexts in which teachers learn while they interact with others on practice-based issues (Lave & Wenger, 1991; Borko & Putnam, 2000). This idea draws from the situated learning model that emphasizes the contexts in which people interact and the interaction itself as sites where learning takes place (Putnam & Borko, 2000). According to this model, teachers increase their expertise in teaching practices, as they

focus with others on particular practices in their classrooms, school, and professional learning community.

Third, this teacher professional growth takes place in particular policy environments, school leadership, school environments and cultures, some of which are not conducive to teacher professional learning experiences (Clarke & Hollingsworth, 2002). Therefore, this inquiry is based on the fact that, successful facilitation of teacher professional learning presumes an understanding of the school-based conditions that support or inhibit teacher growth, as well as the larger policy environment and historical context that gives local conditions particular meanings to the teachers in question.

These premises underlie the conceptual framework I am using in this study, which I will explain and develop during the remainder of the chapter. The informing ideas that I use to construct my conceptual framework are drawn from the research and literature in the United States and other developed countries on teacher learning, teacher knowledge, and high-quality teacher professional learning opportunities in an education reform era (Desimone, Porter, Garret, Yoon & Birman, 2001, 2002; Supovitz & Turner, 2000; Valli & Hawli, 1999; Wilson & Berne, 1999; Cochran-Smith & Lytle, 1999; Borko, 2004; Penuel, Fishman, Yamaguchi & Gallagher, 2007; Putnam & Borko, 2000; Knapp, 2003; Webster-Wright, 2010). The framework also uses the growing scholarship from both developing and developed countries on recent innovative approaches to supporting professional learning that take place within communities of practice that foster collegiality (e.g., Borko, 2004; Harris & Muijs, 2005; Jita & Ndlalane, 2009; Webster-Wright, 2010; Steyn, 2013) and reflective practice (Beijaard, Verloop, & Vermunt, 2000; Evans, 2002). Finally, I draw from the research on organizational conditions that have an impact on teacher professional learning (Clarke & Hollingsworth, 2002; Pedder, 2006; Richardson, 2006; Steyn, 2009, 2013).

A general overview of teacher professional learning and professional knowledge will be presented first, along with a discussion of teachers' self-knowledge and their learning stance. Following that, I review innovative approaches to professional learning in an era of education reform. These innovative approaches include various forms of high-quality professional development, including ones that take advantage of the environment that professional learning communities can afford. Finally, I discuss conditions that may operate as influencing forces shaping the learning of teachers, including teachers' background, school context and school leadership, all within conditions of disenfranchisement set up by the historical and current context in South Africa.

Teacher Professional Learning and Knowledge

Education reforms often communicate an urgent need for teachers to change their existing professional knowledge and skills. This change can be acquired through a variety of formal and informal learning opportunities (Paris & Spillane, 2010), and it occurs over time, not only in discrete formally designated professional learning events. What teachers learn here becomes the *professional knowledge* that they use in their practice. While engaging in these learning opportunities, it matters a great deal how teachers approach their own knowledge, learning needs, and self as a learner. Teacher self-knowledge influences how they respond to professional development as well as their abilities to implement changes in their classroom practice as a result (Beijaard, Verloop & Vermunt, 2000).

Conceptions of Teacher Professional Learning

Contrary to teacher "professional development," which refers to activities that are aimed at bringing about changes in teacher practices, teacher professional learning has usually been defined as an individual internal process of cognitive changes in how teachers think, what they know, and how they approach their teaching practice, coupled with a social

process of actual engagement with new ideas and practice alongside colleagues (Knapp, 2003; Paris & Spillane, 2010). Theorists vary in the emphasis they place on the social aspects of learning, with some treating it as a completely social process. According to a situative perspective, teacher learning is defined as “a process of increasing participation in the practice of teaching, and through this participation, a process of becoming knowledgeable in and about teaching” (Adler, 2000, p. 37). Simply stated, it is a process by which teachers move towards knowing after and through engaging in different aspects of their practice both in their own classrooms and in teacher communities.

The focus of this inquiry, as outlined in Chapter 1, is on several aspects of this professional learning domain. Specifically, the study seeks to determine (1) what South African rural and township teachers think they already know and are able to do in their classroom practice; (2) what these teachers think they need to know to accomplish the new curriculum and meet new expectations for their work (including their awareness of the new curriculum and what they are supposed to teach); and (3) what they believe would enhance their understanding of the new curriculum and the ways in which they are supposed to teach it. Therefore, I base this enquiry on Evan’s definition of teacher learning that she describes as the “the process whereby the teacher’s ideologically and epistemologically-based stance in relation to his or her professional practice, is enhanced” (Evans, 2002, p. 130).

This focus sits within a broader set of ideas about teachers’ professional learning and supports for professional learning. Teacher professional learning is acknowledged as an ongoing process that continues to evolve after engaging in the event of professional development (Knapp, 2003). This process is initiated within teacher education institutions and continues within teaching practice itself, as well as in settings outside the practice. As teachers engage with each other and in events specifically arranged to promote professional learning in these settings, growth in their subject matter knowledge and teaching practice may

result. Within these settings, teacher professional learning is both a personal process and collective act that is appropriately shaped through a wide range of learning opportunities (Lave & Wenger, 1991). The personal process refers to the internalisation whereby the individual teacher develops new theoretical ideas and new teaching processes, as well as attending to their beliefs that are associated with change (Evans, 2002). On the other hand, the collective act refers to a process where teachers try out and practice these new ideas over an extended period of time in a collaborative manner, through which they exchange ideas, develop mutual norms and understandings of their work, and are able to reflect critically about their practice. The combination of these two processes points towards more effective ways of understanding and improving teachers' learning (Hodkinson & Hodkinson, 2005).

The nature of teachers' professional learning is differentiated in that it encompasses different forms of learning opportunities that occur in different settings (Wilson & Berne, 1999). For instance, prospective teachers participate in teacher preparation programs as well as in practice teaching. That is where they learn in a formal sense about the school and the purposes of schooling, what they are expected to do there, and how they do that; of course, they have already learned a lot about these things indirectly, through their "apprenticeship of observation" as former students (Lortie, 1975). As practicing teachers, they participate in compulsory or optional professional development programs and also learn from everyday interaction with their colleagues in attempts to consider aspects of their practice in light of new knowledge and expectations.

Professional learning also takes place in formal learning opportunities and informal or on-the-job learning opportunities (Parise & Spillane, 2010). The informal learning opportunities can take place within teaching practice itself as teachers interact with each other about their work, asking questions and getting answers, observing colleagues, and exchanging feedback, interacting with students, and meeting with parents (Paris & Spillane,

2010). Most of the formal learning experiences follow the traditional approach in that they occur outside the teaching context which is the classroom, and are often facilitated by an expert whose aim is to teach the teachers. These include workshops, special courses, graduate coursework, conferences or in-service days (Garret, Porter, Desimone, Birman, & Yoon, 2001; Desimone et al., 2002).

There are some suggestions that formal learning opportunities are not likely to influence change on teachers' practices (Parise & Spillane, 2010), at least under the most common and established designs for professional development. However, a series of alternative designs for professional learning, often referred to as "reform professional development" (Garet et al., 2001), has emerged in recent years. These opportunities may take place through professional learning communities and networks, committees, organized study groups, mentoring, and internships. In the new view of teachers' professional development represented in these alternative designs, teachers are engaged in professional learning throughout their working hours (National Partnership for Excellence and Accountability in Teaching, 1999). This new view emphasizes sites for and activities guiding professional learning that differ from more conventional formal learning opportunities in that they mostly resemble the teacher's classroom context, engage teachers actively and collaboratively with their colleagues, and may even take place during normal school hours in teachers' classrooms (Desimone et al., 2002). Regardless of the type of learning opportunity that teachers engage in, what they learn through these reform professional development efforts becomes a powerful knowledge base that is useful for their professional growth and development (Desimone, 2009).

The broad-based perspectives that frame the concept of teacher professional learning under more recent, alternative designs for professional development emphasizes that learning is embedded in teachers' everyday working lives (Putnam & Borko, 2000). This idea rests on

situativity theory, which argues that teachers' knowing and learning are located in their work experiences (Owen, 2004). Teacher learning thus can take place in a teacher's own classroom as the teacher reflects on his or her teaching, engages in self-development in the form of any advanced studies, or when they teach a lesson (Guskey, 2000). It can also be situated within a particular school or professional community that has developed a shared understanding, and it is shaped by the physical and social contexts in which it occurs (Lave & Wenger, 1991; Putnam & Borko, 2000). Current research emphasizes that, in order to understand teacher professional learning, it should be conceptualized within various contexts which include "both the individual teacher-learners and the social-systems in which they are participants" (Borko, 2004, p. 4).

Teacher Professional Knowledge

By engaging in professional learning opportunities, teachers gain a richer understanding of the subject that they teach, get a better understanding of their learners, and develop knowledge and skills to teach in such a way that learners can comprehend (Knapp, 2003). In other words, what teachers learn becomes *professional knowledge* that they can use in their practice. Teachers' professional knowledge is commonly viewed as knowledge of facts and concepts, professional teaching practices, and personal experiential knowledge that are attained in various ways from the practice (Shulman, 1986; Higgs & Titchen, 2001). Possession of this 'special' knowledge by teachers is what distinguishes them from other professionals. These different notions of professional knowledge underpin the way that we understand teacher professional learning. Currently we see a shift in the understanding of learning from thinking of this as just "acquiring knowledge" to developing an understanding of learning that is embodied in teaching practice.

For teachers to gain this professional knowledge, powerful forms of professional learning opportunities are crucial. It is essential that this notion of a special knowledge base

for teaching should frame the professional learning opportunities if they are to have an effect on teachers' practices (Shulman, 1986; Mulholland & Wallace, 2005; Opfer & Pedder, 2011). However, research recognizes that some professional learning opportunities, particularly those that follow more traditional 'training' approaches, continue to be ineffective in changing teachers' professional knowledge (Borko, 2004; Timperley & Alton-Lee, 2008). Researchers in this field continue to wrestle with this idea up to today, trying to understand why and how these activities sometimes fail to impact teachers' knowledge. Thus, a shift in thinking about how teachers gain this professional knowledge has rapidly grown, alongside ideas about what kinds of teacher knowledge actually matter most for success in the classroom.

A number of scholars have explored this matter of teacher knowledge in an effort to understand the connection between this knowledge and the improvement of teaching practices (Shulman, 1986; Cochran-Smith & Lytle, 1999; Driel, Verloop, & de Vos, 1998; Sawyer, 2001; Eraut, 2007). Cochran & Lytle, for instance, conceptualised the connection between teacher knowledge and practice, by identifying three domains. (a) *The knowledge for practice* is the domain that addresses the formal knowledge and theory that teachers use to frame, explain, and guide their efforts to improve their practices. It is based on the idea that teachers have a special knowledge base whose possession distinguishes teachers from people in the streets. This domain of knowledge is gained through teacher preparation programs and various professional development experiences. (b) *The knowledge in practice* refers to knowledge in action—that is, the practical knowledge that is gained from one's teaching practice and that is actually embedded in teachers' own classrooms or in situations where they are able to reflect on their practices such as in teacher communities or networks. (c) Finally, *the knowledge of practice* which alludes to the knowledge that teachers gain from their inquiries about their teaching and learning. This knowledge can be generated from

teachers' own classrooms and schools as well as outside these contexts. When possessing this knowledge, teachers are regarded as having a broadened view of their practices.

However, the concepts of knowledge above do not address teachers' knowledge of the *content* they teach and how to teach it—that is, what is considered to be the 'special' knowledge that all teachers should possess (Shulman, 1987). Shulman, a seminal figure in conceptualizing teachers' professional knowledge, identifies various components that form this content knowledge. These components include: general pedagogical knowledge; knowledge of learners and their characteristics; knowledge of educational contexts, knowledge of ends, purposes, and values; their philosophical and historical background; content knowledge, and “pedagogical content knowledge.” His main contribution centered on the importance of content understanding among teachers, which was a shift from the past research focus of how to teach. Consequently, Shulman (1987) paid more attention to content knowledge, curricular content, and especially *pedagogical content knowledge*.

He defines pedagogical content knowledge as “that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding” (p. 8). This knowledge connects the subject content and teaching practice which Shulman felt that it had been missing in the conceptualisation of teacher learning. A teacher should not only have in-depth understanding of a subject taught, but should also be able to teach that subject such that the learner acquires the same understanding. A teacher should also be able to provide alternative explanations to cater for student diversity. All these components are part of pedagogical content knowledge. Shulman, by bringing this understanding of what teachers should know, do, and understand in their practice, articulates the process of teacher learning that scholars of this concept, including this study, focus on in their research endeavors.

Teachers' Professional Self-Knowledge and Learning Stance

Given these ways of approaching teachers' professional learning and teachers' knowledge, a third and essential conceptual element needs to be considered. As individuals who potentially actively engage in professional learning within their practice on a day-to-day basis, taking advantage of various formal and informal opportunities for enhancing their professional knowledge, it matters a great deal how teachers approach their own knowledge, learning needs, and self as a learner. How they see themselves as a learner and how they conceptualize their learning process figure prominently in how well they have developed the tools to reflect on their professional knowledge and capabilities, and how they take advantage of opportunities for professional learning. Also how willing they are to accept the changes and implement them in their own teaching practice.

In order for education reforms to be a success, teachers need to undergo a considerable amount of transformation in their own knowledge and teaching practice, and as they do so, assume what I call a *learning stance*. In this stance, teachers change their beliefs and dispositions about the subjects they teach and the ways to teach them—in other words, they change their professional identity (Drake, Spillane, & Hufferd-Ackels, 2010). A learning stance can be considered as a position where teachers assume a different 'self,' both as a learner and teacher in response to the vision of the education reforms. It is apparent when they are ready to apply new ideas in their subjects and teach them in new ways (Evans, 2002). Whether teachers reach this position of being ready to be changed, and how they do it, depends in large measure on what they already know, believe, and are able to do (Spillane, 2000), although the nature of their organizational and collegial surroundings may also enhance or inhibit their adoption of a learning stance. Therefore, it is not surprising to discover that teachers assume this learning stance differently depending on their knowledge and beliefs, as well as their sense of self.

To assume a learning stance, teachers need to have a clear sense of self (Spillane, 2000). Most studies talk about professional identity in referring to a teacher's knowledge of self in relation to his or her practice (Beijaard et al., 2000; Spillane, 2000; Connelly & Clandinin, 1999; Knowles, 1992; Drake, Spillane, & Hufferd-Ackles, 2010). Generally, identity is defined as a person's sense of self (Spillane, 2000). Thus, professional identity entails a person's knowledge, beliefs, dispositions, and orientation towards their practice (Drake et al., 2010). Connelly & Clandinin (1999) refer to "storied-identities," where teachers use stories to understand themselves personally and professionally as well as the context of their work. These stories contribute towards understanding the response of teachers towards the changes. This inquiry intends to explore the "sense of self" of teachers in impoverished school settings and how they use this sense to assume the different 'self' as expected by education reformers. The inquiry notes that, in general, it is often not easy for teachers to express what they know about their practice since they are more in a 'doing' environment rather than a 'knowing' environment (Beijaard, 2004).

Certain categories make up the teacher's professional identity, according to Beijaard et al. (2000). These authors assert that teachers create their professional identity from a combination of the ways the teachers see themselves as subject matter experts, pedagogical experts, and didactical experts. These concepts are briefly discussed as follows:

- (a) *teacher as a subject expert* – teachers construct their professional identity through the subjects that they teach. It is crucial for teachers to possess the subject knowledge base in order to be able to execute the tasks of their practice confidently;
- (b) *teacher as a pedagogical expert* – this concept encompasses the teachers' engagement with students. The way teachers relate with their students influences

how teachers perceive themselves, for instance, if teachers have a good relationship with their students, they might consider themselves as good teachers which, admittedly, is not always the case; and

- (c) *teacher as a didactical expert* – knowledge of good models of teaching also have an impact on how teachers view themselves. These models usually guide how teachers plan, implement and evaluate their lessons. Using these models, teachers explicitly learn to consider relevant aspects of teaching. Knowledge of the perceptions of their professional identity may be useful in helping teachers cope with educational changes.

To construct this learning stance, teachers undergo thorough professional development. Still, the effects of professional development depend largely on how it is presented to teachers and how they learn from them. Camburn (2010) argues that many teachers fail to transform their practices because some of the professional development approaches that are provided for them do not give them a chance to critically reflect and evaluate their practices on their own. The consensus among researchers is that professional development opportunities that allow teachers to engage in active *reflection* on their practice, either as individuals or with their peers, are likely to foster changes among teachers (Garet et al., 2001; Hawley & Valli, 1999; Borko, 2004). In other words, teachers need to engage in professional development that allows them to be reflective practitioners (Schon, 1983) through own inquiry or in their communities of practice.

Reflective practice—the embodiment of a professional learning stance—is described as a deliberate action (Ghaye, 2011) where a practitioner scrutinizes his or her professional practice to identify what has worked successfully and what has not worked in order to learn from that process. Through reflective practice, teachers articulate stories of what they

experience in their professional worlds with the hope of using those experiences to create new ones for themselves. Through this process teachers get to understand what is possible and less possible in their practices. The concept of the reflective practitioner was popularized by Schon (1983) where he introduced four key ideas that give an image of how practitioners learn. These ideas include 'technical rationality', 'knowledge-in-action', 'reflection-in-action' and 'reflection-on-action'.

This study aims to explore the understanding of the teachers' views and thoughts on their professional learning, thus it aligns itself more to the idea of 'reflection-on-action' that emphasizes the development of self-knowledge that is useful for future planning. Schon describes 'reflection-on-action' as that purposeful act of looking back that occurs after the event and away from it. This is done in order to set the pace for future action. Practitioners think about something significant that took place in their practice or did not take place and they learn from that and determine what could be changed for next time. The study recognizes that comprehending what goes on in one's professional practice does not automatically warrant the professional growth of that individual. However, engaging teachers in such reflective practice is likely to reveal new insights of where these teachers come from, what they actually learn from their practice and how that knowledge can be used to create better learning for them.

Some teacher learning opportunities allow teachers to engage in reflection and learning more than others (Camburn, 2010). The situated approaches to teacher learning shed light on how this is the case. Situated learning suggests that knowledge cannot be separated from the contexts in which it is created (Putnam & Borko, 2000). It emphasises the contexts in which teachers interact as sites where learning takes place. Thus, learning for teachers, may occur in some aspects of their teaching practices such as their own classrooms, schools and in their professional learning communities. There is contention that the contexts that

support collaborative working relationships are more conducive to reflection and open communication (Argyris & Schon, 1974). Hence, the fast-growing trend of professional learning experiences that takes into account the contexts in which teachers learn while they interact with others on practice-based issues (Lave & Wenger, 1991; Borko & Putnam, 2000; Borko, 2004; Eraut, 2007). Engaging in collaborative communities provides teachers with an opportunity to critique the existing knowledge and gain new one (Sawyer, 2001) that will inform, and in turn, be informed by their classroom practices.

Supporting Teacher Professional Learning in an Education Reform Context

Professional learning in a demanding education reform context, as in South Africa and elsewhere, turns out to be a challenging task for teachers. While teachers are expected to develop the knowledge and skills to take on new approaches to teaching, they also have to unlearn the old ways that have dominated their working lives prior to the reforms. Nothing matters more for education reformers than changing teachers' capacity for practice (Cochran-Smith & Lytle, 1999), which they target in their provision of numerous and diverse learning opportunities. To achieve that, they set new policies to promote and support teacher professional learning. These include increasing a number of hopefully effective or high-quality professional development opportunities, supporting professional learning communities, and motivating teachers to also take responsibility for their own professional learning. Unfortunately, whether these interventions are made available or not, effective or not, the onus is on the teachers to change their practices as the reforms expect.

In order to make the reformers' vision a reality, a change in the design and provision of the support strategies for teachers' learning is implied, as the preceding discussion of professional learning, professional knowledge, and learning stance makes clear. As noted

above, the traditional “top-down” strategies that follow an in-service training model (Little, 1993) would definitely not work in the reform era, as they are not compatible with the complex and evolving nature of teaching and learning environments, nor do they reflect more sophisticated understandings of professional learning itself. A shift to innovative strategies that would help teachers assume a new stance towards their professional learning—the “reform professional development” (Garet et al., 2001) alluded to earlier—becomes inevitable. These are the strategies that move away from learning that is mere delivery of knowledge to learning that considers the relationship between the whole person and their contexts (Putnam & Borko, 2000; Webster-Wright, 2010). These strategies also allow teachers to reflect on their practices in order to identify their successes and failures which they could use to adopt this new stance in their learning. Current research literature shows consistently that where teachers can reflect, engage in new ideas and are given opportunities to work together and learn from each other, a change in their practices will be evident (Harris & Muijs, 2005). I start the discussion of these innovative strategies to professional learning by looking at the learning opportunities that are regarded as “high quality.” Following that, I will look at professional learning communities, as a context and prompt for professional learning.

“High-Quality” Professional Learning Opportunities

Research in the developed world regards ‘high-quality’ opportunities for professional learning as a particularly good tool for changing teaching practices (Valli & Hawley, 1999; Supovitz & Turner, 2000). Desimone (2009) cautions, though, that it is not the professional learning experiences as such that are linked to changes in teachers’ knowledge and skills, but core features of these experiences. A number of scholars have established a professional consensus that professional learning opportunities can be regarded as “high quality” if they include many of the following critical features: explicit focus on subject matter; active

engagement in learning activities; intense and extended period of engagement; collaboration with peers; ‘reform type’ professional learning designs that differ from the traditional ones in that they include study groups, coaching, and mentoring; and coherent connections with a wider set of opportunities for teaching and learning (Desimone, Porter, Garret, Yoon, & Birman, 2001; Valli & Hawley 1999; Wilson & Berne, 1999; Borko, 2004; Penuel, Fishman, Yamaguchi, & Gallagher, 2007; Coenders, Terlouw, Dijkstra, & Pieters, 2010). These features are explained in detail in the following paragraphs.

First, numerous researchers affirm that *collective participation of teachers* in learning opportunities can foster their subject knowledge and instructional improvement. Working collaboratively and through discussion, teachers are able to change their beliefs about what is important in content subject matter and what their students are capable of doing (Garret et al., 2001; Borko, 2004; Penuel, et al., 2007). Garret et al. (2001) emphasize that if teachers from the same school, grade, or department engage in shared learning opportunities, they have the chance in their settings to share information that arises from their professional learning experiences, and are also likely to share common curriculum materials and information about the needs of shared students. Research asserts that teachers that participate in strong professional communities are particularly successful in implementing new reform plans, because reforms have more authority when they are embraced by peers.

Second, a number of authors agree that professional learning requires a *dual focus on both knowledge of subject matter content and an understanding of how children learn specific content* (Garret et al., 2001; Penuel et al., 2007; Supovitz & Turner, 2000; Fishman et al., 2003; Borko, 2004). For instance, Borko refers to professional learning activities that focus directly on the subject matter, engage teachers as learners, and are followed by on-going support that can help teachers develop powerful understanding of the content subject. This feature alludes to the essential idea of “pedagogical content knowledge” (following Shulman’s

notion), and by explicitly addressing pedagogical content knowledge, professional development is more likely to be high quality. Desimone (2009) suggests that it may be regarded as the powerful feature in changing teachers' practices.

Third, high quality professional learning opportunities are likely to be both *intensive and sustained over time*, involving follow-up and support for further learning (Garret et al., 2001; Hawley & Valli, 1999; Supovitz & Turner, 2000; Borko, 2004; Penuel et al., 2007). Garret et al. (2001) indicate that activities that extend over time are more likely to provide an opportunity for in-depth discussion of content and allow teachers to try out new practices in the classroom and obtain feedback on their teaching (p. 922). Professional learning experiences that are of longer duration and time span are more likely to contain the kinds of learning opportunities necessary for teachers to integrate new knowledge into practice (Penuel et al., 2007). There is no exact specificity of duration but research suggests professional learning activities that can take a whole semester and include more contact time (Desimone, 2009).

Fourth, researchers assert that professional learning is likely to be more effective when it *engages teachers in concrete teaching tasks and based on teachers' experiences with students, thus promoting active learning* (Garret et al., 2001; Penuel et al., 2007; Jeanpierre, Oberhauser, & Freeman, 2005; Borko, 2004). Active learning includes activities such as observing more experienced colleagues or being observed by them, instructional planning and discussion, and reviewing students' work, followed by discussions. Learning is fostered when teachers engage in conversations about new material, discuss strategies for effective teaching, push one another to experiment around new initiatives, and work collaboratively to share expertise (Borko, 2004). As such, learning experiences that encourage teachers' participation may be more effective in supporting implementation of innovations (Penuel et al., 2007).

Finally, professional learning activities are more likely to be effective in improving teachers' knowledge and skills if they *form a coherent part of a wider set of opportunities for teachers' learning and development*, for example, building on what teachers have learned, content, and pedagogy aligned with national, state and local standards (Garet et al., 2001; Penuel et al., 2007). If teachers perceive the alignment between the professional learning activities and their own goals for learning and goals for students, they will thus commit to adopting the innovation (Penuel et al., 2007, p. 931).

To conclude this section on high-quality professional learning experiences, this inquiry concurs with the Ndlalane (2006) argument that it is not yet clear whether these kinds of high-quality professional learning opportunities, recommended by scholars in developed countries, can be possible in disenfranchised contexts such as the one that this study focuses on. Other researchers (e.g., Bantwini, 2009; Mokhele & Jita, 2012) are in line with what Ndlalane says, that the contextual factors and teachers' various needs in their subjects, that are the results of the legacy of South African's educational system, may hinder the success of high-quality professional development for teachers in these contexts. However, a notable growth in a number of the professional learning models that carry some of the components of high-quality professional development, such as professional learning communities where teachers can work collaboratively, is evident even in this context. A shift to the innovative strategy that emphasizes the collaborative nature of learning will be discussed in the next section.

Professional Learning Communities

A rapid-growing shift from a focus on individual learning to collaborative learning, with particular regard for the contexts in which teachers learn while they interact with their peers on practice-based issues, is highly evident in recent years (Putnam & Borko, 2000). The

contexts may include their own classrooms, schools, and any place where teachers meet to discuss their practice. A common meeting place are structures and patterns of engagement among teachers in what are referred to as “professional learning communities” (PLC’s). A popular idea capturing the attention of scholars across the world, PLCs seek to promote the professional growth of teachers within a context of community (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006, p. 221). Stated simply, a professional learning community refers to a community of professional people, in this instance, teachers who are engaged in collective learning about their practice. Much of the current literature on teacher learning emphasizes the collaborative nature of the learning process, and engagement in PLCs is thought to be one way to encourage this kind of collaboration. This approach is different from traditional approaches in that it moves away from teachers who work alone—and who learn alone about how to do their work—to teachers who work in a community.

Professional learning communities can be interpreted differently in different contexts. The following terms such as “a reform movement, a rallying cry for change, a specific education reform strategy, distributed leadership in schools, teacher collaboration and more” (Johnson in Mullen, 2009, p. 18) are used to describe professional learning communities generally. For purposes of this research study, I prefer to define these communities as professional contexts in which teachers engage in collaborative work and participate in decision making with a shared sense of purpose and outcomes (Harris & Muijs, 2005). This notion of teachers’ collaborative efforts seen as being effective in the improvement of their students’ learning was recognized a while back (e.g. Rosenholz, 1989; McLaughlin & Talbert, 1993; Darling-Hammond, 1996). However, it garnered most attention after Garet et al’s study (2001) that showed collaborative professional development to be more effective in bringing about teacher change.

There is consensus on the key features that are generally shared by the professional learning communities. I provide a brief discussion of these features as highlighted in Stoll et al., 2006:

- (1) *Shared values and vision.* A vision and purpose is centrally important in professional learning communities. When teachers operate from a shared value basis, they are able to make collective decision-making that impacts the learning of their students in a positive manner.
- (2) *Collective responsibility.* Professional learning communities are collectively responsible for student learning. Such responsibility encourages commitment from all the members of the community. It also helps in preventing teacher isolation which is common in the teaching profession.
- (3) *Reflective professional inquiry.* This includes frequent examination of teachers' practices that is conducted by teachers themselves or by their own peers and conversations about educational issues involving the application of new knowledge.
- (4) *Collaboration.* This refers to working as a team in order to achieve the shared goals of improving student learning. As teachers work interdependently to reach the shared the purpose, they are able to manage conflicts effectively.
- (5) *Emphasis on group, as well as individual, learning.* As teachers work jointly with their peers, creation of collective knowledge is evident instead of learning as individuals. Through collective learning, teachers interact and participate in dialogue.

Researchers concur that teachers need to participate in such learning communities to be in a position to take on the new roles that are demanded by educational reforms (Borko, 2004; Jita & Ndlalane, 2009; Opfer & Pedder, 2011; Steyn, 2013). Professional learning

communities are necessary for teachers in that when they come together to work in these professional learning communities, they have an opportunity to discuss problems that they encounter in their teaching practices and are able to share strategies and solutions (Putnam & Borko, 2000). In that way, they are able to look at the various ways in which their subject matter can be taught. Through collaboration, teachers learn from each other between subject areas, classrooms, and schools. Research evidence shows that when teachers engage in a dialogue with each other about their practices, meaningful teacher professional learning follows (Harris & Muijs, 2005).

Much of what reformers hope will happen in professional learning communities embody many of the attributes of high-quality professional learning opportunities as discussed in the section above. In this sense PLCs are not a different reform “approach” but a set of ideas about professional learning and how to support it that embraces various approaches and design features.

Conditions that Influence Teacher Professional Learning

To understand how the process of professional development works in a reform context, it is imperative to pay attention to conditions and forces that are likely to promote or hinder the teachers’ learning experiences and their capacity or motivation to realize their learning in daily practice. This may include conditions that are located within and outside teachers’ boundaries such as teachers’ background, the school context with its support systems and structures, and the type of school leadership (Darling-Hammond, 1995,1997; Clarke & Hollingsworth, 2002; Knapp, 2003; Wallace, 2010; Parise & Spillane, 2010; Darling-Hammond & Richardson, 2009).

Within-school factors such as its leadership, the school environment, and the organizational norms play a huge role in shaping the quality of, and access to, professional

learning experiences, while also influencing teacher perceptions of teacher professional learning (Scribner, 1999; Clarke & Hollingsworth, 2002). For instance, in schools where teachers show proficient individual competence whilst at the same time they work in collaboration with their peers (Newman, King, & Young, 2000), are encouraged and given support to participate in professional learning experiences, and where teachers have support from their organizational leadership to try out new teaching techniques, then teachers usually encounter no challenges in promoting their professional growth (Clarke & Hollingsworth, 2002).

In contrast, in schools that are characterized by deprived-professional environments (Mushayikwa & Lubben, 2008), in which teachers work with minimal resources, limited exposure to professional development experiences, and lack of support from organizational leadership, teachers are likely to have difficulties in changing their understanding and teaching practices. Before looking at how such deprived contexts can have an effect on how teachers learn and teach, I discuss how the school contexts, in general, contribute towards enabling or constraining teacher professional learning. And it is also important to consider what teachers as individual participants in professional learning bring to it.

Whatever the school context, the new professional learning of teachers is inevitably shaped, to an extent, by who the teachers are and what they bring as individuals to that task. Their backgrounds are thus a first and basic condition influencing the professional learning they are engaged in.

The Influence of Teachers' Background on their Professional Learning

As teachers engage in professional learning opportunities, they do not come as empty vessels that wait to be filled with new knowledge and skills that are required by the reform contexts. They bring their past experiences and beliefs that affect how they learn and teach in

their classrooms (Richardson, 2003). These past experiences and beliefs constitute, what I call, teachers' background. Teachers' backgrounds are shaped by both their personal and professional experiences. The professional background encompasses how teachers were taught as students both in their school and teacher education (Robinson, 1999). Knowles (1992) argued that a number of personal dimensions such as the teacher's childhood experiences, the early teacher role models, the previous teaching experiences and other critical incidents in the teachers' lives shape their images as teachers. Such 'image of self as a teacher' is critical to the development of the teacher's knowledge and classroom practice.

Also, the beliefs that teachers have or carry about their teaching and learning influence their response towards professional learning (Opfer & Pedder, 2011). They may be motivated to learn new knowledge and new teaching practices, or alternatively, resist to unlearn what they believe, know and know how to do. In other words, teachers bring to their teaching attitudes, values, and images in the semblance of beliefs that influence their own decisions about learning.

Teachers' knowledge and teaching practice not only depends on what they know or believe about teaching and learning (Jita, 2004). It is also shaped by their sense of self (Spillane, 2000), that is, their *identity or self-knowledge*, as discussed above. Teachers' identity defines who they are and how they understand themselves when it comes to their learners, their colleagues, and their subjects. Not only are teachers expected to know their subject concepts, they also need to understand themselves as specific subject teachers (Drake et al., 2010). Knowles (1992) argues that the teachers' childhood experiences, early teacher role models, their initial teacher programs, and all other critical incidents all contribute towards the formation of a teacher's identity. One of this inquiry's aims is to explore how the participants see to their identities enable or hinder their development of new knowledge and classroom practices.

Teacher professional learning in a reform context might be challenging for some teachers. This may be the case with teachers in this research study as will be elaborated in the discussion of disenfranchised school contexts in the following section. It is challenging in that the new knowledge and classroom practices demand teachers to move away from what they already know about themselves and their subjects (Drake et al., 2010). They need to reject not only that old knowledge of their subjects, but also their beliefs about those subjects and how to teach them. Consequently, it is crucial to understand what teachers know about themselves as teachers, their subjects, and their classroom practices before the design of their professional learning experiences aimed to foster their teaching and learning (Drake et al., 2010).

The Influence of School Context on Professional Learning

Research has proven that school contexts have the capacity to impact teachers' professional growth at every stage of professional development, that is, from their access of professional development throughout the process of change (Clarke & Hollingsworth, 2002, Pedder, 2006). School context, an organizational environment unique to teachers and other school stakeholders (Scribner, 1999, p. 242), is where teachers are socialized to the existing organizational norms through the policies and procedures that give direction of the organization and also control how personnel in these organizations conduct themselves.

Numerous elements in the school context may support or hinder the process of teacher professional growth. Such elements include access to opportunities for professional development, restriction or support for particular types of participation, encouragement or discouragement to experiment with new techniques, and administrative support or restrictions in the long-term application of new ideas (Clarke & Hollingsworth, 2002, p. 962). For instance, other schools prioritize other aspects that occur in schools more than the

development of their teachers, and thus, do not encourage or give them time to engage in professional learning opportunities. Inevitably, schools that are characterized by unsupportive conditions such as the conservation of the traditional culture of teacher isolation, less collaboration amongst teachers, and a lack of visible commitment to professional development impinge on the learning of their teachers. Unfortunately, for teachers who are the focus of this study, their school settings tend to fall under this latter category.

The quality of teachers' relationships in a school organization also falls under the influences that foster or impede teacher learning (Spillane, 2000). These relationships are formed when teachers show trust amongst each other and strive to work collectively towards the improvement of their teaching and learning. The school's joint pedagogical norms and practices, shared beliefs about their teaching and learning in the school as well as shared capacity to accomplish shared learning goals are other school-level factors that motivate teachers to engage in professional learning experiences (Paris & Spillane, 2010; Opfer & Pedder, 2011). Whilst improved classroom practice is a result of individual teacher proficiency, the student achievement of the whole school is made possible through the collaborative efforts of all teachers in that school (Newman et al., 2000). This collaborative effort to improve the students' achievement is referred to as the school capacity. Such schools where teachers hold collective responsibility for student learning and display high capacity to learn are more likely to influence changes on their teachers.

Regarding the shared norms, on the one hand, these shared norms that support openness may serve to incapacitate an individual teacher's practice when it is in line with what the colleagues believe about learning. On the other hand, one's practice can be constrained if it goes against one's colleagues' beliefs. In light of that, it is obvious that schools have a large responsibility to adapt their structures and practices in order to create the atmosphere of openness and trust among their teachers. For instance, giving teachers time to

meet and discuss common issues about their practice on daily or weekly basis can motivate teachers to open up to their colleagues about challenges encountered in own classrooms.

Finally, schools that have enriched technical resources such as high quality curriculum, books and other instructional materials, laboratory equipment, computers, and enough work space are able to improve their school capacity in that they have support structures (Newman et al., 2000). The enriched resources make it possible to execute effective teaching practice. Sharing teaching techniques and collaborating on the classroom practice becomes much easier where there is access to resource materials.

The Influence of School Leadership on Professional Learning

As the discussion of school context might imply, school leadership—one of the chief influences on school context—plays a crucial role in shaping teachers’ professional learning (Heck & Hallinger, 1996, 2010; Parise & Spillane, 2010; Knapp, Mkhwanazi, & Portin, 2012, p. 188). These and other scholars describe the link between school leadership and professional learning well, as they state that professional learning “sits at the heart of leadership”. The quality of organizational leadership is central to the success or failure of teacher learning. The leadership in schools informs the learning and teaching of its teachers, or lack thereof.

A constant suggestion from the scholarship over the past several decades has been that the school’s principal is the key element behind the high level of performance in a school. Also, there is contention that schools that are known to be effective have in common effective principals, who carry out a clearly articulated shared vision within their schools (Sergiovanni, 2001). The school’s principal was viewed as the vision holder, the keeper of the dream, or the person who has the vision of the organization’s purpose (Wiley, 2009, p. 14).

The traditional conception of school leadership focused on the role of a school leader as an administrative one that emphasizes management activities such as discipline and community relations (Graczewski, Knudsen, & Holtzman, 2009). This conception did not pay attention to the role of the principal in relation to, and its impact on, the instruction of learners. Contemporary research, however, reflects a shifting landscape in thinking about school leadership in two ways that depart from this focus on school administration and the principal's role as manager.

First, the school leader's role has been increasingly redefined, with less emphasis on management and much more on the guidance and improvement of the instructional program. In this respect, principals have been viewed more as instructional leaders, who influence instruction and other practices such as teacher professional development that lead to improvement in student performance.

Second, treatments of school leadership have shifted focus from the individual to the team, from leaders' actions to interactions among leaders and team, from position- and person-centered leadership to more distributed conceptions (Knapp et al., 2012). A growth of new terms have come to the center of discussion and scholarship, such as *instructional leadership* (Hallinger, 2005), *collaborative leadership* (Hallinger & Heck, 2010), *shared leadership* (Marks & Printy, 2003), and *distributed leadership* (Spillane, 2001), reflecting a changed landscape of school leadership. Whatever term is used, this broader conception of leadership soon became the main focus when talking about organizational leadership that has an impact on the improvement of teaching and learning. Organizational leadership encompasses all school actions aimed at the improvement of the school that are shared by the principal, teachers, teacher leaders, administrators and so on. This leadership is treated as the "shared work and commitment that both shape the direction of the school and its learning

improvement agenda, and also mobilize effort and energy to pursue that work” (Knapp et al., 2012, p. 189-190).

Effective school leaders—principals and others who exercise instructional leadership along with them—affect teacher learning in the workforce in various ways (Paris & Spillane, 2010). They do this by encouraging knowledge sharing among teachers and creating internal structures that promote collaboration among teachers. Instructional leadership includes activities such as setting regular meeting times for teachers to plan instruction and reflect on their practice, promoting social trust among staff members and practicing distributed leadership. In addition, those school leaders that set clear expectations to teachers and concrete goals for student achievement can encourage teachers to improve their practice.

Also, effective school leaders influence conditions and practices in their organizations through their beliefs and actions regarding teacher professional development (Youngs & King, 2002). They connect their schools to effective professional development that is sustained as well as continuous, and provide opportunities for feedback and assistance in teachers’ classrooms. Blasé & Blasé, 2001, p. 363 emphasized teacher developmental strategies that promote teacher professional growth that include (1) emphasizing the study of teaching and learning, (2) supporting collaborating efforts among teachers, (3) developing coaching relationships among teachers, (4) encouraging and supporting redesign of programs; (5) applying the principles of adult learning, growth and development to all phases of teacher development and finally, (6) implementing action research to inform instructional decision making. When teachers work under such supportive leadership, their professional growth is stimulated.

Disenfranchised School Contexts and Professional Learning

Mushayikwa & Lubben (2008) describe the ‘disenfranchised contexts’ as those school contexts in which teachers work in isolation with minimal support from the education system. What is more, they often serve communities that can also be described as “disenfranchised”—lacking power and resources, and living in circumstances that present severe challenges. Usually teachers that work in this context have limited access to professional development opportunities, lack support from the school and district leadership, and receive little encouragement to experiment with new teaching techniques. In places such as the United States, such a context is seen in many urban and most inner-city schools noted for the highest turnover of high-quality teachers, with stressful teaching loads, and limited professional development supports (Darling-Hammond, 1997).

The participants of this particular study, as many of the current practicing teachers in South Africa, are from such “disenfranchised” settings. They suffered for a long time under the Apartheid education system that subjected them to a poor quality of school and professional education (Maistry, 2007). There were hardly any professional learning opportunities and education leadership support to enhance these teachers’ professional knowledge and growth. The only form of professional learning opportunity for these teachers usually occurred in their initial teacher preparation program, and often it was of poor quality. Once they completed that program, they were considered competent enough to get into their classrooms and start teaching.

There was also no support from the building or district leadership whatsoever. Instead school principals and district leaders who were called ‘inspectors’ served to ensure that the teacher was executing the well-defined instructional tasks as set by the department of education. It should be remembered that it was the responsibility of the department to enforce

the objectives of the then governing system, which was *not* to expose the learners in disenfranchised settings to the best quality of education that would have not “been useful to them and their people anyway” (paraphrased from the Minister of Education’s speech made in 1953).

Undisputably, the norms, values, attitudes, and beliefs of South African teachers have been shaped by a combination of influences that dates back to the era of apartheid education. Teachers have internalized images that were instilled in them during this unfortunate era that they were not good enough and, in anyway, they did not need to be. It is no wonder that, despite a notable improvement in the provision of the professional learning opportunities to improve the quality of teaching and learning in this context, there is still a huge cry about the lack of good professional knowledge and practice among the teachers in disadvantaged schools (SA Department of Education, 2006, 2010, 2011).

Teacher professional development is a crucial element in any educational attempt to improve teaching and learning (Ono & Ferreira, 2010). In its process to implement the new curriculum, South Africa had an urgent demand to focus on the professional development in order to prepare the existing teaching force for the new curriculum. During the initial stages of the reform, continuous professional development was meant to familiarize teachers with the new curriculum, helping them in this process of translating theory into their classroom practice. Nevertheless, as is often the case with educational reforms, more attention was paid to the desired educational change rather than the improvement of teachers’ professional knowledge and teaching practices (Bantwini, 2009). From my personal experience as a former teacher in this setting, I recall that the government, in an effort to enhance their teacher quality focused more on upgrading the *qualifications* of teachers to the neglect of their professional learning.

As noted in Chapter 1, research indicates that during the introduction of the reforms in South African context, traditional approaches to professional development such as workshops, courses, and seminars that were delivered through the cascade approach were popular (Potenza & Monyokolo, 1999; Kriek & Grayson, 2009). Unfortunately, such professional development models had limited effectiveness for South African teachers who were mostly affected by the legacy of apartheid education and thus were exposed to basic schooling and inadequate teacher training (Maistry, 2008: 67). It was only after the recognition that most teachers were struggling to develop learning programs that translated into their classroom practices (Mulaudzi, 2009) that the professional development programs that considered the contextual needs of individual teachers and were focused more on improving the subject knowledge and teaching skills of teachers began to emerge.

Even in developed contexts, scholars point out that education reform movements usually flounder in deprived settings for various reasons, such as being implemented in weak social, political, and professional scaffolding; inadequate support for teacher development from leadership on the ground; and less recognition of teachers' beliefs and their capabilities (Payne, 2008). The schools in these contexts (as in the United States urban areas studied by Payne) are often staffed by new teachers, who soon become overwhelmed because of difficult conditions under which they work and less support from the organizational leadership. These schools bear some resemblance to disenfranchised schools in the South African context, that are often staffed by *unqualified* teachers or those who are about to retire and thus lack motivation to improve their learning and teaching.

These teachers are expected to learn to teach to the reforms' expectations on their own. What usually happens in such instances is that these teachers just learn to cope rather than strive to be the best teachers (Darling-Hammond, 1997). A pervasive demoralization of

the teacher workforce is common in such settings, whereby they do not believe things will get better or that their students can be successful (Payne, 2008).

Summary of the Conceptual Framework

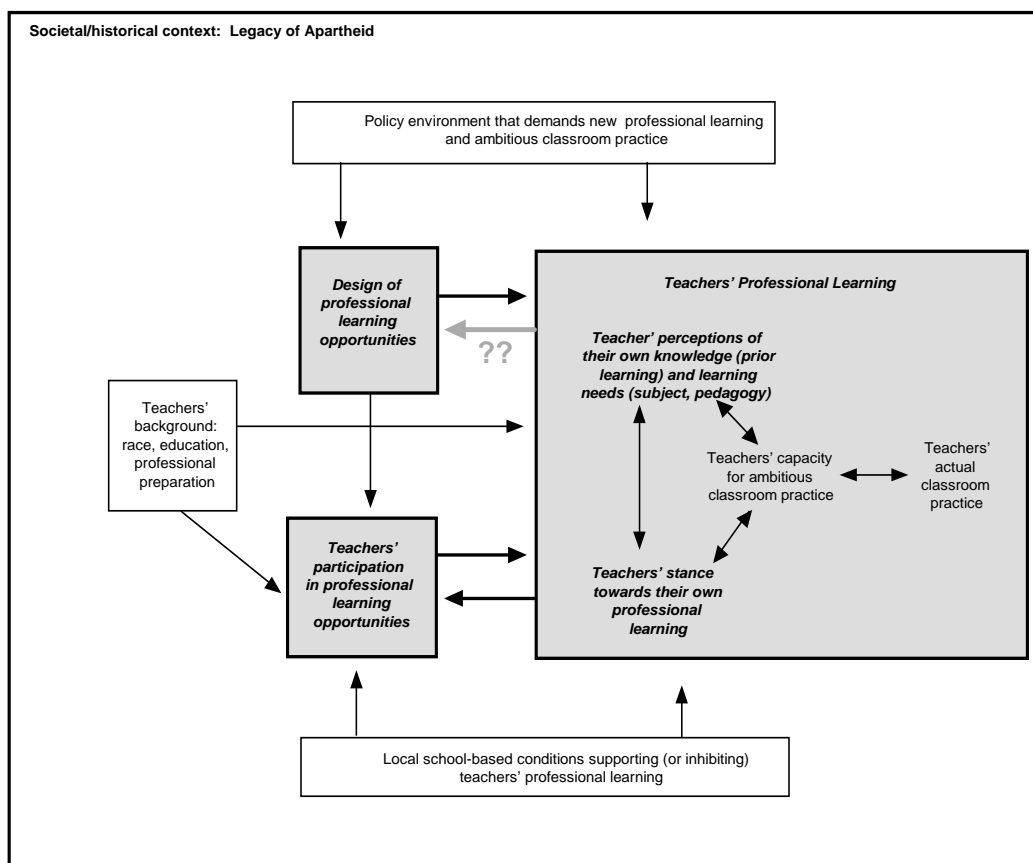
Professional learning encompasses the changes in both teachers' capacities for their practice and the practice itself (Knapp, 2003). It refers to the changes in teachers' knowledge, skills, and thinking about their professional practice. At the same time, it alludes to the changes in the practice itself when teachers apply their new-found knowledge and skills. The more recent alternative views of professional learning and how to support it bring into view a new set of assumptions about how professional learning and classroom practice are related. In an older view, the two would be completely distinct: teachers would acquire knowledge first, and then "apply it" in the classroom. The newer, more situated view would treat the learning as intimately bound up with classroom practice, as realized in the actual new forms of participation in the classroom.¹

Teacher professional learning remains a puzzle that researchers struggle to solve, in that effective change in some of teachers' knowledge and practices seems to be unreachable. Knight, 2002, p.2, as cited by Bantwini (2011) describes this puzzle as "a never ending story that is like a religious struggle in an escape of sin." An attempt to contribute towards solving this puzzle was the driving force behind this inquiry. The inquiry intended to explore whether teachers themselves understand their own knowledge and practice, and if so, what do they understand and what influences that understanding. In pursuing the research questions presented in Chapter 1, this study's conceptual framework, schematically described in Figure

¹ As will be discussed in Chapter 3, for this study I was unable to observe the actual practice but as teachers in the study expressed their understanding of own knowledge in the reform context, they also attempted to give a picture of how that knowledge link to their classroom practice.

2.1, foregrounds key ideas from scholarship on teachers’ professional learning, knowledge, and learning stance, coupled with research on high-quality professional development and the contexts for professional learning, represented both in the current and historical policy environment and local school conditions.

Figure 2.1. Conceptual Framework Regarding Teachers’ Professional Learning In The South African Reform Context



In this study, I treat teacher professional learning as the process that evolves both during and after engaging in the various events that constitute formal, intentional professional development. This process is initiated when the teacher enters the teacher training phase and continues throughout the teachers’ working experience. The kinds of teacher knowledge that

are developed in these phases focus on what teachers need to know and how they learn to teach that, what they actually know and how they teach. These encompass the knowledge of practice, knowledge in practice, and knowledge for practice (Cochran & Lytle, 1999). However, the crucial knowledge is the knowledge of content and how to teach it that is referred to as special knowledge (Shulman, 1986, 1987). This is the type of knowledge that distinguishes teachers from other professionals. Thus, it is inevitable for every teacher to possess this professional knowledge. Otherwise, they find it hard to do what they are supposed to do in their classrooms.

The inquiry also considered how teachers understand themselves as learners and the process of learning itself—in other words, it matters both what knowledge they possess and how they understand or perceive what knowledge they have (or don't yet have). For education reforms to become a reality, teachers need to assume a learning stance, that is, acquire a predisposition to seek and absorb new knowledge and teaching approaches. To do that, they need to, first, have a sense of self as subject matter experts, pedagogical experts, and didactical experts. Teachers may or may not be well prepared to express what they understand about their learning due to the legacy of their past. However, the chance to articulate what they understand about their learning and teaching helps them and others understand their views about the professional learning opportunities presented to them. The insight gained from there may be useful in giving future direction towards the design of professional learning opportunities that may be meaningful to these teachers.

Second, as signaled in Figure 2.1, to be able to assume a learning stance, teachers need to participate in high-quality professional development programs that are necessary to support teachers in their reform context. What they know and the stance they assume is thus very likely shaped by the design of the professional learning opportunities they participate in. High-quality teacher professional learning experiences can have a significant impact on

teachers' knowledge and teaching practices, students' learning and on the implementation of new educational reforms (Villegas-Reimers, 2003). High-quality professional learning opportunities refer to those learning opportunities that carry certain critical features that are linked to changes in teachers' knowledge and skills. These learning opportunities should also allow teachers to engage in critical reflection about their knowledge and work either as individuals or in collaboration with their peers. Thus, this research inquiry uses the context-based lens to view teachers' professional learning opportunities that are likely to expand teachers' knowledge and learning.

Finally, to fully understand the trajectory and possibilities for their professional learning, South African teachers' learning is likely to be pervasively shaped by several important contexts, also highlighted in Figure 2.1. For one thing, their learning is set in motion yet also constrained by a current and past policy environment that, on the one hand, urges them forward to ambitious form of teaching practice, yet historically has critically limited what they could and should learn as professionals. Reflecting that environment, individual teachers come to their teaching and professional development experiences with background heavily shaped by their racial roots and prior professional preparation and experiences. Finally, the teachers' workplace and the support they receive from school leadership will have a great deal to do with what they can accomplish as learning professionals (Darling-Hammond, 1997; Clarke & Hollingsworth, 2002; Wallace, 2010; Paris & Spillane, 2010; Darling-Hammond & Richardson, 2009).

These elements of my conceptual framework are a central guide to the findings I present in Chapter 4. But, first, in Chapter 3, I describe and justify the design and methods through which I explored this topic.

Chapter 3

Research Design and Methods

This dissertation study sought to explore what teachers in South African rural and township schools understand about their subject matter knowledge and teaching practice, particularly within their current reform context. It aimed to investigate teachers' professional learning process by encouraging them to reflect about what they know regarding the reform curriculum they are teaching, the subject matter knowledge it may imply, and how they go about teaching it. They were also encouraged to express their understanding of how they learned the curriculum, their subject matter and how to teach it, and in particular, how the kinds of professional learning environments they had been able to access did or did not facilitate their learning. By doing that, the study intended to discover how to motivate the teachers to use those elements of knowledge articulated to engage in the creation and design of new professional experiences for themselves. In sum, this study aimed to answer research questions concerning South African teachers' views of their own professional learning and themselves as learners, their accounts of the professional development they experience, and the ways these professional development experiences can facilitate their learning.

To answer these research questions, I conducted a "basic" interpretive study (Merriam, 2009), which drew on several elements of case study research designs, though it stopped short of incorporating a full multiple-case design and analysis process. Qualitative research was the best way to learn about the issues at the heart of my study because I aimed to investigate what meanings teachers attribute to their professional learning and their professional development opportunities (Miles & Huberman, 1994; Merriam, 2009). Through basic qualitative study, the researcher strives to understand and make sense of the phenomena from the participant's point of view (Merriam, 2002)—in this instance, the teachers' point of

view, a perspective that has been noticeably missing from policy discourse and the design of professional development in South Africa. The components of all qualitative research include the search for meaning and understanding, the researcher being the instrument for data collection and analysis, using an inductive strategy to yield rich and descriptive data (p. 6).

The type of qualitative design that I employed drew on a case study research strategy (Merriam, 2009; Yin, 1994) in order to explore teachers' understanding of their learning. In my research the unit of analysis was the teachers' understanding of their professional learning as well as their learning experiences and support structures. By focusing on the teachers' understanding of their learning and learning opportunities, I intended to gain a better understanding of these teachers' vantage point, which would clarify what they need—at least, what they believe they need—and what they find meaningful in their professional development programs. Case study provides the researchers the ability to focus on the particular phenomenon in order to gain a rich, 'thick' description of that phenomenon in a manner that brings clear understanding to the reader (Yin, 1994; Merriam, 2009), and in a classical case study the researcher seeks to develop "in-depth description and analysis of a bounded system" (Merriam, 2009, p. 43). A multiple-case design simply adds parallel or contrasting bounded systems. My design identified a set of contrasting teachers as "mini-cases" of professional learning in the South African reform context, as would happen in a multiple-case design, but given some significant limitations in available data and my overall analytic goals, I refrained from conducting a full "within-case analysis" of each teacher in their school setting. As described later, my analysis process, drawing from cross-case strategies, was able to identify patterns, limiting conditions, and important differences among the teachers.

Specifically, including multiple "cases" and conducting a cross-case form of analysis gave me an opportunity to examine complex units that have multiple variables which are of

importance in understanding the teachers' knowledge about their professional learning (Merriam, 2009). By focusing on six teachers from different school settings, with varying teacher qualifications, initial teacher education experiences, and teaching experiences I was able to explore the wider applicability and credibility of the findings, because if there are more and varied cases, the findings are likely to be believable to audiences concerned about the *full population* of teachers, as policy audiences often are (Yin, 1994; Merriam, 2009). While case study designs—and for that matter, all qualitative research—do not offer the basis for “generalizing findings to larger groups of participants or cases” (p. 45), as surveys and other quantitative designs may do, by including more and varied cases, the findings are likely to be seen as applicable to a variety of contexts, and further allow the phenomenon to be explored more deeply by testing its conceptual boundaries under different conditions (Yin, 1994; Merriam, 2009).

A qualitative interpretive approach, using multiple cases, was especially appropriate for answering my questions since my focus was on examining how teachers articulate their understanding about their professional learning and professional learning opportunities, and how they came to that understanding. As Miles & Huberman (1994) state, the power of words can “prove to be more convincing to a reader than summarized numbers” (p. 1). What an individual says in their own words is much easier to believe than numbers that might be complex to understand and you are unable to probe further.

Sampling of Settings and Participants

In order to obtain the required information for pursuing research questions in this study, particular settings, persons, or events were deliberately selected as the case to be studied to set up an array of mini-cases that would reflect my overall concern (understanding teachers' professional learning in settings that pose adverse circumstances for teaching) and that reflect differences among them that might be important to how they approached their

professional learning or what came of it. In so doing, I was able to uncover the interaction of significant factors characteristic of the phenomenon.

Settings

I conducted this study in two school districts in the province of KwaZulu-Natal (KZN), South Africa. These are the school districts in which the most disadvantaged (rural and township) schools within this province reside, thereby enabling me to get at teachers' professional learning in school settings that pose difficult conditions for the practice of teaching, as well as for any new professional learning that teachers might do. "Township" is a term commonly used in South Africa to refer to often underdeveloped urban living areas that, during the Apartheid era, were reserved for non-Whites. Townships were often built on the periphery of towns and cities. Although the purposes of their origin may differ, townships can be related to residential "projects" in the US, designed for low-income residents in urban areas.

These school districts are King Shaka and Ilanga Districts (pseudonyms). King Shaka school district consists of approximately five hundred public (state) schools that are largely spread throughout the townships, urban, and semi-urban areas of KZN province. It is the largest school district in this province. The majority of teachers in this district show an improved qualification profile with the minimum qualification being a 3-year teacher diploma (SA Dept. of Educ., 2006). Ilanga school district contains four hundred and twenty eight schools and most of these schools are in the rural areas. Due to shortages of teachers in rural areas, sometimes schools are compelled to recruit people with other qualifications. However, they are encouraged to enroll for a one-year postgraduate teacher's diploma offered in many of the higher education institutions in South Africa.

Six teachers from different rural primary and township secondary schools (three from each type of setting) were selected for this research study. Township and rural schools, although not all, usually have teachers that possess poor subject matter knowledge, lack resources, struggle to get a grip on the curriculum changes, and have limited exposure to professional development opportunities, to mention just a few of the challenges in these schools (Kriek & Grayson, 2009; Bryan, 2011; Mestry, Hendricks, & Bisschoff, 2009). The six schools were targeted as follows:

- (1) *Three “township” secondary schools (Schools 1, 2, 3) from King Shaka school district*, that are recognized as highly disadvantaged due to acute lack of infrastructure and resources, well-qualified teachers and access to professional development opportunities. Most often than not, such schools are under purview of the provincial education department because of the poor matriculation pass rate (this refers to Grade 12 which is a point of graduation from high school in South Africa). Such schools are placed under school improvement plans, where teachers, supposedly, receive more support in the form of increased professional development opportunities, frequent school visits from the district subject advisors (district coaches) and more funding for teaching resources and learners’ materials.
- (2) *Three rural primary schools (Schools 4, 5, 6) from Ilanga school district*, that are also recognized as highly disadvantaged as the township schools above. Primary schools, particularly Grades 3 and 6, are also subjected to systemic evaluation in the form of annual national assessment. This assessment is administered to learners at the end of each phase² to mark a shift from one phase to another.

² The South African education system is referred to in phases that are as follows: Foundation Phase, Grade 0 (also called reception, or Grade R) to Grade 3, Intermediate Phase (Grade 4 to 6), Senior Phase (Grade 7 to 9), and Further Education and Training Phase (Grade 10 to 12).

These particular six school settings were chosen according to their performance rankings in terms of national assessment. Among the worst performing schools of these two districts, I selected the most accessible ones. Being a native of KZN province and having been a schoolteacher for a number of years near the districts that I chose, I had considerable “insider knowledge” of the settings that I studied. I had an established network among educators as well as school and district administrators in these schools that helped me to gain access to these settings and secure permission from targeted teacher participants. Also, I was able to make sense quickly of what I heard. In sum, setting selection for this study was both convenient and purposive (Merriam, 2009).

Participant Selection

Using maximum variation purposeful sampling strategy (Patton, 2002), I selected six teacher participants, who were likely to be information-rich cases, one from each school in the two settings described above. This type of sampling allows researchers to explore the common and unique indicators of a target phenomenon across a broad range of demographically varied cases (Sandelowski, 1995). Maximum variation purposeful sampling was suitable for this study since, due to time and resource constraints, I was only able to recruit a small sample of teachers from one province out of nine provinces in this country. While acknowledging that this sample does not represent the general population of teachers in rural and township schools in the whole country (nor was that intention of this kind of study), it helped me to include participants with varying characteristics as discussed below that form the general pattern in South African disadvantaged schools from all the provinces. KwaZulu-Natal is in many ways comparable to most of the other larger and well-populated provinces in the country, and by selecting both rural and urban conditions, I included teachers who work across the range of settings which characterizes the whole country.

Selection was based on the following criteria:

- (1) *Rural or township school experience*: selected teacher must have worked only in rural or township schools, or both. Teachers that had worked in other settings such as private or suburban schools were likely to have had better professional experiences because such schools were usually privileged, and for that reason, such teachers were excluded from this study.
- (2) *Teachers who were initially trained to be teachers before and after the transition phase*. Here I wanted to ensure a contrast used on the nature of the teachers' exposure to the Apartheid-based educational system and all that it assumed. Consequently I selected some teachers who were exposed to limited training and teacher development opportunities under the Apartheid system, and therefore entered the profession with limiting ideas about their roles, and themselves as professional learners (they may have participated in other professional development experiences since). Other teachers in the sample were initially trained after the transition phase: these teachers were exposed to an improved system of teacher education that sought to give them a more expanded view of their roles and professional learning (they, too, may have accessed various professional development opportunities since).
- (3) *Teachers with a teaching diploma only, and who are not engaged in any advanced education programs alongside those with a teaching degree and more or who are currently engaged in advanced education programs*. In the former category are teachers who typically show less enthusiasm for improving their teaching and learning experiences. A lack of interest in engaging in professional development programs is common among these teachers, as compared to those in the second

category, who have taken steps to further their professional learning beyond their initial teaching certificate. Although this is not necessarily the norm, teachers with higher levels of education tend to possess more professional knowledge and are more confident in their teaching skills since they have been exposed to various learning experiences.

Table 3.1 below summarizes the criteria of the selected teacher informants, and shows how I was able to vary the teachers' training backgrounds within the two types of school settings (though not suprisingly, among the rural teachers, more limited educational backgrounds were more prevalent than in in the township-based teachers).

Table 3.1. Characteristics of Study Participants

<i>Participants</i>	<i>School</i>	<i>Period of Teacher Education</i>	<i>Level Taught</i>	<i>Qualifications</i>
Teacher D	Rural	Pre-Transition	Primary	Diploma
Teacher E	Rural	Post-Transition	Primary	Diploma
Teacher F	Rural	Post-Transition	Primary	Degree/Degree & Above
Teacher C	Township	Pre-Transition	Secondary	Diploma
Teacher B	Township	Pre-Transition	Secondary	Degree/Degree & Above
Teacher A	Township	Post-Transition	Secondary	Degree/Degree & Above

The different combinations of the criteria above form common patterns of South African teachers in disadvantaged settings. For instance, a teacher who has a three-year diploma or less is likely to work in primary schools. Someone with a four-year teaching degree or more usually works in secondary schools. From the widely different individual

cases, the common patterns that will appear in the findings are important in showing the main shared understanding of teacher learning in these settings (Patton, 2002). To recruit participants who fit these criteria and are potentially information-rich cases, I made use of key informants (Miles & Huberman, 1994) such as the school administrators and former colleagues who recommended and secured permissions with the participants on my behalf.

Data Collection Strategy and Procedures

To provide a sufficient description of my cases (Patton, 2002), I collected data from two sources: interviews and document review. I had originally intended to include an observational component as well, but unusual circumstances in the field prevented that possibility (see discussion in the design limitations below, concerning this aspect of the study design).

Semi-structured Interviews

Given my overall goal of understanding how teachers experience and view their own professional learning, an interview strategy formed my primary way of capturing that experience—and as such it was an especially appropriate and flexible tool, allowing me to “get inside” the teachers’ experience of their professional learning both at the present time and in years past. Specifically, I used open-ended semi-structured interviews to investigate how these teachers interpreted their day-to-day experiences with their subject matter, how they learned to teach it, and how they teach it (Merriam, 2009). A semi-structured interview is a combination of more and less structured questions. I chose this type of interview because it allowed me to get specific information from my respondents, respond to the situation presented to me by the respondents and at the same time allow me to probe and follow up on ideas that they were raising. I conducted two rounds of open-ended semi-structured

interviews with each teacher respondent on different dates and that gave me a total of twelve interviews. The multiple interview strategy enabled me to engage longer with my respondents (Lincoln & Guba, 1985) since this was my main source of collecting data. Through this strategy I was able to identify consistency in answering of the questions. It also gave me an opportunity to reframe the questions that helped me elicit more responses. Furthermore, this strategy helped me to develop rapport with the teachers which made them free to divulge even more information than they had done in our first encounter.

The first session was an in-depth interview that ranged between 45-90 minutes per participant. The questions that I asked focused on what teachers know and think they need to know about their subject matter and teaching it, for example, I asked each individual participant to talk briefly about the important concepts of his or her particular subject for the particular class and how he or she learned to teach it (see Appendix B). I also asked questions about their professional learning opportunities (both teacher education and professional development programs) and how and what about these helped or did not help the teachers to reach the understanding that they have about their professional learning. The second session which ranged between 15-30 minutes for each respondent was a debrief interview that was conducted towards the end of the data collection period to clarify questions that arose from the first interview session.

All these interviews were audio taped and then transcribed later. I used an interview guide that included the questions that I asked all participants, follow-up questions with probes, and a list of topics that I had hoped to know more about from the teachers (Merriam, 2009). (Some participants who had been more articulate on the interview topics and were open to further interviews were interviewed up to four times—acting almost as “key informants”.) As theories started to build up during the analysis stage, some concepts seemed

to be more relevant and needed more information (Strauss & Corbin, 1998). Those particular interviews were often very short in duration, lasting from 5-10 minutes.

Review of Documents

Documentary evidence served to supplement and highlight what was learned from the interviews. Two documentary sources were used.

National curriculum documents. The South African education system is in its third revision of its curriculum; schools across the nation all are expected to teach this curriculum. It was launched in 2010 (SA Department of Education, 2011) and is currently being introduced in all grade levels. The new Curriculum and Assessment Policy Statement (CAPS) updates the previously revised curriculum. This CAPS document is simply known as the *National Curriculum Statement Grades R-12*. It aims to provide clearer specifications of what is to be taught and learned each school term-by-term. For each subject it indicates the main topics that should be taught, the aims of learning those topics, the requirements for the teacher to offer and the learner to learn that particular subject, as well as suggestions for assessment. For example, concerning “Tourism for Grades 10-12,” there are nine main topics in the curriculum for the whole school year. The first topic looks at “tourism sectors”, which should be further divided into subtopics that can be taught for the whole quarter. The specific aim for this topic is “so that learners will study different types of tourists and the purpose of their travelling” (page # 36). Requirements for learners include “a textbook, a road map of South Africa, and access to a variety of tourism magazines”. The teacher should have access to e-mail facilities and the internet and a school should have a permanent classroom for tourism, not shared with other teachers. Formal assessment can be a project or class test.

This curriculum document served as a reference for what knowledge and skills teachers should possess in order to achieve desired student outcomes and thus it indicated what teachers need to learn from their professional development programs. All teachers have this document; they know what skills and knowledge they need to be enabled to teach. That is how they are able to determine the weakness of their professional development programs if its content does not focus on enhancing those skills.

Professional development program documents. I also reviewed the professional development program documents used in sessions that my teachers had attended. Specifically, the resource materials (work schedule, cluster moderation forms) and workshop meeting agendas that were used by the program facilitators to give the background and overview of the whole professional development guidelines and requirements. I reviewed a wide range of professional development programs that these teachers were exposed to, which varied somewhat, depending on the professional development experience attended. For example, in the “departmental workshops” (those facilitated by staff from the Department of Education) teachers were usually provided with the agenda that displayed the topics that would be under discussion. Most often, in the subject cluster workshops, they were provided with ready-made work schedules that contained topics to be taught and the fixed timelines. These documents helped to confirm the themes around which my research questions are organized such as the shaping of ideas about professional learning. For instance, most of these professional learning experiences focused on identifying content to be taught given as a list of topics. There were hardly any experiences, from the reviews I did, that focused on training the teachers about their content and teaching it. Hence, teachers perceived most of their experiences as not enhancing their knowledge and skills (to be elaborated further under the Findings chapter).

Summary of Data Sources by Research Questions

The two data sources offered different kinds of information that pertained to my research questions as shown below. Table 3.2 below displays the data sources used for each research question:

Table 3.2. Research Questions by Data Sources

<i>Research Questions</i>	<i>Data Sources</i>		
	<i>Initial interview</i>	<i>Follow-up interview</i>	<i>Documentary sources</i>
What does 'professional learning' mean for teachers in South African rural and township schools? -What do they claim to know about their subject matter and classroom practice?	X	X	
How have their ideas about professional learning and their own stance towards themselves as learners been shaped – and are currently being shaped – - by their personal and professional backgrounds? - by their work contexts? - by their school leadership?	X X X	X X X	X
How do teachers perceive the professional learning programs that are provided for their learning? - what characteristics of these programs enhance or hinder their learning?	X	X	X
What kinds of professional learning programs and supports can help these teachers assume a "learning stance"?	X	X	

Timeframes and Events

The interviews that I conducted with the participants explored the teachers' reflection on their professional learning and professional learning experiences prior to and after the transition phase in the South African context. The process of document review helped to bring an understanding on how teachers gained the perspectives on their professional learning. I conducted this study over a 7-month period starting from September 2012 and ending at the beginning of April 2013. During the months of September and October, I recruited the participants and secured their permission. I had planned to start interviewing teachers in November but it turned out to be an unsuitable time to engage with teachers. This was the period towards the end of the school year, and consequently, teachers were busy with learners' examinations. Thereafter, teachers went on school vacation from December until mid-January 2013. That was the time I began the interviews process with my participants and it ended at the beginning of April 2013. The documents for review were collected after the interview sessions from some of the participants and were reviewed during the month of April 2013.

Approach to Data Analysis

The overall approach that I used to analyze the data for this study followed the general inductive approach (Merriam, 2009; Miles & Huberman, 1994). When using the inductive approach, the researcher identifies units of data in the form of concepts, themes, or phrases that emerge and form common patterns. Drawing from my research questions and conceptual framework on teacher professional learning, its opportunities, and professional development, I began by identifying the key concepts and themes (Coffey & Atkinson, 1996). First, I made a list of major themes out of my research questions and conceptual framework, for example, themes on 'knowledge of subject matter', 'knowledge of classroom practice',

and ‘types of professional development experiences’ were identified. These themes offered an overarching organizing framework for findings, one that was deductively generated from the initial concerns of the study. This thematic organization provided a useful way to organize the more inductive process of analysis that I undertook, as described below.

In approaching my data, I bypassed a full case analysis process, which would have featured a “within-case analysis” phase, followed by a “cross-case analysis” phase (Miles & Huberman, 1994). Instead, I went directly into a cross-case analysis process, treating each of the six teachers as an independent source of information that could help to illuminate the phenomenon of teachers’ professional learning in the South African reform context, and in the adverse circumstances of township and rural schools. In a full within-case analysis, I would have examined each teacher separately in relation to his or her particular school context and the specific configuration of professional learning experiences they were able to experience. But given the limitations in my data set, this would not have yielded a sufficiently more developed picture of the teachers’ experiences and perspectives. Furthermore, the cross-case process allowed me to take immediate advantage of the contrasts between the teachers (e.g., in setting, experience base) as an analytic tool.

The next step was to read each transcript to get a sense of what was happening there, and jotting down the ideas and thoughts that came to mind in the margin as I was reading (Merriam, 2009; Saldana, 2009; Miles & Huberman, 1994). For example, an early read of my data, brought to view the notion of teacher background, which I noted in the margin of one of the interview transcripts. This prompted a further more systematic open coding process around this idea. Here, I was engaged in an iterative process of open and focused coding. Using the themes that I talk about above to label the data (broadly construed as a form of focused coding) coupled with a close read of the data to generate more grounded categories (through an open coding process). Thus, I made a list of all the phrases and concepts from the

data, clustering together those that were similar and created a code list. Then I followed these strategies: (1) using open coding (Strauss & Corbin, 1998), I coded phrases, terms, and ideas from the data itself, next to the appropriate line or segments of the data; (2) re-assembling similar codes that gave more focused and complete explanation about the theme or category (through axial coding), to enable me to scan the entire data set systematically for instances of the themes at work (e.g. teacher as role model, less job choices, passion for working with children) which gave a focused theme of “teacher personal background”; (3) generating assertions from the themes by linking them together and seeing how they related to each other and what bigger information they provided about my study research questions; and (4) writing analytic memos based on the assertions that were emerging along with supporting evidence (Miles & Huberman, 1994), which helped me to write a descriptive story that led to the analytic one. Memos helped me to sort out my ideas and question myself where these ideas did not make sense.

Given a much closer read of the interview transcripts and documentary sources, the identification through coding of comparable segments of the data, and the generation of an initial round of assertions, I then made extensive use of the contrasts built into the sample to surface conditions affecting teachers’ perspectives on their professional learning, and the (self-reported) extent and nature of their learning. Here, two contrasts were especially important. (1) I compared responses from those who had started their teaching career and were initially trained under the former Apartheid regime, with those who received their initial training in the post-Apartheid reform era. The striking differences in both the content and pedagogy of teacher education were useful for generating further assertions about the power of teachers’ early professional background for shaping their learning stance, learning opportunities, and what they seemed to have gained from these experiences. (2) In a similar way, I compared teachers in the more and less disadvantaged schools to generate the

assertion about how the lack or shortage of educational resources, types of learners, the location of the school and its community constrain the abilities of teachers to teach as required by the new curriculum.

To verify and make conclusions based in the assertions that I was generating against my data, I made use of various strategies as suggested by Miles & Huberman (1994)—in particular, searching for disconfirming evidence, triangulation, member checking, and setting up a peer review system. To illustrate searching for disconfirming evidence, there was one extreme case where the participant seemed to be satisfied with the professional learning programs and was positive about his learning. It turned out that his case was unique in that he was the only Science teacher and Science being the national priority, more support was given to teachers who were responsible for this subject area. This case did not warrant discarding the assertion that most participants were dissatisfied and discouraged by their professional learning programs, though it provided a useful counter-case, which helped to identify the conditions that could enable or inhibit support for professional learning. I was able to somewhat triangulate what teachers were telling me through the use of the multiple interviews especially from those who took on “key informant” roles. For instance, Teacher B and F (who showed unwillingness to engage in further interviews), when talking about the change of their teaching approach mentioned how difficult it was with the types of learners that are in their classrooms. Teacher D, one of the key informants, clarified this point further by explaining, when I probed about this concern, that teachers were incapable of actively engaging learners since in the past, they could ‘force’ them to engage in their work through the use of corporal punishment which is illegal in the current era. Also to confirm the findings, I conducted member-checks by going back to my participants and sharing the findings from their interviews, to verify if I had captured their responses well. I also sought

assistance from colleagues by asking them to read through one or two transcripts and then note what they are getting from the data.

Limitations of Study Design and Issues of Data Quality

Regarding the study design, by drawing from two types of data sources (interviews and document reviews), the study yielded satisfactory data for my purposes (Patton, 2002), though somewhat more limited than I had originally intended. Initially, I had planned to use three sources— interviews, documents review, and observations of professional development events—since triangulating these three traditional sources (Merriam, 2009) would maximize confidence in the final results. The addition of an observation component, in particular, would be particularly helpful in helping me actually *see*—as well as hear from self-report— what the teachers were experiencing in professional development environments, and how they might be applying this to their actual practice. Due to some constraining situations that were beyond my control, I was unable to conduct the observations. My data collection process was conducted during a period when some of the teacher unions were discouraging their members from being appraised by the education officials and other external people. Unfortunately, I fell into that category of external people. Consequently, I managed to conduct only the interviews and the documents review. Given my focus on teachers’ perceptions, understandings, and experiences, however, the absence of corroborating observational data was not a critical weakness, though it points the way to certain kinds of further research that need to be done soon, if the phenomenon of South African teachers’ professional learning is to be fully understood.

The interviews were therefore the main source of my data collection, and fortunately, because I was focusing on teachers’ interpretations of their professional learning and views of their professional learning stance, this source was the best way to get inside that

phenomenon. The documents offered a secondary source of information, helpful for capturing the context for teachers' practice and professional learning, and also to offer specific reference points for their learning. In that sense, they did not directly contribute towards my understanding of teachers' knowledge of their learning. Rather, they served to give the idea of what the teachers supposedly should know and learn about their subjects and classroom practices, and what the educational system had designed to facilitate their further learning.

Useful as they might be for getting inside the main focus of inquiry, the interviews had several distinct limitations regarding the purpose of this inquiry. First, it is difficult to study the notion of teachers' professional knowledge empirically, because it is often tacit and contextual, and not easy to verbalize. There is also uneasiness concerning the ethics of 'testing' teachers on their knowledge. In the South African context, where teacher unions are fairly strong, such testing of teachers' knowledge is at best likely to be viewed with suspicion. If I could be given a chance to do it differently, I would focus on observing how teachers are encouraged to engage in their workshops and what they are learning in these contexts (the content). Also, I could observe how these events were structured and facilitated. In addition, doing some observation in these teachers' workplaces, would have helped me triangulate what they told me about the school conditions and leadership that my conceptual framework had identified as important potential influences on their professional learning. As it was, I had few ways to corroborate the teachers' views of these conditions in relation to their professional learning.

That said, I was able to do the interviews in a manner in which my informants would have felt relatively at ease, and likely to have been forthcoming about their professional work, learning, or views of professional development experiences. To do so, first, I conducted the interviews in the participants' own language to make sure that they understood

all the questions and they expressed themselves freely when responding. The interviews were later sent to translation services so they could be translated to English. Also, all the interviews were conducted in the participants' homes or my home (informal setting) so that they would not feel as if they were being evaluated for work. In addition, I kept referring them to their consent form and reminding them that the interviews were for my doctoral study purposes and would not be used for their professional evaluation. Second, I persisted with the questioning where it was possible. Although not all participants were open to further interviews after the two consented sessions, two of the six participants were open to further interviews. Lastly, these two participants made it possible for me to verify all the facts that kept coming up in most of the interviews, as well as verifying some general facts that were mentioned by those other participants who were later not available for more questioning.

Concerning the issues of data quality, in qualitative inquiry, the human investigator is the key instrument in data collection and its analysis (Patton, 2002). Therefore, she or he needs to be sensitive to the data and to have skills that will help them make good decisions on filtering data as they collect, analyze, and interpret. My skills as a novice researcher may have affected the data quality in that I may have not been able to ask questions in a manner that yielded relevant information or probe responses from my respondents in the most effective way. I noticed that tendency as I conducted the interview with the first participant. However, through consistent practice and communication with my research peers and supervisors to verify some techniques, I was able to strengthen my interviewing skills and gained confidence in doing it.

In addition, as a native of the setting where the study was conducted and being a former teacher in this setting's education system, I have an insider's perspective. On one hand, the fact that the setting was familiar to me was advantageous in that I knew the culture, languages, and the habits of the participants in this setting. For instance, I could tell when the

participants were withholding information out of respect, and when they were resisting 'authority' since I was in a position of authority at that moment of the interview. In that case, I rephrased the question or made the participants feel at ease by reminding them of the confidentiality as well as the purpose of the interview. As a former teacher in the same context, I also understand the education system and was able to quickly make sense of what I saw and heard.

On the other hand, as an insider, I had the challenge of staying objective, since I had undergone similar experiences as the participants, both as a teacher and as a professional learner. At times I found myself 'injecting' my own views and feelings as I was interviewing them. Since the goal of this study was to capture the real and unfiltered voices of the teachers in the field, I kept reminding myself to stay as neutral and credible as possible as a researcher. As far as possible, I did member-checks with the participants during our second session and constantly with the other two participants who, acting as "key informants", agreed to be interviewed on further occasions, to ensure accurate interpretations of what they had said. I also used a peer review system with researcher colleagues who were not involved in data collection, to help double check the possible operation of biases. These double checks and the peer review system strengthen the findings of this dissertation.

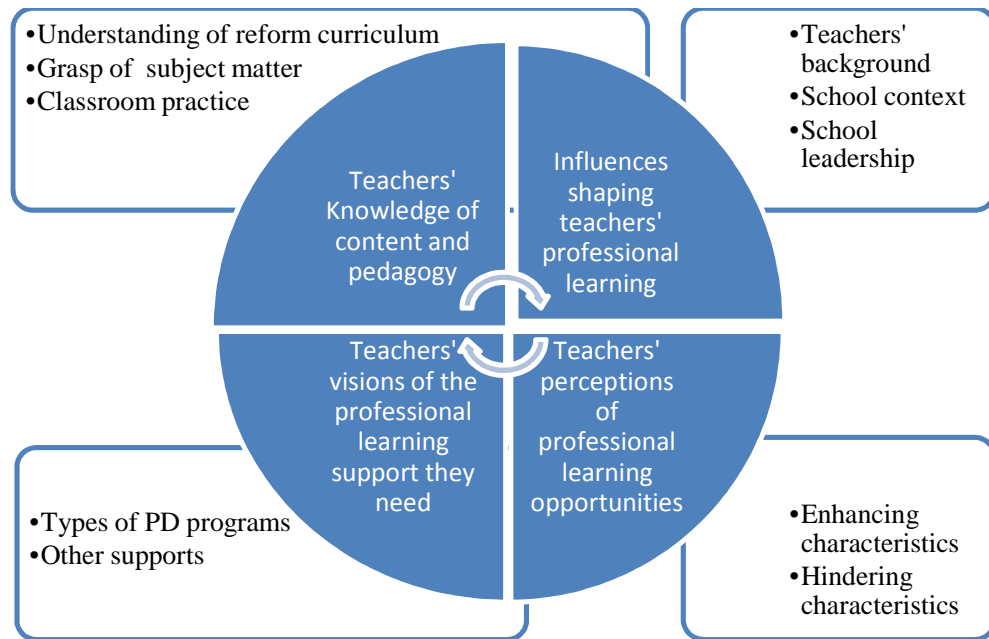
Chapter 4

Teachers' Understanding of their Professional Learning and How It is Supported in the Education Reform Context

This chapter presents the findings based on an analysis of the data presented by the participants. Four themes emerged from their data: (1) *Teachers' knowledge of the reform curriculum and what it expects of their subject matter knowledge and classroom practice.* This theme looks at what teachers know about the new curriculum and how it may depart from the curriculum they used to teach, as well as what it implies for their understanding of subject matter and approaches to pedagogy. (2) *The conditions that shape how these teachers' are developing new understandings of the curriculum, content to be taught, and classroom practice.* This second theme considers various influences on these teachers' learning, especially those that derive from the teachers' background and initial training, the school context, and school leadership. (3) *Teachers' perception of their professional learning programs.* This theme is specific to the professional development programs that teachers engage in to promote their professional growth in the current reform context. It highlights the characteristics of these PD programs that teachers see as enhancing and hindering their professional learning. (4) *The support for professional learning that these teachers envision for themselves.* This theme considers the types of professional learning activities and other supports that teachers believe they need.

Figure 4.1 below displays the summarized view of the above themes:

Figure 4.1: Themes of findings as identified in data.



The chapter is divided into three sections. First, a brief overview of the South African's reform context lays the groundwork for understanding the demands placed upon teachers to engage in their professional learning. Second, I present the views of these teacher participants on their professional knowledge and learning through the first two themes that I identified after analysing the interview transcripts and the documents highlight what teachers understand about the reform curriculum, what it implies for their current subject matter knowledge, and their ways of teaching it. Third, I review findings related to the third and fourth themes, concerning the way teachers experience and envision professional learning support. The teachers' biographies and the historical background of their school settings are also presented (see Appendix A).

The South African Reform Context and its Demand for New Professional Learning

As briefly highlighted in the introduction section, the curriculum reform in South Africa was implemented after the post-Apartheid elections that took place in 1994. Since then, three national curriculum reform initiatives have been introduced. The first initiative launched in 1997 was known as Curriculum 2005 (South African (SA) Department of Education, 1997) Later it was changed to National Curriculum Statements (SA Department of Education, 2001), and recently in 2010, it was further changed to Curriculum and Assessment Policy Statements (SA Department of Education, 2010). The common element among these initiatives is their approach to education which is focused on outcomes, consequently, it was labeled as Outcomes-Based Education (OBE). Teachers in this study and most South African teachers often use the term ‘OBE’, whenever talking about their curriculum reforms, regardless of which one they are referring to.

The genesis of Outcomes-Based Education marked a noticeable shift from a teaching and learning approach that emphasized the content to the approach that focuses on the outcomes. Outcomes make explicit what learners should know (Jansen, 1999b). For example, in *Mathematics for the Foundation Phase* (Grade R-3) the first outcome is that “*the learner will be able to recognise, describe and represent numbers and their relationships, and to count, estimate, calculate and check with competence and confidence in solving problems*” (documentary evidence). The old curriculum paid attention to the content coverage and what the teacher or the textbook had to say (Education Information Center, 1996, p.12)—it was important that learners remembered and repeated everything they learned, and not whether they understood and were able to use what they had learned in different ways or situations. The new curriculum is learner-centered and expects learners to take charge of their learning, as well as apply it to problems, situations, or activities. Needless to say, this change in

curriculum placed a huge demand on teachers to change their understanding of mathematical learning, deepen their subject knowledge, and change their classroom practice.

There are many implications of these curricular changes for teachers' professional learning and their expanding awareness of what they can and should be doing in the classroom. One set of implications has to do with the roles that teacher and learners assume. Teacher B is one of the teachers, with both school and teacher education experience in the Apartheid era, who had taught for a number of years in the old era. She attempted to explain how they understood these reform changes:

The teaching approach is different because the government has introduced many new curriculum changes.....such as OBE, NCS, and now this new one, so now, for example, the teacher is required to give learners work and then learners do more work, like research and find information on their own, unlike before where we did all the work.

As Teacher B's comments underscore, both teacher and learner had to assume different roles in the new curriculum reform context. This expectation was based on the assumption that teachers were qualified and would be able to make sense of such a challenge (Jansen, 1999b). A departmental document stated the following new roles that the teacher should assume (SA Department of Education, 2000): learning mediator; interpreter and designer of learning materials; leader, administrator, and manager; scholar, researcher and life-long learner; community, citizenship, and pastoral role; assessor and learning subject specialist. With or without any form of assistance or support structures, it was imperative for teachers to assume these particular new roles. Unfortunately, the document failed to address the question of 'how that would happen'.

All the six teacher participants had experienced the so-called Apartheid education at some point in their lives, specifically, their early school education. Unsurprisingly, even

though some of them (Teacher A, E, and F) had trained to be teachers and started teaching in the post-Apartheid era, as we were talking they also referred to the pre-Apartheid era because that is what they knew the most. Whatever their formal training after the end of Apartheid, their “apprenticeship of observation” (Lortie, 1975) had instilled in them many of the ideas about teaching and learning that the Apartheid regime promoted. Thus, teachers referred a lot to ‘before,’ which means the old era or curriculum. Teacher D, whose school and teacher education as well as teaching experience is similar to that of Teacher B’s and C’s, shared her thinking about the introduction of the new curriculum reforms in this way:

First of all, change is not easy because I was in training for three years, then I tried to develop myself privately and then while you are doing that, there is curriculum change and then you are expected to go and train for five days and understand all this thing in few days, so this is one of the challenges we had with these reforms. I remember the confusion, the old curriculum told us about specific aims and general aims, but then with the changes we were supposed to know learning outcomes, assessment standards.... Now with CAPS we are supposed to focus on the topic and its contents....what I knew before is that I was supposed to stand in front of the learners and talk, but now they emphasize groupwork, diversity, learner space, yet we are in the rural areas. Sometimes you find that the environment is not conducive for that....

Teacher B has clearly internalized the idea that she and her students can and should interact in new ways in the classroom, and that this set of interactions presumes a different kind of focus on and understanding of the content. At the same time she communicates a lack of clarity about what exactly it means to do this, or how, and that her attempts to do so happen in a difficult environment.

As other teachers expressed, the introduction of the new reforms brought “*the fear of the unknown because of not knowing what to expect*” according to Teacher E and “*confusion*”

as stated by Teacher D. In general, teachers were of the opinion that the new education reforms were rushed and did not give them enough time to comprehend the new terminology, changes, and the expectations. The next section provides a detailed look at the teachers' vantage point on their understanding of the shifts that they had to make in their pedagogy and teaching practices during the reform context.

What the Teachers Understand about the Curriculum They are to Teach and How to Teach It in Current Reform Context

The first two themes emerging from the data help to capture how teachers thought about and understood the curriculum they were teaching, and also their ways of approaching that teaching. The data also allow us to identify salient conditions that, from the teachers' viewpoint, were strong influences on their professional learning, either enhancing it or limiting it.

Theme 1: Teachers' Knowledge of the Reform Curriculum and What it Implies for Their Teaching Practice

This theme considers what the participants understand about the reform curriculum, including the demands it placed on their subject matter knowledge and how they teach it. It is further divided into sub-themes. The first sub-theme looks at the teachers' awareness of the new curriculum and its subject knowledge demands and what these demands imply for these teachers. The second sub-theme addresses how their teaching practice may have been impacted by the changes and how they have (and have not yet) adjusted their old teaching practices to adapt to the new reform context.

Awareness of curriculum and implications for subject knowledge in the new reform context. Awareness of the reform curriculum reflects the teachers' grasp of the nature and sequence of topics set forth in the new curriculum, along with accompanying skills that

students are expected to develop along the way. Knowledge of the curriculum implies, but does not presume, good “subject knowledge” on the teachers’ part. I divide teachers’ subject knowledge into what I call “the elements of understanding”. These elements include the subject knowledge base, subject concepts, how these subject concepts have changed or not changed in a reform context, and the purpose for teaching those concepts (Verloop, Van Driel, & Meijer, 2001).

First and foremost, the participants appear cognizant of the fact that the subject knowledge base is crucial to be able to teach their subjects well; at least, they assert that they need good subject matter knowledge. Nevertheless, the reality is that the majority of teachers, particularly those that teach in the township and rural schools, are likely to lack this subject knowledge base required in the reform context because of the inferior quality of their past education. Here, my data do not permit an accurate appraisal of the actual extent of subject knowledge these teachers possess, but their responses make clear a somewhat defensive stance on their part concerning this matter. When I asked them if they thought they had a good base of knowledge about their subjects, almost all of them felt uncomfortable to respond to that. Instead, they gave indirect responses that implied that they believed they had that knowledge base. For instance, Teacher C responded like this, *‘teaching and creating task activities can be challenging and next to impossible if you have no subject knowledge’*. Even though this was a self-report, Teacher A revealed his understanding of possessing good knowledge base in the following extract:

I might be biased because I am referring to myself but I think I am a good teacher because I have a good understanding of the content of the subject that I teach and I think I am, to a great extent, sensitive to learners’ needs and I am trying to use the updated methods of teaching so I don’t think I’m boring learners. I try different ways of conveying information to them.

Although these teachers were not forthright about their own knowledge base, they showed awareness that a teacher needed to be an expert in their subject by possessing in-depth content knowledge. Admittedly, an overarching self-report question concerning the state of one's knowledge in a particular subject area will not necessarily offer a specific picture of what teachers actually know about the subject. But it does reveal the teacher's stance towards their subject knowledge. And it points to a key dimension in planning for support of teachers' professional learning: what exactly do they know about the subject matter they are to teach, and how do they understand the content?

Second, the reform curriculum is now more conceptually organized and more fully specified, placing a great demand on being well grounded in the subject concepts the teachers will teach. All participants displayed a specific knowledge about the nature of the reform curriculum in their respective areas of teaching, and they were comfortable to talk about particular subject concepts and easily referred to examples that applied to teaching these subject concepts to different grade levels. For example, Teacher A, showed the knowledge of the concepts in his subject, Tourism when he said:

There is a topic of Tourism as an interrelated system, I think I like it because I find it easy to impart to learners because it involves practical things. In this section they talk about that tourism has three sectors so that would be travel sector, hospitality sector as well as the attraction sector. I think anyone even without doing Tourism can understand this. In order to be a tourist you must have travelled by transport and the transport is under the travel sector. He must be accommodated somewhere and get meals and that is under the hospitality sector. Thirdly, he will visit the places of interest and that is travel sector. So when we look at tourism as an interrelated system we look at the relationship at these elements of sectors. I find this interesting to teach and when I travel I look at sector to see if these services are there and see how they ensure that they provide an excellent service.

What this teacher displays is a confident grasp of this concept that is featured prominently in his part of the reform curriculum, and as such may represent new conceptual learning on his part. Tourism happens to be one of the subjects that were introduced in the new curriculum. He shows understanding of tourism as an interrelated system and its related matters. The teacher is confident about this topic which he is now expected to teach and shows the purpose of teaching it through his own experience.

Third, teachers are noticing new concepts and the dimensions of the subject matter they have to teach that differ from the curriculum of the past era. Some of them shared that there were no changes in their subject concepts, only that they were adjusted or adapted to fit the current times. Others shared that there were new concepts that were prescribed, and there were new expectations for teachers as well as learners. Teacher C put it this way:

For example, evolution—it was not there in the past. Then you have to adapt those new topics, the whole content of the subject changed completely. It was quite overwhelming, even topics that were there before, there were new things that were added. Actually let me say this, topics have not changed, just that they have added new things, let's say, for example, photosynthesis is still there but more things have been added to it.

Teacher F also shared this: “*you no longer do what you like, as from grade 1 the learner should know how to write a word ‘nose,’ for example, be able to read words with subsequent a’s and o’s*”. Consequently, the new concepts and the adapted ones require that teachers should really know their content; otherwise they would be unable to convey new knowledge to learners and set task activities that apply to the new concepts.

Finally, the teachers are finding new purposes for teaching their subject matter, and the expectation is that they will be able to articulate those purposes to the learners. As they describe their work, they no longer teach subject matter just so learners can “know” it, but so

learners could *apply* whatever they learn in their real lives. Teacher A had this to share about the purpose of teaching his subject, Business Economics:

We are given the outcomes that we are expected to achieve, but beyond that, each teacher goes to the classroom with a purpose that they wish their learners to reach. So, for myself the purpose of teaching Business Studies is for the learners to develop the entrepreneurial skills, to give them opportunities to be able to start their own business, because currently in our country we do not have many work opportunities so if we can develop our learners and make them understand the business environment it can make them not rely on being employed but on being self-employed, so that is the overall purpose of teaching this subject. All in all, they need to know how to use information from Business Studies so they could be able to stand on their own in their future.

Teachers are now aware that they are no longer teaching learners to memorize so that they can re-produce what they were taught. Instead they are teaching the learners so they could apply that knowledge in different situations in their lives. In the past era the learners were taught so they can reproduce that knowledge when asked to do so. There was no expectation that the knowledge could be useful in some aspects of their real lives.

In teaching learners to memorize, there was no need for teachers to show their knowledge and *understanding* of the subject, but they could directly transfer what was in the textbook to the learners. It did not matter whether the learners understood the concepts or not, as long as they could remember them later. Currently, teachers are expected to use their content expertise to create new explanations that learners can comprehend, and here what teachers understand about the subjects they are teaching begs questions about pedagogical content knowledge, and what the new intentions require of the teacher as facilitators of student learning, to which I turn to next.

Teaching practice in the new reform context. Teachers show adequate understanding of the expectations in their new teaching practice, even though their capability to embrace and facilitate it remains unknown. As the teachers describe their work and their learning over time, their teaching practice in the new reform context has been impacted in numerous ways. As earlier examples imply, teachers have been discovering a new role for the teacher and student in the kind of teaching that is learner-centered, as advocated by the new reform. The implications are that the new roles for teaching styles, methods, and approaches, as well as the resources and related training, are required by this new kind of teaching.

First, the participants were all aware that the new curriculum demanded a kind of teaching that was learner-centered, in stark contrast to the old curriculum that was mainly teacher-centered and which all of them had at some point experienced—for example, now the learners are actually meant to *do* research, as Teacher B noted, where before they would simply passively be told about research. As a result, the participants were under pressure to assume new roles by changing their teaching styles, methods, and approaches. Most notably, the period in which the teacher training took place, that is, before or during the new reform context, influenced teacher's understanding of the new role and the change in their teaching approaches. For instance, a sense of frustration with the new teaching approaches was detected from some of the teachers that had been trained prior the reform context appeared as evident in what Teacher B expressed:

Our problem is the product of the learners that we have now, learners these days are not motivated to learn and follow-up on their work, no matter how well you have planned your work but they end up not doing anything because there are many changes that have occurred in education and they have rights now, there's no corporal punishment anymore, so now it's easy for learners not do their work if they don't want to and it ends there.

Teacher B, referred to the students' attitudes and behavior when she engages them, she indicated that it was a challenge. She felt that it was becoming difficult to make learners participate actively in their learning because, prior to the changes, teachers could 'force' learners to engage by administering punishment to those that did not want or were unable to. She clearly felt more comfortable with the extrinsic motivation dynamic that pertained under the old teaching paradigm, rather than the one embedded in the reform curriculum that pushes for the development of more intrinsic motivation by students.

In contrast, the teachers who were trained in the reform context seemed to have an understanding of teaching in a 'new' way which was learner-centered since they were introduced to teaching skills and strategies that were suitable for this kind of teaching in their training phase, as Teacher E put it:

So with this new approach, learners have to do things on their own like they have to do research, they also share their experiences with other learners, which didn't happen before; it was our teachers telling us learners that it's like this and that, so that made the teachers to be seen as knowledgeable. Now, we have to dig deep when we are preparing our lessons, and also know that we are teaching people who are able to get that information by themselves, now they are able to challenge us in terms of when we ask questions, yet before they never asked any question.

Teacher E points to various dimensions of the change: students expected and helped to engage actively in their learning, with a capacity to gather information for themselves and to pose questions of the teacher and even to "challenge" the teacher, all with implications for what teachers should know and how they would prepare the lesson, no less engage students within it.

Teacher A, another of the teachers trained in the post-Apartheid era, illustrates how he plays his role of being a facilitator rather than a teacher who did all the talking, that which he had experienced in his school education.:

Obviously I would lead because when I get into the class, I would tell them that today we will be talking about the social responsibilities, for instance, then we would look at what they understand about social responsibilities we unpack what we are going to discuss so they would tell you what they understand about that, then we make a common understanding of the term, so we would move to the next term—maybe ‘community’—so I’ll be posing questions obviously because I’m a teacher and the facilitator of the learning program, I’ll be getting in more often to clarify some of the things so but mainly they are going to be involved and they are going to identify things that must be jotted down as they, so it differs there that I’m not the one who has to say, here’s the important information you need to jot it down. They are going to identify the rich areas and then note them down for themselves.

Whether or not teachers embraced new teaching practices also had to do with their perceptions of what was possible or desirable in their particular circumstances, and what would “work” with the students they were teaching. Here, the teachers shifted attention away from the actual teaching practice itself, and on to the enabling (or inhibiting) conditions that surrounded their work, a topic I take up shortly. The teachers’ perspective was that the availability of resources makes it possible for them to spend the whole time allocated to the period engaged in actual teaching instead of running around trying to organize lesson materials. In the previous era teachers spent most of their teaching period copying notes on the board that learners had to copy in their notebooks, and then the teacher would explain those notes. In the current era, with the easy access to various resources, the teacher can simply type and photocopy those notes and hand them out to learners. However, the downside to that is that teachers lack training in using some of the resources that are made accessible to them. Furthermore, there are schools that are still without resources and teachers have to fend for themselves. An utterance made by Teacher D that “*teachers need to compromise and do things for themselves because if you wait for the school, then I’d be*

behind with my work, so improvising as a teacher is important” was regularly heard from these participants. Teacher A commented that *“resources are still not enough, but we do manage by compromising”*. Teacher F mentioned it in passing just as we were busy with our interview that she needed to remember and buy extra assessment books and pens for her learners.

In sum, the main finding under this theme can be put this way: the teachers show considerable awareness of the reform curriculum they are expected to teach, and often a clear grasp of the concepts (both new and old) that are building blocks of that curriculum. How deeply and well they understand the underlying subject matter is unclear, however, as is the extent of their professional learning in this regard. The understanding and acceptance of new teaching approaches and teaching roles depended on the period of initial teacher training. Those that had been subjected to ‘new’ teaching strategies in their training (e.g. where their teachers modelled the learner-centeredness as they were teaching them) seemed to embrace their teaching approaches and roles, according to what they shared. In contrary, those that were trained in “old” ways seemed to be struggling to accept their new roles. They believed in extrinsic motivation to make learners participate actively in their learning.

Theme 2: The Conditions that Influence Teachers’

Professional Learning

Teachers were used to teaching in a way that they knew and had learned from their teacher education programs. In this initial phase of their careers, they got to understand themselves as learners as they were learning about their subject matter, and how to teach it. Their subsequent working environments also contributed to their learning by exposing them to the professional development opportunities and to their colleagues. Furthermore, as the discussion above has hinted, the contextual factors that form part of their school environment could have a great impact on the extent of new professional learning required or implied by

the reform curriculum, the teachers' willingness or ability to embrace this curriculum, and how they actually taught their subjects. Three sets of conditions seemed especially prominent to these teachers: their background, which encompasses both personal and professional aspects; their immediate school context, which afforded both resources and constraints, and which created an overall climate for learning and for professional work; and finally school leadership, which communicated expectations about, and offered direct support for, certain forms of teaching practice. These factors are meant to be structures or part of the support system for teachers' professional learning in this reform-context era. Unfortunately, the reality is that these are the factors that may actually heighten the teachers' challenges in coming to understand the curriculum more deeply and developing substantially new approaches to teaching it.

Teacher personal background. The era of Apartheid was a critical period that affected all South Africans before 1994. All six study participants, in some way, had been personally affected by this era, and it had infiltrated all aspects of their lives. When talking about their participation in professional learning experiences as well as their teaching practice in the reform context, they often started with how it was before the reforms. Even when a question was specifically directed to the period after the changes, the participants often referred to how it was before the changes and then move to how it is in the current era. This was mostly noted among teachers that had been trained during that era. Phrases such as *"during our times"*, *"at that time"* *"in the past"* were often used by the study participants. Such references were often made to compare, for instance, how the changes had made it challenging for them to apply the knowledge and the teaching skills that they already possessed.

Most of the participants had chosen teaching mainly because they did not have many career options, as evident in what Teacher D expressed: *"In fact it was not my intention to be*

a teacher, if I tell you the truth, it was not easy to get other jobs, teaching was the most accessible job at that time I had no other choice, I just became a teacher by default". Two of the participants (Teachers A and B), for example, indicated that they had chosen the teaching profession out of passion for working with children. There were other reasons that ranged from having teacher role models, siblings who were teachers, to choices made by parents. Teacher C mentioned a teacher role model, as shown in the following extract:

It developed, let me just say, from primary school; there was a lady teacher who taught us and she was good, so the way she teaching in such a way that everyone wished to be a teacher because it was not just that she was a teacher only, she also served as a parent and go an extra mile. I remember one day a boy who played soccer, so he was not good in Maths and corporal punishment was used a lot in those days to, he used be punished because he had a problem with Math. You know what she did, she bought a stick sweet (lollipop). All of us we were like hey our teacher is really like a parent. So we all liked the fact that teachers are sensitive.

All these reasons could have contributed to the attitudes and beliefs they had about themselves as teachers. It seems as if Teacher C looked upon his primary school teacher as someone who encouraged his learners to learn by providing incentives and was also kind. And so, he strived to be like her when he became a teacher.

Teacher professional background: Initial teacher training. The participants' experiences of the initial training phase of their careers varied widely, depending on the type of intended qualification (degree or diploma), the grade level (primary or secondary), and the period of training (prior or during the reform era). As already noted earlier in discussing the teachers' knowledge of content and pedagogy, the content of their training regarding their subject matter, how to teach it, teaching approaches, and classroom management skills differed, with implications for their perception of how reform changes affected their subject matter knowledge and teaching skills. Consequently these teachers had varying perceptions

about their initial training and its impact on their learning and teaching. The teachers trained before the transformation noted that the teaching methods their teacher educators used were mostly teacher-centered. Their teacher educators relied on textbook methods, chalkboard (a method where the teacher uses chalk and board to teach) and telling method (same as teacher-talk approach). Teachers shared that they had limited access to resources during that phase and teacher learners got most of their activities from the chalkboard and textbooks.

Yet, those who were trained after the transformation had a differing experience. They were exposed to different teaching methods such as teacher-talk, demonstrative (teaching through showing by examples or experiments), and discussion methods (learning through exchange of ideas in small or big groups). Their teachers also used different teaching strategies to engage them as learners such as presentation and facilitation (methods of teaching by leading the class in discussions). The contrast in what teachers shared about their training experiences is displayed in the following matrix:

Table 4.1 Impact of Teacher Education Background on Teachers’ Approach to Professional Learning

	Teacher Education during Apartheid Era	Teacher Education after Apartheid Era
Primary	<i>“There was not much theory, the emphasis was on the method from your first year..... So I did a Method of teaching Math and English for all those three years, even when we were given activities it was something like “how can you teach this activity?” “how are you going to introduce the activity to the learners?” (Teacher B)</i>	<i>There were many methods, yes they used the teacher talk method but they did not believe in teacher talk method a lot; they believed a lot in group discussions—we would work as groups or in pairs. Then in your groups there will be one person who will be assigned to do presentation... (Teacher E).</i>
	<i>The first thing that you were required to know was the content, then you had to</i>	<i>If you remember very well our learning at that time, it was always the teacher</i>

Secondary	<i>master the methods of how to teach Biology. For the first year it was mainly content, and then the second year you dealt with the methods of teaching your subject, then in third year you combined both content and the methods..... (Teacher C)</i>	<i>talking and we would sit and listen so it was not usually the case that we were involved. We would sit and listen and write while the teacher talks,.....(Teacher B)</i>
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It appears as if these teachers tended to replicate their learning in their own teaching— that is, they teach in exactly the same way as they were taught, as in the case of Teacher B noted above, who indicates: “*During those times when I came to class, I would teach them, write notes and if there were textbooks I would give them activities to do*”. It is only now, in the current reform, that they are compelled to use other teaching styles. On the contrary, teachers who were trained during the reform context were exposed to a variety of teaching approaches as Teacher E indicates above. Even though their classroom environments sometimes did not encourage them to employ those different teaching approaches, as they shared, they knew about them

Finally, some of the teachers commented about the lack of connection between the training phase and the work experience. A perennial issue in teacher preparation, both in South Africa and in developed nation contexts, they reported experiencing some challenges in making what they learned in their training to be practical in their classes. The cause for this may have been inadequate training in that their curriculum was short-changed, as it was always the case with Apartheid-era education; it is also possible that their practicum experiences, as student teachers, failed to offer opportunities to “try out” new teaching practices in circumstances that they would be likely to experience in their future careers. Teacher D explains it this way:

At that time, because there was nothing else that I knew, I was happy with my training, but now when I look back, I don't think I need to be happy because when I moved from high school to tertiary level, there was no connection, tertiary level was so different to what I was used to. And again when I went to work, that was another world, you find a class register, the thing that I cannot even mark; my high school, tertiary, and work experience did not link, other things you got to know as you become more experienced in your job.

Teacher F seemed to be in agreement with Teacher D's view as she mentioned that she was *"happy with her teacher training, just that when you get into your classroom, then it's a different story, depending on the type of the learners that you get"*. Expanding on this, Teacher F explained that it is common to have learners who have learning disabilities in mainstream classes, particularly in primary schools. So as a teacher, even if you were confident about your knowledge and skills, you then find it challenging to deal with such learners—individuals with special learning needs they were not prepared to address in productive ways. Although this may be attributed in part to the school environment, teachers believed that they should have been trained to deal with such learners as Teacher F added that: *"We do not have training for such things, you just have to be passionate and have a heart for these kids"*.

School contexts. Besides the initial training phase, the school context in which the teacher works plays a role in enabling or constraining the individual teacher's development of professional knowledge and capacity to implement a reform-oriented curriculum. The participants looked at the school context in various ways that had potential impact on what they did as teachers (or were able to do), and what they learned to do as classroom teachers. They considered the physical context of the school, like the availability of the buildings,

desks, or materials; also, they considered the location of the school and the surrounding community, with all the factors that characterize that community, such as poverty, unemployment, and crime. In addition to that, they looked at the availability or non-availability of the teaching and learning support resources. Regardless of which component and its impact these teacher participants focused on, it appeared to these teachers as if their school contexts were far from allowing these teachers to be, first, learners, and then teachers that fit the new curriculum context.

Most of these teacher participants remarked about the lack of teaching and learning support resources that largely affect their teaching practices and student learning. Their perspective was that lack of resources made it difficult or next to impossible to teach as the new curriculum requires them. For instance, in talking to these teachers, it became apparent that the shortage of textbooks is still rife in their schools. Learners often have to share in groups of three's or more. In other schools there are no textbooks whatsoever. Managing such classroom situations is often challenging for teachers. Consequently, teachers choose to use one teaching method, the chalkboard or teacher talk method, which they can easily manage. Resources such as radios, computers, televisions, and other electronic media tools are just a dream in these teachers' schools. The lack of resources and how it affects their teaching is highlighted by Teacher D:

Take me, as I am in primary in the rural school. We struggle in English since there are no televisions here, learners end up hearing from talking in class and in the book that they share in two's or three's and read without any understanding. If we say that we want the learner to develop the skill of speaking English, how is the learner going to develop that speaking skill if they are not provided with even simple resources such as books.

As an example of how student learning is hampered, consider the *English for Seniors* phase that Teachers D and E teach. This learning activity requires that learners brainstorm

ideas for advertisements (commercials). Teachers are expected to give visual, auditory, or written examples (Curriculum document, English First Additional Language, p.23) to show learners how to do the task. However, most of these schools lack even the basic resources such as newspapers and magazines, and learners cannot bring them from their homes since their parents cannot afford to buy them. Consequently, teachers skip that part or alternatively, they teach it in an adapted form which they are at times unable to do.

The new curriculum requires teachers to use different teaching methods and approaches, including group work and student presentations. Due to overcrowding in their classrooms, however, these methods are sometimes a challenge. It becomes impossible to group learners into manageable groups, and there is often no space where these groups could meet. Teachers are still compelled to stand in front of the classroom and teach by talking while learners sit and listen passively as teacher C indicates: *“Not completely that methods have changed but there are methods that you cannot change like in schools that are disadvantaged, and have no resources. Because we have no space for groups, we cannot say we have changed the chalkboard method where you write on the board and explain, it is still there”*. Even though there is a huge improvement in the provision of learning support materials, there are still cases where learners come to school without pens and writing books as Teacher F shared that, *“working as a teacher is challenging these days, we work with learners who have big problems and while they are having those problems you come with your lessons, you demand them to have pens, where will they get these pens?”*

Another huge challenge is that these schools are located in communities that are overwhelmed by a high rate of poverty, natural disasters, crime, and illnesses, all of which highly impact teaching and learning. Their learners come from homes that have no electricity, radios, and televisions and, worse, the schools also do not have such resources. Teacher C mentioned that in his school they have resorted to infusing homework time into their class

periods because their learners face various challenges in their homes, such as no electricity and cramped space, that make it impossible for them to engage in their homework activities. Teacher F talked about one task activity and assessment in Literacy for the Foundation phase (Grade R – 3) where learners are required to tell a story about what they saw or heard in the news and then they are assessed on their speaking ability. This is how the environment in which her school is located hampers the achievement of this objective:

You see, there are kids who are not exposed to TVs or radios like at my school, they don't even know what is happening around them [I assume she's referring to the news]. Every time before we start class lessons, we have story time, they have to tell a story about anything that is on the news maybe for five to ten minutes. Sometimes they have to tell what the weather forecast was—where would they get that information from if they don't have a radio or TV at home? They have to tell the story of what they saw in TV. At that time when they are telling the story, it forms part of the assessment; that's Orals. That's when you are able to tell that the learner can speak, there are those who just keep quiet and not say anything and that's how you know that they haven't mastered the speaking ability. The environment counts a lot...

Her further comment continues to highlight how the school context hampers teaching and learning, in situations that could be especially acute in the rural settings of some of the schools:

In this school, proper learning only happens in winter because in the summer.....you know, there is a time where the month goes by without any teaching. For each week, sometimes we go to school on Monday and Tuesday only and for the rest of the week we cannot go because of rain. The rivers would overflow, there would be mud and no transport to take us there. Our school is far from the main roads and we end up starting school at 8h30, everything depends on our transport, just one bus a day goes there, mind you. If it arrives at 9h00 that's when school starts. There are

17 teachers, sometimes it helped that there were those who were local who would hold the fort while others were still on their way. Sometimes we walk for long distances to come to school if that bus cannot make it because of slippery roads. By the time we arrive at school we would be so tired that we had to rest before going to our classes.

Teacher B, who taught Home Economics, was expected to engage learners in Cooking lessons and thus she needed stoves and cooking utensils. This is what she said when asked about resource availability in her school:

Sometimes schools have resources, then criminals or just ordinary people in the community break into schools and steal those resources and schools end up not.....like I remember in my first school there were sewing machines and stoves and people in the community would steal them so children ended up suffering because they could not do their practical lessons.

In sum, teachers viewed the conditions in their school contexts as potentially blocking the improvement of their application of the reform curriculum and teaching skills and methods it implies. There seems to be no structures or any provision in their school contexts that may enable teachers to gain more expertise in their subjects, or even if it they had been exposed to new approaches, to actually realize them in the classroom. The circumstances that surround these contexts and that are beyond teachers' control make it difficult for teachers to facilitate their teaching in a manner that the reforms demands, and perhaps to imagine what reform-guided instruction would actually mean or look like. For instance, the majority of these participants carry the old assumptions about the nature of the subject matter that is to be conveyed to students, along with ideas about how it can be conveyed to them which probably differ from the knowledge required by the reforms. Teachers had familiarized themselves with how to apply that knowledge in their adverse conditions and it might have worked for them. I got a picture that teachers were finding it hard to apply the new knowledge in their

old contexts. From what teachers shared about their work environments, it looks like the education reforms were not based on an awareness of the conditions that exist in many disenfranchised South African classrooms, nor what adaptations might be needed to realize the spirit of the reform curriculum in such settings.

School leadership. The inception of new education reforms in this context also brought a new structure of school leadership and management. It moved from a principal being a sole leader of the organization to distributed leadership exercised by school management teams. This body comprises all educators with management roles – the principal, deputy principal(s), heads of department (HODs) and senior teachers. As teachers faced the new reform's demands and were even more overwhelmed, they needed more guidance and support from their school management teams. They needed support to renew or increase their subject knowledge and refine their teaching skills. Regarding school leadership support, teachers had varying perspectives on how their school leadership managed to enhance or hamper their professional learning. School leadership support or lack thereof was often based on whether or not the school leadership team provided them with teaching and learning resources, as well as organized professional development programs in their schools. It was also based on whether the leadership team encouraged them to attend, or offered help to teachers to improve their classroom practices through class visits or mentoring.

Some of the teachers acknowledged that their school leadership was supportive, and that enabled them to teach in a better way and grow in their understanding of the reform curriculum and what it asked of them as teachers. Teacher A recognized his principal for providing resources, such as money, so he could organize more field trips that are a requirement for the Tourism subject that he teaches (*Curriculum and Assessment Policy Statement for Tourism, Grades 10-12, p. 39*). He also talked this way about how his principal contributed towards enhancing his subject knowledge:

I'd say the School Management Team also does have support although Tourism is a new subject and not many people have its knowledge here at school. There is support because when I started teaching this subject, I thought of developing myself, I enrolled in the Advanced Certificate Education on Tourism. What excited me was that the school principal also enrolled in the same program so I realized that there is collaboration in our school, so now there are two of us who know this subject and we can share what we know about the subject because we have the same understanding.

Teacher C, also, had a positive perspective about the support from the school leadership. He stated that they were so supportive of his professional growth:

It differs from school to school, like in school there's a principal, there are heads of departments (HOD's), so the HODS have to see to it that teachers do attend the workshops, they also have to see to it that their teacher belong to certain clusters. And the HOD must organize, like in my school, maybe let's say in Accounting Teacher A is not comfortable, the HOD has to invite someone who's an expert in Accounting maybe to come every afternoon and teach your learners. The principal is responsible for making sure that you get the training and you do attend trainings. I'm not saying that all schools have this though.....

Teachers A and C were the only participant who seemed to have a positive outlook on how their school leadership was encouraging their professional development and even recounted how it did that. Teacher B had this to say about her school leadership, “*what I see is that the class that our school management team focus on is Grade 12, where they meet with Grade 12 educators to talk about strategies and make pledges of how they will improve Grade 12 results like have extra classes but they only focus on Grade 12 and not on other classes*”.

Generally, most of them felt that their school leadership did not contribute towards stimulating their learning and teaching practice. They commented about lack of opportunities

or encouragement to participate in workshops, lack of support in their teaching through class visits or mentoring, and non-provision of teaching and learning resources. Teachers were of the idea that their school management teams focus more on monitoring that they referred to as ‘policing’ and ensuring that teachers do their work rather than giving them support to deepen their subject knowledge and enrich their ways of teaching. Teacher A speculated that the lack of professional support from the head of departments may be attributed to the fact that some department heads are not subject specialists. They got to be in such a position because they had taught the subject at some point in their lives. Teacher B alluded to the lack of encouragement to engage in professional learning programs. She put it this way:

The thing is, there are different rules, it depends from school to school that for workshops only one person should attend per department, so if the department has 12 teachers only one teacher should attend. So we argued that because at the end of the day, the information is not conveyed back to us properly and then you find that you don’t know what’s going on. You know there’s something that happened when the year started, so it happened that this teacher who had attended the workshop got sick, I am in Grade 11 this year, I ended up not knowing what to do, I didn’t have any document, nothing, no program, I didn’t know what was going on in my subject.

Asked if her head of department conducts class visits or follow-up visits to assist her and her colleagues in their classroom practice, Teacher F expressed her view this way:

No, mine is not helpful in those things, she is only good in asking for the lesson plan and what is required by the principal. She doesn’t think about other things like visiting my classroom. But I asked her recently to come and introduce the sound of ‘m’ in my Grade 1 class. She came and was helpful. I was ‘testing her and she passed the test’.

Teacher D talked about the leadership’s unwillingness to offer its teachers the resources that could help them in their professional practice, “they would say there’s no

money and you end up seeing no need to report that you need something". In sum, most of the participants viewed their school leadership as unsupportive in increasing the capacity of its teachers. There can be various explanations for that inability of principals to improve their teachers' capacities. The school leaders and leadership team themselves are often constrained by many of the same conditions that teachers face, and they, too, need (and often don't get) support in their leadership work (Knapp & Portin, 2014), a condition that teachers may or may not be able to see from their vantage point. The reform context in South Africa is also likely to pose for school leaders new kinds of instructional leadership work that have been identified in developed nations (e.g., Knapp, Mkhwanazi, & Portin, 2012). Important questions remain unanswered in this research about the nature of the support systems for instructional improvement and related leadership work that deserve to be further explored in the future.

In sum, teachers' grasp of the content they are to teach, their willingness to change their teaching practice, and their perceptions of their ability to deepen their content knowledge are all shaped—and often constrained—by their personal background and training, an often adverse workplace environment, and the quality of school leadership. These constraining effects are especially pronounced for those who were initially trained for teaching under the Apartheid regime, and who are currently teaching in rural settings. Yet, the education reforms require all teachers, regardless of their learning as well as working experiences, to assume a new 'stance'. It looks like the education reformers were not aware of the conditions that exist in many disenfranchised South African classrooms.

What Teachers Experience and Believe They Need in Support of Their Professional Learning

Two more themes in the data take us closer to the means available to teachers in the South African reform context to bolster their capacity for realizing reform curriculum and

teaching practice. The first details the nature of their professional learning opportunities, as they see it, including where it may fall short of providing high-quality and sustained professional development. The second captures the ways they envision what they need to take their professional learning farther than they have been able to date.

Theme 3: Teachers' Perceptions of Professional Learning

Opportunities Available to Them

A brief overview of the professional learning opportunities that are generally provided for in-service teachers in the South African transformation context helps to introduce what teachers have actually experienced, in support of their professional learning. These professional learning opportunities are often referred to as 'training workshops' and this study will use that term interchangeably with 'professional learning opportunities,' while acknowledging that such an activity constitutes only one kind of professional learning opportunity, and not necessarily one that exhibits all the characteristics of high-quality professional development discussed in Chapter 2. Following that, I will review how the participants in this study perceived these workshops. There is broad consensus among scholars that education reforms and teacher professional development cannot exist without the other. As already mentioned in the introduction, when education reforms were introduced in South Africa, teachers expected that they would be provided with in-depth training that would help them move from their 'old way' of teaching to a 'new one'. Particularly, they faced their legacy of the past which had subjected the majority of teachers to teacher education that was of inferior quality and had exposed them to few, if any, in-service programs. Instead, they were subjected to one-week training workshops provided by the department of education.

Therefore, the obvious challenge that South African teachers still grapple with 20 years later into the reform context, is the unsteady support in their professional development.

Other than the workshops that were provided to “re-skill” teachers for the new curriculum, teachers participate mostly in two kinds of professional learning opportunities. First are the workshops conducted in the school districts. Such workshops are often organized and facilitated by subject advisors (subject coaches). The subject advisors are based in the school district offices and are considered district officials. The organizers choose a central venue and invite teachers from the same school district. Usually teachers are grouped according to the subjects and the grade levels that they teach, for example, Science teachers for Grades 7-9 will be grouped together. Although it varies with each district, subject, or grade, the normal occurrence of these workshops is once or twice in a school year.

Secondly, teachers also engage in a recent trend of professional learning opportunities, commonly known as ‘teacher clusters’ in South Africa. A teacher cluster is defined in two ways in this context. On the one hand, it means a group of teachers from neighboring schools who work together as a group. On the other hand, it refers to a group of teachers who work together on some specific subject matter issues. Apparently, teacher clusters were originally teacher-initiated and facilitated, and were attended on a voluntary basis. The school district leadership saw how convenient the clusters were as leaders could visit small groups of geographically closer schools at once. Administrators started using these clusters as well, and the facilitators would be the district officials (usually the subject coaches). Attendance was then made compulsory. Both these versions of clusters (teacher-initiated and district-initiated) operate simultaneously and all participants in my study engage either in district-initiated or teacher-initiated clusters, while some of them participate in both. Depending on the subject and the grade level that they teach, the participants attend approximately two to three cluster-based workshops per year.

The General Perception: Inadequate Opportunities For Professional Learning

There is general consensus among all six teachers that the professional learning opportunities available to them are insufficient for enhancing their knowledge and improving their teaching practice, along the lines the reforms expect. Specifically, they are disillusioned and frustrated by these learning opportunities and they regard them as “*a mess that is confusing and boring to attend*” (Teacher F). Teacher A provides a clear image of these training workshops in the following extract:

There are not enough workshops to move a teacher from an old practice to a new practice. The reason for that is that they are one day workshops that sometimes start from 12-2.30pm and usually they are about providing information to teachers, it's not about the total development of the teacher to make him ready to teach his subject. When we were in the training institutes we trained for three years to teach a particular subject; now when there's a change, I don't think that change is so minor such that you need to get it within few hours or a day so they are not enough....

Teacher A, as all the other teachers, implied that they needed ample time to be developed for the curriculum reform. It appears as if they believed that total transformation of the teachers would not be possible with limited development programs that were of short duration which they were often exposed to.

Even though Teacher C was in agreement with other participants about the inadequacy of these opportunities, he had a differing view about the training workshops that he as a Science teacher attended. A brief explanation may highlight this unique perception from Teacher C. Among the six participants, Teacher C was the only one who talked about attending more than six sessions of the PD programs which were a combination of cluster, district, and externally-organized workshops. This may be attributed to the fact that Teacher C is a Science teacher in Grade 12. Improving Science teaching is one of the national

priorities in the South African education system, due to the fact that the number of learners that pass this subject in Grade 12 is very low. Thus, more support in the form of resources, professional development, and extra assistance from the district is given to the development of Science teachers. Grade 12 is another priority since there is a huge outcry in the country about the high percentage of failures in this grade level. Teacher C, being a Science and Grade 12 teacher, happens to be inundated with support in his professional development and this is experienced by very few teachers in this context.

Characteristics of professional development that enhanced teachers' professional learning. Even though these participants were generally disillusioned about their professional learning opportunities, they still identified some characteristics in these opportunities that might be having a promising effect towards their growth. These characteristics include the form of professional learning and its facilitation. The most common form for these teachers, if not the only, is the cluster-based workshop, and it seemed to be especially popular when carried out in teacher-initiated clusters. Usually in cluster-based workshops teachers that teach the same subject meet and identify the topic in their subject to discuss. The cluster leader who is chosen by the cluster often sets the meeting dates and organizes the facilitator. They share and exchange ideas on how to teach that particular topic, the challenges they might encounter, and the activities on the topic that they might give their learners. Consequently, most of the participants talked about their teacher-initiated cluster workshops in a favourable way. They talked mostly about how these clusters contributed to improving their teaching practice. That said, the content in these clusters still leaves a lot to be desired, as will be discussed in the next section of characteristics that hamper teachers' learning. Not much was shared about enhancing the subject knowledge, and this may reflect the general absence of subject-matter expertise among the teachers who come together in a particular local cluster. However, the participants shared that clusters helped them to communicate and

set the task activities and assessment with their colleagues from within and outside their schools. Teacher C illustrates how professional development in the form of clusters contributes to improving their practice:

When you arrive in the clusters, we help each other by sharing how to approach each topic, how to assess that topic because you cannot say as a teacher that you are doing well in all 8 topics. You may know the content but maybe you have a problem with your teaching approach. As a result if I have a problem with a certain topic I am able to invite the teacher in my cluster who I know is good in that topic. That is why teachers have decided that we must have clusters to share the information, to share the problem and to share the resources because you'll find that your school is advantaged and mine is a disadvantaged school. You find that in my school I need to do 'practicals' but I cannot, but you in your school have chemicals, for instance, and that's why clusters are important.

Teacher D also points to the clusters, when asked about what helps them in teaching the new curriculum:

I would say it's this thing of meeting together as neighbouring schools because let's say the workshop was at Ndwedwe (workshop venue) and I could not reach there, I have to make sure that I meet my neighbouring teachers so that I know what they are talking about because they would fill me in. I would know that by this time this is expected and I need to have it ready by the end of the term, I need to have finished this so that I could be in par with my cluster.

However, when asked to talk about the difference in their teaching practice before and after engaging in these clusters, teachers were not really clear in their responses (and without observations of teaching at multiple time points, this study had no way of corroborating whether changes in practice were occurring). Teacher A attempted to show the difference in the best way he could:

I think it becomes easier for you to teach because you become confident that you've got the information that you know what you are going to be teaching, yes I think it boosts your confidence.

His response communicates little about what cluster participation may have helped him do differently, and even implies that good teaching is mostly a matter of “knowing what you are going to be teaching”. Further study will be necessary to establish what the actual potential for teacher-initiated clusters might be.

Other than the form or structure of professional development, the participants talked about the good facilitation in which they were actively engaged during certain professional development sessions. For example, when asked if the facilitators engaged them in any in these workshop sessions. Teacher D had this to say:

Yes they do although I cannot remember well what we do but they do, maybe they give you an activity and then you'll present and then maybe the facilitators will comment on what you did right and what you should not have done, and then you should do like this with children.

Even though her response was vague and ambiguous, she indicated that there were facilitators who engaged the teachers as they were training them.

Characteristics of professional development that hampered teachers'

professional learning. Unfortunately, the characteristics of these professional development programs that these teachers identified as hindering their growth prevail over those that are said to be enhancing. In general, many teachers in South Africa show dissatisfaction with their professional development opportunities, particularly the departmental-initiated ones, and insist on their ineffectiveness in changing their practice. Many factors contribute to this ineffectiveness, for example, the fact that these opportunities fail to consider the teachers' needs (Mokhele & Jita, 2012). Teachers consistently identify characteristics of these opportunities that do not have an impact in increasing their knowledge and changing their

classroom practice. As expected, teachers in this study unanimously identified some of these characteristics, which include limited duration, unclear content and purpose, and the poor facilitation of these workshops. Starting with the duration, all six participants perceived the contact hours and the span over which the workshops are spread as not viable for gaining any useful knowledge and skills from these opportunities. Other than Teacher C, the participants shared that their average attendance of workshops is not more than three times per year and they last, at most, 3-4 hours. This 9-12 hour total time across a year falls well short of estimates emerging from research on high-quality professional development for what is needed to substantially impact teaching practice. The following extract from Teacher E illustrates how teachers regard the duration as limiting to their learning and teaching:

If I tell the truth, we had one workshop in English and that workshop was in May 2012 (the interview took place in November 2012). I don't think workshops should start in May because then the damage is already done. I believe that right from the beginning of the year we should have a workshop where we will plan everything, where they show us all that we should teach as well as activities to do and also give us resources and other handouts. Because if they say we should come in May there are people who have already messed up.

The school year in South Africa starts in January and ends in December. Teacher E had an opinion that workshops should be provided right from the beginning of the school year, that is, in January. It became apparent that these teachers were concerned about the timing of these workshops, as is evident in Teacher F's comment as well:

I don't enjoy attending workshops because you go there to be confused, because what they do, is the workshop's duration would be 30 minutes sometimes. The people who workshop you, they just come and read papers like this, and then after that they say we should divide ourselves into groups and that's the workshop. And even if the person knows what she has come to say, time is limited.

It seemed like teachers did not think that they could learn and be in a position to change their practice within a few hours and few instances of meeting in these workshops, compounded by poor quality of workshop facilitation that could accompany the short time.

The next characteristic that teachers viewed as most worrisome was the purpose and content of their training workshops. What seems to be the case is that, according to what teachers shared, workshops generally focus on the overview of the new curriculum, “assessment and moderation” activities, instead of professional development activities that teach about the subject content or how to teach it. Regarding those workshops that focus on the assessment and moderation, what normally happens is that teachers in each cluster, particularly the district clusters, set a common test for a specific subject. After administering it to their learners, they meet in order to analyse the test results. That is what they refer to as a moderation process, a variant on “data-driven” teaching practice that is common in many nations’ educational reforms.

The outcome results of that moderation activity, supposedly, help teachers to identify their weaknesses as shown by low learner performance and their strengths as evident in high performance. Thereafter, a workshop is planned to provide teachers remedial training on that particular topic with low performance. These workshops are usually conducted in the middle or towards the end of the year. Due to shortages of district facilitators, sometimes, these remedial workshops do not occur in some school districts. Teacher-initiated clusters are often a solution in such districts.

Usually at the beginning of the year, teachers are called for workshops that provide information about the new curriculum. The implementation of the new or revised curriculum is carried out in phases and not simultaneously to all class levels. For example, if new curriculum was introduced to Grade 1 in 2013, then in 2014 it will be introduced to Grade 4.

The agenda for one workshop of Tourism Grade10 (document evidence) included the content such as the definition of CAPS (new curriculum), topics, time frame, and suggestions for assessment activities. Teacher A expresses his view about this workshop clearly:

The purpose must be to support teachers, provide them with what they might require to provide quality education. I think that should be the purpose, but in reality, that is not the case. Especially with our Further and Education phase the workshop is now for moderation and they are for disseminating information if there is a particular form that you have to fill and since we are going to be starting CAPS in Grade 12 next year, we are supposed to be taken step by step because some of the topics will be new. Last year before we started implementing in Grade 11, they called us at the beginning of the year and they called it the Orientation workshop. In that workshop they were just outlining that this topic is new and we will do it so I did not find that developing, it was really orientating in that they were telling us what to expect and not to expect. Whereas the content is very important because some of the teachers, especially in Tourism, they did not specialize in tourism. As a result, if they are not capacitated by being provided with content, they might not be able to provide quality teaching.

One would expect that, with constant changes of the curriculum, as mentioned in the first paragraph of the introduction, teachers would be trained on the topics of their subject content and new teaching strategies related to them. Other than Teacher C whose unique case was explained above, none of these teachers talked about participating in subject-focused workshops.

Finally, poor facilitation of these workshops was also viewed by these teachers as limiting their chances of improving their knowledge and skills. The participants remarked on how their facilitators often lacked knowledge of what they were presenting and how they, as teachers, were not properly engaged in the presentations. Teacher F's earlier comment about

the “*people who workshop you just coming and reading papers like this...*” captures a style of workshop facilitation that offers the teachers little:

You don't benefit anything in these workshops because one tells you this and then another facilitator comes and contradicts that. I can say everything is a mess so far. They arrive with a work schedule already done, so in that way, there's nothing that they will be facilitating. They give you that finished product and then you have to go and file it, you don't even know what you are filing.

Teacher D commented almost in a similar way as Teacher F:

There's this tendency that you go to workshops and they read the document for you as it is, this thing that I can do on my own at home you find that the facilitator for English say the same thing as the other subject because it's the same document. So you end up saying that because we are provided with the documents I won't go.

The facilitators presented the information about the subject and presented the classroom activities in the exact manner in which the document stipulated, according to what the teachers shared. It appears as if teachers expected to be taught as in the classroom and maybe coached on how to teach their subject matter. Some of the comments in the next section that discusses the type of professional development that these teachers envision attest to that expectation. This section also looks at what kind of supports these teachers viewed as would be helpful in order for them to reach a learning stance.

In sum, the findings related to this theme demonstrate that teachers were dissatisfied with their professional development opportunities, particularly those that were initiated by their department. Teachers emphasized the ineffectiveness of these opportunities in changing their practice. Teachers in this study unanimously agreed about the characteristics of these opportunities that hindered their envisaged growth, which include limited duration, unclear content and purpose, and the poor facilitation of these workshops. However, cluster-

workshops, especially those that were teacher-initiated, carried some of the characteristics that may contribute towards a change in these teachers' professional learning.

Theme 4: Teachers' Visions of the Types of Professional Learning Opportunities and Support They Need

The teachers in the study expressed their views on how their professional learning opportunities could be designed so that they are meaningful to them. They had different suggestions on how the characteristics that constrained their learning, as highlighted above, could be improved in order to effectively support their professional growth.

First, the teachers' view was that these learning opportunities need to equip them with new subject knowledge and teaching approaches that fit the expectations of the new curriculum. In other words, the content of their workshops should focus on the subject matter, for example, upgrading their knowledge of concepts, how to make those concepts relevant to their learners, and how to present them in an understandable way. Without using the term, they were seeking a more robust exposure to the "pedagogical content knowledge" implied by the new national curriculum. Teacher A illuminates a broad image of the professional learning opportunities that they envision:

They'll focus on the topics, maybe say today's workshop will focus on Tourism geography and travel trends so the educator will know that we are going to focus on the topic that will capacitate us on this particular topic. So we will look at that particular topic and unpack all that is involved in that topic and ensure that educators understand that topic clearly. And after that on that topic again, we will look at the questions that might be used to assess the understanding of the learners, maybe say, for instance, learners might be given a case study on this topic, so what kind of case study they might be given? What questions they might expect and how also to answer those questions. I think they can focus on such things, workshops could make an impact.

Here, Teacher A seems to be saying that if their workshops could focus on particular topics in each subject where they could discuss the topic and how they could engage their learners in that topic, then that can make an impact on their knowledge and teaching practice.

Second, teachers were consistent in expressing their need for learning opportunities that allow them to *participate* in their learning, and not those where they sit quietly as the document is read to them by the facilitator. Teacher D remarked above that their non-involvement in these training workshops is exactly what discourages them from attending. They also talked about needing facilitators who can teach them as if they are in a classroom. Both Teacher A and Teacher F asserted that the facilitators needed to be subject specialists who possessed the content knowledge and teaching expertise. Teacher F added that the facilitators should be in a position to model and demonstrate what they were teaching. This is how she puts it:

Maybe they could come to our schools or alternatively, they could call us to a big venue and there are learners there that they would teach for the whole day, maybe they could help. Let's say 30 learners and the subject advisor/facilitator could teach them, maybe, this could help instead of telling us what to do in our classes.

One gets an understanding, through these teachers' remarks, of what would make them view a professional learning opportunity as meaningful. It should be content-focused, engage teachers actively, and have facilitators who can teach, model, and coach them

Third, these teachers also perceived that the planning and the design of their professional learning opportunities used a top-down approach where school leaders and outsiders planned what the teachers should be trained on. Teacher B argued that because she and her colleagues are the people who teach in the classrooms-they should be involved in designing their own training. This is how she puts it:

What I would like to see is that they need to involve teachers a lot, in the planning of all this, the content of these workshops. A teacher who is in Post level 1 (classroom teacher) should be the one who's more involved because they are the ones who know what actually happens in class. The workshop facilitators just tell you do this and you find that it's impossible to implement those things in class. So it'd be good if they could involve teachers in their planning and systems.

Finally, the participants acknowledged a need for other support systems in stimulating them to become highly knowledgeable and skilful teachers who are able to teach as the reform context demands. As to high-quality professional learning opportunities, external support was identified by teachers as other ways to needed to enhance their learning. Teacher A suggested intervention from outside subject experts such as faculty from higher education institutions who could facilitate these workshops and even train the trainers. This intervention would help to equip “*teachers who were not really trained on the subject and those who did not get good training*”. Teacher F talked about the district leadership support. Sometimes teachers feel pressured by the district leadership who expect teachers to produce high achieving learners without guiding and providing resources to make this possible.

In summary, the teachers pointed to a variety of attributes of the professional development experiences they would like to have available to them that mirror closely what the literature on high-quality professional development has identified in other, more developed national contexts. They wanted more regular experiences that engaged them as active learners, modeling good practice in the kinds of classroom settings in which they taught. They wanted to develop a deeper grasp of the subject matter they were expected to teach, and an understanding that would take a more significant investment of time as they participate in professional learning opportunities that extend over time. The teachers suggested what the professional development programs that might work for them may look

like. Most significantly, these teachers indicated that they needed to be directly involved in designing and planning their professional development.

Chapter 5

Discussion and Conclusion

This study sought to explore key elements of purposively selected teachers' understanding of their own professional learning, gained after reflecting on their teacher training and professional experiences, in the current context of reform in South Africa. Stated another way, the study sought to determine what teachers understood about the curriculum they were expected to teach in the reform context, what it implied for their knowledge of subject matter, how they currently approach teaching the curriculum, and how their professional learning experiences were or were not enabling that teaching, within the various disadvantaged settings in which they worked. It has been established that when teachers are able to articulate and examine their insights and strategies that they bring into their practice, improvement in their teaching is evident (Harris & Muijs, 2005; Camburn, 2010). This study acknowledges that comprehending what goes on in one's professional practice does not automatically lead to the professional growth of that individual. But it is an important first step: engaging teachers in such reflective practice is likely to reveal new insights into where these teachers come from, what they actually learn from their practice, and how that knowledge can be used to create better opportunities for their learning.

The study was conducted against the backdrop of educational reform in South Africa, in which research has not yet attended to nor captured the teachers' voices concerning their professional development and the assistance they believe they need in order to gain professional competency (Mokhele & Jita, 2012). The findings of this study indicate that teachers have a growing awareness of the reform curriculum and what it implies for their practice and future growth, and furthermore, they show in various ways that they can see what teaching this curriculum implies for the professional learning that they must do, in some

ways implying substantial departures from the ways they were taught. They are clear about how the professional development opportunities which they have so far encountered fall far short of this mark, and how their workplace environments are often not as supportive of their further learning as they could be. At the same time, they are able to identify elements of effective professional learning programs that are meaningful for them. Above all, they are articulate and self-aware about their professional learning (or in some cases lack of it), and as such they offer an important voice informing the design of professional learning opportunities that can be meaningful to them.

I start the discussion of this chapter by summarizing the study findings that were presented in themes in Chapter 4. Next, a larger picture of what the findings say or mean will be presented. Then, I discuss unanswered questions, limitations to the findings, and possible directions for future research. Finally, I conclude by considering implications of the findings for practice and policy.

Summary of the Findings

The study pursued the following research questions: (a) What does “professional learning” mean for teachers in South Africa’s rural and township schools? What do they claim to know about their subject matter and classroom practice, that they believe would make them more accomplished and successful teachers in today’s reform environment? (b) How are their ideas about professional learning and their own “stance” towards themselves as learners shaped by their personal and professional backgrounds, and the local conditions that they experience? (c) How do teachers perceive the professional learning programs that are provided for their learning, and what characteristics of these programs do teachers perceive as enhancing or hindering their learning? (d) What kinds of professional learning programs and supports can help these teachers assume a “learning stance”, from their point of view?

Following is a summary of the findings presented in themes that were drawn from the data in relation to these questions.

Theme 1: Teachers' Knowledge of the Reform Curriculum and Its Implications for Subject Matter Knowledge and Teaching Practice

The first theme considered teachers' understanding of what they are expected to teach and how they do or can go about teaching it, in their new reform context. Teachers attain this understanding from their teacher education phase, on-going professional development, and from the informal learning they derive from their classroom experiences. The findings indicate, first of all, that the teachers have a clear picture of the reform curriculum they are to teach, grasp it as a sequence of topics and "subject concepts", many of them new or more developed than what they would be expected to know and teach in past years. All were aware that the reform curriculum made new demands on their subject matter knowledge—and as such posed a significant challenge to their professional learning. All six participants showed awareness of the knowledge base of their subjects, though the depths of their understanding of their respective subject domains (and especially their "pedagogical content knowledge") is hard to say from a study such as this. That said, they seem to be clear about the subject concepts that are now emphasized in the reform curriculum, which they have learned in their teacher training programs or elsewhere, how these subject concepts have changed or not changed in a reform context, and the new purposes for teaching those concepts. Furthermore, these participants were cognizant of the fact that a good grasp of the subject knowledge base is crucial to be able to teach one's subject well. As such, though they have much still to learn about their knowledge base underlying their teaching, they have taken important first steps in that direction.

Along with their growing awareness of the content that the reform curriculum expects to be taught, they were discovering in various ways that the reform curriculum implied a

different relationship between teacher and learners, and new roles for both parties. In various ways, they were able to point to interactions within the classroom were becoming, or needed to become, more active (or at least expected to be), for example, involving learners in asking questions and doing research in various arrangements (e.g., group discussions and projects), and the teachers in a more facilitative relationship to students' learning. For some of the teachers, these changes were substantial.

The extent of these teachers' learning about the content of reform curriculum or new forms of classroom interaction were heavily influenced by the period in which their initial teacher training took place and when they started working, that is, before or during the new reform context that started with the ending of Apartheid. That difference seemed to affect the depth of their understanding of their subject concepts, the way they taught them, and even their willingness to embrace these changes. In general, the participants shared that they tended to teach their subjects in the same ways in which they were taught. For example, those whose teacher educators often used the teacher talk method mostly employed that method in the classrooms where they currently teach. Also, where they had used memorization to learn their subject concepts, they also expected the same from their learners. However, those teachers who had trained after the changes had been exposed to other teaching methods such as group discussions and presentations and they attempted to use them in their classrooms. In short, the extent of the *actual* change in their practice (which this study was unable to observe directly) is likely to vary greatly, from those who have changed relatively little to those who are making substantial changes, by comparison with practices before the reform era. Despite all that, they were collectively conscious of the new roles that they as teachers have to play in the new learner-centered teaching required by their new reform context.

Theme 2: The conditions that influence teachers' professional learning

Second, it was clear from these teachers that powerful forces and conditions in their working history and local circumstances were shaping their understanding of the reform curriculum, their new learning about content and pedagogy, and their teaching practice—in particular, the teachers’ background, school context, and school leadership. Teachers’ background included personal and professional dimensions, including the initial and ongoing professional learning programs in which they had participated. Regarding their personal background, the critical events such as their legacy of the past and childhood role models might have had implicit impact on the learning of these participants.

Regarding the initial teacher training phase, the experiences of these participants varied according to the period of training—especially, whether it occurred under the Apartheid regime or after that time—and, along with the time of training, the level of qualification they had aimed for, and grade level to be taught. Thus, their perspectives on how this phase shaped ideas about their professional learning also differed. For instance, some of those that were trained prior to the reform context seemed not to consider their initial teacher training as impactful, in terms of their gaining new understandings and approaches to teaching (in fact, the pre-Apartheid training may have had the opposite effect, by suppressing their expectations, limiting their conceptions of subject knowledge, and unnecessarily constraining ideas about how to engage students in learning). Those that were trained during the reform context, by contrast, thought that their training had begun to prepare them to assume the roles required by the reform era. The general consensus among all these participants, however, was that their initial teacher education and ongoing teacher learning opportunities, taken together, were not adequate to improve their subject knowledge and teaching skills (as I discuss further under Theme 3).

Second, regarding their school contexts, all six participants work in disenfranchised school settings marked by minimal resources for teachers to work with; lack of infrastructure

such as proper school buildings, desks, or equipment; limited access to professional development resources; and poverty in the surrounding community. Although the mentioned aspects of these participants' school context impacted them in varied ways, their collective thinking was that their school settings hindered their professional growth. For instance, shortfalls such as lack of textbooks and cramped classroom space for learners dissuaded these teachers from using various teaching styles and methods encouraged by the curriculum reform.

Finally, the findings also established that the support of school leadership can play a helpful role in renewing or increasing teachers' subject knowledge when, for instance, school leaders provide opportunities for teachers to learn about their subject with internal or external peers as well as being mentored or coached in their schools. Two participants acknowledged school leadership support as contributing towards their professional growth, through supportive resources that help in their teaching practice and some mentoring from the head of department. In contrast, the remaining four participants agreed that their school leadership did not contribute towards stimulating their learning and teaching practice. They identified lack of opportunities or encouragement to participate in workshops, lack of support in their teaching through class visits or mentoring, and non-provision of teaching and learning resources as impeding their professional learning. Instead the school leaders paid more attention to monitoring that teachers are doing their work.

Theme 3: Perceptions of the extent and quality of professional learning opportunities

The third theme looked at how teachers perceived their professional learning opportunities and also what about them was seen as promoting or blocking their learning. The professional learning opportunities referred to here are those that contribute towards continuous development of teachers throughout their working experience, chiefly taking one

of three forms: workshops serving large numbers of teachers (e.g., in a similar grade and subject area across a district) led by the SA department of education, “cluster-based” workshops led by district staff, and cluster-based workshops initiated by and led by the teachers themselves. The study participants consistently indicated that the professional learning opportunities provided by their department of education left much to be desired, whereas the cluster-based activities sometimes offered more to teachers, especially when initiated and guided by teachers.

All these teachers were in unison about the characteristics of these departmental workshops that they viewed as not contributing towards the improvement of their professional knowledge, and here their observations bear out much of what the literature on high quality professional development asserts. They shared that these programs were not really focused on promoting their subject knowledge and teaching skills, and were often characterized by limited duration, unclear content and purpose of these workshops, as well as poor facilitation. Regarding the duration, the participants reflected the contact time and the distribution of these workshops as not giving them enough chance to learn more about their subject and how to teach it in a better way. Also, these workshops are not usually focused on the subject content and related teaching practices, and only a few teachers are lucky enough to engage in workshops that took that focus. Finally, the participants remarked on how their facilitators often lacked knowledge of what they were presenting and how they, as teachers, were not properly engaged in the presentations.

Teacher clusters were viewed in a much better way. The participants remarked that they acquired new understanding of their subject concepts and how to teach them through exchanging ideas with other teachers. Echoing patterns that have begun to be apparent in developed countries, they shared that networking, collaboration, and sharing among teachers was fostered in the clusters, and that these kinds of activities had exposed them in a more

helpful way to different ideas about their teaching. That said, the depth of the subject matter understanding in such encounters was uncertain, as the participants in a cluster grouping might not bring to it much expertise in the subject. Teachers' subject knowledge in this study remained at a topical level, as was evident in their account of the topics that they are teaching in the reform context and the purposes for teaching them. However, that knowledge does not particularly go deep into the subject domain.

Theme 4: Types of professional learning opportunities and support that teachers envisioned

The fourth theme considered what teachers said about the types of professional learning opportunities that they envisioned as meaningful to their learning and the improvement of their teaching skills. They also suggested other support structures that could enable them as they strive to heighten their subject knowledge and teaching expertise in order to fit in their new reform context. The majority of the participants reflected a need for professional learning programs that center directly on subject matter content and how to effectively teach that subject content to learners. As they see it, these programs should focus on the subject topics that teachers teach in their classrooms, in settings where facilitators would teach teachers as they are going to teach their learners. Another general perception from the teachers was that they are the people who know exactly what works and what does not work for their teaching practices. Thus, they need to be involved in the creation of their professional development programs, through a more explicit attempt to listen to and consider their needs. Teachers also believe that assistance from outside, such as higher education institutions and their school districts, can contribute towards improving their learning.

Summary

To sum this up, the collective voice of these teachers working in South African township and rural schools suggests that teachers are aware of the nature of the reform curriculum and what it demands of them, have begun to incorporate its content into their teaching, as well as to appreciate their need to know the new content more deeply, and to learn how to engage young learners in the subject matter in an effective way. As the teachers see it, this awareness and their ability to move beyond initial awareness to deeper professional knowledge and changed practice is substantially influenced by a convergence of influences that date back to the era before the education reform context and that are embedded in their workplace circumstances. The views of the participants on their professional development programs reflect that they know what works or does not work to enhance their professional learning. They also agreed on what they think could be done to make these professional learning programs meaningful for them.

Discussion: Listening to Teachers' Voices and Strengthening Professional Learning

Since the participants in this study are currently immersed in the process of education reform, it was necessary for them to engage in professional development in order to learn new knowledge and teaching approaches (Garet et al., 2001). Certainly, teacher professional development is a crucial element in any educational attempt to improve teaching and learning (Ono & Ferreira, 2010). *'Fear of the unknown', 'confusing', and 'frustrating'* were some of the phrases that were articulated by the participants in this study when asked about their views on their education reform. The conceptual framework of this study reflects that, in spite of inconsistent support, education reformers expect teachers to teach in ways that stimulate critical thinking and problem solving skills, and that require intense subject matter knowledge (Cochran-Smith & Lytle, 1999). The same was expected from the participants in this study, yet the support for teachers to change was limited. Unsurprisingly, these

participants seemed to view their process of change as hard. These facts prompt some further reflection on what these teachers are saying, and what it may mean for the ongoing improvement of education in South Africa.

“This is what we know about what the curriculum asks us to teach, the underlying subject matter, and ways to teach it....”

Generally, the literature on teacher professional learning in the South African context suggests that many teachers in this context possess a limited knowledge base (e.g., Mestry, 2007; Jita & Ndlalane, 2006; Bantwini, 2009). The study findings show that teachers had internalized aspects of what the reform curriculum asked of them—at least at the level of topics and key subject concepts—had some understanding of the underlying subject matter, and had begun to visualize appropriate teaching approaches. The latest scholarship shows that subject knowledge contributes to a part of the knowledge base (Verloop, Van Driel, & Meyer, 2001). The total knowledge base can refer to the skill of using this knowledge to change programmes, create task activities, and being able to detect learners’ misunderstandings and misconceptions. In this regard, it is not yet clear what the “total knowledge base” of these teachers comprises, nor the net contribution to it, to date, of their professional development experiences.

To be sure, the participants in this study revealed a fair knowledge of the content of their curriculum and explained ways they go about teaching it. Even so, the study was only able to gauge this through the teachers’ self-evaluation and not from the observation of their classroom practice or actual task activity that required teachers to apply their subject-matter knowledge. It was evident in their confident expression of their subject concepts and descriptions of how they apply them practically to learners so they can understand, that the teachers see themselves as professionals who are building a stronger repertoire, and are able to do more than in years past they or others would have expected them to do. But how much

more? How much deeper into their respective subject domains have they pushed their understanding, and how much farther would be needed to do justice to the reform curriculum as it is now conceived? Here there is a distinct possibility that, while they have a clear appetite for further subject-matter learning and realize they have more to learn, there are important areas of the new curriculum and its underlying subject matter that they have not yet begun to imagine. And they may still be teaching with a prior set of assumptions about knowledge itself (e.g., treating knowledge as a set of topics to *present to* students, as opposed to a set of processes in which to *engage students*).

The findings of this study can help designers of the professional development to realize that teachers possess some knowledge and an appetite for more, which they could build upon when designing the professional learning programs. At the same time, the designers can continue to explore the range and depth of what teachers are coming to know within and underlying the new curriculum, and to imagine how best to help teachers encounter these new ideas, or to visualize how to teach them. And here, the designers of professional development have a long way to go.

Sadly, most of the participants indicated that the workshops that they often attended did not emphasize the subject content or teaching skills. At least in some clusters, according to what teachers shared, they tackled the subject content directly. Thus clusters were perceived as enabling their learning and teaching, and they were motivated to attend them. This is in line with Guskey's (2001) remark that teachers are often attracted to professional development programs that they believe will expand their knowledge and skills.

***“What influences our grasp of the reform curriculum
and how we teach it?”***

Listening to the voices of South African teachers concerning what they know and know how to teach, in relation to reform curriculum, brings one quickly to the circumstances in which they teach, and a series of related influences on them as teachers and as learners. In particular, the professional knowledge of South African teachers in impoverished school settings is substantially impacted by teachers’ past social background, prior learning experiences, lack of a support system, and poor structures within which teachers work. It has been well established that teacher professional learning is shaped by different classroom contexts in which teachers work, which in turn are shaped by their school culture, society, and community in which the school is located (Opfer & Pedder, 2011; Beijaard et al., 2000). The study participants indicated that indeed these conditions played a critical role in determining what they believe about their professional identities, how much they see themselves as capable of learning new practices, and how well these practices apply in the day-to-day world in which they work.

Here, the study findings suggest that the legacy of Apartheid runs very deep, and the continuing challenges presented by impoverished schooling circumstances are likely to exert an enormous influence on the possibilities for the reform curriculum to take root. Research suggests that a number of dimensions of people’s lives have an impact on their teaching and learning (Richardson, 2003). From the findings on these teachers’ backgrounds, it is possible that they still carry internalized images that were instilled in them during the Apartheid era that they were not good enough for some jobs. Consequently, they bring to their professional learning attitudes, beliefs, and images that impact how the teachers respond to their learning opportunities. Also, the findings reflect dissatisfaction among the participants about their initial teacher education programs, while at the same time acknowledging its power over their

current way of teaching: experiencing “teacher talk” pedagogy leads to the same practice in the next generation. They felt that they were not empowered well in their subject theory and classroom practice. Teacher D’s reflection on this issue highlights this point when she shared that she learned many things about her teaching practice on her own when she was already a teacher. In her teacher education program (which she underwent prior to the end of Apartheid) she and her colleagues were taught the exact subject concepts that they would be teaching their learners. They learned those concepts through memorization, and had to reproduce what they were taught exactly as it is. If not, they were considered unsuitable to teach that subject and they were encouraged to choose another subject. One can speculate that such incidents may have affected the views of these participants about their own learning and teaching, and even more to the point about the nature of knowledge itself (as a fixed body of facts and concepts to be transmitted from teacher to learner).

It is not clear that the South African Department of Education has fully appreciated or considered what the legacy of Apartheid and impoverished schooling circumstances may mean for teachers’ learning—or for ways that the reform curriculum can most productively be adapted to work in these circumstances. Considering the new curriculum policy framework that requires learners to critically reflect and engage in problem solving (SA Dept. of Education, 2011), a process which the teachers must facilitate, one can be tempted to speculate that education reformers had never spent some time in South African classrooms and schools with poor physical and educational resources. In this study, the participants were consistent in that they were expected to teach in a ‘new’ way, yet they faced many challenges in their classroom setting that, in their view, compelled them to revert to their ‘old’ ways of teaching. It is hard to say how much of their reverting to old ways was absolutely necessary and how much reflected their demoralization or their inability to visualize how new teaching practices could be adapted to the difficult classroom circumstances.

Recent scholarship shows that many reform efforts seem to fail because teachers are not supported, and if so, they abandon the new approach and return to what they know (Verloop et al., 2001). It looks like there was assumption on the part of the reform framers that their existing structures will allow teachers to make the reformers' vision a reality (Cochran & Lytle, 1999). Also, another assumption was that teachers in all school settings were highly competent to make sense of such a challenge. As the participants in the study shared how their school conditions blocked their professional growth, the researcher detected a sense of frustration and hopelessness. Payne (2008) asserts that pervasive demoralization of teacher workforce under deprived professional environments can result, and there was clear evidence of this kind of demoralization among the teachers in my study. Whatever the reasons for teachers' failure to implement reform-oriented teaching strategies, it was clear that the absence of a good support system was a contributing factor.

“This is how we view our professional learning opportunities...”

Participants shared disheartening utterances about their professional learning opportunities. *“They are a mess”, “I don’t like going there”, and “Why attend if all they do is read the document?”* Teacher professional learning is defined as the process of gaining new knowledge and changing how teachers think, how they approach their teaching, and ultimately how they participate in their professional work. To attain this learning, teachers need to participate in high-quality professional learning opportunities with certain characteristics (Garet et al., 2001). A consensus on that set of characteristics that are highly likely to increase teachers' knowledge and improve their teaching has been established, at least for the developed world (Desimone, 2009).

Unfortunately, South African teachers, despite their history of weak subject knowledge and teaching skills (Maistry, 2008), were not offered such high-quality

professional learning opportunities at the beginning of their reform era. They were mostly subjected to a traditional approach, in the form of workshops that were offered in a “cascade” fashion, with individuals who were increasingly less expert offering the training at successive levels of the “cascade” (Kriek & Grayson, 2009). Only recently have the teachers, as the participants shared, start engaging in innovative approaches that carry some of the above-mentioned core characteristics of high-quality professional development. And noticeably, the teachers *themselves* took on an important role in shaping some of these professional learning opportunities. The study participants were all part of teacher clusters that they considered as the best for their learning. They agreed that they gained more knowledge by sharing information about their subject with other teachers. This is in agreement with Villegas (2003), who argued that teacher professional communities (teacher clusters, in this case) bring teachers together to tackle the subject problems that they experience in their classrooms. In that way, the participants promoted their own professional learning as individuals and groups. However, they recognized that not all clusters are impactful, as one of the participants commented that it “*depended on how knowledgeable is the cluster leader or facilitator*”.

Seemingly, despite inconsistent support for professional learning from their leaders, the teachers I studied are motivated to upgrade their knowledge and skills by engaging in advanced studies. The issue with this self-initiated professional learning is that it is only for those teachers who are willing to learn. What usually happens when there is no support during a reform context is that many teachers feel unmotivated and lose the desire to strive for innovation and improvement in their profession (Samoff, 2008). However, some teachers are motivated by uncertainties that they face and they strive to improve their learning on their own initiative. But reformers may too easily “typecast” teachers such as the ones I studied as demoralized and unmotivated to improve. According to Jita (2004), reformers have not paid

sufficient attention to a teacher's will to learn in order to enable the required changes in their teaching. Briefly, he talks about the teacher's personal transformation, that alludes to teacher's personal efforts to transform themselves by identifying and considering their personal identities or biographies as motivating factors in their participation in professional learning programs.

The majority of the participants in my study, despite their sense of discouragement at the poor quality of available professional learning opportunities, showed a sense of desire to learn, as evident in their involvement in advanced studies that they identified as impactful to their increased knowledge. They also networked with their peers through the teacher cluster arrangements and with those who work in privileged school settings. To that effect, this study finding supports Jita's assertion in that it reflects how the participants' will to learn helped to stimulate their learning.

In my discussion of high-quality professional development opportunities in the conceptual framework, I noted that it has not yet been established that such opportunities will be effective in a South African context. To that effect, Mokhele (2013), driven by her study findings on a particular innovative professional development, proposed an adapted version of Garet's model of effective professional development that might be suitable for developing worlds. This refined model would have added features above the six core features, which are personal transformation and the context of teaching in impoverished settings. Mokhele suggested that carefully designed professional development experiences that combine different activities, such as small cluster (few neighbouring schools) as well as larger (many schools in the district) workshops, coaching from experts such as university faculty, and study visits (schools in the developed world) have a potential to bring about personal transformation and growth. The context factor refers to a consideration of lack of resources when designing content for the professional development programs. Desimone's model

emphasizes the focus on the content, according to Mokhele, when developing teachers in township and rural settings, the examples and resources used to explain the subject content should fit these contexts. Scholars interested in professional development in South Africa might have to listen to teachers' experiences and continue to explore and make sense of these experiences in search for suitable models for impoverished schools.

“These are the types of professional learning opportunities that we envision....”

Even though the participants recognize promising initiatives towards their professional development, they still felt that their professional learning opportunities are not designed for their needs. In other words, in putting together teachers' professional development programs, participants feel that their needs were and are still not considered. Consequently, they are not confident to teach in a “new” way, not because they did not want to, but they do not know how. In most of the professional development events they encountered, little or no time was spent demonstrating or modeling the new approaches, and working with the teachers on ways to adapt the “new” way to the specific classroom conditions they were facing. Teacher B reflected this in her comment *“they just tell you, do this, do that, and you find that it's impossible to implement those things in class”*. As participants shared about their current professional learning programs, they drew a picture that they were feeling as if everything was imposed, even their own learning. Take for instance what Teacher A (one who had come to teaching after the end of Apartheid) shared:

So I think if I was a facilitator, I would not tell the teacher that this should be done like this, but I'll put the problem to them and let them work on it on their own because I think they can develop quite nicely from one another instead of being told. And I know teachers do not want to be told, because some of them think they know, so if I come and tell them, they'll say 'oh, we know this.' But when they discuss their

understanding, share their experiences, share their challenges that they are facing, I think it could be interesting.

When told what to do, it appears as if teachers feel undermined, as if they do not know anything. When given a chance to show what they know as they work on a certain problem with each other, they feel involved and that their knowledge is considered. When teachers feel involved, they show willingness to learn. In contrary, when new knowledge and skills are imposed on them, and they feel as if they have been excluded from the development of new initiatives, teachers tend to resist or reject the new knowledge (Hargreaves, 1995). In a sense, the teachers are reflecting back the notion that, if treated like professionals, as capable of improving a complex practice through collective problem solving with other professionals, they will rise to this expectation and succeed.

Research indicates that teachers participate in professional development for various reasons (Villegas, 2003). It may be for improving one's skills in performing one's job, for career development or promotion purposes, to improve one's professional knowledge and skills, for motivational purposes, or to help teachers prepare for transformation in education. It is noted in the South African literature that at the early stages of education reforms, teacher professional development opportunities were aimed at promoting teachers' skills so they could be in a position to fulfil the new agenda of transformation to reconstruct the education system (Mestry et al., 2009). Considering this, it appears as if the assumption of the reformers was that all teachers in this context already had adequate knowledge and skills to fulfil the transformation agenda. However, as my respondents made clear, the participants reflected a need for programs that focus on increasing their grasp of subject content and ways of teaching it. Grundy & Robinson (2004) argue that teachers who show limited content knowledge can only benefit in professional learning programs that aim at the extension, growth, and renewal of the knowledge and skills. In emphasizing programs that focus on the

content for their envisioned professional learning opportunities, as some of the participants did, they show the support of Grundy & Robinson's model.

In conclusion, the findings in this study suggest that in order for professional learning opportunities to be meaningful and helpful from the teachers' point of view, they have to consider the needs of the participating teachers, while treating the teachers as legitimate sources for understanding those needs. Also, they need to consider what teachers already know and allow them to participate actively in their programs. The teachers' direct involvement in their professional development thereby can accomplish several agendas: guiding their learning towards areas of professional practice where they feel weakest, and reinforcing their initiative in recognizing, and taking ownership of, their own professional learning.

Concluding Remarks

The study planned to provide these teachers with a context to examine their professional knowledge and teaching practice, as well as their approaches to professional development. To conclude this dissertation study, I will highlight what my study has and has not achieved, the limitations of the findings, and unanswered questions as well as possible directions for future research. Furthermore, I will look at the implications of the findings for practice and policy.

What the Study Has and Has Not Achieved

This study provided an analysis of what teachers in South African township and rural schools understand about the curriculum they are expected to teach and how they teach it, and in relation to it their professional learning and professional learning opportunities. The underlying purposes behind this study were to try and create a picture for scholars with interest in the field of teacher professional learning, and reformers in this context, of the

knowledge of the reform curriculum that teachers in the most difficult teaching conditions possess, its implications for subject matter knowledge, and how they approach delivering it to their learners. Another purpose was to determine what these teachers think of their current, as well as envisioned, professional development opportunities. The insight gained from there would be useful for the planning and designing professional learning opportunities for practising teachers, informed by what the teachers themselves identify as their professional needs.

This dissertation study attempted to contribute towards the most uncharted territory of this field, that is, teachers' reflection of what they know about their subject and how they apply that in their practice. Teachers around the world do not usually express what their knowledge base is, nor are they often asked to do so. First, the study highlighted teachers' awareness of the importance of coherent knowledge of subject matter and teaching it. The study showed that, in varying degrees, teachers are coming to understand the nature of a reform curriculum, have begun to appreciate the subject matter demands and what it may take to teach it, as well as the conditions that influence or block the development of this knowledge. Second, the study conveyed that teachers also have perceptive insights into what is and isn't facilitating their learning and what may enhance their professional learning. In this way, this research study offers some insight into the design of both their pre-service and in-service professional learning opportunities. It recommends a further review of initial teacher education programs in this context that focuses on the development of teachers' knowledge base, and that considers the history of teachers such as their biographical contexts, which includes their previous learning and expectations for the future. The study also has suggestions for continuous professional learning opportunities that consider teachers' input and that focus on the subject matter content and methods of teaching.

However, this research study only begins to explore the full extent of teachers' existing knowledge. It did not manage to show the degree and depth of teachers' subject matter knowledge in a comprehensive way for any given subject area, with respect to specific topics and the knowledge of transforming those topics into terms that they are understandable to learners. It also did not pursue knowledge of specific instructional strategies that increase the learners' understanding of particular topics. To do so would have taken subject-specific research, organized around a map of the full curricular domain. Rather, the study's exploration of what teachers know about their professional learning is limited to self-reflection shared through the interviews that elicited illustrative examples of what they know and do as teachers.

Furthermore, the study did not examine these teachers' practice directly. Because there were no observations of classroom lessons where the subject concepts were presented to the learners, the degree and the depth of content knowledge of these participants and how they present it to their learners could not be verified by the researcher. Also because there were no observations of the professional learning opportunities that these teachers participated in, the researcher could not determine what, exactly, about these workshops caused teachers to assume the views that they have.

This study also did not address the differences experienced by teachers in their subject knowledge and teaching practice after participating in their professional learning programs; lacking two timepoints, with a baseline time period and subsequent time point to establish change, the study could not show convincingly how teachers may or may not have changed their thinking and practice over time. Even though these teachers mentioned that most of their workshops were not focused on improving their knowledge and changing their practices, they alluded to clusters where they shared ideas about their subjects and classroom practice with

their colleagues. It would have been informative to examine how the participation in teacher clusters actually influenced thinking and practice.

Unanswered Questions and Possible Directions for Future Research

Most researchers on South African education as well as education leaders continuously mention the weakness of teachers' knowledge base in this context, especially among teachers who teach in impoverished school settings (SA Dept. of Education, 2006, 2010; Jansen, 1998; Maistry, 2008; Jita & Ndlalane, 2006; Steyn, 2013). The underlying purpose of this research study was to reveal, in an illustrative way, the actual grasp of the reform curriculum and its associated subject knowledge base that a group of these teachers possess—to see how confident and comfortable teachers were with the conceptual material presumed by the current national curriculum, and to suggest how aware teachers were of particular knowledge gaps they might have in relation to this curriculum. It was my hope that that revelation would provide vital information towards the planning and design of future professional learning opportunities for these teachers. However, the study only managed to show what teachers claim to know about their professional learning as well as their views on the importance of possessing the knowledge base. The actual subject-matter knowledge with regard to specific topics and the knowledge of transforming these topics in their classrooms remain unexamined. Future research focused on particular subject areas could use interviews, reflective journaling, inspection of lesson plans and other unit-related materials, and observations of lessons to examine how teachers actually understand their subjects and how they try to transform it into teachable content.

Closely linked to above, another research study could seek more direct evidence (with some suitable pre- and post-measures) of how various kinds of in-service education programs affect teachers' subject knowledge and pedagogy, that is, how these programs elicit the

knowledge mentioned above and its application to the classroom. Observation of teachers' lessons before engaging in these programs could be done, followed by observation of the in-service programs to see how teachers are engaged in learning about new subject content and instructional strategies, and the characteristics of the programs that cause teachers to assume a learning stance. Lastly, following the in-service experience, interviews could be conducted on what teachers consider as they create their lesson plans and choose the instructional strategies to use, coupled with post-observations of teaching.

Finally, this research study provides an understanding of professional learning of a small group of teachers with characteristics that vary widely (their school settings, township or rural; their qualifications and the grade levels taught). These different characteristics might have contributed different effects on their learning. In that way, there can be no certainty if the effects are raised by one or two teachers. A future study that I plan to undertake in order to extend and refine this research study will engage a large group of teachers with similar characteristics, for example, primary or secondary math teachers who participate in one cluster. It will be conducted over extended time and will utilize the interviews, observations, and reflective journaling to increase the richness of the data.

Implications of the Study Findings

As already discussed earlier in this chapter, the views of these teachers disclose that they do have insights about their knowledge and teaching, and what might further facilitate it. What is more, their insights articulate and underscore ideas that a body of research on high-quality professional development (in developed countries) has come to, even though these teachers have no exposure to that research base. If nothing else, the thoughtfulness of these teachers conveys seriousness about improvement and how to get there that policymakers

should listen to and respect. These findings carry different implications for policymakers and designers of professional development programs, as well as the scholars of this area.

First of all, the study suggests a somewhat different way of viewing the teachers in rural and township schools, who are the “recipients” of and participants in professional development. Rather than concentrating on their deficiencies—what they don’t yet know—policymakers might take an “asset-based” view of these teaching staff, built on a perception of them as competent and caring professionals. While it is easy to take a “deficit view” in this kind of circumstance, doing so may only diminish the chance that these teachers assume and sustain a learning stance in their approach to their work.

More specifically, the study revealed what a professional development program that works may look like from the perspectives of these teachers. The study findings suggest that in order for professional learning opportunities to be successful, they have to be meaningful to the participating teachers. While the needs of teachers may not necessarily be the same for all teachers even in similar contexts, an important lesson learned for policymakers, who are often also the designers of these programs, is to understand what teachers want and what they find meaningful. Also, the findings suggest that it is imperative that teachers are directly involved in their professional development, a basic design principle. Accordingly, policymakers might start to consider a more “bottom-up” approach in the planning and design of their professional development programs, which prioritizes a careful assessment of teachers’ needs—in the teachers’ own words and as they perceive these needs.

Findings from this study might also lead scholars that have interest in teacher professional learning issues to work on producing scholarship that incorporates the voice of teachers in the design of their professional learning opportunities, and in particular, what those voices may be saying that reflect the particular circumstances of disenfranchisement

that pertains in a place like South Africa. There is indication that research, particularly in the developing world, lags behind in capturing the views of teachers on the assistance they need in order to gain professional competency. And listening carefully to teachers may be a first and vital step in motivating and supporting teachers on that difficult learning journey.

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APPENDICES

Appendix A: Participants' Biographies and their Schools' Background

(1) *Teacher A*

This is a high school teacher who teaches in a township school. He started teaching in 2007. His teacher training took place in the new transformation era. He holds a four-year Bachelor of Education (B. Ed) degree, a one-year Advanced Certificate in Tourism and is currently furthering his studies towards the Master degree in Education. His specialisation subjects were Business Studies and Accounting. He chose these subjects because they were his favorite subjects at school and he excelled in them. He teaches mostly in the Further Education and Training (FET) (Grades 8 - 10) phase and has a teaching experience of 7 years. His school has a population of approximately 908 learners. There are 28 teachers and the school management team consists of one principal, two deputy principals and 4 heads of department. Teacher A's school is a no-fee paying school. This school is located in a poverty-stricken environment. Its community is characterized by the high rate of unemployment, crime, and HIV/AIDS diseases. Most of the families are headed by grandparents who live on a state grant. The school buildings are small but they are in a satisfactory condition. The school has some resources such as a computer, printer and a photocopier.

(2) *Teacher B*

This is a high school teacher who teaches in a township school and has a teaching experience of 17 years. She holds a three-year Secondary Teachers diploma which was obtained prior the educational transformation era. Her major subjects at the college were Home Economics and Zulu. Her choice of Home Economics was influenced by her passion for cooking and sewing. Later she improved her qualifications and added an Advanced Certificate in Adult Basic Education and Training (ABET) and a certificate in Tourism. Currently, she is engaged in Honours degree in School Guidance and Counselling. She teaches Home Economics, Travel and Tourism, and Zulu in the FET phase. Teacher B chose this profession of teaching because of her passion for working with children. Her school is one of the biggest schools in this township with a population of 1400 learners. There are 44 teachers with a school management team that is made up of a principal, two deputy principals and five heads of departments. The school has good buildings, the classrooms are in good condition

with adequate teaching resources and well-kept administration office. However, it is situated in a poor community that is characterized by crime. Most families here live on a state grant.

(3) Teacher C

Teacher C is another high school teacher who teaches in a township school. He has been teaching for 26 years in the same school. His teacher training took place prior the transformation era. He holds a 3-year Secondary Teachers' diploma, Further Diploma in Education and an Honours degree in Business Management. His specialisation subjects were Biology and English and he has been teaching Biology, currently known as Life Sciences, for the past 15 years. His choice of these subjects was influenced by his primary school teacher who was his role model. In addition to that, he had the highest marks in these two subjects in Grade 12. That influenced him to choose them as his specialization subjects. He teaches in one of the biggest school with a learner population of 1400. There are 43 teachers, the school management team consists of a principal, two deputy principals and five heads of departments. The school has enough buildings that are not in good condition. Some of these buildings have no windows and others have no doors. Teacher C's school is supposed to be a fee-paying school but the parents cannot afford to pay as expected. The school has an administration block which is fairly resourced i.e. it has computers, a telephone and printer. It is situated in a working class community (not comparable to working class in suburban areas), however a large percentage of the community live on state grants.

(4) Teacher D

This is a primary school teacher who teaches in a rural school and has 24 years of teaching experience. Her teacher training experience also took place prior to the transformation era. Her qualifications are a 3-year Primary Teachers' Diploma, Bachelor of Education and the ABET certificate. She specialised in Math and English. Currently she teaches Math, English and Zulu to the Intermediate (Grade 4-6) and one of the classes (Grade 7) in the Senior (Grade 7-9) phases. The teaching profession was not her first choice but it was the most accessible job at that time of her high school completion. Teacher D's school is located in remote rural community that is surrounded by poverty and high rate of illiteracy and unemployment. It is a small school that has a population of approximately 300 learners. There are 7 teachers and the school management team consists of one principal, one head of department and one senior teacher (Teacher D). The school buildings are just two rows of buildings with four classrooms in each. The school has a computer, photocopier and a printer that they do not use because they have no electricity.

(5) Teacher E

This is also primary school teacher who teaches in a rural school and has 18 years teaching experience. His teacher training experience took place in the education transformation era. He holds a 3-year Primary Teachers' diploma. His specialization subjects were English and Zulu but he has never taught Zulu. Although his initial teacher training was for the primary phase, he taught English to the FET phase for fourteen years. He is currently teaching all subjects except Maths, Social Sciences and Zulu in the intermediate phase and this is the 4th year. His choice of the first specialization subject, English, was influenced by his English primary teacher who was his role model and spoke English well. Also, he comes from a family who had passion for English, his older siblings are also English teachers. His school is also situated in a remote rural community that is very poor and has a high rate of illiteracy and unemployment. It is also a very small school with a population of about 200 learners. There are three teachers and only a principal in school management team. There were four classrooms that are poorly resourced and one small room that was used as a principal's office. The school has no electricity, computers, printers, and photocopiers.

(6) Teacher F

Teacher F is a primary school teacher who teaches in a rural school. She has 14 years of teaching experience and has been teaching in the current school for the past 4 years. She holds a 3-year Primary Teachers' diploma and a Further Diploma in Education. She was in the middle of her teacher training experience when the education transformation. Her specialisation subjects were History and English. Currently, she teaches in the Foundation phase (Grade R – 3). Her choice of the teaching profession was influenced by her aunt who had a passion for teaching. Teacher F's school is big with a population of 1200 learners. There are 46 teachers and the school management consists of one principal, one deputy principal and 4 heads of departments. This school is situated in a rural community that is not very poor. The school buildings are in an adequate condition. The school has two computers, a printer and a photocopier.

ⁱ No-fee schools refer to South African schools that are in the lowest 40% of poorest schools that allow learners to enrol without paying fees. The government funds expenses that were previously covered by school fees. Otherwise all state schools in South Africa still charge fees. All the schools in this study are no-fee paying schools

Thank you for giving me this opportunity to interview you about your understanding of your professional learning (subject matter knowledge and how you teach). I am interested in finding out what you know, and what you need to know about your subject matter, how you teach it and how you learned and continue to learn to do that. I am also interested in knowing your experiences of the professional learning approaches that you have participated in, and how, if at all, they may have helped you reach the understanding that you have.

1. Tell me about your teaching background (how long have you been teaching, grade levels and subjects taught, schools you have taught at, etc.)
2. Share with me your journey towards becoming a teacher
 - What made you decide to choose the teaching profession?
 - Tell me briefly about your teacher training experience (Where did you train? How long? Your subject specialization/grade level?)
 - Why did you choose to teach this subject/grade level in particular?
 - Talk to me briefly about your experience of learning your subject matter at school.
3. Talk to me about your learning experiences as a teacher trainee (specifically about your subject specialization/grade level and learning to teach it).
 - Specifically, what were you required to know about your subject matter (the concepts/objectives)?
 - What strategies (teaching methods, resources) were used to help you attain that knowledge?
 - What did you learn about teaching your subject (teaching strategies, lesson design)?
 - How was that taught to you?
 - What other supports (besides your teacher) were there for you as you were learning to be a teacher?
 - What did you find challenging about learning your subject? And learning to teach it?
 - How have your learning at school, college/university prepared you for your teaching experience?
4. Now, let us move to your teaching experience, especially in this current period of the curriculum transformation which is marked by drastic changes in what is expected from you as a teacher and your learner.
 - Talk briefly about the education transition period and how it affected your subject matter and teaching experience? (Do you still teach the same subject as before? Were there any changes in your subject? How have the changes impacted your classroom practice?)
 - What do you understand as the purpose of teaching your subject at school?
 - How has teaching your subject changed from before? (What are you now required to know about your subject matter? What are your learners expected to know – concepts, skills - about your subject?)
 - What strategies (methods, resources, planning) do you use to help them reach that knowledge?
 - What do you think is “missing” in your subject that you think your learners should know?

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- How have you come to understand the changes in the curriculum and the changes that are required from you as a teacher in this reform context?
 - How have your learning at school, college/university, workplace prepared you, if at all, for these changes?
5. Can you give me a full picture of the professional development (PD) programs that you are currently participating in?
- How often do you participate in PD programs? What forms of PD? What is the usual focus of your PD?
 - Talk about the specific-subject PD programs that you have attended (For example, what was your last PD session concentrating on? What did you all do as part of that session? What did you take away from that session – about your subject matter, teaching it, assumptions about your students and how they learn your subject?)
 - What features of this PD program have contributed mostly to your understanding of your subject and teaching it?
 - How have those features helped you with that understanding and the changes in teaching you have just described?
 - How and how much do these PD sessions get at the things you are most challenged by in teaching your subject?
 - If there is anything that you would change or add in these PD programs, what would that be?
 - Besides the PD programs that we have talked about, what are the other things that have supported your subject learning and classroom practice during this transformation period and, how? (Probes: Your workplace environment? School leadership? Prior learning experiences?)
6. Now, take me back to your classroom after participating in any session of this PD program, and talk to me about what you have tried that is different about your approach to teaching, planning lessons, dealing with students, etc.?
7. Again, think of a recent PD session and something that struck you as useful, doable, and important to try? What was it you tried to do? How did it turn out? (e.g. what was the students' response?) Would you be likely to do that again? Why or why not?
8. If there is anything more that you would want me to know about your professional development programs and your professional learning, what would that be?