

**ASSESSMENT OF THE IMPLEMENTATION OF STATE-LED CONTINUING
PROFESSIONAL TEACHER DEVELOPMENT (CPTD) IN THE GERT SIBANDE
EDUCATION DISTRICT OF MPUMALANGA PROVINCE IN SOUTH AFRICA**

BY



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**A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENT FOR THE
DEGREE OF DOCTOR OF PHILOSOPHY IN EDUCATION**

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2017

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DECLARATION

I hereby declare that the study entitled "Assessment of the implementation of state-led continuing professional teacher development (CPTD) in the Gert Sibande Education District of Mpumalanga in South Africa" is my original work. It has not been submitted to any other institution of higher learning for the award of any degree. All information from other sources made use of in this thesis is included in the reference list and acknowledged.

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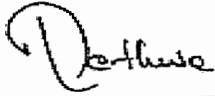
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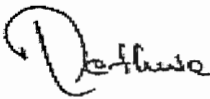
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ABSTRACT

The study sought to assess the implementation of state-led Continuing Professional Teacher Development (CPTD) in Gert Sibande District in Mpumalanga Province. The factors that triggered the interest in this study were the absence of reported research on the assessment of state-led CPTD in Gert Sibande as well as personal observations of teachers' inadequacies in quality teaching competences despite having attended a series of CPTD activities. The pragmatism paradigm, a mixed method research approach, and concurrent triangulation design were adopted. Senge's Learning Organisation and Wenger's Social Learning theories informed the study. For quantitative data collection, the two samples were: 200 teachers from 100 randomly selected schools with grade 6 (one Maths and one English teacher per school) and 200 relevant SMT members (one Principal and one Head of Department per school). The return rates of questionnaires were 59.5% for teachers and 61.5% for SMT representatives. For qualitative data collection, the sample consisted of one principal and one teacher of Mathematics or English from one randomly selected school out of the selected 100 schools; four Curriculum Managers and four subject advisors from the district office. Different interview schedules were used for samples from each of the interviewee cohorts. The quantitative and qualitative data were analysed descriptively and thematically, respectively. The study found that teachers were not consulted at the design stage of CPTD programmes and consequently, it did not address teachers' needs and never earned their 'buy in'. The study also found that the traditional in-service training using transmission mode was predominant as opposed to the contemporary job-embedded approach. This resulted in teachers failing to gain job-embedded knowledge and confidence despite attendance of several CPTD sessions. Teachers expressed unhappiness with the short duration and bad timing of CPTD activities such as the 2-hour quarterly workshops and the use of weekends and holidays for CPTD. The majority of teachers recommended the use of in-school CPTD to facilitate job-embedded activities. As a way forward, the thesis presents a framework for the productive use of CPTD which focuses on the use of job-embedded professional development.

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DEDICATION

This work is dedicated to my late father, Mr Njavia Bessam Tembo, my mother Zodwa Sarah Tembo for investing in my education, my husband Timothy for his support and to my kids Nontobeko, Dolly, Melusi and Phethani for the perseverance and unwavering love that gave me the push to pursue my studies regardless of the hurdles. I also dedicate this piece of work to all teachers as professionals, colleagues, scholars and all who will apply the suggested framework for effective CPTD provisioning.



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ACRONYMS

ANA	Annual National Assessment
APEC	Asia-Pacific Economic Cooperation
C2005	Curriculum 2005
CA	Class Act Educational Services.
CAPS	Curriculum Assessment Policy Statement
CCO	Circuits Coordination Officer
CERT	Centre for Educational Research and Training
CES	Chief Education Specialist
CI	Curriculum Implementer
CPD	Continuing Professional Development
CPTD	Continuing Professional Teacher Development
CRDP	Comprehensive Rural Development Project
CSATDP	Canada-South Africa Teacher Development Project
DBE	Department of Basic Education
DBST	District Based Support Team
DHET	Department of Higher Education and Training
DoE	Department of Education
DSG	Development Support Group
DTDC	District Teacher Development Centre
ECDI	Early Childhood Development
EEA	Employment of Educators Act
ELRC	Education Labour Relations Council
EU	European Union
FAL	First Additional Language
FET	Further Education and Training
GET	General Education and Training
GSD	Gert Sibande District
HOD	Head of Department in a school
ICT	Information and Communications Technology

IE	Invitational Learning
INSET	In-Service Training
IQMS	Integrated Quality Management System
ISPFTED	Integrated Strategic Planning Framework for Teacher Education and Development
JEPD	Job-Embedded Professional Development
JSTC	Junior Secondary Teachers' Certificate
MDOE	Mpumalanga Department of Education
MMOE	Malawian Ministry of Education
MSSI	Mpumalanga Secondary Science Initiative
MST	Maths Science and Technology
MSTA	Maths Science and Technology Academy
NCS	National Curriculum Statement
NGO	Non-Governmental Organisation
NICPD	National Institute for Curriculum and Professional Development
NPFTED	National Policy Framework for Teacher Education and Development
NSN	National School Network
NSTED	National Strategy for Teacher Education
OECD	Organisation for Economic Cooperation and Development
PAM	Personnel Administration Measures
PCAR	Primary Curriculum and Assessment Reform Initiative
PD	Professional Development
PDP	Personal Development Plan
PEA	Primary Education Advisors
PGP	Professional Growth Plan
PIRLS	Progress in International Reading Literacy Study
PLC	Professional Learning Communities
PTC	Primary Teachers' Certificate
PTD	Primary Teachers' Diploma
PTDI	Provincial Teacher Development Institute

REQV	Relative Education Qualification Value
RSA	Republic of South Africa
SACE	South African Council of Educators
SACMEQ	The Southern and Eastern Africa Consortium for Monitoring Educational Quality
SADC	Southern African Development Community
SAQA	South African Qualifications Act
SBA	School Based Assessment
SBST	School Based Support Team
SGB	School Governing Body
SMT	School Management Team
SMT40A	Respondent 40a in the SMT Questionnaire
SPSS	Statistical Package for The Social Science
STD	Secondary Teachers' Diploma
TALIS	Teaching and Learning International Survey
TDC	Teacher Development Centre
TED	Teacher Education and Development
TIMSS	Trends in International Mathematics and Science Study
TR24	Respondent 24 in the Teachers' Questionnaire
TR36	Respondent 36 in the Teachers' Questionnaire
UNESCO	The United Nations Educational Scientific and Cultural Organization
US OPM	United States Office of Personnel Management
USA	United States of America

CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION TO THE STUDY

The study assessed the implementation of state-led continuing professional teacher development (CPTD) focusing on its nature, its challenges and factors supporting or hindering its implementation with a view to providing recommendations to strengthen and enhance the implementation of such programmes. The study focused on one of the four education districts in South Africa's Mpumalanga Province, the Gert Sibande District (GSD). The study emanated from the premise that CPTD has become a key component of school improvement plans especially where large-scale systemic change is taking place (Reddy, 2010).

1.2 BACKGROUND TO THE STUDY

In line with the Integrated Strategic Planning Framework for Teacher Education and Development (ISPFTED) in South Africa (DBE & DHET, 2011), GSD has four District Teacher Development Centres (DTDCs) spread at least in each of its sub districts with two of them being located in one sub-district. These centres serve teachers from a cluster of circuits. Since the norms and standards for DTDCs have not been implemented as yet, these centres differ in size and structure. Some have adequate capacity while others do not. However, a level of functionality does occur except in one which got relocated and does not have enough space to adequately service the teachers yet. The other three centres are used as venues for 1+4 Mathematics, subject content training and for self-assessment diagnostic tests for Mathematics and English. Means had to be made to reach all teachers through the DTDCs and service the areas that were totally not catered at that moment.

1.2.1 International Perspectives on CPTD

The European Union (EU) with its 23 participating member states has prioritised education and training, viewing schools as vehicles to attain the Union's Lisbon goals of social cohesion, economic growth and environmental stability (Organisation for Economic Cooperation and Development) (OECD, 2010b). In actualizing the European Union's plan of action, the European Commission's Education and Training 2020 programme focused on the quality in teachers' continuing professional development. Reports indicate that there was a link between teachers' competence and the learners' achievement in key milestones such as reading and becoming autonomous and independent (OECD, 2010b; Pretorius, 2008). There was also the realization that teachers were not only a variable in the transformation of communities but were catalysts (Villegas-Reimers, 2003) and therefore, their development through CPTD was important for learning.

The 2010 Teaching and Learning International Survey (TALIS) report (OECD, 2010b) regards CPTD as the continuum of well-organized activities that prepare and develop teachers' knowledge and individual skills to prepare them for teaching (OECD, 2009). The definition includes teachers' initial training, induction and continuing professional development and therefore, supports the European Union member states' holistic approach to professional teacher development. In keeping with this holistic approach, the use of "organized activities" in a broader definition was intentionally brought to the picture to enable the member states and all their functionaries to identify their role in creating conducive systems for systematic quality teacher professional development (OECD, 2010b: 19). Each state was therefore, obliged to give an account of progress made on objectives identified at planned meetings. A holistic approach with regard to teacher education was adopted where each state accounted for initial training, induction into service, in-service training, and continuing professional development (OECD, 2010b). The development of teachers was regarded as a lifelong activity and member states took a stance that the development from initial training to continuing teacher professional development would be of high quality, well-resourced and well structured (Villegas-Reimers, 2003). Focus was directed on the nature of CPTD in the 23

European Union (EU) member countries. The following sub-sections discuss how the European Union countries spend time on CPTD, associated incentives for CPTD and the voluntary or compulsory nature of CPTD, as reported by the 2010 TALIS report (OECD, 2010b).

1.2.1.1 Time spent on CPTD

Concerning stipulation in terms of time spent on CPTD, the OECD and the EU offer no guidance to member states and therefore, there is a flexible arrangement where some countries give guidance on how much time is to be spent on CPTD while others do not (OECD, 2010b). Of the 23 member states that participated in the European Union, over half had no stipulation for the minimum time to be spent on CPTD. Countries that had set minimum standards for CPTD such as Finland, Austria, Australia, Netherlands, Scotland, the United States, and Switzerland stipulate not more than 5 days for CPTD over a period of one year. The annual range is from 15 hours for countries like Austria to 104 hours for Sweden (OECD, 2010b). In line with the stipulation above, the Asia-Pacific Economic Cooperation (APEC) (1999) as referred to by Villegas-Reimers (2003 p. 125) indicated that teachers in China, Germany and Japan spend 30 to 40 percent of their time conferring and collaborating with students and other teachers. An enabler to this is that teachers have smaller classes and reduced teaching load to allow them to participate in CPTD.

1.2.1.2 CPTD and the use of working time

In countries undergoing educational reform, the time for conducting professional teacher development has been highly contested. Literature reveals that the majority of CPTD activities are held during the teacher's time, after contact time with learners between 4 and 5 pm, over weekends or during the school holidays as teaching is given the priority (Ray, 2011). However, in order for developing countries to support teachers' CPTD participation, policies that allow teachers to participate in CPTD during working hours have been conceptualized, where substitute teachers teach classes where teachers have CPTD time in order for the latter to fully focus on CPTD. This is to avoid situations where teachers would find themselves worrying about catch-up programmes when they resume teaching their classes after CPTD (OECD, 2009). Many countries provide

teachers with a research grant and allow for leave of absence when engaged in research activities (OECD, 2005). Teachers in the United Kingdom, Czech Republic, Luxembourg, Finland, Italy, Portugal and Romania use a certain amount of paid time ranging from 5 days (Lithuania, Slovenia and Finland) to 12 days for Czech Republic (Eurydice, 2008), for CPTD. In Italy, the teacher's contract provides for that a teacher can alter the timetable or suspend classes for a few days creating the "mental space" (Burget, 2000 in Villegas-Reimers, 2003 p. 126) for engagement in CPTD. In the United Kingdom (Wales, England and Northern Ireland), out of the 195 days set aside as school calendar days, only 190 days are demarcated as teaching days and the remainder are for non-teaching activities including CPTD. Other countries like Romania (with its methodology day), Belgium and Luxembourg allow for weekly CPTD ranging from a few hours to the whole day. Research indicates that despite the formal arrangements in the above mentioned countries, CPTD is generally conducted outside working hours, not only as a cost-saving measure, but also due to the non-availability of substitute teachers (Eurydice, 2008). With the lately preferred stance of using job-embedded CPTD, the use of classroom teaching time for CPTD adopts the approach of professional development taking place on-site, in class, during teaching. In mentoring, coaching, lesson study, action research and other forms of teacher collaboration within CPTD, the activities take place during teaching time. Therefore, there is no contestation between teaching and professional development times. Only management's support is the key factor.

1.2.1.3 Compulsory or voluntary nature of CPTD

In spite of the focus placed on CPTD in most of the EU countries, CPTD is not compulsory and teachers participate voluntarily. The participation in CPTD outside working hours indicates that highly motivated teachers value it in their career pathing (Eurydice, 2008). The provision of compulsory CPTD in some countries indicates that there are government driven educational priorities which have to be achieved by all within a stipulated time (OECD, 2010b). About 51% of CPTD activities in the 18 month period of the TALIS report were compulsory, with the highest number of days reported in Bulgaria, Italy, Korea, Mexico and Spain.

1.2.1.4 Measures to encourage participation

In the EU countries, there were several measures that encouraged teachers to participate in CPTD. According to OECD (2005), some countries use the completion of CPTD for teacher recertification (Israel and the United States), for promotion (Wales, England, United States of America, Northern Ireland and Switzerland) and for additional remuneration (Spain) for teaching staff after a minimum of five years. The condition is that teachers provide proof of having completed training in recognized programmes of between 60 to 100 hours. Hungary gives teachers pay progression on the salary scale subject to their completion of CPTD courses once every seven years but in Iceland, only the completion of postgraduate (Masters' and Doctoral) degrees is considered for salary increase (OECD, 2010b).

In further elaborating on how other countries manage promotion as an incentive for CPTD participation, the OECD (2010b) highlights that in Belgium, participation and completion of a CPTD programme makes teachers eligible for promotion when the principal's evaluation report reflected "good" or "very good". In Czech Republic schools, the principals award a bonus of 50% of the teacher's salary for any extra high quality work that the teacher does (Eurydice, 2008). In Lithuania, a teacher can get a re-categorisation either as a senior teacher, teacher methodologist or expert teacher from participating in CPTD while in Austria; a teacher can get a participation certificate which is positively considered when application for a new post is submitted (Eurydice, 2008). Belgium, Portugal and Malta impose penalties for non-participation or record a negative entry in teachers' appraisal system (OECD, 2010b).

1.2.1.5 Types of CPTD undertaken

The researchers in TALIS (OECD, 2010b) asked teachers to indicate the types of CPTD activities they had engaged in over 18 months. The report indicated, in decreasing percentages, the activity and the percentage of teachers across all the countries in the study who reported. The figures were as follows: 'informal dialogue for the improvement of teaching' (93%); 'attending courses and workshops' (81%) but in some countries this activity was most common such as in Lithuania (96%), Mexico (94%), Estonia (93%) and Austria (92%); reading professional literature (78%);

observation visits to other schools (28%) and qualification programmes (25%). In the same report, participation in professional development networks as an activity was as follows: Iceland (83%), Slovenia (72%), Poland (61%), Australia (60%), Bulgaria (20%), Italy (20%) and Portugal (15%). Also, with regard to individual and collaborative research, the percentages were: Mexico (63%), Italy (57%), Brazil (55%), Norway (12%) and Slovak Republic (12%).

The fact that the informal dialogue to improve teaching was the most common type used across all countries indicated that the EU still has a long way to go in popularizing the professional development networks which had been identified by researchers (Caena, 2011) as the type of CPTD to pursue in order to free the education system from the traditional way of doing things. However, the courses and workshops, as part of the traditional teacher development activities, were still ranked more highly, with fewer teachers engaging in more reflective practices like individual and collaborative research to enhance teaching and learning.

1.2.1.6 Areas of teachers' development need

In a study conducted by Tan et al., (2015) to determine factors affecting professional development in Singapore schools, teachers identified pedagogical skills, teaching skills, content knowledge and different approaches of doing things as areas where they liked to be developed in. From nine possible areas to choose from, teachers were asked to indicate their area of need in the 2010 TALIS. The findings similar to those obtained a year earlier (OECD, 2009) indicated that most teachers pointed to teaching of students with special learning needs as a need, confirming the challenges associated with this aspect across countries (OECD, 2010b), including developing countries such as South Africa. Addressing special needs in the context of inclusive education in public schools calls for a differentiated approach to teaching and learning which teachers found themselves wanting on. The need for teaching skills in order to catch up with the current technology was rated as second to addressing special learning needs. Student discipline and behaviour was also rated highly with 21% of respondents across the countries identifying it as a need (OECD, 2010b).

1.2.1.7 Impact of CPTD on teachers' professional development

Ninety percent (90%) of teachers from participating countries in the OECD (2009) reported a moderate to large impact associated with their participation in individual and collaborative research followed by informal dialogue to improve teaching as forms of CPTD activities. This perceived impact meant that teachers' knowledge, skills and perceptions towards their work had been enhanced through participation in the CPTD activities. When there is high impact in an activity, there is bound to be sustainability which is displayed by the willingness to be involved in CPTD. On one hand, Doherty (2011) warns against taking the teachers' word when evaluating impact of CPTD, citing that teachers always report positively about their experiences in a CPTD session but when the actual follow up visit is made to their classrooms, it is found that they never implement what they were upbeat about at the end of the CPTD activity. So, the impact reported in the study may not be the actual impact on the ground. Further to that, the 2010 TALIS also picked up that there were teachers who reported barriers that prevented them from participating in CPTD (OECD, 2010b) and this is discussed in the section that follows.

1.2.1.8 Barriers that prevented involvement in CPTD

It was crucial for TALIS (2010) to gather information on factors that prevented teachers from involvement in CPTD so that countries could attend to barriers in their policies. Teachers were requested to indicate as many factors as they could. Forty seven percent (47%) of all teachers from almost all 23 member state countries cited 'conflict with work schedule' as the greatest barrier that prevented them from participating followed by 42% who indicated "no suitable professional development" (OECD, 2010b:73). On specific countries, the findings from teachers who cited high cost as a barrier were 51% from Poland, 49% from Mexico and 47% from Hungary. About 45% of the teachers from Malta cited family responsibility as a barrier to CPTD participation (OECD, 2010b). The issue of high cost was found to be common where teachers were paying for themselves for enrolling in further studies in higher education and the cost was unaffordable.

1.2.1.9 The recommended CPTD approach from international research

In spite of all the work in EU countries to assist in the improved delivery of education in their countries, the 2009 and 2010 TALIS reports (OECD, 2009, 2010 a & b) established that the professional teacher development programmes offered in these countries did not meet the teachers' needs (Opfer, et al., 2010). As a result, the programmes did not show significant impact on classroom learning. Countries over time did put some systems for regulating variables such as time spent, use of working time for CPTD, the flexibility in CPTD offerings in countries and other variables as presented in 1.2.1.1 to 1.2.1.7. However, these attempts have not yielded resounding results that could render the countries' education systems successful in the delivery of CPTD. In order for CPTD to cater for individual teacher's learning, and to enable a teacher to play the role of being the real catalyst of change in the education system, the recent learning and cognition theories put an emphasis on the importance of empowering the teacher through collaboration and development of a supportive school culture. The suggestion is to use the professional learning communities (PLC) as a conduit for teacher development instead of relying on the 'one shot' traditional workshop approach that regards teacher development as an event (Caena, 2011).

Stoll, et al. (2006) articulate some of the characteristics of PLC as focus on student learning thereby generating classroom based experiences, collective responsibility for the learning activity that occurs, shared values amongst the participants, collaboration, reflective professional enquiry, as well as group and individual learning for the teacher. According to Yildirim (2000), PLC offers opportunities for the teacher to understand herself or himself in a secure environment but without fear of challenging and pushing beyond the comfort zone. The belief that underlies this approach is that learning and development are embedded in the school context as well as in the teacher's experiences and beliefs about learning. Through the cooperative climate and positive leadership provided by the school, a conducive climate for nurturing and a feedback mechanism is enabled for the teacher to develop (Caena, 2011). More research still needs to be done to establish the nature and extent of on-going growth that is achieved

through PLCs for both the teachers and the learners (Slegers & Leithwood, 2010). The African perspective on CPTD is presented below.

1.2.2 African Perspectives on CPTD

South Africa belongs to the Southern African Development Community (SADC) grouping, an organization for Southern African countries. As a collective, countries benchmark their approach to public services such as education, health and other essential services. The SADC grouping consists of fifteen countries which are Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia, and Zimbabwe. It is of interest to the study to get a sense of how other African countries manage their education systems in general, and professional teacher development in particular, hence the Malawian Ministry of Education and its management of CPTD is discussed in this section as an example. While South Africa has the National Policy Framework for Teacher Education and Development (NPFTED) guiding teacher development, the National Strategy for Teacher Education (NSTED) guides professional teacher development in Malawi (Selemani-Meke, 2011). The absence of such a strategy in countries like Angola leads to a very disjointed teacher provisioning resulting in poor teacher competences (Bethke & Braunschweg, 2003). The strategy guides CPTD offerings within a broader teacher education system managed by the Malawi Department of Teacher Education and targets two main categories; the secondary teacher education development (whose pre-service is offered through public and private Higher Education Institutions plus the Domani College of Education for the Diploma in Secondary School Teaching) and primary teacher education development based on a two year qualification at the Primary Teachers' Training Colleges (Selemani-Meke, 2011).

The Malawian's National Strategy for Teacher Education and Development (NSTED) (MMOE, 2007) and the Malawian government acknowledge the key role played by CPTD in the professional development of practicing teachers and directs that this task be conducted by zones (a zone consists of an average of 15 schools) through the 315

Teacher Development Centres (TDCs) staffed by the Primary Education Advisors (PEAs) (Selemani-Meke, 2011). These centres are also used as conduits for communicating curriculum reforms from time to time like in the execution of the 2006 Primary Curriculum and Assessment Reform initiative (PCAR) which was driven by the ministry.

Like in all the countries, the transformation agenda was driven by the state and so Malawi used a cascade model for this initiative and for all the other similar programmes run by the state as the major initiator. The train the trainer model was used, especially for primary school CPTD where the PEAs attached to TDCs were trained and in turn trained head teachers who were expected to train their teachers in schools.

Teacher development literature has been very consistent about the weaknesses of the cascade model and the threat it poses with regard to diluted transmissions to the teacher who, unfortunately, occupies the lowest level in the loop in the classroom. The evaluation of the Angolan Open Society Institute cascade model approach to in-service teaching attested to this weakness. Teachers trained to train other teachers could not transmit the trained competences to their peers (Bethke & Braunsweig, 2003). Kennedy (1998) and other researchers strongly warn against this risk as it affects the quality of CPTD and the ultimate message that reaches the teacher in the classroom. Unfortunately, one could not pick a convincing strategy that the Malawian system put forward to manage this risk.

Selemani-Meke (2011) lists some initiatives that the ministry ran for specific groups as off-site in-service training such as the National Professional Certificate in primary headship offered to school management teams and the National Professional Certificate for primary advisory services meant for the PEAs. These focused initiatives were the strength of the system as they equipped managers with skills specific for their responsibilities. Apart from the ministry-led initiatives, Selemani-Meke (2011) maintains that formal and informal CPTD did occur where head teachers organized CPTD sessions for their staff members to deal with school-specific CPTD but the occurrences

of such were very minimal. In line with this, there was also the use of the transformative model and good practices in CPTD, associated with the few projects that were run in the country. The cluster activities that were initiated and managed by the Save the Children Project (Centre for Educational Research and Training (CERT), 2009b) and the Action Research initiated by the Centre for Education Research and Training in the University of Malawi are examples of such projects. According to the CERT (2009a) report, teachers who participated in these projects indicated a changed attitude, coupled with improved knowledge and skills which made them embrace the new strategies that were taught and, with the assistance of monitors, implemented the strategies in their classrooms (CERT, 2009a). These pockets of excellence were on a small scale as teachers participating in the projects worked collaboratively with each other bringing change in the classrooms they taught (CERT, 2009a).

Despite all these efforts and CPTD initiatives in Malawi, the study conducted by Selemani-Meke (2011) indicated that there was no change in the professional knowledge of teachers and with regard to their attitudes and beliefs, which prevented them from appreciating and implementing new strategies learnt during CPTD sessions (Selemani-Meke, 2011). Similar findings had been made earlier by the SACMEQ II project report which indicated very low participation and performance of learners in schools in Malawi (SACMEQ, 2005). According to Selemani-Meke (2011), the Malawian system seemed to be disregarding the socio-economic factors when planning for CPTD which was affecting learners in rural societies and as a result, these learners were failing dismally in the national tests compared to learners in urban areas.

To address the situation, Selemani-Meke (2011) encouraged CPTD organisers to address a cohort of issues affecting the teachers' learning and knowledge acquisition. The education system in Malawi was also encouraged to pay attention to the design of CPTD by making room for the teacher's input, addressing motivation factors, rendering follow-up support after training, addressing the duration of CPTD programmes, considering residential sessions to cater for deep learning, and using the transformative approach in the delivery of CPTD (Selemani-Meke, 2011). It is of interest to this study

to compare the South African professional development policy framework and its implementation and that of Malawi in the discussion below.

1.2.3 The National Policy Framework for Teacher Education and Development in South Africa

The National Policy Framework for Teacher Education and Development (NPFTED) was put together to guide teacher education in South Africa by directing how the initial training of teachers and continuing professional development (Department of Education (DoE), 2006) should be conducted in order to ensure that teachers are ready to function effectively in schools. Steyn (2008) points that the policy framework is essentially a management tool to guide and regulate CPTD activities. This policy is underpinned by the tenet of "teacher driven development" (DoE, 2006: 5), and the teacher's willingness and ability to reflect on practice (Steyn, 2010).

There seems to be a constraining factor to growth and attaining maturity in some of the tenets of the policy. In the preceding paragraphs, research has shown that participation in CPTD is voluntary in most countries indicating the maturity in the teaching profession. The NPFTED stipulates that some forms of CPTD will be compulsory while others will be self-selected. The policy directs that compulsory CPTD be paid for by the state while teachers pay for the programmes they select which fall under the voluntary bracket (DoE, 2006). This is because from time to time, the Department will initiate programmes to drive a transformation agenda driven by the government (Reddy, 2010) and such programmes are deemed compulsory. Further clarification on the types of CPTD programmes is provided by the policy as, those driven by the school, the department as the employer, qualifications, teacher unions, NGOs and other organizations (DoE, 2006). The policy stipulates that a teacher will obtain professional development (PD points) for all these activities indicating a focus on the development of the individual teacher. Every time a teacher attends a CPTD programme, the teacher accumulates PD points and these are to be captured for auditing every three years and a suggestion is made for the system to be linked to teacher re-registration (DoE, 2006). According to the framework, those with adequate points are not expected to apply for registration

while those who are unable to meet the required points are eligible for re-registration considerations. In the policy, the South African Council of Educators (SACE) is given the task of quality assuring all CPTD programmers by establishing and managing an electronic register for accrediting CPTD providers as well as creating an accumulative point system to credit teacher participation (DoE, 2008c; SACE, 2011). The Teacher Development and Governance directorate in Mpumalanga Department of Education is tasked with the duty of creating learning systems for all teachers and ensuring that teachers sign up on the SACE CPTD electronic system (See 1.2.4 below). The Integrated Strategic Planning Framework for Teacher Education and Development in South Africa is discussed below.

1.2.4 The Integrated Strategic Planning Framework for Teacher Education and Development in South Africa

The Integrated Strategic Planning Framework for Teacher Education and Development (ISPFTED) in South Africa is a national policy document aimed at facilitating the implementation of the NPFTED. The document was put together to mitigate against the challenges raised by the 2009 Teacher Development Summit with regard to teacher development in the country. The challenges were listed as follows:

- No access to opportunities for involvement in quality teacher development programmes for teachers in service.
- A patchy and disjointed approach to teacher education and development where everyone is doing a bit of this and that with no one taking control of the whole teacher professional development process.
- The failure of the system to respond to the country's needs of producing high quality teaching and learning in schools.
- Lack of teachers' involvement with their unions in the planning of teacher development programmes
- Lack of a collaborative approach into teacher development.
- Discrepancy between the need, the preparation and the supply of teachers needed for specialized services and
- A generally poor system for the provisioning, support and monitoring of teacher development and its funding (DBE, & DHET, 2011).

In order to respond to the challenges indicated above, the plan prescribes some actions for the Department of Higher Education (DHET), the Department of Basic Education (DBE), provinces and districts. However, it has been observed that the plan says very little, if anything at all, about the role of local level structures such as schools and local management offices that deal with a group of schools, which are the equivalent of the Malawian zones (Selemani-Meke, 2011) as mentioned in 1.2.2. The plan fails to devolve the powers and the ownership to the teachers to enable them to initiate and drive CPTD from the classroom and the school. This omission also indirectly reveals the system's non-belief in the strength of job-embedded CPTD even though PLCs are earmarked as one of the approaches in the plan.

The fifteen year plan (2011-2025) identifies four important requirements for the success of its implementation namely:

- a) improved collaboration among role players,
- b) a national system for teacher development that is well coordinated,
- c) allocation of sufficient time for teacher development, and
- d) enough funding (DBE & DHET, 2011).

To improve the effective implementation and coordination of CPTD, the plan directs that the National Department establish a National Institute for Curriculum and Professional Development (NICPD) whose responsibility will be the management of the whole CPTD system in the department (DBE & DHET, 2011). This assignment by DBE has been carried out as there are units that have been set up to do the function of the Institute even though they operate from the DBE offices. Several functions such as the recapitalization of DTDCs and their functioning and the implementation of ISPFTED are being pursued by these units already. In line with the above, provinces are directed to establish Provincial Teacher Development Institutes (PTDIs) with a specification that these should have residential facilities (in a similar manner as the Malawian TDCs (Selemani-Meke, 2011) where subject advisors, mentor teachers and other district officials can be trained. To ensure coordination, this structure is to liaise with the NICDP directly on matters of teacher development (DBE & DHET, 2011).

In Mpumalanga, the formation of the Early Childhood Development Institute (ECDI), tasked with the training of ECD practitioners and the Maths Science and Technology Academy (MSTA) focusing on the training of Maths, Science and Technology teachers, represents a step towards satisfying this requirement as these two structures are part of the Mpumalanga Provincial Institute. The province has been working towards the creation of a coordinating structure that will ensure a framework within which these two structures operate to ensure standardization of their operations regardless of their different nature. The ECDI complies with the residential facilities stipulation meted by the policy while the MSTTA focuses on the provision of the broadcast and networking between its main hub, the sub-hubs and the project schools. What is key with the MSTTA is that it is based on the use of the latest technology in e-learning and connectivity for teacher development including teaching of the focused subjects in 100 selected secondary schools and their feeder primary schools. The main hub is connected to four sub-hubs in the districts and each sub-hub services and broadcast lessons to the 25 selected secondary schools rendering support to those schools' feeder primary schools. Technology is the vehicle that enables the system to provide CPTD to the 100 schools as well as feeder primary schools to the identified secondary schools. The introduction of collaboration would enable the teachers to engage in PLCs and use technology as a bank of resources.

According to the ISPFTED (DBE & DHET, 2011), districts has to establish District Teacher Development Centres (DTDCs) to serve as local support sites where in exactly the same manner as the Malawian PEAs (Selemani-Meke, 2011), subject advisors operate from these DTDCs. The province operates seventeen (17) DTDCs in its four districts with most of them being located in Ehlanzeni District. Four (4) of the DTDCs are in the Gert Sibande District which is a far cry in terms of the economies of scale considering the total of 489 schools and the 8 409 teachers that are serviced by the district in comparison to a total of 315 TDCs that Malawi has. The Teacher Development and Governance Directorate oversee the functioning of these centres which are being resourced for full functionality by DBE with the help of business entities. According to the ISPFTED (DBE & DHET, 2011), there is a need for these structures to

be accessible to teachers from surrounding areas as they can be used as venues for CPTD and Professional Learning Communities (PLC) which should be driven by teachers themselves.. It is observed that the whole plan seems to shift the focus of CPTD everywhere else but the school (Bertram, 2014) as the school context and its influence on effective CPTD is totally disregarded. According to the plan, even the PLCs are supposed to meet at the DTDCs which indicate a total miss of the job-embeddedness of communities of practice (Bertram, 2014). PLCs and communities of practice should take place at the school as the site of practice (Bertram, 2014). The plan saliently encourages off-site support for PLCs thus: "DTDCs will be able to serve as the local central meeting venue for the PLCs, as they will be adequately resourced to support PLC activities" (DBE & DHET, 2011: 13).

With regard to the formation of PLCs and in line with Ono and Ferreira's (2010) observations, the province has been operating clusters since 1999 which were formed in partnership with the Japanese government in the implementation of the Mpumalanga Secondary Science Initiative (MSSI) project which dealt with a whole system improvement for the teaching of Science and Mathematics in Grades 10-12. These clusters were formed as entities for working together and sharing good practices and the conduct of lesson study was successfully used as a vehicle for professional development during the years of the project. However, Jita and Mokhele (2010) criticise the institutionalization of clusters which saw clusters being used for moderation of School Based Assessment (SBA) in the subsequent years after the end of the project, as opposed to the use of clusters for CPTD support through the use of lesson study which was very common during the project implementation period. With the introduction of the PLCs as required by the ISPFTED, the province has an opportunity to deinstitutionalise, standardise, streamline and regulate the functioning of the clusters in collaboration with the PLCs in the other phases in the system.

The Department of Basic Education (DBE) is also tasked with the development and setting up of teacher development ICT support system for teachers to access the on-line diagnostic self-assessment tools for curriculum competence (DBE & DHET, 2011) which is offered through the DTDCs in Mpumalanga. The recapitalization of DTDCs by

DBE is aimed at strengthening the delivery of ICT for teacher development. Once assessment is done, teachers are expected to choose the relevant accredited courses for development from the linked SACE CPTD management system.

The plan also tasks DBE to identify and handle immediate to medium term needs in the system which encompass training of school management teams (SMTs) and teachers, provision of mentors for unqualified and under-qualified teachers and special needs teachers, as well as some schools' interventions (DBE & DHET, 2011). In the province, this training is done through the use of various directorates such as the Further Education and Training (FET) directorate, the General Education and Training (GET), which are mainly responsible for the management of curriculum in schools as well as teachers' CPTD in their subjects. Other directorates that also deal with teacher training are the Inclusive Education and the Maths Science and Technology (MST) directorates. The Inclusive Education directorate deals with education for special needs and provides CPTD programmes and support for differentiated teaching and learning skills in order to equip teachers with abilities to cater for all learners regardless of their different needs. Over and above that, the directorate assists schools in early identification of learning barriers by establishing and providing training to School Based Support Teams (SBSTs) at school level and District Based Support Teams (DBSTs) that render support to the SBSTs. The directorate is also responsible for psychological services, career guidance and services for special schools which demand that the directorate provides CPTD programmes and support to the SBSTs, the DBSTs, teachers and school managers from time to time. The MST directorate focuses on the systems' priorities by providing CPTD to all Maths, Science and Technology teachers as well as school management teams teaching these subjects in fulfilment of what the NPFTED and the ISPFTED prescribes.

One of the key directorates in the Mpumalanga Department of Education is the Teacher Development and Governance directorate which is at the centre of teacher development in the province. Although the directorate offers its own limited CPTD programmes to teachers, its main function is to manage teacher learning systems for the province in accordance with the mandate given to SACE. Three units are attached to the

directorate with the first unit being the Education Governance Development responsible for School Governing Bodies' (SGB) capacity building and functioning (developing parents, principals and teachers within the SGB and implementing CPTD). The second unit in the directorate deals with Education Management Development (EMD) and is responsible for the capacity building of all education managers such as principals, deputy principals and heads of department. This unit ensures that school managers and all education managers are developed to enable them to perform and lead schools and education as expected. The third and last unit is the Teacher Education and Development (TED) unit responsible for the development of all teachers in the system and therefore, the creation and management of teachers' learning systems. It further involves ensuring that all teachers register with the SACE CPTD point system and report accordingly for professional development (PD) points after taking part in CPTD programmes. Over and above that, the unit deals with the selection of teachers who get bursaries for initial teacher training and ensures that they are inducted when appointed back in the system to ensure their good orientation into the system for productivity in their teaching life (MDE, 2007a & b).

TED further manages the District Teacher Development Centres (DTDC) in the province to ensure that they are well resourced, well maintained and well utilised by teachers. TED also monitors the implementation of Integrated Quality Management Systems (IQMS) (ELRC, 2003) in schools and ensures that all teachers participate in their performance management to see to it that Personal Growth Plans (PGPs) are generated and their contents drive the teachers' involvement in CPTD programmes.

While the ISPFTED acknowledges the pivotal role played by teachers in learner achievement, the assumption that there is linear correlation between the teachers' attendance of short courses and the increase in learners' performance is indicated (Bertram, 2014). The impact of such an assumption is refuted by research which points out that exposing a teacher to CPTD, let alone in once-off short courses may not necessarily influence learners' achievement in the classroom (Villegas-Reimers, 2003). Opfer and Pedder (2011) stress that it takes an interrelationship between the teacher's

learning, professional development activity and the school context for a teacher to gain a high level of competence and subsequently apply what has been learnt to an extent that learners are positively impacted upon. Bertram (2014) applauds the ISPFTED seeing it as a huge step in providing direction to the coordination of CPTD noting the coordinating role played by the NICPD. However, the silence of the ISPFTED on the school context and its inclination to the support of short courses as a form of CPTD is a huge limitation. Studies are still underway to document and establish the extent to which the plan is implemented in the whole country as it is a 25 year plan. There is also no formal report on the extent to which the implementation of the ISPFTED has progressed so far and the document itself does not specify any review and reporting processes. However, it has been observed that the NICPD units monitor the implementation of this plan. The research focuses on a specific context in Mpumalanga earmarking the structure of the units that drive CPTD and the implementation of the NPFTED and the ISPFTED in the province.

All the above mentioned directorates, including the GET and FET directorates are attached to the provincial office and have managers under their wing at the provincial office. District offices have four Chief Education Specialists (CES) whose rank is just below that of the director. Two of these managers lead curriculum for GET and FET while handling the MST and at a very small scale the MSTA issues. The other two CESes handle curriculum enrichment and support issues (which include Inclusive Education, psychological services, career guidance and learner support associated with the other above mentioned directorates) while the fourth handles teacher development and governance issues. All district CESes manage their specific mandates and liaise with the provincial office at all times and are very crucial for the implementation of plans put together at provincial level as they play a dual reporting role reporting to the district director as well as to the provincial director responsible for their specific programme. All these units deal with CPTD in all their programmes.

1.3 THE PROBLEM STATEMENT

The introduction of the national policy framework for teacher education and development was an attempt to address teacher professional needs in a structured manner (DoE, 2006). It was also meant to guide CPTD activity management in terms of planning, implementation, monitoring, and evaluation. Progress has been made towards bringing CPTD to a large number of teachers (MDE, 2009 a & b). However, the management of state-led CPTD activities, according to the Systematic Evaluation Report (MDE, 2001), has always been a challenge in the province and in Gert Sibande District in particular since 1994. The attempt to coordinate the events for teacher training through the calendar of events (MDE, 2009c) and the individual invitations to CPTD sessions targeting teachers for specific Grades (MDE, 2009b) did not add value to CPTD management as the aspect still remained problematic for the Education Department with special reference to the past five years. The 2011 to 2016 annual reports (MDE, 2012, 2013, & 2014) indicated a number of planned activities targeting the development of teachers. However, these activities, like in the rest of the country (van der Merwe, et al., 2010), did not lead to improved learner performance (Weldon, 2010). The Annual National Assessment (ANA) (DBE, 2013) indicated the following difficulties:

- the large numbers of FET and GET teachers that are trained at each session depriving them of real engagement and active participation,
- the overemphasis on standardisation of the training programme as designed by the national department, and
- the hasty offering of the workshops to teachers displaying a technicist-functional paradigm that only serve the state rather than lead to professional growth of teachers (Steyn, 2008; Van Niekerk & Killen, 200).

These then, lead to feelings of incapacity to teach even after teachers have attended several sessions for the different modes of the National Curriculum Statements (NSC) (Jansen & Taylor, 2003).

The absence of the process for the consolidation of Personal Development Plans (PDPs) for individual teachers emanating from IQMS and the schools' needs in the

District (ELRC, 2003) robs the Department of the opportunity to have a bank of teacher needs to use when planning for all development, especially for CPTD.

The evaluation of learner performance in Annual National Assessments (ANA) administered in Grades 1-6 and 9 and performance monitoring processes revealed that learners were performing below standard in languages and mathematics (DBE, 2013; Moloï & Chetty, 2010). This was in spite of all the teacher training that had been done since the introduction of the new curriculum. This was a cause for concern for the department as a whole (Bertram, 2014) and for Gert Sibande District in particular (DBE, 2013). Furthermore, the strategies and approaches adopted by the department to plan, develop, and implement CPTD ventures were in tension with the principles of the policy framework, which the department itself constructed (Van Staden & Howie, 2010). CPTD, for instance, had to be teacher driven yet, as the evidence showed, the consolidation of teacher-needs and analysis to inform CPTD had never been done in many years in the department and in Gert Sibande. In fact, CPTD activities have remained largely employer-driven (Van Staden & Howie, 2010), yet the policy framework makes allowance for greater variety. The Department continues to spend money carrying out CPTD (Desimone et al., 2006; MDoE, 2013) even when the cost to undertake the activities belies the benefits, as according to the two investigations that showed minimal impact (CSATDP, 2006; Ramoroka, 2007).

Some of these problems have been discussed extensively by the education department (Reddy, 2010; Van der Merwe & Van der Merwe, 2008). It is not known which one or a combination of problems has been resolved for effective management, in terms of planning, implementation, monitoring, and evaluation, of these activities. The expectation is that the activities should be managed to reflect greater conformity to the CPTD policy framework and to lead to high learner performance (King & Newman, 2001). In the sense that (a) the tenet of the CPTD policy is reflected; (b) that a tight match exists between the teachers' needs and the CPTD activities undertaken; (c) that it is quality assurable; and (d) that it prevents teachers leaving schools in droves to participate. Previous research has not sought to investigate the manner in which the

various levels and units tasked with CPTD in the department of education have managed the activities which they have undertaken to do as they develop teachers in their professional practice, or whether the management of these activities has in any way mediated the way these activities have been experienced.

1.4 MAIN RESEARCH QUESTION

This study was guided by the question:

How is state-led continuing professional teacher development (CPTD) implemented in the Gert Sibande Education District of Mpumalanga province in South Africa?

Sub-Research questions:

In answering the main research question, the study sought to answer the following sub-research questions:

- What is the nature of state-led continuing professional teacher development (CPTD) in Gert Sibande District of Education?
- What factors promote or hinder the implementation of CPTD programmes?
- What challenges beset the implementation of CPTD programmes?
- What in teachers' perceptions should be done to enhance the implementation of state-led CPTD programmes?

1.5 PURPOSE OF THE STUDY

The study sought to assess how state-led continuing professional teacher development (CPTD) was implemented in the Gert Sibande District of Education of Mpumalanga province in South Africa.

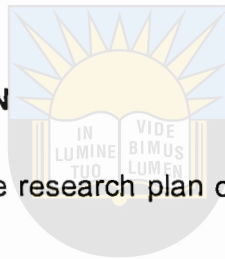
1.6 OBJECTIVES OF THE STUDY

The study sought to answer the following research objectives:

- 1.6.1 To establish the nature of state-led continuing professional teacher development (CPTD) in Gert Sibande District of Education
- 1.6.2 To identify the factors promoting or hindering the implementation of CPTD programmes.
- 1.6.3 To ascertain challenges in the implementation of CPTD programmes.
- 1.6.4 To explore what could be done to enhance the implementation of state-led CPTD programmes.

1.7 RESEARCH PLAN OF ACTION

Table 1.1 gives a description of the research plan of action whose details are given in chapter three of the study.



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Table 1.1: Research plan of action

Guiding Research question	
How is state-led continuing professional teacher development (CPTD) implemented in the Gert Sibande education District of Mpumalanga province in South Africa?	
Paradigmatic Suppositions	
Epistemological Models: Wenger's social learning theory & Peter Senge's learning organization theory	Paradigm: Pragmatism
Research design	
The Concurrent triangulation design	
Sample and sampling procedures	
Sample	Number of participants: 200 teachers and 200 School Management Team Members (SMTs)
Data Collection	
Data collection methods: The Questionnaire for teachers and SMT members consisted of questions with possible answers to choose from. Participants were then asked to provide reasons for their answers. Face to face interview	Procedures for data collection: circulation of semi-structured questionnaires to 200 teachers and 200 SMTs for filling. 123 Out of 200 (61.5%) questionnaires for SMT members were returned. 119 Out of 200 (59.5%) Teachers' Questionnaires were returned. The district managers, subject advisors, a principal and a teacher were interviewed separately and some as a group
Data Analysis and interpretation	
Data analysis method: quantitative using SPSS	Descriptive statistics
Data analysis method: Qualitative using thematic approach	Thematic content analysis was used.

Validity and reliability/Data trustworthiness	
Reliability	Questionnaires were first given to selected managers and teachers to check if there were no ambiguities and other irregular expressions expressed in the questionnaires
Validity	Triangulation was used where the researcher compared the meaning of the data obtained through qualitative means to the meaning of the data obtained quantitatively to determine synergy in the meaning
Data trustworthiness	The researcher tried at all cost to use concepts that are commonly used by teachers in the district more over teachers from a local school as well as the selected managers from the district were used to pilot the questionnaire before the roll out of the questionnaire. These were used as a sound board to verify if the concepts were captured well

<u>Ethical Issues</u> Ethical issues to be considered the following: Voluntary participation Confidentiality Informed Consent	An informed consent form containing the brief of the study and other related information including the statement indicating that participation was voluntary and could be terminated at anytime was given to the participants A statement indicating the right to confidentiality and anonymity was issued and this was maintained in the research Before the start of any interview, the researcher stated that the interview could only proceed if participants were willing to participate in the interview. Anyone who felt that he/she did not want to participate was free to withdraw. Attached to each questionnaire was also a note indicating that participants had a choice to fill or not to fill the questionnaire
Conclusion: It was concluded that the state-led CPTD in Gert Sibande Education District followed a traditional in-service training model which basically used workshops and training modes which are counterproductive. Therefore there was a need for change into a reform type of CPTD in the district and in the province as a whole.	

1.8 SIGNIFICANCE OF THE STUDY

The study contributes significantly to the body of knowledge with regard to continuing professional teachers' development and approaches to teaching especially in countries associated with transformation and education reform. Through this study, the assessment of state-led CPTD would reveal challenges that affect teachers during education reform period.

The study would provide an opportunity to do literature study on what other researchers say and engage teachers in determining whether the CPTD provided to teachers in the Gert Sibande District in particular conformed to the directives provided by the national policy for teacher development in South Africa. Valuable information necessary for assessing the extent to which the National Policy Framework for Teacher Education and its strategic plan was implemented at provincial, district and school level could potentially be gleaned. In this sense, it could contribute to policy review and development, especially with regards to the praxis knowledge development. Further to that, the study would also verify whether officials at various levels were aware of these policies and plans for CPTD provisioning in the Department.

The study would capture the silent voice of teachers who find themselves compelled to undergo rigorous training during education reform where state-led CPDT was compulsory to an extent that the CPTD programmes offered disregard teachers' real needs, inequities and special training needs. Such information would be of high significance to policy makers and managers in education.

Over and above that the education stakeholders would benefit from the recommendations that would be made by the current research for effective state-led CPTD that would lead to highly competent teachers who will produce high performing learners. Managers and subject advisors will get information on the approaches to for effective CPTD that will positively add to teachers' skills, knowledge and attitudes.

It was also essential to assess the extent to which the Integrated Strategic Planning Framework for Teacher Development was implemented by the province and the district to create a conducive environment for the implementation of CPTD. This was done through a literature study and empirical investigation to guarantee tighter conformity to the CPTD policy framework and minimize associated difficulties.

1.9 RATIONALE

The researcher was driven by personal experience as a manager and passion as a teacher. The researcher also believed in the potential of teachers and in the fact that policy makers and management were there to create a conducive environment for teachers and leadership to enable them to develop into their fullest potential. This served as a summative statement indicating why the researcher decided on the topic at hand and why the researcher believed the subject was worth researching (Vithal & Jansen, 2010).

1.10 RESEARCH METHODOLOGY

The research paradigm for this study was pragmatism which allowed the researcher to use multiple ways of collecting data. According to Ivankova et al. (2007) pragmatism follows the study of nature and form of reality by applying a research criterion that is based on the theory's capacity to solve human problems. The generation of solutions is done in an open minded interpretation of ideas which are produced by the research process. In the quest of fulfilling the generation of ideas for human mind probing, the mixed method research approach was used. The concurrent triangulation for the collection and interpretation of data was also applied. This ensured the generation of reliable ideas on the subject under investigation and solutions to challenges that had to be identified (Tashakkori & Teddlie, 2003). Both the quantitative and the qualitative research method (to adhere to the subjective nature of reality) were used (Maree & Van der Westhuizen, 2007). More information is provided in chapter three.

1.11 OPERATIONAL DEFINITION OF KEY TERMS

This section provides the operational definitions for key terms used in the study.

1.11.1 Continuing Professional Teacher Development (CPTD)

Continuing Professional Teacher Development is the on-going professional development and support offered to a teacher after the initial training which is located in school setting (OECD, 2010b). Although the study embraces the generic definition of CPTD, in the study CPTD was viewed more in a transformed light which focus on long term interactive, collaborative professional development which is teacher driven as opposed to one-shot, technician, expert-run sessions that depend solely on workshops, courses and seminars. CPTD was viewed as job embedded activities, taking place on site while the teacher collaborates with peers through reflection on own practice.

1.11.2 State-led continuing professional teacher development (CPTD)

State-led CPTD activities are teacher professional development initiatives initiated by the state for practicing teachers to enhance their teaching in line with the system's prescripts. The National Policy Framework for Teacher Development (DoE, 2006) directs that the employer, which is the Department of Education, provides CPTD programmes side by side with the unions, NGOs and other service providers. In the context of the study, state-led CPD activities were viewed as the compulsory CPTD programmes offered by the Department to equip teachers with skills to implement the National Curriculum Statement and any policy prescribed at a given time. It is the training that is directed to the individual which takes a form of short courses, workshops, conferences and other similar initiatives.

1.11.3 Job embedded professional development (JEPD)

According to Croft et al. (2010) Job Embedded Professional Development (JEPD), is an on-going reform type of CPTD that takes place on site, in school in collaboration with other teachers as peers, while the teacher continues with day to day teaching practice,. It provides opportunities for content-specific growth through shared enquiry and reflection. In the context of the study, JEPD is a reformed type of CPTD. It is also regarded as the learning that the teacher obtains from participating in collaborative learning during reflective sessions such as the lesson study, PLC, action research and others. For example, during the lesson study, the teacher participates in a collective

lesson production process which leads to delivering or critically observing a collaboratively developed lesson being taught and reflecting on how that lesson has been taught, paying attention to what worked and which aspects need to be improved. The whole process is started all over again until the team is satisfied about the product. The team of these teachers engaging as mentioned above form a PLC and this concept, the action research, non-institutionalized cluster activity (Jita & Mokhele, 2012), mentoring, coaching, being coached and class observation are all other examples of JEPD.

1.11.4 In-service training (INSET)

In-service training (INSET) is the traditional way of professional development which consists of sporadic workshops and short-courses (Villegas-Reimers, 2003) run as events and taking place away from the classroom where the teacher teaches. INSET is offered by experts and is designed from a deficit premise where it is believed that the teacher has to be taught new information and is therefore, individualistic in nature. INSET can be part of CPTD and not vice versa.

1.11.5 Farm school

In the context of the study, a farm school is a school situated in an area owned by a farmer which service children from a farming community on the basis of a signed lease agreement which regulates the payments done by the Department and the conditions under which the school is operated. The farm school is characterized by less learner enrolment, and long distance travelled to the school, negatively affecting the learners.

1.11.6 Multi-grade teaching

Multi-grade teaching is a teaching approach where one teacher handles and teaches more than one grade in one class due to low numbers in enrolment for each grade. Multi-grade teaching is mostly associated with farm schools as the small farming community is unable to draw enough learners per class in line with the prescribed learner teacher ratio of 1:30 for grade R and 1:40 for all primaries and 1:35 for secondary schools.

1.11.7 Urban schools

In the study, urban schools are schools found in townships, towns, cities and suburbs. Some of these schools have a large enrolment on average as they adhere to the prescribed learner-teacher ratio as indicated above.

1.11.8 Rural schools

Rural schools are schools found in the countryside and in rustic areas. These are schools found in areas where towns are far. In the context of the study, rural schools include schools found in the former homeland areas which have since developed to have little shopping malls and many facilities they did not have prior to transformation in South Africa. Regardless of the little development that has come with transformation in these areas as indicated above, the area in discussion remain classified as rural because of the lifestyle followed in the area.

1.12 ORGANISATION OF THE STUDY

The first chapter dealt with the introduction and the background to the study, giving perspectives on what research says about international, African and South African CPTD offering trends. The chapter also presented the problem statement and the research questions as well as the related aspects.

The second chapter presents the theoretical framework and the literature review while chapter three deals with the methodology applied in the study indicating why a particular approach was chosen. The data collection and its processes are discussed as well as the ethical considerations made.

Chapter four deals with the presentation of findings and their analysis which is discussed in the last part of the chapter. Chapter five deals with the summary and conclusions. The chapter concludes by making recommendations for the study followed by the suggested framework for CPTD.

1.13 CHAPTER SUMMARY

The section introduced the study and dealt with the background issues and the literature on international trends in CPTD. The African trends in CPTD were discussed from a regional perspective since South Africa and Malawi (which is the country whose system was viewed) fall under the SADC region. The South African Teacher Education and Development policies (the NPFTED and the ISPFTED) were discussed establishing the extent to which they are implemented in the department. The problem statement, the research questions and the objectives of the study were also discussed to indicate the gap in knowledge to provide a framework for the rest of the study.

The researcher further provided justification for undertaking the study and indicated the significance and the rationale for embarking on the study. To summarise the process to be undertaken the research plan of action and the organization of the study was presented. Chapter two presents the literature review and the theoretical framework.

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CHAPTER TWO

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter introduced the study and dealt with the background issues to the study including trends in the implementation of CPTD in the international sphere, the African continent and in South Africa. The structure of the study was also introduced, identifying the problem statement and the questions that guide the research. This chapter presents the theoretical framework that informs the study and continues to review the literature exploring the nature of state-led CPTD in Gert Sibande District of Education, the factors hindering or promoting the implementation of CPTD, the challenges and ways that can enhance CPTD implementation.

2.2 THEORETICAL FRAMEWORK AND ITS IMPORTANCE IN RESEARCH

This section expounds two theoretical frameworks; Wenger's (1999) learning theory and Senge's (1990) theory of learning organization as a basis for the study at hand. The theoretical frameworks are presented in a manner that shows their relevance to the concept under study.

The theoretical framework plays a very important role in the study as it provides a rationale why the study is being undertaken. Simon and Goes (2011) indicate that a theoretical framework provides the order and logic to one's thoughts and therefore, gives assurance that the problem being investigated is not based on personal instincts only but is backed up by a theoretical framework and can be proven through experimental facts. The researchers further maintain that a good theory can guide the whole study from the problem statement to the findings and the recommendations of the study (Simon & Goes, 2011). The researchers even refer to the theoretical framework as the glue that holds together what the researcher observes and the recommendations

made at the end of the study (Simon & Goes, 2011) to make it a neat package. Wenger's social learning theory is discussed below.

2.2.1 Wenger's Social Learning Theory

The social learning theory as promulgated by Wenger (1999) has a few assumptions that are key to learning and therefore, relate to the present study which is about professional teacher development and involves teacher learning. The first assumption related to the social learning theory is viewing learning, not as an individual course of action that may be dealt with alone, but as a group affair where people experience participation in the world together. This view is very much in line with the collaborative and interactive learning that is advocated by job-embedded CPTD as opposed to the individualistic learning espoused by traditional in-service training (Steyn, 2008). Fullan et al. (2005), in their 8 forces for leaders of change, emphasize the importance of learning from each other especially during change as it devolves collective responsibility and commitment to change. The second assumption is that the social learning theory views learning as a dynamic way of expressing one's social contribution rather than a way of knowing the world (Wenger, 1999), demonstrating a positive disposition to learning voluntarily, more interactive than passive as one has to express one's social contribution. Furthermore, the expectation for contribution suggests a belief that the learner is not an empty vessel but has something to offer, thereby refuting the deficit model promulgated by Kennedy (2005). The assumption is also very significant to CPTD provisioning and the study at hand as it suggests that when the education system operates from Wenger's social learning theory the design of CPTD will be based on these underlying assumptions and will provide more opportunities for teachers to express their contribution instead of planning for one-shot sessions where teachers listen to experts lecturing them on how things are done as if they have nothing to offer. In a similar manner, teachers who embrace Wenger's theoretical framework will not view their involvement in CPTD as a state obligation and expect to be coerced to attend CPTD sessions made compulsory by the state. Instead, these teachers will be readily available to collaborate and voluntarily share with their peers as they view their engagement in CPTD as a way of expressing their professional prowess and agility.

This dynamic expression, according to Wenger (1999), occurs through interaction with other people in the communities of practice and in organisations.

Wenger and Snyder (2000) view a group of people that has informal ties due to shared expertise and passion for a common purpose as a community of practice. This collective could be that of bank workers seeking innovative ways to service delivery, engineers drilling a borehole, architects planning a huge operation and teachers attached to a certain school or a cluster of schools seeking to improve their teaching output. The researchers maintain that what makes the grouping different is that it has an identity and it builds relationships with one another. The group is therefore, defined by a shared vision and all the members become practitioners (Wenger, 1999). This notion has huge implications for the study and suggests that teachers in a school should be led by the common vision which is to teach effectively. When they have this common understanding, it will drive them to work, plan and present lessons together using the on-site reflective strategies such as the lesson study, action research and others (Ono & Ferreira, 2010). This implies that for teachers to effectively learn in the community of practice, there must be a common goal around which relationships can be formed. This relationship enables collaboration and co-learning which is absent in the traditional in-service training setting which relies on individual learning.

The social learning theory values the role of leadership, and the communities of practice are no exception. Wenger (2000), in understanding the looseness of the communities of practice and that it is easy for learning not to occur in the group, directs that the leader push the group towards real learning using own experiences, to prevent the community of practice from being a social gathering (Wenger 2000). There should be leadership that will drive and urge members to stretch themselves to learn (Wenger, 2000) and unfortunately, this leadership and its role is what bureaucracy fails to understand. Members to the community of practice organize themselves and establish their own leadership based on mutual trust and willingness to be led by the person they are choosing while managers in other normal settings form teams by looking at either the person's seniority or relevant skills (Wenger & Snyder, 2000). Meetings are held as

regularly as needed ranging from lunch meetings to fortnightly meetings (Wenger & Snyder, 2000). Alternatively, members link through emails. The meetings, if held, have an agenda but may not follow it tightly as the nature of interaction is free flowing. People share their own experiences and knowledge which form a basis for their solutions to problems. Most of the time, the knowledge shared becomes intangible which makes the approach not to be taken seriously in other circles (Wenger, 2007). The sharing of own experiences and knowledge has implications for the state-led CPTD as it has limitations for the interaction suggested by the social learning theory. The facilitators always take the lead and organize the sessions depriving the teachers of interactive learning.

Lee (2005) notes that a group of teachers from the same school benefits from the community of practice set up as they have common needs and have a potential to develop as a collective from such a setting. The community of practice becomes the centre of enabling people to learn meaningfully and becomes a prerequisite for learning (Wenger, 1999). Communities of practice have successfully been used to introduce innovate ways of doing business, drive outstanding operations, spread best practices and vigorously drive the development of professional skills (Wenger & Snyder, 2000). Furthermore, the communities of practice can be used for the development of high quality skills for teaching the National Curriculum Statement. Teachers have reached a stage where they can be able to draw from their various knowledge bases and share their experiences with each other in a less threatening environment as peers.

However, the loose nature of the community of practice concept makes managers wary of the concept as they cannot do the traditional supervision and evaluation in a conventional sense, something that makes the approach less favourable amongst non-progressive management (Wenger & Snyder, 2000). This characteristic is the very same feature that explains why communities of practice have not been as popular as they should be, taking into account that the concept has been used since the Stone Age. However, managers are encouraged to support formation of communities of practice by providing the necessary infrastructure and creating a conducive environment that enables employees to meet and interact in a professional way that encourages

professional growth (Wenger & Snyder, 2000). Organisations have a lot to gain from such interactions.

In contextualising the communities of practice to education, Sheppard (2008) and other researchers expound on the professional learning community concept which has been successfully used for CPTD in schools by pointing to the following reasons for their success:

- they are based on the needs of the teachers
- they have great impact on changing teachers' practice (Lee, 2005)
- The activities targeted are specifically designed for the group of teachers
- Activities promote the targeted school's goals

The criteria used in designing CPTD activities involve ensuring that IT creates opportunities for collaboration and collective learning, highlighting the importance of leadership and support in CPTD, ensuring that CPTD opportunities are sustained over a long period. Further to that, the design includes room for feedback to teachers. For the current study, there is need to integrate the use of ICT in CPTD (as suggested in chapter 5) to expose teachers to different ways of accessing the endless ICT resources available. Peter Senge's theoretical framework is discussed next.

2.2.2 Peter Senge's Learning Organisation theory

The second theoretical framework that informs the study is the Peter Senge's learning organisation theory. Senge (1999), the pioneer of the learning organisation theory, is described as an idealistic pragmatist who is more concerned about the role of leadership in an organisation and how organisations can achieve maximum growth through collective participation (Senge, 1999). Senge (1990) observes that there is a need for change from the individualistic traditional leader who sets the direction, takes key decisions and motivates followers; to a new leader who designs systems within which followers will extend their horizon on the basis of their understanding of the vision, mission and values of the system. According to Senge (1990), the role of the leader is viewed in a fundamental, holistic way where the leader is regarded as the

designer rather than the captain of the ship. Senge (1990) argues that you can be a good captain but if the ship is faulty from its design, it will not reach its destination. The leader, according to this theory, works behind the scenes and comes up with a rounded well-collaborated product whose parts coordinate well and which can stand the test of time (Senge, 1990). This is why Senge (1990) reflects on a large number of companies and organisations that become prominent for a short period and vanish into thin air. This explains why a province/district or a school in education will consistently produce high learner performance and just perform well as an organization because of good systems set by leaders. Leaders who efficiently communicate the vision of the organization to their subjects and get a buy-in to change strategies, get subjects to own and drive the required change. Such a disposition is attributed to the organisation's ability of embracing and practicing the learning organization concept. It is in this context that the education policy makers and their role come to the fore.

This theoretical framework suggests that true leadership in education must come with a dynamic CPTD design which is self-sufficient to allow teachers to freely and responsibly engage in their own collaborative learning without managers fearing that whatever they do will be off the mark because the teachers shall have been exposed to the full knowledge of the vision, the mission and the values of the organization. The clear targets set for the organization and the strategies for change will be parameters within which they engage. This type of leadership comes in very handy when education reform is introduced in an organization. It is at the time of education reform that state-led CPTD puts a lot of emphasis on teacher competence in teaching as the CPTD programmes focus on developing the teacher's knowledge and teaching skills. According to Senge (1990), how a teacher adapts during the education reform time depends on the type of leadership that leads the transformation.

Slightly similar to Wenger's communities of practice, Senge's learning organisations theory is viewed as a collective entity where people in a relationship with each other and at an on-going pace passionately expand their capacities to reach pre-identified levels of capabilities through control of their own thinking (Senge, 1996). According to the

learning organisations theory, in order for rapid change to be effected in organisations, there should be flexibility and people should adapt easily to change. This calls for commitment from the people attached to that particular organisation (Smith, 2001). Senge's theoretical framework also stresses the use of collaboration and organisation, putting emphasis on collective learning as opposed to individualistic learning promulgated by the traditional model of CPTD (Steyn, 2008). This collective learning is what Fullan, et al. (2005: 55) list as the fourth force of change referred to as 'learning during the implementation'.

In line with Wenger's social learning theory which views learning as a way of being in the world (Lee, 2005), tying learning to existence, Senge's learning organizations theory also views learning as that which forms the core of what it is to be human (Smith, 2001). Such a view sees learning as being fundamental to humanity since through learning, human beings recreate themselves as they adapt their understanding (Smith, 2001). However, the theory continues to add a practical dimension to development by noting that adaptive learning alone may not be enough and should be coupled with generative learning which is the ability to create things and new ideas. (Smith, 2001). The two types of learning put forward by Senge have implications for the study at hand as generative learning, which is the preferred type of learning, suggests that teachers should be original in the thoughts that guide their learning. When teachers engage in the professional learning communities, they become the creators of their own learning and therefore, their involvement generates more will and choice to want to be involved. Senge (1994) cites the issue of 'want to' versus 'choice' (Senge, 1994: 360) and indicates that choice is the more preferred one as it indicates an abundance rather than wanting just one thing. This notion too speaks to the willingness of teachers to be involved in professional development indicating that when there is a variety to choose from, the willingness becomes more.

What distinguishes a learning organisation from traditional organisation is the five basic principles (Smith, 2001) which, according to Senge (1994), should develop as a whole; a prescript which needs a lot of effort to realise. Over and above the interaction of the

principles, to achieve maximum organisational growth, the five disciplines can be conceptualised at three levels namely; as practices (where they are put in action), as principles (guiding information) and as essence (explaining the state of being of the phenomenon) (Smith, 2001). These principles are personal mastery, mental models, creating a shared vision, team learning, and systems thinking. They can interact with each other to produce heightened capacities.

2.2.2.1 *The principle of personal mastery*

Personal mastery is a concept that Senge (1990) and his followers use to describe a field of knowledge associated with personal growth and learning. This concept is deeper than skills and competence, as it has to do with a deep understanding and real proficiency which is based on a calling rather than some dominance. It has something to do with objectivity which is driven by personal attributes that makes one aware of one's inequities. One will thereafter choose a disposition of on-going learning to an extent that one "never arrives". (Smith, 2001: 5). The significance of this awareness for the present study is that a teacher who possesses personal mastery voluntarily participates in CPTD and does not need to be coerced to attend. An education system whose leadership apply the learning organisation's theoretical framework as a basis for its engagement does not need to apply compulsory CPTD because teachers choose to participate and collaborate in their learning as a lifelong activity.

Senge (1990) presents some basic qualities of this principle, the first one being a strong sense of purpose supporting the person's vision and goals. The second quality is the ability to work for change not against it and the third and the last is a feeling of connectedness to others and life which makes an individual to live in a persistent mode of learning (Senge, 1990). There is a warning given against the feelings of hopelessness and lack of self-worth which are regarded as the worst enemies of personal mastery. Individuals are then guided to tap on the sub-conscious mind for strength to fight these negative feelings because of the untapped nature of this resource which is a powerful tool (Senge, 1990). It is the collective power of well-trained sub conscious minds that makes one company to soar above while others go under.

The above basic traits associated with personal mastery are a prerequisite for the lifelong disposition needed for teachers to stay fit for purpose and that is very befitting for the study at hand which has to make recommendations on how state-led CPTD can be improved. The basic traits of personal mastery, with its lifelong learning principle, tally with the National Policy Framework for Teacher Development prescript for engaging in CPTD (DoE, 2006) which directs teachers to continually engage in lifelong learning for them to stay abreast with educational transformation and new developments. However, in an enlightening way, Senge's (1990) personal mastery concept directs that the individual must first embrace the vision and mission of the organization under which one is serving. Once the vision is embraced the individual must always be willing to work for change instead of blocking it. This principle is very essential for the contribution that each individual makes to the organisation as the more competent individuals are in support of the organisational vision as a collective, the more the organisation will be developed (Fullan et al., 2005). It is the synergy of the individual's aspirations and the organisation's vision that propels the person to work for change (Lunenburg, 2011). The personal mastery possessed by a teacher becomes key for CPTD because it is the one that drives educators to continually want to make change and improve how they teach for the better (Smith, 2001). It is the absence of this principle that made the Malawian teachers fail to implement the new teaching strategies taught as observed by Selemani-Meke (2011) in 1.2.2.

2.2.2.2 *The principle of mental models*

The principle of mental models deals with the use of deeply rooted mental pictures, generalisations and assumptions in understanding the world and reality (Smith, 2001). In engaging with the world and expanding one's frontiers through learning, the individual engages in an internal conversation where mental models and images are scrutinised critically, reflected upon and shared with others. This influences growth in an organisation and contributes positively to continuous learning in an organisation, allowing individuals to become catalysts of institutional change as they transcend the mental models formed (Smith, 2001). The implication of this principle for the study is that it explains abstract processes that a teacher should engage in during teacher

learning associated with CPTD for effective engagement. Fullan et al. (2005) encourages learning during implementation as it is the only way that new ideas are generated and shaped. A teacher who sticks to one old method will stay like that unless a mental model is embraced during a professional debate or during reflection after a lesson study. When that mental model is made practical, an improved lesson results in class. Fullan et al. (2005), further emphasize that it is the shared vision or the moral purpose that drives the whole change process.

2.2.2.3 The principle of creating a shared vision

The principle of creating a shared vision entails the capacity to hold a vision truly internalised and owned by the people in an organisation as opposed to just having a vision statement (Smith, 2001). Other researchers refer to this principle as the moral purpose (Fullan et al., 2005) which involves understanding why change must be effected. In a situation of transformation, teachers will see the need for improving learner achievement as the moral purpose which will be an indication of narrowing the gap in quality of education offered to learners in disadvantaged schools and those in historically able schools. When people have bought into an idea and have a genuine shared vision which is not characterised by compliance but by true commitment, the vision is reinforced as it is shared from one person to another, being articulated much clearer and rubbing enthusiasm and more commitment to others as they excel in their practices (Smith, 2001). This principle is key to the establishment of effective professional communities of practice and engagement in CPTD collaboratively because when all members of the PLC share a common vision, their growth become phenomenal.

Creating a shared vision plays a very crucial role in CPTD in the department as it becomes a driving force behind the willingness of teachers to engage in their own development and upholding the vision of the department which is improved quality education. Teachers readily collaborate and learn from each other (Fullan et al., 2005) and share good practices in order to better achieve the organisation's objective which filters down to schools through effective teaching and learning.

2.2.2.4 The principle of team learning

Team learning deals with the alignment of the team's capacities to produce results desired by members (Smith, 2001). While the learning organization theory maintains that this principle builds on personal mastery as members' proficiency as well as having a shared vision is important, this is viewed as inadequate. The ability to act together as a team is important. The theory has the strong view that when members are able to act together, they learn and grow rapidly. Members start by having a dialogue which leads to thinking together, a process which is very conducive for team learning associated with teacher development in schools rather than being bogged down by individual tendencies and leadership styles (Smith, 2001) as prevalent in traditional CPTD models and approaches. This simple procedure explains the activities that take place in a PLC and how teachers learn and grow together in that relationship of trust.

2.2.2.5 The principle of systems thinking

In his theory, Senge refers to the principle of systems thinking as the fifth discipline (Senge, 1990) and it encompasses all the other principles indicated above. Systems' thinking is viewed as the understanding of how the whole system operates and is oriented towards a long term view concept which places all the pieces into a whole in order to see the bigger picture. Such an approach to CPTD allows teachers to have a holistic view of their development and transcend individual needs to the group or a school or organisation's needs. Teachers understand the interconnectedness of key elements and therefore can own and direct their development. In this study, the principle of systems thinking features prominently in highly developed teachers who have reached a high level of development emanating from reflection and collaborative learning with peers to an extent that these teachers play roles of leadership or mentorship for new teachers or for those who are not there as yet. Fullan et al. (2005) refer to this process as building program coherence which is the pulling together of ideas towards the achievement of the main objective or the vision.

2.2.3 The importance of leadership

As Wenger's communities of practice accords leadership high status, the same applies to Senge's learning organization theory where leadership also plays an important role. Unlike in a traditional setting where leadership is based on the notion that people are powerless and do not have the ability to manage change due to lack of vision, in learning organisations, leaders are stewards, teachers and designers. Leaders inspire, manage processes for the benefit of others and teach people throughout the whole organisation to do what they are supposed to do (Senge, 1990). For the study, this notion gives the idea of leaders with a redefined role befitting reform. In designing CPTD implementation systems, room should be afforded for teachers to continually shape their horizon and extend capabilities instead of being passive and accept what they are told by experts. When leaders and management adopt this theoretical framework, they are able to provide a system that will enable teachers to be self-sufficient and be well inspired because their personal mastery would enable them to voluntarily embrace change and engage in lifelong learning collaboratively.

Goh (2003), expounding on Senge's (1996) theory, lists the following conditions for effective learning in a learning organization:

- The articulation of a clear vision and mission to all members of the organization for all individuals to understand each other's contribution to the success of the organization.
- Commitment of the leaders to the success of the learning process and the organization.
- Improvement of practice through the communities of practice by continuously experimenting with new approaches. .
- Insurance that effective communication happens to transfer knowledge amongst the members
- Practice of team work where members attack problem solving as a team instead of doing that as individuals.

The role of leaders in the change process driven by Senge's learning organization theory processes versus change in the traditional setting are presented in Table 2.1

below as conceptualized in Fullan et al. (2005). According to the researchers, flamboyant, charming leaders who are acceptable in the traditional settings drive organisations by becoming the centre of everything including decision making whereas in the learning organisation theory shared values prevail. Vibrant and dynamic responsible integration takes place at all levels.

Table 2.1: The traditional leader versus the leadership for change

The traditional leader	Leadership for change
Associated with sustainability. The leader becomes the centre in the organization	Associated with deep personal humility and intense professional will
Focuses on short-term results	Builds enduring greatness
Only leaves improved learner results on retirement as a legacy	Over and above the improved results, this leader leaves many leaders who can lead and go further as a legacy on retirement
The emphasis is on own success	Fosters success in others and celebrates them rather than feeling threatened
Makes and takes decisions for the organization	Enhances decision taking in others
Assumption that people in the organization shall always depend on the leader for direction	Building the organization where everyone embraces and understands the vision as a bigger picture and work towards change

The important role accorded to leadership in learning organisations is very relevant for the direction needed for CPTD implementation to be effective. There is need for managers to lead for change at all levels starting from the school, district and national level where education policy is determined. Fullan, et al. (2005: 58) refers to this systemic beefing up as “tri level development”. The literature review is dealt with below.

2.3 LITERATURE REVIEW

The section above discussed Senge's learning organisations (Senge, 1990) and Wenger's social learning as the two theoretical frameworks guiding the study. The current section reviews the literature on CPTD implementation paying special attention to what CPTD is, its relationship with in-service training, its nature and the challenges associated with the concept. Further exploration on how state-led CPTD is conducted, and in this context the traditional and job-embedded models of CPTD, are also discussed.

2.3.1 *Continuing Professional Teacher Development (CPTD)*

Continuing professional teacher development (CPTD) is the professional development that the teacher engages in while teaching after the initial training has been completed (OECD, 2010b). The single most significant factor why teachers should be professionally developed is the conviction that the quality of teachers influences the quality of the learners' experience and achievement in a positive way (Mestry, et al., 2009). Ono and Ferreira (2010: 60) posit that "professional development lies at the heart of every educational effort to improve teaching and learning" but they acknowledge its limitation too when they state that "it is not a panacea for all problems." Villegas-Reimers (2003) broadly refers to professional development as the growth of a person in his or her professional role while Guskey (2002), elaborating this notion, defines professional development of teachers as processes and activities planned to enhance the teacher's knowledge, skills and values, depicting the continuing nature of professional development. Turner and Mitchel (2004) highlight the confusion that is associated with professional development and indicate that in some circles it is referred to as staff development and in-service training (INSET). While INSET, as an old concept in education, has been associated with short courses emanating from "training", staff development has been viewed as a whole staff inclusive process that is a bit more sustained than INSET (Turner & Mitchel, 2004:71). Besides, INSET is also associated with the use of external agents which use workshops and conference arrangements for teacher development encouraging teacher dependence on external control (Lee, 2005). The concept of CPD was introduced in the 1970s to cover all three perspectives

namely, professional development, staff development and INSET (Turner & Mitchel, 2004) as an attempt to emphasize a shift towards the individual's ownership of own development (Gray, 2005) as opposed to external control, dependence on external experts (Lee, 2005). CPTD is still used (Lessing & de Wit, 2007).

2.3.1.1 CPTD and In-service training

Gray (2005) associates CPTD with continuing lifelong learning that plays a direct role in improving quality of teaching and therefore leading to high learner achievement in class. While there are other related concepts associated with CPTD such as teacher development, in-service training (Mashile, 2002), professional development and staff development which put emphasis on subject knowledge acquisition and teaching skills, what makes CPTD distinct is the continuing process for holistic development and improvement over and above the mere content knowledge (Adu & Okeke, 2014; Day, 1999). In CPTD and in line with the learning organization theory on the basis of the personal mastery concept (Senge, 1990), teachers accept responsibility for their own development and therefore, collaborate with other teachers to improve their professionalism and teaching (Ingvarson, 2005). The preparedness of teachers is partly drawn from the concept of learning organisations which promulgates a disposition to embracing change from teachers subscribing to the learning organization's framework and choosing to participate in a paradigm shift (Senge, 1990). Therefore, the development associated with CPTD extends to the enhancement of their attitudes and approaches to the education of children, enabling the teachers to choose change for the improvement of quality of teaching and learning collaboratively with other teachers (Adu & Okeke, 2014; Caena, 2011). It is also perceived as affecting positively both the curriculum and the teacher's self-efficacy through the impact noticed. In summing the above discussion up, Gosha et al. (2010) consolidate all the other thoughts on CPTD by describing it as a formal and informal on-going learning activity that results in enrichment of attitudes, skills, knowledge and capabilities necessary to equip the teacher or a group of teachers to carry out determined professional duties. This definition indicates that CPTD encompasses in-service training but the same cannot be said for in-service training where CPTD is concerned. The study defines CPTD as a

structured approach to continuing lifelong learning that can be formal or informal but is embedded in personal mastery enabling a teacher to make a conscious choice of collaboratively working with other teachers for change not against it, in a quest for improved quality of teaching and learning.

According to Steyn (2009), effective CPTD is teacher learning that occurs every day and is grounded on teaching practice in school. Expounding the concept of teacher learning further, Hirsh (2009) points out that it provides new knowledge and opportunities for content-specific growth through shared enquiry with other teachers, peer support and through reflection. The writer continues to indicate that such learning is linked to the learners' and teachers' needs. It gets adapted to context and it continues over a period of time. Maistry (2008) contends that the opportunities provided by effective CPTD are rigorous and on-going as opposed to being one-shot incidences to allow for collaborative work with other teachers. The activities that teachers engage in during CPTD include planning together, delivering the lesson whilst other teachers critic the lesson as in lesson study (Fullan et al., 2006; Ono & Ferreira, 2010). During this process, teachers take responsibility for their own development and engage in collaboration to improve learning and teaching (Ingvarson, 2005). Bhushan (2013) also encourages continuing professional development through interaction and collaboration. However, various researchers highlight key principles that govern successful CPTD such as focusing on learner outcomes, creating sustained learning opportunities and collective participation (Getenet et al., 2013; Steyn, 2004; Turner & Mitchel, 2004). They indicate that it is the combination and integration of these various factors that lead to successful CPTD and what follows are some of the principles.

Focusing on teaching and learner outcomes context

Relating CPTD to the ever changing context of teaching and learning helps to equip teachers with the necessary skills and knowledge of content in their specific subject. As a result, they become master teachers (Desimone et al., 2006). The introduction of Outcomes Based Education in South Africa in 1996 conforms to this principle where learning outcomes, skills and knowledge were pivotal in determining whether learning

had occurred (Reddy, 2010). The outcome of learning was measured with measurable evidence of what the learner could do or knew and the skill that they could display as a result of learning (Reddy, 2011).

Sustained and in depth learning opportunities

When learning is prolonged over time to allow teachers to reflect on their practice and get feedback on how well they are doing, CPTD is bound to be successful (Desimone et al., 2006; Getenet et al., 2013). However, most common approaches like workshops, conferences or courses do not provide room for in-depth learning, practice and reflection and as a result, are found wanting in providing real teacher growth that enables teachers to implement the new skills acquired from CPTD (King & Newman, 2001; Anderson et al., 1996). A case in point is the Malawian teachers as observed by Selemani-Meke (2011) in her research. These teachers could not implement the new skills acquired from the training because of unchanged attitudes. Punctuating reflective sustained educator learning with conferences and courses to create a combined approach to CPTD is sometimes effective (King & Newman, 2001). In addition, Loucks-Horsley et al. (1998) further suggest that when CPTD provides opportunities for teachers to build their own knowledge and skills through continuous self-assessment and improvement, it is bound to be effective. Added value also occurs when there is simulation of an ideal situation of effective classroom learning and teaching while using the strategies that teachers use with learners as models (Loucks-Horsley et al., 1998).

Collective participation

According to King and Newman (2001), when teachers have an opportunity to work with peers from the same school or from the cluster and at the same time have access to expert support, educator growth is likely to occur. The examples of experts cited were researchers and knowledgeable programme presenters. While Lee (2005) agrees with the need for collaborative work, others criticize over-dependence on external experts as it encourages individual learning which undermines collaborative learning (Mundry, 2005; Steyn, 2005). When teachers comfortably participate in the communities of

practice on their own without being prompted by management to do so, the level of learning and their openness to new approaches gets very high (Lee, 2005).

The ability of educators to influence content and the development process

King and Newman (2001) maintain that when teachers have a say in the content and its development, they are bound to have ownership of the whole CPTD process. This requires designing programmes on the basis of educators' needs which rarely happens in South African education department. In addition, Hirsh (2009) points to the key aspects for the success of CPTD. These are the realisation that on-going growth and continuing professional development is crucial for the effectiveness of the education system and that retention of the best professionals in the education system is pertinent. Furthermore, that there should be willingness, commitment and keenness for change from educators, which manifest from their voluntary engagement in CPTD through the formation of PLCs. Fullan et al. (2005:55) refer to this aspect as the 4th of the 8 drivers for change, referred to as 'developing cultures for learning' which calls for the establishment of conditions for success at school level to bring change. A key condition is to learn during implementation with peers. Therefore, the formation of professional learning communities (PLC) is key as teachers generate new knowledge and skills as they work collaboratively and commit to change. Teacher learning is discussed below because of its importance to the development of the teacher.

2.3.1.2 Teacher Learning

Since all the above job-embedded professional development activities involve teacher learning Avalos' (2011) definition of teacher learning within the continuum of CPTD which follows is befitting:

Teacher professional learning is a complex process which requires cognitive and emotional involvement of teachers individually and collectively, the capacity and willingness to examine where each one stands in terms of convictions and beliefs and the perusal and enactment of appropriate alternatives for improvement or change. All this occurs in particular educational policy environments or school

cultures, some of which are more appropriate and conducive to learning than others (Avalos, 2011:10).

Teacher learning occurs through an interplay of the personal attributes of the teacher (teacher knowledge, beliefs and attitudes); the practice domain (the classroom and the school), the domain of consequence (the outcome of practice which entails learner performance) and the external domain (support sources, resources provided and information) (Clarke & Hollingsworth, 2002). The depth and width of the teacher's personal attributes (knowledge, beliefs and attitudes) will always be affected by whether the teacher is in possession of personal mastery, as promulgated by Senge's (1990) learning organisations theory, or not. The personal attributes determine and punctuate the interaction and interplay with all the other aspects and is therefore, key to the success of teacher learning.

2.3.1.3 Types of Teacher knowledge

Ziedler (2002) illustrates three types of teacher knowledge as being at the forefront of teaching. These are: (a) subject matter knowledge (which is the teacher's ability of arranging and organizing a whole lot of information in a particular field of study; (b) pedagogical knowledge (knowledge of basic instructional construct like classroom management, questioning, assessment, administration, discipline and other related concepts) and (c) pedagogical content knowledge (which is teaching what one specialises in effectively. Harmmeness et al. (2005), Avalos (2011) and Bertram (2014) concur with Clarke and Hollingsworth (2002) who argue that the key to teacher learning is the interrelationship between teacher learning and the context of learning. How the interaction of the above positively impact learner achievement is critical (Wei et al., 2009). A case in point is the transfer of knowledge gained from another context such as participation in lesson observations. According to Bertram (2014), such knowledge is always difficult for teachers to transfer into class and therefore, teacher learning needs to take place in the same context where practice is taking place.

2.3.1.4 The school context

The school context is another system that influences teacher professional learning (Bertram, 2014). Different groups of teachers from separate schools taking part in the same intervention will not display the same positive learning results. That is, the context entails the norms applicable at the school, the culture, practices, the powers and any obvious structures which either obscures or supports learning (Bertram, 2014). Cohen (2010) indicates that a positive school environment supports teacher development and learning. This becomes visible in schools that practise Invitational Education (IE) which promulgates the view that schools should be places where a positive environment prevails so that teachers can develop and learn together (Sparks, 2003).

Nonetheless, it is worth mentioning that schools (as a collective) under a particular district and province follow a particular culture especially with regards to the administration of key activities like CPTD, which depend upon an underlying philosophy underpinning the functioning of that particular organization. An organization whose leadership believes that teachers have the potential to act as catalysts and change agents designs CPTD programmes driven by a theoretical framework that views educators as people with a 'voice' (Stacy, 2013: 42). The organization creates a teacher learning situation that enables teachers to engage in participatory and active learning as they construct meaning. Teachers get an opportunity to develop holistically using their personal mastery to shape their world through their learning (Avalos, 2011; Senge, 1999).

2.3.1.5 The nature of state-led CPTD

The 2010 TALIS report describes professional development as the development of a person in his/her professional role which enables the individual to do the job they are appointed for (Caena, 2011). Cinkir (2007: 66) asserts that "In recent years, professional development is being recognized as crucial, not only to the individual, but also to the promotion of effective and efficient organizations in many countries across the world." Professional development is the quality improvement factor in every profession which is a life-long process and teaching profession is not an exception

(Villegas-Reimers, 2003). In general, professional development is determined by a number of variables such as the changing circumstances to which professionals have to adjust (van Staden & Howie, 2010), expansion of knowledge and communication technology (Power & Thomas, 2007), demands by employers to provide quality service to the consumers and value for money (DoE, 2006). In education too, all the above factors apply. In addition, pressure from curricular changes and improved assessment strategies that are applied after teachers have completed pre-service training are additional factors that demand that teachers be involved in CPTD (Reddy, 2010). Stacy (2013) observes that the pressure to deliver state-led CPTD creates barriers to teacher empowerment with too much control that stifles teacher autonomy. Some of the barriers are the administration of common, standardized assessments (which cause teachers to teach for them instead of teaching for knowledge), scripted curricula and generic teaching notes that rob the process of teacher's professional discretion, teachers working in silos and in isolation as they compete with each other to meet deadlines. Further to that, the pressure to submit evidence for compliance drives teachers to submit double results, one for the system and another for teaching in the class, a concept labelled by Webb et al. (2009:11) as "fabricated pedagogy" which leaves the teacher with feelings of low-self efficacy.

2.3.1.6 State-led CPTD in Gert Sibande Education District

State-led CPTD in Gert Sibande Education District is also driven by the transformation agenda where the department as an employer expects teachers to adjust and display improved professional development skills in line with the prescripts of the National Policy Framework for Teacher Education and Development in South Africa (DOE, 2006). However, to clarify the state-led CPTD further, Reddy (2010) notes that whenever the state drives CPTD, it is usually because of a transformative agenda of that country, and South Africa is not an exception. Since 1996, a transformative curriculum was adopted and this curriculum has seen adaptation after adaptation up to the present National Curriculum Statement (NCS). It is for this reason that the department still runs state-led CPTD programmes on content for the various subjects

through the various sections in the department in form of workshops associated with traditional in-service training, a stance that the researcher calls for a re-look on.

In public schools in the Gert Sibande district, it has been observed that state-led CPTD activities are largely skewed towards one category specified in the policy framework; that is, towards employer-driven activities (MDE, 2009 a&b). These CPTD activities have centred around three core professional service areas (a) curriculum, (b) curriculum support, and (c) teacher education and development (MDE, 2007a).

The curriculum activities have largely been on teacher subject knowledge, pedagogical skills, and on understanding requirements of different versions of the National Curriculum Statements (MDE 2007d). However, in terms of curriculum support activities, the focus over the years has been on the provision of content training in the various subjects with emphasis placed mainly on Maths and Languages for General Education and Training (GET) and all subjects for the Further Education and Training (FET) band. The other curriculum support activities provided have been on Inclusive Education, specialised support such as ICT enhanced teaching and learning, and life skills (MDE, 2007a). In terms of Teacher Education and Development, the focus has been on setting up the CPTD system, management, monitoring and support of learning systems such as the IQMS, the teachers' signing up in the South African Council of Educators (SACE) CPTD systems and the support of District Teacher Development Centres (DTDCs) (MDE, 2007a; CA, 2007).

Steyn (2008) asserts that the CPD initiatives undertaken above inherently reflect state-led interests and this is hardly surprising given that PD activities in public schools are dominated by employer-driven projects. Whether the department encourages school-based professional development (PD) has been a pertinent question. But Lee (2005) and others (Steyn, 2008) maintain that the above state-led approach is traditional, external-agent dependent, and is sometimes ineffective due to its divorce from the classroom setting. Furthermore, the narrow focus on these activities in the Gert Sibande district has prompted education critiques (Stacy, 2013; Steyn, 2008) to question the

instrumental nature of PD, as they contend that CPTD has been caught up in a technicist-functionalist paradigm. This paradigm is aimed at serving the state interest (Steyn, 2008), which is not necessarily the teachers' interest driven by their professional needs at the school level (Stacy, 2013). In Gert Sibande, this reality contradicts the fundamental tenet of teacher-driven development on which the national policy framework is based (RSA, 2007).

At the same time, there was evidence from different schools in the district that no auditing and documenting of teacher professional needs have been carried out by the district education office (CA, 2007). In fact, over the past 8 years, there has been no integrated annual report on teacher training needs to inform the training menu in the district (MDE, 2009). Interestingly, the training menu itself was non-existent. The team responsible for managing CPTD had not done a training impact analysis of the programme especially the training provided by the curriculum units. Thus, whether the training that has been provided yielded the intended result was not established. These deficiencies pointed to systemic problems in the management processes of CPTD activities at the district level.

Linked to the above, the needs assessment performed by a team of researchers in the Canada-South Africa Project in Gert Sibande, and other areas of South Africa, in 2006 and 2007 (CSATDP, 2006; Ramoroka, 2007) indicated that the majority of teachers felt an inadequacy to confidently teach according to the new curriculum, even after undergoing years of district-led professional development training sessions. The trickle-down effect of a feeling of inadequacy to teach culminated in high failure rate in Numeracy, Mathematics and Languages, especially in English First Additional Language (FAL) as indicated in the Annual National Assessment (ANA) (DBE, 2013).

2.3.1.7 Factors promoting the implementation of state-led CPTD programmes

Research highlights a number of factors that can make a CPTD programme to succeed or fail (Doherty, 2011). Some of these factors deal with what happens during the planning of CPTD as adequate handling depends on how the system views teachers

and their role, while others deal with the actual handling of the CPTD session during facilitation. The last category of factors pertains to logistical arrangements for the CPTD sessions.

The factors that feature in the planning of CPTD are the lack of consultation for input in the CPTD programmes design and issues of adequacy of time allocated to each CPTD session or the choice of time of the year for the major CPTD sessions. Factors such as poor facilitation of the CPTD session and the methods used by facilitators feature during the actual presentation of the CPTD session. The usefulness of what was learnt for the classroom affects the teacher's grasp of learnt capabilities and evaluation of the impact in the anticipated development that might occur due to learning. Factors associated with logistical arrangements such as long distances travelled to the venue, improper arrangements for the CPTD session and late information or no information about the arrangements for CPTD also hinder participation in state-led CPTD.

2.3.1.8 Challenges in the implementation of CPTD programmes

CPTD implementation can be negatively affected by a number of factors such as the inadequate amount of time allocated to CPTD, incompetent facilitators with poor facilitation skills, no teacher input in CPTD design, non-usefulness of what was learnt to classroom practice, and the non-implementation of what was learnt. These factors become barriers either in the implementation of CPTD or they prevent teachers from participating in CPTD.

The issue of time for CPTD seemed to be a huge problem either with the right timing, the duration or relevance thereof. Gulston (2010) points out that state-led CPTDs that were associated with the phasing-in of the new curriculum were conducted during the holidays and this timing had not found favour with teachers as this had been viewed as intrusion into their rest time. Heystek et al. (2008) suggest that school days, instead of weekends and holidays, should be used for CPTD. This view is supported by international research (Darling-Hammond, et al., 2010) which cites that in most high performing countries, CPTD is conducted during working days. Japanese teachers are

given time during working days to conduct the lesson study. Countries such as Singapore, France and others give teachers who are mentors time-off in order to be trained, to mentor and visit the mentees' classes to observe presentation of lessons.

2.3.1.9 Measures to enhance the implementation of state-led CPTD programmes.

For CPTD to be effective, it needs to conform to certain structural aspects such as: form, duration, collective participation and time (Steyn, 2004). With regard to the *form* of the activity, state-led CPTD follows the traditional type of workshops, short courses and seminars which, according to literature, are less favoured due to their unsustainability and failure to change teacher behaviours in class (Mokhele, 2014a). The factor that exacerbates the ineffectiveness of the workshops is that they are externally driven by experts, subject advisors and not by the teacher involved, rendering the teachers powerless with regard to their own development (Mokhele, 2014b). To enhance state-led CPTD, a reform type CPTD should replace the traditional workshop and in-service training with on-site teacher development initiatives that take place during instruction time where teachers work with mentors and coaches to observe and be observed while teaching. Such opportunities allow reflection and action research. (Mokhele, 2014a). The community of practice concept, lesson study, teacher visits, reflection-on-action and other on-site development activities offer opportunities for teachers to learn from each other and offer on-going learning as opposed to the one-shot intervention of traditional INSET (Ono & Ferreira, 2010; Turner & Mitchel, 2004) and therefore, results in enhanced CPTD.

2.3.2 Kinds of CPTD models

There are a number of CPTD models that are used and preferred by both policy makers and leaders in education which eventually get to be used by teachers for their professional development. When the policy makers and education leaders' theoretical framework is sound, the design of all CPTD activities in the department will be based on even keel. Education leaders who adhere to Senge's theory of learning organization (Senge, 1990) and Wenger's social learning theory (Wenger, 1999) follow the new view of leadership of building the department and creating opportunities where teachers

continually expand their understanding and become responsible for their own learning. Instead of viewing teachers as powerless, as people who lack vision and who rely on a few individuals deemed as leaders, these leaders build the department as an organization in accordance to the theoretical framework mentioned earlier as they are viewed as stewards, designers, and teachers. They communicate the organisation's vision to all including the high expectations they have for everyone as they do not operate from a deficit position. Leaders that subscribe to Senge and Wenger's theoretical framework display the belief that everyone is capable therefore, personal mastery, mental modelling, team learning, systems thinking and shared vision are the principles that guide their perspective and decision making. The direction articulated in professional development policies and the frameworks suggested in teacher development policies will be those that show that the system believes that teachers have something to offer and therefore, they should be provided with opportunities to collaborate to shape their capabilities. Therefore, the type of CPTD models chosen and used by the organization depicts the underlying theory and beliefs in the organization.

Various researchers list different professional development models and approaches (Cinkir, 2007; Fullan et al., 2006; Kennedy 2005) and all these can be categorized into two main models: traditional and job-embedded. According to Bertram (2014), the traditional models of CPTD are based on the cognitive perspective and target the knowledge acquisition of the individual teacher. The job-embedded approaches support teacher learning in collaboration with others (Fullan et al., 2006) and both models are discussed in detail below.

2.3.2.1 The traditional models of CPTD

The models of professional development which are categorized as traditional rely on external experts for the delivery of their programme (Kennedy, 2005). Lee (2005) describes these models as short term, once-off programmes that find expression in workshops, seminars, lectures, conferences and other training events as delivery modes. This form of professional development is also referred to as the formal model (Wei et al., 2009); as it is also associated with university courses and takes place off-

site (Cinkir, 2007). The belief underpinning this group of models is that learners benefit more when the teacher is knowledgeable as an individual (Smith & Gillespie, 2007). The concept of traditional models is sometimes used interchangeably with transmissive models which focus on mere transmission of information especially the technical aspects of the job rather than issues relating to attitudes, belief and values (Adu & Okeke, 2014). These models leave no room for professional autonomy and creativity but are strong on compliance and conformity (Kennedy, 2005). Hence they are always compulsory and the state-led CPTD offered in Gert Sibande district is no exception. The examples of traditional models are the training model, standard bearing model, deficit model, cascade model and the award winning model (Kennedy, 2005) and these are discussed below.

2.3.2.1.1 The training model

The training model of CPTD is based on a skills view of learning where the programme of development is delivered by an external expert who concentrates on theory rather than the practical part of teacher development (Kennedy, 2005). The training agenda is determined by the deliverer and the participants are placed in the passive mode, rendering the model divorced from teachers' needs (Kennedy, 2005), which is a difficulty that Day (1999: 49) summarises as lack of "connection with the essential purposes that are at the heart of teachers' professionalism". The training model operates by using workshops, conferences and seminars to train teachers on the basis of a belief that teachers' knowledge and skills can only be improved by external experts who lead the process of learning (Lee, 2005).

This is typical of South African CPTD. Since 1996, the training model has been used to train teachers in the phasing-in and the implementation of outcome based education up to the current National Curriculum Statements. The training programme was, and is still, determined nationally and the content knowledge; its amount and the standards are still set and controlled centrally to enable easy monitoring and management of the process from a central point of view (Reddy, 2010). Mokhele (2014a) highlights that with the roll out of C2005, the Gauteng Department of Education had to employ other organisations

to run its teacher training workshops because the department could not cope with the demand. These organisations ran the programme over 6 Saturdays.

According to the supporters of this model, its use was aimed at quality assurance and setting a common standard across all provinces and all schools in South Africa. It was envisaged that teachers would strive to display particular skills prescribed in a nationally agreed programme (Mokhele, 2014a). The Chartered teacher programme in Scotland serves as an example for this approach (Kennedy, 2005) as it relied on training teachers externally for its survival. Although Hoban (2002) projects this model as being effective when introducing new knowledge, critics view these approaches as ineffective as it has been proven that they have succeeded to change neither teachers' content knowledge nor their pedagogical skills (Mewborn & Huberty, 2004) due to their detachment from teachers' needs. The model dismally fails to display the transfer of knowledge gained by teachers into practice. The only thing that this model succeeds to do is to allow dominant stakeholders like the state to exercise complete control on the training agenda (Kennedy, 2005) and render teachers passive recipients of knowledge imposed by the state regardless of their needs. As indicated in 2.2.1, the leadership that drives this type of CPTD operates with an assumption that teachers lack the personal vision and always need an expert to tell them what to do while they listen passively. This training model is used in state-led CPTD in Gert Sibande district of Education. The standard base model is discussed below.

2.3.2.1.2 The standard-based model

The standard-based model involves teacher development initiatives that are based on demonstrating that a pre-set standard has been met through empirical evidence (Kennedy, 2005). Instead of elevating teaching as a complex and dynamic profession, standard-based model represents a system of teaching that seeks to confirm connections between teaching and learner achievement (Kennedy, 2005). Getenet et al. (2013) observe that although the standard based system of CPTD operates from the school as a site, it is actually a top-down system which is controlled by the department of education outside the school because that is where the standards are determined.

Such an approach limits opportunities for alternative use of other forms of CPTD as it relies heavily on the behaviourist perspective of learning (Kennedy, 2005). The competence of individual teachers becomes the focus and is rewarded at the expense of collegial and collaborative teaching (Kennedy, 2005).

Similar to the training model above, through its reliance on externally imposed standards set somewhere without the teachers and inspections, the standard-based model undermines teachers' initiative to set their own standards as well as their capacities to be reflective of their own teaching practice (Beyer, 2002). Standards are set for learners specifying exactly what they should achieve by the end of a specified period. They are also set for the content of instructional material, the curriculum, and classroom pedagogy. The teachers undergo a vigorous training in order to meet the set standards to enable learners to in turn achieve the set standard (Getenet et al., 2013). To counteract the criticism levelled against non-collaboration in standard-based models of CPTD, Draper et al. (2004) posit that the standards set nationally enable teachers to engage in a dialogue because the standards are shared and are common to all teachers regardless of the tension that is associated with this approach (as it was applied in Scotland and United States of America for the chartered teachers). However, it needs to be mentioned that the sharing that takes place in the model is not about an agenda originating from the teachers themselves. What they share is designed by the state and therefore, collaboration in such instances is artificial; an observation supported by Webb et al. (2009). In real teacher collaboration exercise, teachers generate ideas, synthesize them and draw conclusions. It is in the process of engagement that teachers' learning occurs and growth takes place (Fullan et al., 2005).

In a quest to shape the standard-based model further, research has presented a different approach to standard-based model which is associated with teacher evaluation in job-embedded professional development (Coggshall et al., 2012). The 4.5 billion federal grant in USA put forward a number of state policies where standards were set for teaching and learning evaluation systems and amongst these were those that specified teachers' responsibilities and the expectation that teachers engage in

professional learning (Coggshall, et al., 2012). However, Kennedy (2005) insists that a balance should be obtained between standardisation and teachers' own initiatives acknowledging the teachers' potential in designing and regulating their own professional development. It is therefore, worth establishing how this balance was maintained in Scotland's standard-based project. Loucks-Horsley et al., (1998) point out that the success of standard based initiatives depends on how the teachers instil the fundamental knowledge, the critical thinking as well as problem solving skills in the learners. Until research confirms this balance, the standard-based model will be found wanting. In the next section, the deficit model is discussed.

2.3.2.1.3 The deficit model

The deficit model is designed to counteract teachers' weaknesses in teaching and is linked to performance management which is usually government driven (Kennedy, 2005). A programme designed on the basis of a deficit model is brought about as a means to remedy perceived weaknesses and raise standards. It is government's way of intervention to obtain greater efficiency and accountability (Rhodes & Beneicke, 2003). The weakness of this model is its dependence on performance management which seems to be driven from outside and it is usually not clear what the expectations are for competent performance (Rhodes & Beyer, 2003). Besides, this model concentrates on teacher deficiencies whereas the problems of lack of performance by individual teachers could be emanating from the system or organisational management deficiencies (Kennedy, 2005: 239). This overemphasis on individual competence militates against a holistic approach to teacher development. The fixation of this model on the teacher's deficiencies still supports the old way of viewing teachers as being empty vessels and in need of fixing; a notion that is not in keeping with Senge's personal mastery (Senge, 1990) and Wenger's social learning theoretical frameworks (Wenger, 1999) that view teachers as people who are willing to change as they take keen interest in designing their programme of change. State-led CPTD offerings use the deficit model continuously without reaching a stage where they take stock of whether the deficiency has been dealt with so that they change the approach. The state-led CPTD model followed at the Gert Sibande District of Education as a model for

Mpumalanga provincial education has a touch of this model as teachers are viewed as having a deficiency that needs endless fixing. The cascade model is discussed next to.

2.3.2.1.4 The cascade model

The cascade model involves the train-the-trainer model where training is offered to certain individual teachers who attend the training session with the aim that they will later disseminate or train their peers in the new methodology they were trained. (Kennedy, 2005). The cascade model is commonly used where resources are insufficient and is characterised by loss of quality of the original training content as it is cascaded down. Selemani-Meke (2011) confirms the use of this model in her study for CPTD provisioning in Malawi where, like in all the other states, it was found to be cost effective.

In South Africa, the model was used during the initial introduction of Curriculum 2005 when a group of teachers was trained in the new methodology and was expected to train their colleagues at their respective institutions. (Coe et al., 2010). Jansen and Taylor (2003: 39) had this to say about the model: "... the training program was weak and sporadic and contained a fatal design flaw (the so-called cascade model) that had very little impact on teachers, teaching behaviours, and teacher understandings."

The cascade model has been seriously criticised for its deficiency on principles of learning. Ono and Ferreira (2010) point that the cascade model is overloaded with transmission of knowledge where teachers have to absorb what they are taught without any active interaction with what is learnt. When individual trainees report back on what they have learned, they usually focus on the actual knowledge they have gained but the values and deep principles they experienced from the training session cannot be shared and therefore, get compromised (Nieto, 2003). This deficiency was noted in Selemani-Meke's (2011) study where principals would be trained and then they would be expected to hold similar training sessions for their subordinates back at their schools. Selemani-Meke (2011), in her study, discovered that the Malawian teachers never changed their attitudes and ways of doing things back in their classes and low learner

performance continued in the system despite the cascade system. This model is still being used especially where there is still a lot of dependence on the central office for standards and pace setting. There shall always be the inclination to select and do the train-the-trainer model because it is very manageable and economical.

2.3.2.1.5 *The award bearing model*

The award bearing model puts emphasis on the completion of a selected programme that is run by a university or an equivalent entity which is a quality assuring body or a funder to such a programme. An example of such a model is the Charter Teacher Programme that was run in Scotland which was intertwined with the country's CPTD programme where academic study formed part of CPTD (Kennedy, 2005). However, there has been growing criticism and debate in that country questioning the emphasis of an academic route versus the professional route which is practice-based (Kennedy, 2005). The model also displays a simplistic technicist view of teaching similar to that of the training model and others that believe teachers can only improve when external experts are used (Lee, 2005). The researcher further contends that courses and workshops are designed for individual learning with their format geared towards an individual gaining knowledge and yet, the new reform models target collaborative learning with other teachers.

Similar to other traditional models, this model too is based on a belief that by exposing teachers to new information and thinking, teachers will change their way of doing things; an assumption that is refuted by researchers such as Bertram (2014) and Lee (2005). However, Smith and Gillespie (2007) note that the award bearing model is an example of the transmission approach and is commonly used when introducing a new methodology or a new instructional model. This is what happened in South Africa with the introduction of the C2005 and the National Curriculum Statement (NCS) (Reddy, 2011). In other countries, it has been used to upgrade teachers' qualifications and the programmes would start with crash courses (Villegas-Reimers, 2003).

The traditional model(s) are alienated from the practice space (Cinkir, 2007) as they take place off-site, away from the classroom. These programmes are dubbed short-cut and once-off and therefore, very little is accomplished by teachers who participate in them (Villegas-Reimers, 2003) also because they only transmit theory. Research data show that only a very low percentage, if any, of these teachers are able to translate the learnt theory into practice when they are in their classrooms (Wei et al., 2009). This is confirmed by Selemani-Meke (2011) in the study she did in the Malawian system of education where teachers could not implement what they learnt from the training sessions and therefore, could not improve learner performance in their classrooms despite having been trained (Selemani-Meke, 2011). Cinkir (2007) also points that off-site training lacks the supporting school's cultural context and it (to some extent) disregards the experience that is brought by the individual teachers into the learning space. The deficiency indicated above is counteracted by Fullan et al. (2005:55) in their article '8 forces for leaders of change' when presenting the fourth driver, which is 'developing cultures of learning'. The researchers maintain that this development driver relates to the strength of teachers learning from each other by establishing social collaboration in developing everlasting change especially when new methodologies and education reform are introduced into the system.

None of the traditional models discussed adhere to Wenger's social learning theory or to Senge's learning organisation's theoretical framework which are the frameworks guiding the present study. Both theoretical frameworks are strong in social collaboration as well as the individual attribute of personal mastery for the teacher who leads the change in the classroom (Senge, 1999; Wenger, 1999).

However, there are some benefits associated with the traditional model as indicated by researchers who support the model. Cinkir (2007) indicates that off-site training takes people away from the classroom's stressful situation so that they can focus on what they are trained on. As a result, they are able to reflect fully on their practice. This view can be questioned depending on what matters most to the reader. If the reader prefers interactive learning that is driven by teachers designing their own learning agenda for

CPTD (the teacher's 'voice' (Ngoepe, 2013), the focus mentioned above will not benefit such teachers. Smith and Gillespie (2007) contend that the traditional model can be more effective with some adaptation to its design and proposes the following factors:

- i) **Longer duration:** If planned over a longer period, the professional development programme can lead to sustainable change in the teacher's behaviour and classroom practice (Cinkir, 2007). This then breaks the biggest criticism to the traditional model of being a one-shot disjointed initiative.
- ii) **Connection of training agenda with what happens in class:** This view indicates that when there is a link between what the teachers are trained on at off-site sessions with what happens in class, that professional development session tends to assist teachers' classroom practice especially when the training session consciously includes planning for classroom activities (Smith & Gillespie, 2007) but the main factor is how the connection is done.
- iii) **Reflection and analysis instead of demonstrating techniques:** When the training sessions offer participants with an opportunity to reflect on their classroom practice, engage in problem solving and learning rather than being taught, teachers are bound to change their behaviour in class for the better (Smith & Gillespie, 2007).
- iv) **Inclusion of a variety of activities:** A workshop that is followed by on-site monitoring is bound to have an impact on the teacher's classroom teaching.
- v) **Team participation:** Encouraging teachers from the same school to participate together breaks the isolation associated with the traditional model and encourages sharing of experiences.
- vi) **Focusing more on quality rather than the format:** Paying more attention to the depth of the programme and activities that teachers are taken through is bound to enrich teachers' classroom practice (Smith & Gillespie, 2007).
- vii) **Assessment:** Conducting of summative assessment at the end of the programme to bridge the theory and the practice gap to ensure that teachers can apply what they were trained on (Cinkir, 2007) although teachers may not feel comfortable with it.
- viii) **Continuous evaluation:** The use of evaluation throughout, right from the beginning of the process till the end will ensure quality (Cinkir, 2007). Respondents in a study

conducted by Safi (2014) to determine the effectiveness of in-service training found the end-evaluation useful in closing gaps that occurred during in-service training.

Cinkir (2007) advocates an integrated approach where a traditional model is slightly adapted and used in an integrated manner that makes it effective. For example, the off-site training can be in a form of job shadowing which will be effective in changing practice. However, applying the traditional models in a strictly formal manner has proven not to be effective for CPTD delivery.

2.3.2.2 *The job-embedded professional development (JEPD) as the alternative CPTD approach*

With the dissatisfaction and criticism that came from the implementation of traditional models of CPTD and how these models paralyzed teacher learning, the constructive approach to learning came to the fore as an alternative. Accordingly, it is argued that people are constantly searching for meaning and they then construct knowledge as they engage in different situations (Ono & Ferreira, 2010). For educators, the ability to construct knowledge becomes more evident during the times of educational change as it is demanded of teachers to develop learning cultures that will support educational change (Fullan et al., 2005). One of the strategies to deal with educational change is learning with peers during implementation which widens the pool of ideas and enhances the “we” identity (Fullan et al., 2005: 55). The job-embedded professional development (JEPD) approach was introduced as an approach to CPTD to ensure that learning activities are designed to take place in the teacher’s day-to-day teaching practice in order to nourish the teacher’s specific instructional practices (Croft et al., 2010). Therefore, JEPD is teacher learning that takes place on site, in school while the teacher continues with day-to-day teaching practice, providing opportunities for content-specific growth through shared enquiry with other teachers, peer support and reflection (Fullan et al., 2006; Hirsh, 2009). All the transformative models or reform type CPTD activities that are collaborative in their approach are classified as JEPD (Bertram, 2014; Croft et al., 2010; Fullan et al., 2006; Villegas-Reimers, 2003). These approaches create a context for professional development by making observations about the demands

placed on today's teachers as compared to those of yesterday. According to Fullan et al. (2006), the never ending new demands for high levels of achievement in Literacy and Numeracy/Mathematics (DBE 2011; Onwu & Sehoole, 2011) raise certain aspects with regard to teachers' competences namely; teachers needing more knowledge in the teaching of Mathematics and Literacy than they were taught, teachers being asked to teach in ways they were never trained in nor experienced anywhere, teachers struggling with time allocation to allow learners to have more practice, teachers themselves being in need of vast knowledge in Mathematics and Literacy in order to meet the demand. The issues raised above make it imperative for professional development to transform in order to meet the new demands as the traditional professional development programmes, with their focus on individual teacher development, have been unable to equip teachers with the skills they needed (Fullan et al., 2006). The JEPD needs to be brought forward to break teacher isolation and create a collective and co-learning culture and an approach to share, sustain teachers in the mist of uncertainties and challenges, especially when a new methodology is introduced by the state and state-led CPTD.

Maistry (2008) notes that the opportunities provided in JEDP are rigorous and on-going as opposed to being one-shot, to allow for collaborative work with other teachers. Croft et al. (2010) stresses that the professional development that occurs in schools is at all times about current work at school and how to improve learner achievement. Key to the success of the job-embedded professional development is that teachers become initiators and active participants in their own learning even when external developers are involved. The professional development programme is on teachers' terms as a collective and whatever the external agent (the agent as mentor or coach) does is on the basis of the teacher's needs (Lee, 2005). According to Fullan et al. (2006), the activities that teachers engage in during job-embedded professional development include planning together, delivering the lesson while other teachers critique (lesson study), (Ono & Ferreira, 2010) and interrogating data with the aim of determining and identifying areas that need improvement in order to improve learner achievement.

Although Wei et al. (2009) and Villegas-Reimers (2003) contend that the traditional model is more suitable when a new methodology or approach to learning is introduced; Maistry (2008) makes counter-arguments. The writer states that the sharing, collaboration and peer support experienced in job-embedded settings put the job-embedded approach at an advantage and makes it the most suitable for the introduction of new approaches of teaching. This is because the teachers are able to learn together, try new things, and learn from each other. Learning together includes sharing the pressure accompanying mastering the new curriculum changes experienced by South African teachers when the outcomes based curriculum was firstly introduced (Reddy, 2010). Maistry (2008) proposes a combined strategy whereby teachers who lack in content knowledge get expert service at the initial stages of the community of practice to take them through the needed content, and thereafter withdraw the expert to allow the teachers to internalise the taught content alone as they engage and support each other going forward. This then allows them to share tribulations and frustrations and support each other morally during challenging times and take ownership of their growth as per Fullan et al.'s (2005:55) fourth driver of 'developing cultures of learning'. The approach submitted by Maistry (2008) seems to be a mitigating strategy for the challenging training scenario painted by Reddy (2010) during the introduction of the new school reform and educational transformation in South Africa where teachers were put through a very rigid and highly standardised training programme for the National Curriculum Statement. .

The activities associated with job embedded professional development are mentoring, co-teaching, coaching, and teacher's enquiry and study (Fullan et al. 2006). Croft et al. (2010) adds the professional learning communities, action research, lesson study, professional networks and collaborative learning as approaches within the model (Garet et al., 2001). An elaboration on some of the approaches follows.

2.3.2.2.1 Mentoring

Historically, mentoring used to be implemented in factories before the era of mass production set in and it occurred where an experienced worker would be responsible for

a newcomer while in other circles it used to be an adult-youth relationship (Nguyen, 2005). Either way, the concept has similarities in that the principle governing mentorship is the provision of guidance to a novice by an expert. Organisations have a concern on how the organizational standards and the way of doing things are transferred from old employees to the new comers in the organization. Mavuso (2007) labels this concept as knowledge management and mentoring is used as a tool to manage the transfer of knowledge. Mentors act as institutional memory whose knowledge is transferred to mentees as they interact and work with them in a spirit of trust that prevails during this process (DOE, 2008b).

Mentoring is essential in education as it ensures that high quality teachers field the classrooms and it may be key to teacher retention (OECD, 2014). Newly recruited teachers must have mentors to receive, orientate and introduce them to the school and its community. Mentorship rendered to new teachers completes the initial teaching programme that the new teacher underwent while studying at the university and introduces the new teacher to the work situation. The mentor acts as a bridge, and levels the ground for the new teacher and introduces a working culture obtaining at the school. If this is not done, the new teacher will orientate him/herself wrongly to his/her alienation from the whole staff.

In recent years within teaching, mentoring has been associated with induction which changed the stance of seeing the first few years in the life of a teacher as a trial of "sink or swim" resulting in high numbers of new teachers leaving the profession (Achinstein & Athanases, 2010). In the context of teacher professional development, mentoring is a one-on-one relationship between an experienced educator and a novice teacher whereby the experienced teacher provides day to day guidance for effective teaching as well as emotional and psychological support to the novice teacher (Fullan et al., 2006). Croft et al. (2010) confirm that mentoring is offered as part of induction of new teachers and may lead to coaching and peer support as the relationship between teachers progress. It is for this reason that Mokhele (2014a) describes mentoring as short-term as compared to coaching. The most successful matches are those that pair teachers on

the basis of similar content area or subjects ensuring coordinated common time for planning and other collaborations. As per mutual understanding of the two teachers, the mentoring programme can include observation of classroom teaching (Croft et al., 2010). Educationally high achieving countries have well-structured mentoring programmes for the induction of new teachers and they channel resources to schools for the support of mentors and the mentorship programmes (Darling-Hammond, et al., 2010). These countries invest in the mentorship process by providing release time for both the mentor and the mentee to participate in coaching activities and for the training of mentors to enable them to do their job efficiently (Darling-Hammond et al., 2010). Norwegian principals use an experienced teacher to mentor each new teacher allocated to the school and those teachers receive special training for the role they should play. In one state in Switzerland, time is set aside for new teachers to meet at district level to reflect and share on their experiences (Darling-Hammond et al., 2010). This then, enables these countries to receive the new teachers and orientate them well into the respective systems of education and lay a good foundation for later teacher learning.

When mentoring is used for career development, it helps the new entrant worker to grow and plan for a career. The mentee is introduced to the whole new field with the aim of enticing the mentee to continue to study in that field (Nguyen, 2005). Career mentoring involves exposure, coaching, issuing of challenging assignments and sponsorship from the part of the mentor (DOE, 2008b). As the mentor and mentee work through the process, the mentee develops resilience, especially during the times of change (U.S. OPM, 2008a). Hargreaves et al. (2010) maintain that if mentees are mentored effectively and allowed to critique the systems prevailing in the organization, they may contribute to change in the organization. This catalyst role played by the mentee is enhanced by the positive attitude and open mindedness of the mentor (Achinstein & Athanases, 2010) who consciously steps back at times, avoids being judgemental and allows the mentees to engage rigorously with issues.

According to the US Office of Personnel Management (US OPM, 2008a), mentoring is also used for other purposes such as career development, professional identity, staff

retention, knowledge management and transfer, leadership and management development, as well as organisational development that includes culture change and skills enhancement. The US OPM (2008a) maintains that mentoring directed at professional identity exposes the mentee to mentoring experts that display good character and practices that give the organisation good reputation and identity. The mentees are then able to inherit this identity and manage high ethical standing and behaviour throughout their working life. In an interesting description of the relationship between the mentor and the mentee, the Advanced Certificate in Education (ACE) tutorial (DOE, 2008b) indicates that in most instances the mentor is older than the mentee but where Information Technology is concerned, the mentor is usually younger than the mentee due to the current agility displayed by young people towards technology. This concept is termed reverse mentoring as indicated in 2.3.2.2.1.5 and it is highly recommended to assist older teachers with IT in order for them to effectively practice ICT-enhanced teaching in line with current developments.

According to Nguyen (2005), when staff retention is the focus of mentoring it works in two ways for the new comer and more for the old employee. When the experienced employees are appointed as mentors to guide new comers or less able fellow workers in organisations, it gives the expert or the experienced employee a boost and a feeling of being valued in the organization. As a result, it serves as an incentive especially if monetary incentive is provided. The new employee also sees viability in being employed while the experienced employee never thinks about leaving out of boredom or feeling of being dejected. According to Hargreaves et al. (2010), the worldwide stance of introducing induction and the appointment of mentors for new teachers has been critical to the increase in staff retention in education.

When mentoring is used for leadership and management development, it focuses on shaping people for leadership and targets people with the potential to grow into management positions (DOE, 2008b). The targeted person will be mentored by a person who is already at the position the mentee is being shaped for. Some of the activities the two will be engaged in will be shadowing, where the mentor will take the

mentee to a real management situation such as the board meeting to allow the mentee to get a feel of how reports are presented and how decisions are taken.

Organisational development and cultural change mentoring communicates the values that the organisation is aspiring to, as well as the vision, mission and the culture of the organisation. As the mentor and mentee engage in a one-to-one relationship, the mentee is able to deeply understand issues and is given room to suggest changes. Both the communicator and the receiver of the message benefit from this process (US OPM, 2008a). The newcomer gets exposed to the culture of the organization and the old employee gets the vision repeated in his/her mind over and over as he/she is mentoring the new incumbent and gains more understanding of the ethos of the organization. Schools as community sites gain a lot from this process. New teachers are able to gel well with the school and its community at large. When mentoring is used for skills enhancement, the highly experienced workers are able to pass their skill on to their protégé and by so doing the skills of the less experienced worker also get enhanced. In class an older teacher mentoring a new teacher will not hesitate to demonstrate a class management skill for the maintenance of discipline.

The purposes of mentoring can be classified into two main categories which are instrumental and developmental. This denotes the novice-expert teacher relationship (Nguyen, 2005). Instrumental mentorship models refer to the programmes that relate to imparting a particular skill and outcome (Nguyen, 2005). Most of the reasons for mentoring mentioned above fall under this category. The developmental mentorship models are those that provide personal, psychological and social support and guidance (Nguyen, 2005). Archeistein and Athanases (2010) view the focus of mentorship as guiding the new teacher to process the knowledge generated around him/her, adapt and transform this knowledge, and introduce change in the environment that the teacher had just joined. The instrumental and developmental mentorship can be presented as follows:

Table 2.2: Classification of mentoring reasons

Instrumental	Developmental
Knowledge management	Professional identity
Leadership and management development	Staff retention
Organisational development and culture change	Career development
Skills enhancement	Skills development

The US OPM (2008a) manual expounds on the different types of mentoring which are chosen based on the needs of both the organisation and the individual. Some of the types listed are peer mentoring, group mentoring, flash mentoring, virtual mentoring, team mentoring, situational mentoring, reverse mentoring and supervisory mentoring. Each of these types is briefly discussed below.

2.3.2.2.1.1 Peer mentoring

Peer mentoring is a relationship between individuals at the same level who have the same organisational challenges. With regard to teachers, the peers can be teaching in the same grade and the aim would be to support the colleague in professional growth and to have the colleague as a learning pal and a critique too. Peer mentoring works very effectively because the criticism meted by a peer is highly accepted as it is viewed as original and never judgmental (US OPM, 2008b). When a senior criticizes, the criticised takes offence and rejects the criticism. Peer mentoring was found to be very useful in providing emotional and psychological support to student teachers during practice teaching. Student teachers preferred asking fellow students for guidance instead of teacher mentors for fear of being judged (Nguyen, 2013).

The concept of 'peer' is also used for IQMS where a teacher's colleague participates with the teacher's senior in the teacher's developmental processes and they form what is called the Development Support Group (DSG) dealing with support for the teacher for performance management purposes (Education Labour Relations Council (ELRC), 2003: 13). However, the involvement of the teacher's senior in the development process translates the IQMS support into a supervisory bracket which is referred to as peer

supervision by Miller (1989). There are research reports which warn against using supervisors as mentors especially during induction. These include US OPM (2008b). Another report indicates that the practice robs the relationship of the co-worker and 'equal peer based relationship' (Nguyen, 2013: 33).

2.3.2.2.1.2 Group mentoring

Group mentoring usually takes place in a situation where it is not possible to get a mentor for each mentee. In such situations, the expertise that the mentor possesses plays a role for that mentor to be chosen as a group mentor to take care of a number of mentees at a time (US OPM, 2008b). Darling-Hammond et al. (2010) highlight the investment that high performing countries make in training master teachers who become valuable assets to the education system when they act as mentors. Because of the vast knowledge that a master teacher possesses, he/she finds it easy to mentor a group of new teachers. From time to time, the group meets in a common session and interacts with the master teacher for shared expertise and collaboration amongst themselves. As mentees respond to the mentor's questions as individuals, they develop themselves based on their own experiences (US OPM, 2008b). Another model of group mentoring occurs when a group of people organize themselves and create a formal sharing oriented setting for all people working under a particular project and allow the project manager to lead them in discussions using his/her experience in project management as he/she steers the process of discussions and shares wisdom and gained experiences to the mentees. However, it has been observed that very few instances of group mentoring result in real in depth connection between the mentor and the mentee because of the nature of the initiative (US OPM, 2008b).

Successful organisations use different modes of group mentoring to meet their companies' objectives and get their workers' supported. The US OPM (2008b) cites Microsoft as one of the organisations at the forefront of this practice. The organization uses the 'mentoring ring' (US OPM, 2008b: 25) where a group executive mentors a number of employees and it is common for these employees to mentor each other again

in the process in peer mentoring function within the ring. The mentoring circle is another form of group mentoring where management can choose individuals to participate or the individuals can volunteer to participate and belonging is on the basis of a common goal associated with career pathing. The circle may be for aspirant members groomed by a senior manager for high management positions or women or a group of people such as those with disabilities but aspiring to climb the ladder to higher positions (Wills, et al., 2009).

2.3.2.2.1.3 Flash mentoring

According to the US OPM (2008b), flash mentoring is the newest and very popular concept where busy executives and senior staff members are recruited as mentors. The matching with mentees is very simple or is randomly done and the only requirement is that the pair meets for an hour session where the senior shares life experiences, lessons learnt and provides advice to the mentees. It is for the pair to decide whether to meet again or not. It is the loose nature of this mentoring type that makes it more exciting to the participants that they will choose to meet after the initial arranged meeting. Pairing a mentee with his/her immediate supervisor is discouraged as the relationship might be seen as the continuation of the formal evaluation (DOE, 2008b) and this will result in loss of opportunity for growth for both participants. Flash mentoring has a role to play in CPTD as it can bring the excitement back into teaching and break the monotony and class teaching routine for the mentee.

2.3.2.2.1.4 Situational mentoring

Situational mentoring is short term and is effected to address a particular need, usually raised by the mentee (US OPM 2008b). The session can lead to some long term mentoring and strengthened relationship between the mentor and the mentee (US OPM, 2008b). The mentee may have initially been allocated a steady mentor and then a situation arise where there is need to bring in or get a different mentor to address the temporal issue raised. For example, the situation could be related to the mentee questioning the status quo in the organization as illustrated in Hargreaves et al. (2010)

yet the original mentor's reasoning might not be at the same level as the mentee's. Another mentor with a skill to handle such can then be called in.

2.3.2.2.1.5 Reverse mentoring

Reverse mentoring is where a senior (in terms of age, experience or position) is mentored by the novice (in terms of experience, age and position). The aim is to help the more executive senior get a perspective of things at lower levels through the eyes of the subordinate usually in areas such as information technology, internet communications and computing. The relationship is based on objectivity and openness and is aimed at removing the barriers emanating from status (US OPM, 2008a). This type of mentoring is worth exploring for the acceleration of reporting in the online SACE CPTD system which is a prerogative for teachers after attending SACE endorsed workshops. Statistics indicate that CPTD reporting in the SACE CPTD system is not done as it is expected for the provinces, yet more than 93% principals and heads of departments (HoDs) in schools were signed up in the system more than three years ago. The challenge in this regard is the use of technology because, whenever reporting needs to be done, the individual teacher has to log onto the internet using a password to access his/her account that would have been opened earlier and report. The younger teachers can be of help in this regard as they can mentor and assist older teachers to log into the system and report on the CPTD system using the tablets issued by the department to all principals in the province.

2.3.2.2.1.6 Supervisory mentoring

This is the day to day guidance and coaching that supervisors provide to their subordinates. It helps to shape their skills and abilities to deliver services as expected (US OPM, 2008a). This is the continuous supervisory duty that is performed by principals and lead teachers at school, guiding and overseeing professional development. However, the use of the term mentoring adds the connotation of guidance and support in the supervision which then puts supervisory mentoring in a different category to the traditional supervision of a member of staff by the supervisor.

Supervisory mentoring therefore, calls for the building of a relationship of trust between the supervisor and the mentee (DOE, 2008b) so that the two embrace each other on their journey to professional growth in a non-judgmental environment.

2.3.2.2.1.7 Team mentoring

Team mentoring concerns more than one mentor involved with one mentee or a group on the basis of specialty. Mentors work jointly or separately to ensure that the mentee reaches the developmental milestone set. When they conduct the separate mentoring sessions, it is expected that they communicate with each other to enable coherence (US OPM, 2008a). At school, one mentor can focus on academic expertise while the other mentor can do the school's programmes for social support to vulnerable children. New teachers who join schools need to be taken through such programmes because they are part of the support that the school renders to vulnerable children as part of community engagement. This approach can be used for inducting new teachers while orientating them in the various responsibilities, i.e., different team members mentor on different projects and aspects at school.

2.3.2.2.1.8 Virtual mentoring

Virtual mentoring is done through the internet using emails (US OPM, 2008a) and the current electronic modes including the social networks enabling mentees who are unable to leave their work sites to benefit. Virtual mentoring is very cost effective and is common where e-learning is used. When rural schools experience an exodus of qualified teachers to urban areas and are left with under-qualified teachers, virtual mentoring becomes useful. Under-qualified teachers in such remote sites can be mentored by able mentors through e-mentoring without them leaving the rural schools as long as internet connection is provided to the schools (DOE, 2008a). Very busy senior executives can also use e-learning to communicate with their mentees. In this current era where technology is so advanced, this is the way to go as internet eases communication and saves time. The mentor becomes accessible to the mentee at any time.

The other types of mentoring such as flash mentoring and supervisory mentoring amongst others indicate an on-going need for mentoring which is not confined to newly appointed teachers only. Practicing teachers need to be mentored for career pathing. With the education reforms continually taking place, there are those teachers who are quick to master new methodology that can act as lead teachers and mentors to other teachers as peers and assist to demystify the new methodology being introduced. The subject advisors are called to take a mentoring role for all teachers if they are to operate effectively within the introduction of the JEPD approach. This is where the use of lesson study (as discussed in (d) below finds expression.

2.3.2.2.2 Coaching

Coaching is a relationship between parties that is based on a defined area of performance with regard to instructional teaching in class (Fullan, et al., 2006). Foltos (2015) directs that the teachers involved in coaching and their principal should clearly define what is to be done as well as clarify roles for each party. Unlike mentoring which deals with holistic issues of professional development, coaching deals with a specific agenda which is monitored towards achievement (Croft et al., 2010). Teachers engage in a number of processes like research, reflection, problem solving, and collaboration with each other, refinement and expansion of ideas in order to improve learners' performance (Fullan et al., 2006). Coaches are chosen on the basis of expertise in the field they coach and they work side by side with the teacher as partners and in a non-judgmental manner. Marchese (2012) indicates that in order for coaching to be more productive, it is important for teachers to have a structured way of communicating. There should be a professional way in which the coach and the coachee discuss the goals they are pursuing. The pairs involved in coaching should meet on average once or twice a month (Marchese, 2012); and similar to mentoring, one coach can coach a number of people.

All forms of coaching involve a pre-visit conference, a classroom visit and a post-visit session. At all times, the coach's mandate is to take part in the teacher's learning process and render support. The forms of coaching used are peer coaching, cognitive

coaching, instructional coaching and content focused coaching (Fullan et al., 2006). The pre-visit conference is for the introduction of the involved parties and for establishing preliminary interaction, getting to know what the expectations of each person from the process are. The classroom visit is for the assessment of the situation with the aim of rendering support and the post-visit session is for reflection on what was observed and advice on what needs to be done. If all goes well, the post-visit is for appraisal and provision of positive feedback on things that are done well. Positive feedback makes the teacher do more and also builds confidence.

Peer coaching has been found to be very effective in the inculcation of improved classroom teaching capabilities (Garber, 2014; Rose & Reynolds, 2009) and takes place when a pair or pairs of teachers have made an undertaking that they will collaboratively plan, share notes, observe each other teaching and offer feedback to each other to contribute to each other's professional growth (Fullan et al., 2006). At the beginning of the relationship, the peers agree on how regularly they will meet, plan and observe each other. When observing one teaching, the observer becomes the coached and the one teaching, the coach. However, it takes a certain level of development for one to volunteer oneself for observation and engage in collaborative learning. Rose and Reynolds (2009) and Garber (2014) highlight that peer coaching has been found to be very effective when used with classroom observation. The concept of "elbow coaching", as presented by Coggshall et al. (2012:13), falls under this category where the coach models the practice for a few minutes and allows the teacher to continue. The approach is very effective as it offers instant feedback to the teacher while it benefits learners tremendously as they are exposed to the best teaching practices right away. According to Rose and Reynolds (2009), teachers with strong interaction and communication abilities in teaching make good candidates for peer coaching as they can observe and demonstrate good teaching practices when there is a need. Over and above the mentioned skills, these teachers must have vast subject knowledge as suggested by Darling-Hammond et al. (2010). They state that in Singapore, only master teachers who have been trained to coach others and lead training of other veterans, take the role of coaches. However, Foltos (2014) warns that although these coaches can be experts in

the subjects they are coaching, they should guard against handing down solutions to an extent that they create a sense of “learned helplessness” in the teachers they are coaching because of lack of ownership for their learning (Kay & Greenhill, 2012: 102).

The IQMS peer concept can be fine-tuned along the attributes indicated above in order to assist the developmental process of the teacher. At the moment teachers choose peers that have nothing to offer for the teachers’ development but only focus on the scores needed for the teacher to get pay progression. This causes the system and the teacher to miss an opportunity to really manage, improve and develop the performance of the teacher.

Cognitive coaching aims at building internal resourcefulness for the support of learning and focuses on one’s thinking; considering the thinking strategies and ideas that one applies to shape one’s teaching (Fullan et al., 2006). Thinking about thinking is referred to as metacognition and Foltos (2014) observes that the coach should use a questioning technique to help the mentee to go through ideas of planning and sifting through thoughts until a viable mental solution or approach to one’s problem surfaces. Probing questions are a tool to unlock thinking capacities and encourage teacher learning which comes with solutions to problems encountered when teaching (Foltos, 2015).

Instructional coaching takes place on site within the classroom where the coach, who is the professional developer, uses tried-and-tested instructional practices to assist teachers in improving their classroom practice (Knight, 2005). The change process is started by meeting the school management team to define roles and responsibilities in the coaching process (Foltos, 2015), expounding on the different available scientifically validated ways for improving teaching practice which allow members to indicate their interest through an evaluation form. The input made on the evaluation form is followed by one-on-one or small group meetings to fine tune what teachers are interested in. A resource pack full of worksheets, checklists and strategies is provided for teachers to try out, and tips for teacher behaviour as well as instructional manuals are supplied. The

coach then models the first lesson in the sequence of lessons in the pool with the expectation that teachers will then try the other strategies out. As the process unfolds, the coach works side by side with the teacher, co-writing lesson plans, co teaching and making teaching aids for use in class (Fullan et al., 2006). Because of the non-judgmental nature of instructional coaching, the approach is potentially acceptable to teachers and is instrumental in changing teaching behaviour. The instructional coach is someone who is an expert in the subject (Rose & Reynold, 2009) but what makes the relationship acceptable or unacceptable is the interaction and the use of the classroom as a site instead of doing all the demonstrations far away from the class. This approach is highly recommended for use by subject advisors as it is job-embedded, interactive, collaborative and non-threatening but highly developmental for the teacher. In order for subject advisors to have an impact in a school when conducting instructional coaching, Foltos (2015) suggests the involvement of principals in the plan so that learned competences can be shared with the other members of staff in a collaborative way, drawing the whole staff in the coaching loop. The above scenario can be done within the prescripts of the PLC with a number of teachers participating in a number of JEPD activities such as lesson study and others.

Content focused coaching focuses on content and how it is developed and taught in class in a collaborative manner between the coach and the teacher where they plan, present and create a constructive dialogue that leads to professional growth during the reviewing session of the lesson (Fullan et al., 2006). Three phases are associated with this type of coaching namely; the pre-lesson, lesson delivery and the post conference phase. At the pre-lesson phase, the teacher explains the lesson plan to allow the coach to understand the thinking behind the lesson to be able to make input. Then collaboratively the coach and the teacher design and improve the lesson, enriching it with concepts that the students are working on. The lesson delivery phase is where the coach collaboratively delivers the lesson with the teacher. Each one tackles a part of the lesson to add value to students' learning. The coach complements rather than becomes the teacher's critic and the discussion is geared towards helping learners to reach heightened understanding of the lesson and the coach and the learner reflect on how

the lesson went (Fullan et al., 2006). Discussing opportunities for growth is done in the last phase which is the post-lesson phase. The discussion is based on the learners' responses towards the lesson and their written work and whatever evidence they produce as a result of the lesson being scrutinised. This then is used to shape an approach for the future (Fullan et al., 2006). According to Ngoepe (2013) coaching is more focused on skills transfer as compared to mentoring which involves an element of professional assistance and a relationship with the teacher.

2.3.2.2.3 Action Research

Action research involves the study of the real situation by the members of that organisation or institution using reflection of own practice with the aim of improving the performance of the organisation (Kennedy, 2005; Reason & Bradbury, 2013). Traditional action research uses a spiral of action research process of plan-act-observe-reflect-and make the results of this process public (Reason & Bradbury, 2013). Action research becomes effective if it is relevant to the practitioners and has transformation as its aim (Bradbury, 2015). When action research is applied in education, teachers are given an opportunity to reflect and ask questions about their own practice, allowing them to embark on a process of growth rather than having this process driven from outside. This is in support of what Bradbury (2015: 2) refers to as having "more citizens capable of developing practical knowledge". Action research is commonly used in developed countries such as the United States of America where teachers are given time within the working hours to practice it (Darling-Hammond et al., 2010).

The National School Network (NSN) and the Innovative Links Project applied in Australia (Villegas-Rheimers, 2003) are good examples of the success of this model. The action research project applied managed to expose the weaknesses in the system and therefore, strengthened policy formulation. Action research was also successfully implemented in Singapore as the country invested in teacher professional learning. The country established the Teacher Network initiative in 1998 and the initiative had six interrelated components that were managed as a continuum, to the success of teacher professional development. These were: (a) learning circles, (b) teacher led workshops,

(c) conferences, (d) a well-being programme, (e) website and (f) publications. The learning circles were the generator and the backbone of the initiative and teachers spent eight 2-hour sessions as they try their lessons before the cycle of activities was taken upward. The teacher-led workshops provided an opportunity for teachers to share and present their ideas and ensure that everyone, including the presenter, was a co-learner during this process. The process developed and was ready to be shared in public through conferences, the website and publications (Darling-Hammond et al., 2010).

Zuber-Skerritt (2015) lists various kinds of action research which are used in different settings. Action learning (AL) is based on asking questions while the group works collaboratively and reflectively reaching consensus on what works and what does not (Pedler, 2008). Active learning and action research (ALAR) is an integrated approach combining action learning and action research in one (Zuber-Skerritt, 2009). Zuber-Skerritt and Teare (2013) present the Lifelong Action Learning (LAL) which combines basic principles of lifelong learning and action research and use these for community development. The educational action research (EAR) as presented by Noffke and Somekh (2009) is used for the improvement of learning in pre- and in-service training of teachers, focusing on teaching, curriculum and administration at the primary and secondary schools as well as higher education institutions that train teachers. Action research is presented in different formats including the lesson study which is discussed in 2.3.2.2.4 below.

2.3.2.2.4 Lesson Study

The Lesson Study, which is called *kenkyuu jugyou* in Japanese meaning research lesson (Darling-Hammond et al., 2010: 4), is a type of classroom research where teachers collaboratively investigate teaching and learning with the aim of improving teaching as a practice (Ono & Ferreira, 2010). The approach became popular in Japan in 1960 and is still used, where schools are used as laboratories for student learning (Darling-Hammond et al., 2010). Teachers are very willing to participate in this activity to an extent that every teacher periodically prepares his/her best lesson for presentation.

The number of teachers involved at each instance depends on the scope for engagement. If the session targets subject teachers, a small group of teachers will be involved but if it is at prefecture (i.e., regional or area) level and higher, the group becomes large as it will involve university representatives, department of education representatives and others (Jita & Ndlalane, 2009; Ono & Ferreira, 2010).

The Mpumalanga Secondary Science Initiative (MSSI) team would attend these prefecture meetings whenever they visited Japan for development and it would be an eye opener to witness university researchers and teachers discuss lessons and teaching approaches. The lesson study is adopted as a school based professional development approach and is practised within the regular working hours in schools. The Japanese system of Education provides teachers with time to be involved in lesson study as teachers are credited with 10-15 hours for lesson study and group meetings which are then spread over 3-4 weeks. The MSSI which was run through the collaboration of the Japanese government with Mpumalanga Education in the late 90s and exited in 2004 introduced the lesson study in Grades 10-12 in the teaching of Mathematics and Science in the province and the approach was effective.

Ono and Ferreira (2010) highlight three phases in lesson study which are the planning phase, lesson delivery and post-lesson conference while Coe et al. (2010) indicate six steps splitting some activities in the three main phases mentioned above. Coe et al. (2010) identify goal-setting as the first crucial step. Firstly the team needs to identify the goal to work to. This goal then directs what type of lesson will be developed.

Planning the research lesson is the next step identified by Ono and Ferreira (2010) as crucial as it is this phase that maps out all the processes that should be done in order for the learners to achieve the specified goal. A topic is selected in this phase in relation to the broad goal selected with the aim of observing how best the learners will attain the selected goal. The teachers then work collaboratively and develop a lesson plan based on the topic chosen in order to take ownership of the process (Coe et al., 2010).

Teaching and observing the lesson is the next step identified and it is where a teacher conducts the lesson according to the plan while the other teachers observe carefully, referring to copies of the lesson plan availed to them during the planning stage (Coe et al., 2010; Ono & Ferreira, 2010). The observing members generate data on the basis of the different aspects of the lesson they have been requested to pay attention to. They listen carefully to how the learners respond to the lesson and note their comments. The focus is on the lesson and not on the teacher and what is being evaluated is the lesson not the teacher (Ono & Ferreira, 2010).

The post-lesson forum or debriefing is the next step and according to Ono and Ferreira (2010), this step follows soon after the lesson or a bit later on the same day depending on the time available. This session is for reflecting on the lesson delivered earlier. The teacher who was teaching starts by presenting a narrative of the lesson and what the expectations were. Members of the team then follow up by sharing their observations indicating what could have been done differently. The focus is not the teacher but the learners' responses on how the lesson can be strengthened.

Coe et al. (2010) regard revising and re-teaching as separate from debriefing while Ono and Ferreira (2010) deal with issues raised under this topic in the post-lesson forum. Coe et al. (2010) stress that during the interaction, observer teachers are urged to support their input with evidence. The lesson is then revised and taught to a different group of learners and observed again (Coe et al., 2010).

The last phase, which is sharing results is for sharing the whole research process and its findings with colleagues and other interested bodies (Coe et al., 2010). This then creates and elevates the findings to be organized information that can be shared, circulated and used. A bank of good lessons is developed in this way and is made available to teachers.

There are many benefits associated with lesson study. The first is that the lesson study acts as an agency of change as teachers work in a collaborative manner from planning

of the lesson to the debriefing stage (Coe et al., 2010). The whole process takes place on site with learners being taught in class and therefore, the process can be said to be 'classroom-situated, context-based and learner-focused' (Ono & Ferreira, 2010:64). Teachers therefore, own the process including their own growth.

Coe et al. (2010) state that teachers become comfortable teaching while observed by their peers as a benefit and the growth experienced becomes a collaborative affair instead of an individualized one. This attribute makes the approach to directly react against the individualised focus in the traditional in-service training in the traditional approach. Lesson study has shown an increase in content knowledge (Coe et. al., 2010). This is confirmed in Ono and Ferreira's (2010) and Jita and Ndlalane's (2009) study in the MSSl Project in Mpumalanga. The lesson study also bridges the gap between the knowledge acquired by teachers and teaching of such to learners (Coe et al., 2010). Currently, the implementation of this approach in Maths and Science has decreased so much in Mpumalanga to the extent of non-existence ever since the project ended. It would benefit the system if the little pockets of expertise that is still available both in schools and in offices can be supported to rekindle this good practice. A start can be made with Maths and Science in FET (because this was the initial target of the project) but the target would have to be the subjects taken by the majority of learners in Grade 12. The system has an opportunity to integrate this with the PLCs as promulgated by the ISPFTED.

There are a few barriers associated with the lesson study. In their account on the MSSl experiences, Ono and Ferreira (2010) point to the design rather than the approach itself when highlighting the barriers associated with lesson study. The issue of time allocation to lesson study seems to be a barrier as management does not give its consent for the process to take place during teaching time (Coe et al., 2010). In order for the other teachers to go and observe the research lesson being presented in one classroom, they must organise their classrooms in such a way that they are able to leave their classrooms and get to the other class where the lesson study is presented. Someone

needs to step in and assist and that needs management's belief in the approach and support for it.

Another minor challenge is with regard to teachers' stage of development. For those teachers that are not well developed, it becomes difficult to put oneself up for criticism while on the other side the observer teachers may also not be able to ask real probing research questions because of their lack of knowledge and exposure. This calls for a carefully managed process of growth that should be combined with mentoring and coaching of teachers who are not comfortable to present for lesson study. However, the approach is powerful and is seen as the one that can form a bridge between policy and implementation in the South African context (Coe et al., 2010).

2.3.2.2.5 Examining Learners' work

A group of teachers that closely examine learners' work with the aim of reflecting on how learning has occurred gain a lot of insight in the teaching and learning process (Steiner, 2004). This process can reveal to the teacher concerned how the learner understood him/her. If the learners' work reveals that the teacher has not been well understood, this process offers the teacher an opportunity to improve in the approach (Steiner, 2004). Research shows that, when the teachers view the learners' work collaboratively, their approach to teaching changes positively because they are made to understand how learners think (Nave, 2004). This entails the analysis of learners' performance data which reveal tendencies and enable the teacher to identify gaps in learners' knowledge.

2.3.2.2.6 The communities of practice

The communities of practice concept is viewed as a group of people that has informal ties due to shared expertise and have passion for a common purpose which is learning (Wenger & Snyder, 2000). The Integrated Strategic Planning Framework for Teacher development in South Africa refers to this concept as the Professional Learning Communities (PLCs) (DBE & DHET, 2011). The OECD (2010) indicates two assumptions on which the concept of PLC is based namely; (i) knowledge and learning

is entrenched in the social context and the teachers' experience and (ii) PLCs lead to changes in one's teaching and therefore, enhances the learners' achievement in class.

While managers can form teams by picking on members with the relevant skills, members of the communities of practice organize themselves and establish their own leadership. Meetings are held as regularly as needed, ranging from lunch meetings to once fortnightly (Wenger & Snyder, 2000). Alternatively, members link through emails. The meetings, if held, have an agenda but it may not be followed rigidly as the nature of interaction is free flowing. People share their own experiences and knowledge which forms a basis for the solutions to problems tabled. Interactions flow freely and most of the time the knowledge shared becomes tangible which makes the approach not to be taken seriously. Wenger (2000) cautions against that and directs that in order for members in the community of practice to learn from their experiences, there should be leadership that will drive and urge members to stretch themselves to learn.

Learning forms an integral part of people's participation in communities of practice and in organisations (Wenger, 1999). Successful and effective change in an organization involves learning during implementation (Fullan et al., 2005). Lee (2005) posits that a group of teachers from the same school benefits from the communities of practice set up as they have common needs and have a potential to develop as a collective from such a setting. The communities of practice become the centres of enabling people to learn meaningfully and become a prerequisite for learning (Wenger, 2000). The concept has successfully been used to introduce innovative ways of doing business, drive outstanding operations, spread best practices and vigorously drive the development of professional skills (Wenger & Snyder, 2000).

However, the loose nature of the community of practice concept makes it resistant to supervision and evaluation by management, something that makes the approach less favourable amongst non-progressive management (Wenger & Snyder, 2000). This characteristic accounts for the communities of practice not becoming as popular as they should be although the concept has been used from ancient times as early as the Stone

Age. However, managers are made aware that although the formation of communities of practice cannot be mandated, visionary managers may create a conducive environment that enables employees to meet and interact professionally to encourage professional growth. Furthermore, management is encouraged to provide the necessary infrastructure (Wenger & Snyder, 2000). In a collaborative way managers can create an opportunity for communities of practice (PLCs) to share celebration moments from their communities of practice in a public platform and the top management can avail themselves just to listen and watch teachers' "aha" moments and testimonies. Similar to the Singapore Teacher Network Initiative publicising its work, managers can allow for breakthrough testimonies to be published in the organisation's newsletter in a representative manner to send a subtle but inclusive message of support for teacher-led professional development. The co-learner stance should always be maintained and managers must try at all these instances to take the back-bench and participate as co-learners if ever they want to participate. What is key is to let teachers lead the process.

The teachers' cluster concept introduced by the MSSI project in Mpumalanga is an example of the communities of practice (Jita & Mokhele, 2012). According to these researchers, the clusters were formed due to the full scale MSSI project in collaboration with the Japanese government (1999 to 2004) to support the teaching of Maths and Science in secondary schools. Phase 1 of the project targeted Heads of Departments (HoDs) in schools, taking them through some content training that was coupled with classroom support. There were expectations that HoDs would cascade the information down to teachers at the schools. Opportunities were created for HoDs to share their school experiences in quarterly organized meetings from which good practices would be flagged and videoed. Phase 2 of the project formed clusters and trained the cluster leaders to deal with tricky parts of the subject and presentation skills. Cluster leaders were also tasked with leading sessions, where teachers from a group of local schools would meet to plan and capacitate themselves and each other in the subject. It was in this context that the Lesson Study was introduced to allow a group of teachers to collaborate and deliver high quality lessons in their schools (Jita & Mokhele, 2012). However, with the time lapse after the close of the project, the department tasked the

cluster leaders to oversee the moderation of School-Based Assessment (SBA) at their clusters and these individuals were paid a stipend; a move which killed the professional development side of clusters since clusters were now concentrating on this departmental assignment and the setting of question papers for some cluster leaders. This institutionalization of clusters was criticized by Mokhele and Jita (2010) because it robbed Mpumalanga teachers of the noble opportunity to grow professionally as they continued with the conduct of lesson study with their peers.

2.4 CHAPTER SUMMARY

The chapter presented the theoretical framework that directed the study and thereafter, dealt with the literature review discussing what different researchers say about CPTD. The properties and attributes of CPTD as a concept were also discussed. The last part of the chapter dealt with types of models; first featuring the traditional models associated with state-led CPTD and thereafter, discussing the job-embedded models of CPTD as the preferred approach for the study. In the next chapter the researcher presents the research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In the previous chapter the theoretical framework and the literature review were discussed. This chapter discusses the methodology selected for the study is discussed, starting with the research paradigm and proceeding to the research design. The population of the study is identified before sampling and survey methods are discussed. The ethical considerations are explained in the last section of this chapter.

3.2 RESEARCH PARADIGM

The research paradigm chosen for the study was motivated by the nature of the research being undertaken. The study aimed at assessing how state-led CPTD was implemented in the Gert Sibande Education District in Mpumalanga province. Decisions were made to ensure that the study conformed to scientific prescripts by eliminating anything that would make the findings biased. Enough had to be done to unravel the truth and come up with ideas that would indicate how state-led CPTD was conducted in Gert Sibande District. That is why the pragmatism paradigm which forms the basis for the use of mixed method was proposed for the study. According to Ivankova et al. (2007), pragmatism involves research traditions that aim at finding answers to research questions rather than focusing on research methods. The methods used for the research allows for circumstantial interpretations and flexibility while conforming to sound research principles. Powell (2003) postulates the rejection of both positivism (which believes in absolute truth according to Ryan, 2006) and anti-positivism (which operates from a premise that any theory goes for them) by pragmatism. The paradigm conforms to its capacity in solving human problems (Powell, 2003). Therefore as the researcher assessed the conduction of state-led CPTD in the chosen district guided by the pragmatism paradigm, ideas indicating

challenges and barriers were unravelled. The pragmatism paradigm provides capacity for the research process by setting processes for the provision and suggestions of solutions to the challenges unravelled. Pragmatism ensure the generation of ideas that when produced are interpreted in an open minded way by human beings in order to enhance their understanding of the world in which they live (Snarey & Olson, 2003). It therefore became important for the researcher to choose a suitable research approach for the study and that is discussed below.

3.3 RESEARCH APPROACH

The approach used in the research is the mixed-method research approach which emerged from the infusion of the quantitative and the qualitative research approaches. The application of the mixed-method approach in a study is characterized by the use of a survey to determine people's attitudes which then is followed by interviews in order to learn more about the individual respondent (Ivankova, et al., 2007). In the current study, the survey was used to determine participants' attitudes and their opinions on CPTD implementation in the chosen district but over and above that the participants were requested to substantiate and give reasons of their choices to answer the "why" and 'how' question.

The combination of the two approaches dates back to the 80s (Tashakkori & Teddlie, 2008) when researchers felt that it was necessary to merge the two approaches to bring a balance in research approaches. Quantitative research approach deals with "if" while the qualitative deals with "why" and 'how' (Terrell, 2012: 258). Because of its multi-pronged nature, the mixed-method approach provides the researcher with many design options involving simultaneous as well as chronological steps. The application of the approach depends on four factors namely; the theoretical framework underlying the study, the priority strategy, the sequence followed in introducing the various activities in the research, and the point identified in the research for integration of the data collected from the two research approaches (Tashakkori & Teddlie, 2008).

Mixed method approach was deemed suitable for the study because of the nature of the study. Because the researcher was assessing the implementation of CPTD in a demarcated area, the quantitative research approach was suitable to gather information enough in order to make generalisations. The elements of the qualitative research approach assisted the researcher to get more information on why teachers behaved in a manner they did and why they made the judgments they made (Clark & Creswell, 2008).

3.4 RESEARCH DESIGN

The research design used in the study is the concurrent triangulation which features a concurrent process for the collection of both quantitative and qualitative data. In this design, equal priority is given to the collection of data for both the quantitative and qualitative information and the information is only integrated at the interpretation level. The concurrent research design was suitable for the study on the basis of the nature of data gathered for the study. Because of the inter-dependence of the qualitative and quantitative data, the information had to be gathered concurrently (Terrell, 2012).

3.5 POPULATION, SAMPLING AND SAMPLING TECHNIQUES

The total population for the research was 1488 teachers (744 Maths and English teachers and 744 SMT representatives) from 372 schools which was the total number of primary schools that offered grade 6 in the whole district at the time of the research. Interaction with the schools established that subject teaching took place in grade 6. In the context of the research, one teacher taught English to all grade 6 learners while another teacher taught Mathematics to the same group of learners. Each school had a principal tasked with overall administration in the school and the Deputy Principal acted as a principal whenever a school had no principal. While other schools had other Heads of Departments attached to the school, the Head of Department (HoD) relevant to the study was the one that led both the English and Mathematics teachers for Grade 6 in the school. Four possible participants were targeted in each school for the population and that consisted of the two teachers as mentioned above and the two SMT members.

Therefore, the total population of relevant teachers and SMT representatives in all schools was 1488 as indicated above. The random sampling technique was used to ensure that the selected sample of 100 schools represented the entire population and to ensure that each school was afforded a chance to be in the sample. The random sampling was done by allocating each school in the 372 schools with grade 6 a number which was also written on a piece of paper and thereafter subjecting these papers to a ruffle for random picking of the 100 schools. When a school got picked the four participants (Maths teacher, English teacher, one HoD and the principal) were automatically part of the study unless they opted out if they chose not to participate, exercising their choice on the basis of research ethics.

Purposive sampling was used to select four Curriculum Managers and four subject advisors for the interviews. One school was further randomly selected amongst the 100 selected schools and the Principal and one teacher from this school participated in the interview.

Each school was provided with two teacher questionnaires (for Maths and English teachers) and two questionnaires for representatives of SMTs (the Principal and an HoD) which made a total of 200 teachers' and 200 SMT representatives' questionnaires. One hundred and twenty three (123) questionnaires representing 61.5% for SMT members and 119 for teachers representing 59.5% questionnaires were returned thus supporting the validity of the research.

3.5.1 Access to participants

The Mpumalanga Department of Education's Policy on research in schools stipulates guidelines to be followed when a researcher wants to access schools for research purposes (MDE, 2007c). In order to comply with this policy and that of the University of Fort Hare Ethics Committee overseeing the research, a letter was written to the Head of Department in the Provincial Education Department asking for permission to conduct the survey. Once the permission was obtained, a request was made to the district through the district manager requesting that the office inform the selected managers

and sampled schools about the survey and soliciting their cooperation before administering the questionnaires. The researcher used the Circuit Coordination Officer (CCO) in the district as *gatekeeper* in order to have access to the research's participants (Saunders, et al., 2009). This was to ensure that access to the site and research participants was secured and that provisions in the department's research policy (MDE, 2007c) were adhered to. The gatekeeper, who is the CCO, played a very crucial role during the process and all the communication in the district was done in collaboration with him. As the gatekeeper, the CCO helped to remove potential obstacles that would have inhibited the investigation.

3.6 DATA COLLECTION INSTRUMENTS

The data collection instruments used were the semi-structured questionnaires and the interviews and these are discussed in the next section.

3.6.1 Semi- Structured Questionnaire

A structured questionnaire is a questionnaire whose answers are pre-determined where the respondent is provided with choices to choose from. Maree and Pietersen (2007) refer to such as closed questions and they are said to be easy to analyse. Semi-structured questionnaires are a mix of structured and unstructured questions which have pre-determined answers but probe further and request the respondent to substantiate why a certain answer was chosen or ask the respondent to provide more information. Maree and Pietersen (2007) refer to such as open answers, as they are not pre-determined by the researcher but allow the respondent to give independent opinion.

In the current study, a survey was conducted with teachers where semi-structured questionnaires were distributed and teachers were asked to fill in the questionnaires and choose the possible answers from the list provided. For some of the questions, the respondent had to indicate why they felt so strong about the choice picked. In some questions, they had to provide more information and give own opinions on issues. The researcher also arranged that the interviews occur after the survey was done to have the two processes talking to each other and for the interview to verify some of the

information indicated in the questionnaires and vice versa. The aim of the survey was to further verify the information obtained through the interview as promulgated by Leedy and Omrod (2013). The researcher earmarked some issues for in depth enquiry and focused on them during the interviews.

The questionnaire gathered information along the following broad ideas:

- a) Opinions on the nature of state-led CPTD programmes.
- b) Views on factors promoting or hinder the implementation of CPTD programmes
- c) Views on challenges that beset the implementation of CPTD programmes.
- d) Recommendations on what could be done to enhance the implementation of state-led CPTD.

Some of the questions that featured in the questionnaires as adapted from Adu & Okeke (2014) and Selemani-Meke (2011) were as follows:

- i) Factors that facilitated teachers' participation in state-led CPTD
 - Frequency of CPTD activities
 - Focused content of CPTD
 - Initiators of CPTD sessions
 - Level of satisfaction
 - Preferred time, venue and period of the year
 - Hands-on activities
 - Relevance to needs identified by teachers themselves
 - School support for CPTD
 - Participant commitment
 - Nature of delivery
- ii) Perceived factors inhibiting the participation of teachers in state-led CPTD
 - Time
 - Insufficient money to pay for courses
 - Content not well focused
 - Personal factors
 - Insufficient knowledge to implement learning
 - Content not well focused/structured

- Teacher workload preventing them from taking up CPTD
- iii) Views on systems and approaches to CPTD as promulgated by policy and research
 - School based versus out of school
 - Cluster
 - Lesson Study
 - Communities of practice/Professional Learning Communities (PLC)
 - Coaching
 - Mentoring

These ideas for enquiry were used for both the survey as well as for the interview.

3.6.2 Interviews

Bless et al. (2006) describe interviews as a method of gathering information that involves direct personal contact with the participant who is asked to answer questions. In the study interviews were conducted as part of data collection exercise in line with the concurrent triangulation design.

Structured interviews were conducted with the 10 participants mentioned in 3.5. According to Maxwell (2002), structured interviews allow the interviewer to pose open-ended questions and the interviewee to express his/her own opinion freely. The timing of the interviews was after the administration and during the capturing of the questionnaire to give the researcher a chance to fill in the gaps that were raised by some of the responses. In a case where the participants had to respond to a question that guided them to indicate frequencies for their exposure to CPTD in a year, the interviews provided detailed information on what the CPTD was about and how the 1+4 Mathematics and content workshops were run in the districts.

The semi-structured interviews were employed to respond to the following questions:

- i) What is the nature of state-led CPTD in Gert Sibande Education District?

- ii) What factors promote or hinder the implementation of CPTD programmes in the district?
- iii) What challenges are experienced in the implementation of CPTD programmes?
- iv) What can be done to enhance the implementation of state-led CPTD programmes in the district?

A forty five minutes individual interview was allocated for each of the following interviewee: the manager of circuits, the principal and the teacher as they were individually interviewed. Enough time was provided to allow for an exhaustive coverage of the issues without wearying the respondents. Group interviews were held for the district curriculum managers and the subject advisors. The interviews were audio-recorded to assist capturing of the information. For ethical considerations, the researcher sought the respondents' consent for the recording and the recording was destroyed after capturing the information to protect respondents' anonymity.

3.7 DATA COLLECTION PROCESS

The main data collection method that was used in the study was the group administration of questionnaire and the distribution of questionnaires through circuit offices. Once the questionnaires were filled, they were returned to the district office through the circuit offices.

For the qualitative part the following process was followed to collect information:

- (a) mechanically recording of data; (b) verbatim accounts, in the sense that direct quotations from the transcribed data were used to illustrate the views and (c) low-interference descriptors, in the sense that concrete descriptions from the interviews were used in the research findings (McMillan & Schumacher, 2001).

3.8 VALIDITY, RELIABILITY AND DATA TRUSTWORTHINESS

Validity of the research instruments refers to the fact that the instrument used is truly measuring what is supposed to be measured (Piertersen & Maree, 2007). This was ensured by measuring whether the content of the questionnaire was making sense regarding CPTD and its implementation after one had studied its relation with other variables. The questionnaire was also piloted with selected teachers, SMT members from one school and selected district managers prior to its administration, requesting them to make input if there were areas that needed revision. Since quantitative research uses an objective process where data is gathered from an identified sample of the population, processed and used to validate and generalize the findings to the whole population (Maree & Pietersen, 2007), closed questions were used to gather information for the quantitative research part using a likert scale for consistency to ensure that the information gathered was valid. This ensured that all participants were exposed to the same alternatives and as a result their responses could be compared.

According to McLeod (2013), reliability refers to regularity or constancy of the information generated by the study or assessment over time and the ability of the tool to measure different people in a construct in the same manner. It also involves a synergy between the small parts of the assessments and their contribution to the whole that is being researched. In the case of the current study, the questionnaire provided participants with an opportunity to express their opinions on the nature of CPTD, challenges encountered when implementing and factors that participants think hinders or promote CPTD implementation providing a complete picture on the subject that was being investigated.

Trustworthiness in research refers to the objectivity of the research by responding to the practical experience of the people even for a scientific study (Loh, 2013). Guba and Lincoln (1989) list credibility, transferability, conformability and others as some of the constructs that constitute the criteria for assessing trustworthiness. They further point to techniques such as peer debriefing, member checks, audits and others as methods used to assess trustworthiness. In the current research, the researcher also used

triangulation to strengthen trustworthiness by using questionnaires and interviews as a combination of research methods while enquiring on the nature of state-led CPTD in the study.

To further ensure validity, trustworthiness and reliability, a pilot study was conducted two weeks before the actual study to eliminate any ambiguity or misinterpretation of concepts in the administration of the instruments for both the survey and the interview. Selected district officials and a team of teachers including SMT members from a local school were used for the pilot. The nature of work that these teachers and managers do and their experiences allowed the researcher to assess whether respondents would be able to interpret the questionnaire correctly and whether the response categories of the questions were suitable (Maree & Van der Westhuizen, 2007). These individuals went through the questionnaires and made input where they felt there was need for adaptation. Amongst the input made by the group was the request for explanatory notes in some parts of the questionnaire to explain concepts in order to avoid ambiguity.

The interview and survey questions were checked for what they were probing beyond their literal meaning and it was ensured that the concepts under research were acceptable. In this research, apart from getting the views about the participation of teachers in CPTD activities, it was essential for the researcher to get a sense whether teachers do gain knowledge through CPTD programmes and therefore it was important that questions covered this part and this was ratified by curriculum experts. Further to that the curriculum concepts used to describe content of the NCS training sessions were checked by the curriculum managers. This ensured compliance with Lincoln and Guba's (1985) statement (in Golafshani, 2003 p. 601) that in qualitative research, concepts such as credibility, consistency, applicability and dependability are used in the same notion as reliability, validity and trustworthiness in the quantitative research.

3.9 DATA ANALYSIS

After the electronic capturing of the data and its coding, the quantitative data was analysed using the Statistical Package for Social Science (SPSS) programme for data

analysis. The SPSS is a versatile software package that is popularly used within both academic and business circles for different types of analyses of data (Arkkelin, 2014). The data was analysed per variable, focusing on the frequencies quantifying them in percentages and providing cumulative percentages at the end to indicate choices made by most respondents. For example in Table 4.41 to determine the preferred mode for conducting CPTD teachers and principals had to choose between non-residential, residential and distance mode. The number of participants choosing each variable was therefore translated into percentages which add up to 100% in total.

The qualitative data collected from the interviews was analysed following the use of spiral data analysis technique. This involved:

- a) organising all data into small units and creating categories of information like sentences, individual words or stories (Leedy & Ormrod, 2013),
- b) getting a sense of what the small units of information were indicating or saying,
- c) further classifying the information into sub-themes and sub-categories, and
- d) putting together a summary of what had been said (Leedy & Ormrod, 2013).

Much of the analysis was descriptive because the research questions above did not require inferential statistical analysis.

3.10 ETHICAL CONSIDERATIONS

Ethical considerations in research involve issues that have to do with respecting the rights of the subjects in the research and being sensitive to the participants in the study (Fouka & Mantzorou, 2011). It has to do with promoting what is fair, good and respectful to the respondents and the information they share with the researcher (McMillan & Schumacher, 2001). This is achieved by observing confidentiality, asking for permission from the participants as well as those in authority such as the accounting officer in education to conduct the research. It also involves informing the participants of their rights as they undergo the research, treating their responses anonymously and with confidentiality and allowing for voluntary participation as discussed below.

3.10.1 Voluntary participation and Informed consent

Voluntary participation is when the participant willingly takes part in the research after having been thoroughly informed of what the study is about and what is expected from him/her. Closely related to the notion of voluntary participation is the requirement of informed consent. Essentially, this means that prospective research participants are fully informed about the procedures and risks involved in research and thereafter provided with an opportunity to give their consent to participate or not (Rose, 2013; Fouka & Mantzourou, 2011).

Informed consent is a voluntary agreement to participate in research. It is not merely a form that is signed but is a process, in which the subject has an understanding of the research and its risks. Informed consent is essential before taking up a participant (Rose, 2013). Babbie and Mouton (2003) indicate that informed consent relates to the communication of all possible information as accurately as possible about the research to the research respondents. Thus, before any interviews, the researcher explained the reason and content of the research to participants. Information containing what the study was about and what would be needed from participants was also shared with the participants. Fouka and Mantzourou (2011) highlight that informed consent ensures that the participant consciously and willingly takes a decision to participate on the basis of the information that has been shared with him/her about the study.

In the current study, the statement indicating that participation was voluntary and could be terminated at any time was communicated to participants to put them at ease about the voluntary nature of their participation in the research. Only those who agreed to participate were confirmed and included in the sample.

The researcher informed the study participants (educators) that no payment was going to be made as compensation to any individual for their participation in the research project. Although respondents were informed beforehand about the aim of the study, the researcher made direct contact with the study participants through individual letters written to each participant which contained information about the study. Participants

were also given the assurance that the information shared would be treated confidentiality.

3.10.2 Respect for privacy

Respect for privacy refers to respecting participants and adhering to the Bill of Rights by allowing the participant to determine how she/he is to be involved in the research as to determining the time for filling in the questionnaire as opposed to imposing time for filling in an attempt to fast track the collection of questionnaires back (Fouka & Mantzorou, 2011). This further involved refraining from disclosing or circulating public opinions and personal information which invaded a person's privacy (Fouka & Mantzorou, 2011). The researcher guaranteed the participants' anonymity and confidentiality by specifying that participants should not indicate their names or give any identification as to who they were as they filled the questionnaires. The researcher ensured that there was no reporting of the participants' personal information or making inferences that could lead to identification of the persons behind the statements as the gathered information was reported on. This did not impact negatively on the follow up in interviews as the follow up did not necessarily require the same participants but used the randomly selected participants as indicated in 3.5.

3.10.3 Anonymity and confidentiality

According to Fouka and Mantzorou (2011), participants have the right to privacy hence the maintenance of anonymity and confidentiality. In the current study, confidentiality and privacy of the participants was maintained. Prior to embarking on the study the participants were guaranteed that their answers to questions would remain anonymous and that was maintained and this information was included in the letter circulated to prospective participants.

3.10.4 Access to Findings

The researcher promised to share the findings (the proposed framework for effective CPTD) with the respondents through the line function of the Department and this was

shared with participants during the survey. This would indicate the role played by research which is to contribute alternatives and solutions to problems.

In conclusion, the Circuit Coordination Officer (CCO) was requested to act as a gate keeper particularly since circuit managers, who this officer manages, were not part of the study directly. Although this officer had a management position in the district, his role made him critique the delivery of quality teaching and learning in the district which is affected by the level of development of teachers. The CCO also has access to both schools and circuits and the officer usually carries out small scale research with regard to service delivery in the district. The distribution and collection of questionnaires and other related activities was managed from this office. As the CCO's office was at the district level, the CCO requested the circuit managers to manage the process at lower levels after they had been briefed on the nature of the study which they voluntarily chose to assist with. The coordination of CPTD was a systemic problem in Gert Sibande which most of the time worried the circuit managers. It is on the basis of this concern that their cooperation was guaranteed.

3.11 SUMMARY

In this chapter the researcher discussed the research methodology for the study starting by determining what research paradigm was suitable for the study. On the basis of the nature of the study, the researcher then settled for the pragmatism paradigm as the research paradigm for the study and proceeded to determine the research approach and research design suitable for the study. Backed by research, the researcher chose the mixed method approach as it caters for both quantitative and qualitative research approaches. Since a mixed method approach was chosen, in this chapter the researcher discussed the process that was followed, indicating the sequence of events. The researcher had to determine when to address the quantitative aspects of the study, when to collect data using the quantitative aspects and when to combine the data. In the last part of the chapter, the researcher identified the techniques used for choosing the sample of the study, the data collection instruments and analysis thereof. The ethical considerations were addressed last involving issues like voluntary participation,

issues of confidentiality, informed consent and access to findings. in the next chapter the researcher handles data presentation, analysis and discussion.



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CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 INTRODUCTION

In the previous chapter the researcher looked at the research methodology indicating the research paradigm and design, data collection instruments and ethical considerations made. In this chapter focus is on the presentation, analysis and discussion of data collected in the study on the assessment of the implementation of state-led CPTD in the Gert Sibande District of Education in Mpumalanga.

The data collected from the likert scale section of the questionnaire, which accounted for the quantitative part of the data was coded and entered into the Statistical Package for the Social Science (SPSS) programme, for interpretation. The analysis involved counting the frequencies and the percentages and then summing them up. The qualitative data from the questionnaire consisted of the statements substantiating respondents' positions and reasons for choices made in response to the quantitative closed items. The statements combined with the interviews were processed and clustered into common themes. The information was also organised in terms of meaning. All information falling under one idea was grouped together and interpreted as findings for the study. In analysing the data, the following main objectives of the study acted as a guide:

- a) To establish the nature of state-led continuing professional teacher development (CPTD) in Gert Sibande Education District.
- b) To identify the factors promoting or hindering the implementation of CPTD programmes.
- c) To ascertain challenges besetting the implementation of CPTD programmes.
- d) To determine what could be done to enhance the implementation of state-led CPTD programmes.

Over and above the main objectives, the research questions of the study were used in the presentation and analysis of the data. The main research question was:
How is state-led Continuing Professional Teacher Development (CPTD) implemented in the Gert Sibande Education District of Mpumalanga in South Africa?

The sub-research questions were:

- a) What is the nature of state-led continuing professional teacher development (CPTD) in Gert Sibande education district?
- b) What factors promote or hinder the implementation of CPTD programmes?
- c) What challenges beset the implementation of CPTD programmes?
- d) What can be done to enhance the implementation of state-led CPTD programmes?

In line with the research questions and the objectives of the study, the analysis of the results is grouped into two main sections. The first section deals with the biographical information of the respondents and the second and main section deals with the presentation and analysis of the results on the basis of the research questions. The second section is thereafter divided into sub-sections to deal with issues that directly relate to the research questions.

4.2 BIOGRAPHICAL DETAILS OF RESPONDENTS

This section provides the biographical details of school management team members (SMTs) and teachers as respondents to the questionnaires. The data for the biographical details of SMT members is presented below.

4.2.1 Biographical details of SMT members' respondents

The total number of SMT members who completed the questionnaire is provided against the number of all SMT members targeted. Variables such as gender of the respondents, experience (in years), the number of respondents, age, nature of appointment, highest professional qualification, experience in the current position, and type of school where the respondent is attached, are included. The total number and the gender of respondents are discussed below.

4.2.1.1 The gender of SMT members as respondents

The Gert Sibande District has a total number of 372 schools with Grade 6 whose 1488 relevant teachers constituted the population for the study. The questionnaire was distributed to 100 primary schools targeting a total of two (2 SMT representatives per school (the principal and one member of the SMT). Two hundred (200) questionnaires were therefore, distributed to the category participants. Prior to the distribution of the questionnaires, the circuit coordinator, as the gate keeper, was requested to assist in communicating the process to the circuit managers indicating the names of schools that were randomly selected as well as the grade and subjects that were the focus. Questionnaires were then distributed to the relevant schools, where each questionnaire was accompanied by a consent form and a covering letter requesting two school management team members (principal and the relevant grade 6 head of department) and two teachers (Grade 6 Maths and English) to fill in the questionnaires. Over and above that, it was stated that responding to the questionnaire was not compulsory. SMT members and teachers were willing to participate in the study and regarded sharing their experiences as an important contribution to education in the district and the province as a whole. Table 4.1 presents the information on the number of SMT representatives that completed and returned the questionnaires as well as their gender.

Table 4.1: SMT respondents' distribution by the total number and gender of respondents

Gender of the participants	Frequency	Percentage
Male	54	43.9%
Female	69	56.1%
Total	123	100%

Table 4.1 indicates that 123 out of 200 SMT members completed and returned the questionnaire which is a good representation of both the management level as well as the various categories of schools found in the district under study. According to Dudte (2008) gender affects how people think due to the norms and the roles prescribed for

males and females in that particular community. The interpretation of events, views and opinions differs for males and for females. However, in the analysis of data in this study, respondents' views and opinions will not be separated and grouped according to the gender. The gender statistics are only used to show that different opinions on issues probed are represented across gender in the study. It would be of benefit if another study would interpret the gathered information further and determine how gender influenced the findings in the current study.

Table 4.1 provides the total number of respondents and their breakdown by gender. The data confirms the broader statistics in the province which indicate that there are more female members of SMTs managing primary schools as opposed to males, with the latter being dominant in the secondary schools. The randomly selected schools indicate that 56.1% respondents were females compared to 43.9% male SMT members.

4.2.1.2 Working experience

Experience brings about improved capabilities in the work allocated to the individual and therefore, affects how one interprets and expresses thoughts about any activity and interaction. This includes CPTD. In accordance with the National Policy for Teacher Development (DOE, 2006), all practicing teachers and managers are expected to engage in CPTD to improve their teaching practice. It is therefore, expected for managers with more experience to have been exposed to more professional development which sharpened their professional outlook. Table 4.2 presents the work experience of SMTs.

Table 4.2: SMT respondents' distribution by work experience

Number of years	Frequency	Percentage
1 – 5 years	6	4.9%
6 – 10	6	4.9%
11 – 15	11	8.9%
16 – 20	24	19.5%
21 – 25	39	31.7%
25 and above	37	30.1%
Total	123	100%

The respondents' results on Table 4.2 indicate that the majority of the respondents had vast work experience. Respondents with the experience ranging from 16 years upwards comprised 81.3% of the total respondents. This was in line with the recruitment criteria into management positions. According to the Government Gazette on promotional posts (MDE, 2015b) issued for the filling of promotional posts, the requirement for the teacher who seeks appointment as a principal is that the applicant must have served in a management post for more than five years. An applicant who seeks appointment as a deputy principal must have served as a head of department for more than five years, and an applicant for the head of department's position must have at least five years' work experience.

The results of the respondents in Table 4.2 also reveal the low intake of new teachers in the management in the Intermediate Phase. Only 4.9% teachers had experience of 1-5 years and 6-10 years respectively.

4.2.1.3 The age of respondents

School management is regarded as a role associated with maturity since the manager is expected to play a leadership role for a group of teachers. This maturity comes with age and is institutionalized in the recruiting strategy for principals and members of school management. As indicated in 4.2.1.2, the advertisement for the filling of a principal's post in Gert Sibande Education District and Mpumalanga as a whole always lists 5-7 years' management experience for any applicant aspiring to be a deputy principal or the principal (MDE, 2015b). These working years (experience) affect the age of the individual as the more working years are accumulated, the higher the age of the manager gets. An aspiring head of department must have been a teacher for more than 5 years and this requirement has a bearing on the age of the School Management Team (SMT) representatives. Table 4.3 presents the respondents' distribution by age.

Table 4.3: SMT Respondents' distribution by age

Age range	Frequency	Percentage
21-25 years	1	0.8%
26-30 years	1	0.8%
31-35 years	1	0.8%
36-40 years	9	7.3%
40 years and above	111	90.2%
Total	123	100%

The respondents' distribution in Table 4.3 confirms the notion that appointment to management positions was on the basis of experience. The bulk of school management team members managing primary schools (90.2%) were found to be aged 40 years and above. Although the three lowest age groupings (21 to 35) presented some 0.8% entries each, the age of these respondents conformed to the management requirements and they could have been appointed with a few years' experience into the head of department's post. Another possibility was that these managers were serving in farm schools at the time where most people did not want to go. The nature of appointment is discussed in section 4.2.1.4.

4.2.1.4 Nature of appointment

Determining the nature of appointment was crucial for the study because the researcher would know whether the respondents were secured in their positions or not. Permanence comes with stability and confidence in taking decisions as well as with freedom of expression of one's views. It therefore, has a bearing on the responses provided by the respondents as presented in Table 4.4 below.

Table 4.4: SMT Respondents' distribution by nature of appointment

Type of appointment	Frequency	Percentage
Permanent	117	95.1%
Acting	6	4.9%
Total	123	100%

The respondents' data in Table 4.4 showed that the majority (95.1%) of school managers were permanently appointed in the schools that participated in the research and could therefore provide assurance on the reliability of the responses brought forward by the respondents. Moreover, this further showed the positive result of the quarterly Government Gazettes that the department issued for the filling in of promotional posts at all levels of management in schools (MDE, 2015b). The presentation of data for the distribution of managers by the post they occupied is presented next.

4.2.1.5 Distribution by management post

The complexity of the leadership role assigned to the principal in this transformation era of education is summarized by Senge (1996:45) as follows:

We are coming to believe that leaders are those people who walk ahead; people who are genuinely committed to deep change in themselves and in their organisations. They lead through developing new skills, capabilities, and understandings. And they come from many places in the organization.

The above quote shows the responsibility that is carried by the principals as well as the school management team members. Top management in education also fall in this category. Therefore, the distribution of respondents by post further qualified and authenticated the data gathered depending on the strength of the perceived dominant group as presented in Table 4.5.

Table 4.5: SMT Respondents' distribution by current position

Position held	Frequency	Percentage
Principal	61	49.6%
Deputy Principal	18	14.6%
Head of Department	34	27.6%
Other (SMT members acting not permanently appointed)	10	8.1%
Total	123	100%

Table 4.5 indicates that more schools have appointed principals as attested by the frequencies displayed in Table 4.5. This therefore, gives assurance to the data provided by the respondents that the majority (49.6%) of them are principals followed by heads of department (27.6%). The 14.6% frequency of deputy principal is in line with the norm as not all schools have deputy principals. Deputy Principals are allocated on the basis of the large number of learners and teachers at a school. Smaller schools do not have deputy principals. As mentioned in 3.5, it is possible that the deputy principals who participated in the study were acting in principals' posts that were vacant at the time of the research. Another possibility is that the deputy principals participated as SMT members in the research representing their schools in the research, because of their role as curriculum management coordinators in schools.

4.2.1.6 Experience in the Position

It is of significance to know how long the principals, deputy principals and heads of departments had been serving in the current position as it has a bearing on their responses in the research. The years in position is presented in Table 4.6.

Table 4.6: SMT Respondents' distribution by year in position

Number of years	Frequency	Percentage
1-5 years	59	48.0%
6-10 years	30	24.4%
10 and above	31	25.2%
Other (Just appointed less than a year)	3	2.4%
Total	123	100%

The analysis of the table indicates that that 48.0% of managers are less experienced as they have between 1 to 5 years in the position as managers and therefore they need more guidance and development. This also indicates the effect of the departmental drive on ensuring that all vacant posts at school level are filled without delay. This had strengthened the system as the all retired managers were replaced by younger managers. Three (3) managers consisting of 2.4% of the total managers had not even

completed a year in their positions as managers suggesting that they are still inducted and undergoing a lot of management development courses and guidance. Twenty four percent (24%) of managers had completed 6-10 years in their positions and has accumulated some experience following those that had completed 10 years and above. The two groups combined constitute 49.5% of the total respondents. The combination becomes the highest distribution in the findings. The interpretation of the table is that a higher percentage of managers had been in the field for 6 years and above 10 years suggesting a certain level of maturity and experience. It would be of interest if this group could be singled out to determine how the CPTD programmes help preparing them for their roles. Table 4.7 shows SMT respondents and the types of school they were teaching at.

Table 4.7: SMT Respondents' distribution by type of school

School type	Frequency	Percentage
Farm School	40	32.5%
Township school	48	39.0%
Other (rural)	35	28.5%
Total	123	100%

Table 4.7 presents a balanced profile of the schools that participated in the study. This therefore confirms that the views received represent the majority of school types in the district. Table 4.8 presents the data on SMTs' highest qualifications

Table 4.8: SMT Respondents' distribution by highest qualification

Qualification	Frequency	Percentage
Grade 12	2	1.6%
Post School diploma	27	22.0%
B-degree	22	17.9%
Honours degree or equivalent	62	50.4%
Masters or equivalent	1	0.8%
PHD	0	0%
Other (old certificates e.g. Form iii)	9	7.3%
Total	123	100%

Table 4.8 indicates that managers of schools that participated in the sample are adequately qualified as the largest frequency is depicted under honours degree or an equivalent thereof. However, no manager was recorded at doctoral level nor at below Grade 12 qualification levels. The fact that there are 2 managers that recorded their qualification as being Grade 12 is a worrying fact. Such managers possibly worked in the areas that are not easy to access and are farm schools. These are areas where the system struggles to attract suitably qualified personnel.

4.2.2 Biographical details of teacher respondents

Variables such as the gender of the respondents, experience in years, the number of respondents, age, nature of appointment, level of professional qualification, years in the current position and type of school where the respondent is attached are dealt with in this section.

4.2.2.1 *The total number and the gender of teachers as respondents*

The total number of 744 teachers teaching Maths and English First Additional Language (FAL) in Grade 6 was targeted as indicated in 3.5. A sample of 200 teachers, which is 26,9% of the total number, was drawn for participation in the study and the study questionnaires were then distributed to these teachers in the 100 sampled schools mentioned. The current section therefore, focuses on the biographic details of the 200 teachers teaching Maths and English FAL in Grade 6 in the 100 primary schools selected as described in 4.2.1.

Table 4.9: Teacher respondents distribution by gender

Gender	Frequency	Percentage
Male	45	37.8%
Female	74	62.2%
Total	119	100%

Table 4.9 indicates that of the total number of 119 teachers who completed the questionnaire, females dominated the phase at 62.2% compared to 37.8% male

respondents. This is line with the trends in the education sector and with the information shared by the SMT respondents in Table 4.1 which depicts more females than males.

4.2.2.2 Work Experience

Work experience is an important variable when assessing the offering of CPTD to teachers because all teachers have to be involved in professional development during their period as teachers and this will then correlate with their work experience (Selemani-Meke, 2011). The more experience a teacher has, the more CPTD programmes will the teacher be involved in.

Table 4.10:Teacher respondents’ distribution by work experience

Experience in years	Frequency	Percentage
Less than one year	1	5.0%
1-5 years	14	11.8%
6-10 years	26	21.8%
11-15 years	15	12.6%
16-20 years	11	9.2%
21-25 years	21	17.6%
26 years upwards	26	21.8%
Total	119	100%

The data in Table 4.10 indicates that the teachers targeted were experienced in teaching as there was only one teacher who had just joined the sector at the time as per the findings. The analysis of the data further indicates that the bulk of teachers (21.8%) fell into the 6-10 years and 26 years and upwards groupings which displaying that the majority of teachers that took the survey had experience in teaching. When totalling the teachers’ experience from 6 years upwards, the analysis indicated 83% of the respondents falling under this bracket. This attribute indicated that there is stability in

the teaching force for the Intermediate Phase which is evidenced by the experience of the teachers.

4.2.2.3 The age of the teacher respondents

As mentioned in 4.2.1.3, age is a determining factor for a person's maturity and it is used to determine the level of maturity of a person and depth in decision making. According to the South African School Act (RSA, 1996), a child can only be enrolled at school when she/he turns 6 before June of that year. This then indicates that the child will complete Grade 12 at 17 or 18 years of age. If enrolled for a teachers' qualification, the young teacher will start teaching at 22 or 23 years of age matured enough to carry on the responsibility of teaching and caring for the young minds. Tůmová (2012) pinpoints a correlation between the level of maturity that comes with age with the demands of understanding the curriculum reform that is embedded in education of developing countries like South Africa. The data for respondents' distribution by age is presented in Table 4.11.

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Table 4.11: Teacher respondents' distribution by age

Age range in years	Frequency	Percentage
Less than 20 years	1	0.8%
21-25	4	3.4%
26-30	3	2.5%
31-35	12	10.1%
36-40	16	13.4%
More than 40 years	83	69.7
Total	119	100%

The data on Table 4.11 indicates 0.8% respondents which presents a deviation from the norm indicated above as the teacher in this bracket is less than 20 years. Such a teacher would most likely not be professionally qualified as yet and could be teaching in a remote area where access to schools is a problem and there is a struggle to get a qualified teacher.

Further to that, the analysis of the data in Table 4.11 correlated very well with Table 4.10 above as it links the age of respondents to the experience groupings indicated in Table 4.10. The table also indicates an aging but experienced group of teachers with more than 50% of the respondents being above 40 years, which also corresponds with Table 4.10 on experience. This could be interpreted as a positive attribute to the sector in terms of stability and possession of deep knowledge for teaching and practice thereof. However, the information also indicates that the phase may be affected by aging personnel and this information might assist the department to plan well for the future in terms of developing a replacement strategy.

4.2.2.4 Nature of appointment

A permanent appointment comes with stability as it provides full benefits such as medical aid, housing subsidy, pension and a guaranteed space against the post. Although the temporary teacher also has these subsidies and some of the benefits, the space against a particular post is not guaranteed. So the teacher is shifted from one post to the other on the basis of the availability of such. So when there is no post, a temporal teacher finds himself or herself without a job and that causes instability in the life of such a teacher. The disposition of a permanent teacher towards CPTD therefore, will be different from that of a temporary teacher.

In implementing career pathing, teachers are, from time to time, asked to act in positions higher than what they were appointed for, to assist the system by performing crucial management duties before a vacated post is formally filled. A teacher acting in an HoD's post will therefore, attend CPTD programmes for heads of department and will benefit from such.

Table 4.12: Teacher respondents' distribution by nature of appointment

Nature of appointment	Frequency	Percentage
Permanent	90	75.6%
Acting	1	0.8%
Temporary	28	23.5%
Total	119	100%

Table 4.12 confirms the stability in the phase as it indicates the majority of educators being appointed permanently as compared to those that are temporary. The one respondent acting could be a Post Level 1 teacher acting in a higher position as the head of department before the post was formally filled. The temporary group consisting of 23.5% of the respondents was presumably in temporary posts deemed to be fluid and not static in the school establishment. Such teachers could be in possession of a foreign qualification that needs to be renewed time and again while others could have a conditional SACE registration that needs to be made permanent through submission of a full qualification or to be renewed from time to time.

4.2.2.5 Years in an acting position

The context of teachers acting as indicated in 4.2.2.4 is still maintained. The processes for filling promotional posts were found to be very efficient as the Government Gazette for the filling of vacant promotional posts was issued at least two times a year. There were times when the system was issuing these gazettes quarterly and school governing bodies and circuits struggled to keep up with the management plan timelines for the filling of advertised posts. In the light of that context, all vacancies for promotional posts got filled quickly unless a dispute was declared over the process for the filling of particular posts. The percentage of disputed posts was found to be relatively low.

Table 4.13: Teacher respondents' distribution by acting capacity

Number of years acting	Frequency	Percentage
Not applicable	59	49,6%
0	38	31.9%
1 year	6	5.0%
2-3 years	4	3.4%
4-5 years	4	3.4%
6 and more	8	6.7%
Total	119	100%

Table 4.13 indicates that 18.5% of the respondents had been acting for various periods; a phenomenon that was not in keeping with the context in the department and a deviation from what obtains in Table 4.12 as only 0.8% was in an acting capacity as compared to the 22% indicated in Table 4.13. However, it is possible that schools, at their own discretion and on the basis of pressures from the new curriculum demand, do appoint teachers to act as team leaders, senior teachers or leader teachers to lead their peers at subject level in order to assist the appointed head of department in coordinating the work at school. Teachers are not paid for that as these positions are not formal. Further research is recommended to determine the circumstances and more information on the 18.5% acting teachers.

4.2.2.6 Teachers' academic qualifications

The academic qualifications play a very important role in teaching as the qualifications determine the level of the teachers' understanding of the content transmitted to learners as well as the understanding of content of the CPTD programmes when the teacher is developed (Selemani-Meke, 2011). The current basic qualification for teachers in South Africa is a four year Bachelor of Education degree in a recognized university with a speciality in either Foundation Phase (Grade R-3) teaching, Intermediate Phase (Grade 4-6) teaching, Senior Phase (Grade 7-9) teaching or Further Education and Training Phase (FET, Grade 10-12) teaching with the latter being a specialisation in a subject (RSA, 2015).

However, the bulk of teachers that qualified prior to 1994, possess recognized teacher qualifications obtained from the closed Teachers' Colleges such as the Primary Teachers' Certificate (PTC) which was a two year qualification after the Junior Certificate (Form III), the Primary Teacher's Diploma (PTD) which was an upgraded version of PTC obtained after matric. There were also qualifications for secondary school teachers such as the Junior Secondary Teachers Diploma (JSTC) and the Secondary Teachers' Diploma (STD) obtained in Colleges for high school teachers. The system accepted these qualifications but had put verification and qualification weighting mechanisms in place such as the National Qualifications Framework managed by the

South African Qualifications Authority (SAQA) which weighs and evaluates qualifications and establishes equivalents of particular qualifications (RSA, 2012). Teachers with discontinued qualifications which were below the set standard were advised to upgrade to acceptable standards, hence the combinations indicated in Table 4.14.

Table 4.14: Teacher respondents' distribution by highest qualification

Highest qualification	Frequency	Percentage
Lower than Grade 12 (matric)	2	1.7%
Grade 12 (matric)	3	2.5%
Post-School diploma	36	30.3%
B-degree	38	31.9%
Honours degree	26	21.8%
Other (Teachers' Certificates' Master's degree and PHD)	14	11.8%
Total	119	100%

The data on Table 4.14 indicates that the largest number of Grade 6 teachers (31.9%) is qualified at degree level or its equivalent, indicating a high level of proficiency by a majority of teachers. The 30.3% which has post-school diploma also further confirms the above assertion. When adding all the frequencies in the categories that are associated with higher qualifications namely; the post school diploma (30, 3%), B-degree (31, 9%) and Honors Degree (21, 8%), these amount to 84% of all the respondents. This means that 84% of the teachers in the sample are well qualified to teach.

However, the 2 teachers with lower than the matric qualification and those with only Grade 12 are a cause for concern. It is possible that the 1.7% teachers with a grade lower than matric are a product of the old dispensation where a teacher could be admitted to a College of Education with Form III (which is the equivalent of Grade 10 today) and do a two year Primary Teachers' Certificate which qualified them to teach at

a primary school depending on the specialization subjects a teacher trainee would have taken during the training. Such teachers are regarded as qualified but with a lower Relative Education Qualification Value (REQV) for example, 12 and 13. They are encouraged to upgrade. Most of these teachers upgraded their certificate qualifications to diploma qualifications.

4.2.2.7 Teachers' qualification status

On the basis of the qualifications elaborated upon in 4.2.2.6, this section establishes whether the teachers in the sample were qualified or not with reference to the National Qualifications Framework prescripts. Such information was at the disposal of the teachers as they had to submit documents to SAQA for qualifications evaluation from time to time. Besides, such information was also available in the teachers' file and appeared in the profile of each teacher after appointment and was updated from time to time when new and additional qualifications were submitted. The Human Resource Management unit in the department processes teachers' qualifications programmatically as part of its work. A qualified teacher has knowledge of the methodology of teaching unlike a teacher who has academic qualifications only.

Table 4.15: Teacher respondents' distribution by verified qualified status

Qualified or Not	Frequency	Percentage
Yes	113	95.0%
No	6	5.00
Total	119	100%

The data in Table 4.15 indicates that 95% of the respondents were qualified, according to the National Qualifications Framework (RSA, 2008, 2012) and the Public Administration Measures (PAM) (RSA, 2011), to teach as professionals. The implication for the data in Table 4.15 distribution was that the involvement of the majority of teachers in CPTD programmes makes them to be better teachers as they engage in lifelong learning. The 5% whose qualifications indicated that they are without a teaching

qualification more or less corresponds with the findings in Table 4.14. which presents the highest qualification of teacher respondents

4.2.2.8 The Relative Education Qualification Value (REQV) for teachers' qualifications

The REQV was considered as an important variable in the study because of its significance in South African teacher education. According to the Personnel Administration Measures (PAM) which is associated with the Employment of Educators Act (EEA), 76: 3c-19, (RSA, 2011), and is a valuable part of the conditions of service for teachers, the REQV is the value attached to the number of recognizable academic years of study in an approved college, university or technikon together with the level of education obtained. REQV streamlines the properties of the various qualifications that teachers were exposed to prior to 1994 and beyond, putting a value of such against acceptable criteria for qualifications. This then, translates to the level at which the teacher is rated and paid. The REQV operates side by side with the National Qualification Framework (NQF). According to the PAM in the EEA, 3c-20 (RSA, 2011), all REQV ratings use Grade 12 as a basis except for REQV 11 which recognizes Grades 8,9,10 or 11 plus a teacher's qualification while REQV 10 recognises Grade 12 without a teacher's qualification.

REQV 12 includes a two year appropriate training while REQV 13 includes three years of appropriate training. REQV 14 has 4 years of appropriate training while REQV 15 consists of 5 years appropriate training after Grade 12. REQV 16 requires six years of appropriate training and only professionally qualified teachers are classified at this level and they should have a university degree. REQV 17 recognises 7 years of appropriate training and the individual must have a recognized Master's degree. The Department recognizes REQV 14 as the adequate qualification for all teachers and, over the past years, teachers had been encouraged to at least upgrade to this level. Table 4.16 is presented below.

Table 4.16: Teacher respondents' distribution by REQV

Distribution according to REQV	Frequency	Percentage
REQV 12	4	3.4%
REQV 13	22	18.5%
REQV 14	62	52.1%
REQV 15	17	14.3%
REQV 16	12	10.1%
REQV 17	2	1.7%
Total	119	100%

Table 4.16 indicates more than half of teachers (52%) are at REQV14 and therefore are adequately qualified according to the system. When combining REQV 12 and 13, it was observed that 21.9% of the teachers were actually under-qualified. The big question that rose was why did the department employ and retain the under-qualified teachers and to what extent did the qualification status affect their teaching in class as well as their development?

4.2.2.9 The nature of schools

Assessing the nature of schools from which the respondents came was of significance to the study as the type of school influences the teacher's environment and affects teaching and learning (OECD, 2014). When planning the study, farm, township and rural schools were earmarked because of the bad conditions under which teachers from these schools work. The Gert Sibande district is predominantly rural and has many farm and rural schools which are found in hard to reach areas due to inaccessibility of the roads leading to these schools (Gardener, 2008). Most of these schools' infrastructure is not sound and is at its worst in farm schools which also battle with multigrade teaching (Du Plessis, 2014) because of dwindling numbers. Township schools also battle with bad conditions as the other school locations. Most of the township schools experience overcrowding and lack of resources as compared to town schools (Gardener, 2008). The overcrowding takes a toll on the teachers' teaching abilities and learner discipline to an extent that such teachers rely on CPTD support for classroom

management. In the same breadth, it was of interest to the study to assess how the teachers with a lot of challenges fare in CPTD programmes. Table 4.17 presents the respondents' distribution by nature of school.

Table 4.17: Teacher respondents' distribution by the nature of school

Distribution according to the nature of school	Frequency	Percentage
Farm School	46	38.7%
Township school	32	26.9%
Town	6	5.0%
Other (Rural)	35	29.4%
Total	119	100%

Table 4.17 indicates that the majority of respondents were from farm schools represented by 38,7% followed by the rural schools with 29.5% respondents displaying that the views shared by the respondents in the study represent the majority of teachers who work economically disadvantaged schools which are many in the district.

Teachers from the majority of schools (38.7%) in the sample teach in farm areas where learners are few, and these learners have to walk or travel long distances to school. Over and above that, learners are sparsely spread in different grades not conforming to the distribution of learners per teacher in accordance to the prescribed norm of a teacher-learner ratio of 1:40 for one primary school grade (RSA, 1996 as amended). In these schools learners will be in various grades as presented in Table 3.1 but under one roof. According to one interviewee teachers from farm schools miss workshops for other content subjects as workshops are run concurrently and do not cater for teachers following multi-grade teaching. It could be of interest to further conduct research to determine how the system handles the integration of CPTD programmes to accommodate these teachers apart from the focused training in the multigrade Toolkit (Du Plessis, 2014) which is for the farm schoolteachers only. Farm school teachers still undergo CPTD training from time to time with the other teachers. It is left upon each teacher to implement the Multigrade Tool kit approach (UNESCO, 2015) while

responding to the mainstream departmental responsibilities as there are no special concessions made by the system for such teachers. Multigrade teachers become very frustrated by the mainstream deadlines for reporting and submission of reports that do not consider their special setting.

4.2.2.10 Subjects taught by teachers

The request for teachers to indicate the subjects they taught was very important to establish if there were other subjects that teachers taught besides the targeted. The study focused on Maths and English FAL as these two subjects feature in the Annual National Assessment and are used to determine whether Grade 6 performs at a national standard. Respondents had to confirm whether they taught the subjects targeted amongst others. An expectation for some deviation was anticipated already with the targeting of farm schools in the sample.

Table 4.18: Distribution of teachers by Subjects taught

Subjects taught	Frequency	Percentage
English FAL	50	42.0%
English HL	7	5.9%
Mathematics	55	46.2%
Other subjects	7	5.9%
Total	119	100%

Table 4.18 confirms that the majority of respondents taught Mathematics (46.2%) and English FAL (42.0%). When combining teachers who teach English FAL with those teaching English Home Language a total of 47.9% is presented. This was in line with the focus of the study which targeted teachers responsible for Maths and English FAL. The 5.9% respondents who fell under category 'other' were presumably teachers who taught other subjects in conjunction with the two subjects of focus or were in farm schools teaching multigrade classes.

4.3 PRESENTATION AND ANALYSIS OF RESULTS ON SUB-RESEARCH QUESTIONS

In this section the data from respondents in response to the research questions 1.5.1 to 1.5.4 as raised by the research is presented and analysed. The section first deals with how the respondents described the nature of CPTD and traditional in-service training determining whether respondents distinguished between the two. The respondents' experiences with both CPTD and the traditional in-service training are presented and analysed in terms of the programmes' focus, frequency, and their level of satisfaction with the facilitation of the CPTD sessions.

The section further presents and analyses the respondents' data with regard to challenges they encountered in CPTD participation. It focuses on CPTD variables like the lack of opportunity to make input in the design of development programmes prior to delivery, the amount of time allocated for CPTD sessions, and the usefulness of what was learnt in class. Other challenges, including the methods used by facilitators, were also attended to in the section.

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4.3.1 The nature of state-led CPTD

In line with the concepts presented in Chapter 1, the study wanted to focus on state-led CPTD as it unfolds in the development of teachers for the implementation of the National Curriculum Statement in Gert Sibande District in Mpumalanga. However, the researcher had to determine if respondents were able to differentiate between CPTD and traditional in-service training. CPTD is viewed as an on-going, teacher collaborative act which is teacher driven and takes place on-site while traditional in-service training is one-shot incoherent activity targeting individual development, and driven by other people than the teacher and mostly happen away from the classroom.

In order to establish the nature of CPTD, the researcher asked the respondents about the number of state-led CPTD attended, their type, the initiator of the CPTD programmes as per the organizational roles defined in the education department, and how regular teachers attended the CPTD programmes. The respondents' views are presented in Table 4.19 to Table 4.25 below.

4.3.1.1 The number of CPTD programmes attended

Establishing the number of CPTD programmes that teachers attended over a specified period was an important variable to determine the frequency of CPTD and establish whether teachers participated in CPTD or not. Teachers and SMT members were asked to indicate the number of CPTD sessions they attended over a period of 12 months. The respondents' data is presented in Table 4.19.

Table 4.19: Respondents' views about the number of reform type programmes offered over the past 12 month period

Number of Reform CPTD programmes	Frequency		Percentage	
	SMTs	Teachers	SMTs	Teachers
1	7	-	5.7%	-
Less than 3	26	18	21,1%	15.1%
Between 3 and 5	50	44	40,7%	37.0%
Between 6 and 10	22	37	17.9%	31.1%
Above 10	15	10	12,2%	8.4%
Never attended any	3	10	2.4%	8.4%
Total	123	119	100%	100%

The respondents' data as presented in Table 4.19 above indicates that the largest number of respondents (40% SMTs and 37% for teachers) had been exposed to 3-5 reform type CPTD programmes over the past twelve months. This was in line with the information obtained through the interviews where it was indicated that quarterly CPTD sessions on subject content knowledge were run for teachers in all subjects at the beginning of each quarter taking the teachers through the whole quarter's work preparation. According to the information obtained, SMT members were also consistently involved in management development programmes to help them manage schools and provide instructional leadership to teachers.

Further to that, the second largest number in teacher component respondents (31.1%) indicated taking part in 6 to 10 CPTD programmes as compared to SMT members' 17.9%. The reason for this high number for teachers could be (according to the

interviewees and the qualitatively obtained information) due to the fact that teachers had to deal with subject specific issues in cluster meetings hence the presentation of more frequencies.

Although a small percentage (2, 4%) of SMT members and teachers (8, 4%) indicated non-participation in CPTD over the past 12 months, the finding was very disturbing when taking into account the number of learners who were supposed to be taught and serviced by these teachers under the guidance and supervision of the 2.4% SMT members who possibly had no clue on the latest developments in education. In line with the norms and standards for post provisioning followed by the department for all primary schools, the learners affected translated to plus or minus 450 as per the teacher: learner ratio of 1:40. Further research needs to be done to determine why these teachers and managers were not participating in CPTD and what the implications of this for effective learning and teaching were.

4.3.1.2 The type of CPTD programmes

Requesting the respondents to indicate the type of the CPTD session they attended was viewed as an important aspect to determine the various types of CPTD programmes that teachers are exposed to. The respondents indicated the type of the last CPTD session they attended and the data is presented in Table 4.20.

Table 4.20 Teachers' views about the type of the last reform CPTD programme attended

The type of the last reform CPTD programme attended	Frequency	Percentage
Cluster activity	60	50.4%
Lesson Study	20	16.8%
Communities of practice	5	4.2%
Coaching	10	8.4%
Mentoring	8	6.7%
Other	8	6.7%
None	8	6.7%
Total	119	100%

The data in Table 4.20 indicates that the majority of teachers (50.4%) attended a cluster activity more frequently over the past 12 months followed by 16.8% of teachers participating in a lesson study. This finding is in keeping with what was shared during the interviews. One manager indicated that a project run in partnership with the Japanese government in the late 90s helped the department to establish the use of clusters and the lesson study as a form of teacher professional development. However, these clusters got institutionalized along the way and Jita and Mokhele (2012) were swift to point to this shortcoming which, according to them, was invading the teacher's space and independence as they engage in communities of practice. The institutionalization of clusters was with reference to the use of cluster leaders as moderators of School Based Assessment (SBA), an activity that is supposed to be done by the subject advisors but had been delegated to cluster leaders due to human resource challenges. The authors maintain that clusters, as communities of practice, should be entities where teacher driven professional development occurs with all teachers being equals and working as peers (Jita & Ndlalane, 2009). The institutionalization of clusters place the cluster leader in an elevated position and therefore, the equality status of teachers in the PLC is being compromised. However, the interviewees indicated that clusters were the main activity used for subject based professional development that deals with standardization in the various subjects. It could be of interest to conduct an extensive study and further investigate the functioning of these clusters in Mpumalanga to establish the content and the extent to which professional development happens in the clusters.

4.3.1.3 *The initiator or organiser of the CPTD*

This variable sought to establish who was responsible for organising the CPTD. The focus was on determining the level that drives most of the CPTD whether it is from the school, peers, supervisors or the district. The researcher also wanted to establish whether teachers initiated professional development activities themselves emanating from their IQMS' Personal Growth Plans (PGPs). According to the SACE CPTD system (DoE, 2008c) the activities initiated by teachers are referred to as Type 1 activities and teachers also can claim PD points for them. Activities initiated by the school are referred

to as Type 2 activities while those organised by the department are Type 3 activities and need to be endorsed by SACE first to enable teachers to claim points for participation in them (DoE, 2008c). Table 4.21 below presents the data on who organised the CPTD activities.

Table 4.21 Respondents' views about who organised the reform type CPTD

Focus of reform CPTD	Frequency		Percentage	
	SMTs	Teachers	SMTs	Teachers
The District/ Curriculum Implementer	20	71	16.3%	59.7%
Cluster Leader	3	18	2.4%	15.1%
The Principal	66	12	53.7%	10.1%
School Management Team	-	5	-	4.2%
Yourself as teacher	-	3	-	2.5%
Deputy Principal	5	-	4.1%	-
The Circuit Manager	14	-	11.4%	-
Heads of Departments (HODs)	10	-	8.1%	-
Not applicable	5	8	4.1%	6.7%
Other	-	2	-	1.7%
Total	123	119	100%	100%

The teacher respondents' data in Table 4.22 indicates that CPTD was mostly organised from outside the school with 59.7% of teachers citing the district and the subject advisor as the initiator, a view supported by the subject advisors interviewed. The interview further established that very few teachers initiate teacher development sessions by inviting subject advisors for support in their classes. The data for SMT respondents indicates that 53.7% SMT members viewed themselves as initiators of CPTD programmes for their staff, something that the researcher welcomed. The divergence in views of the groupings could be because of the different roles that SMT members and teachers play in the system. SMT members plays a management role and because of the influence that comes with their role, it was understandable that they viewed themselves as being instrumental in everything that happens on the ground including CPTD programmes offered to teachers. SMT members write reports and make recommendations for actions to be taken by the system and when the actual

implementation of what was recommended takes place; it is sometimes bound to be owned by the SMT members as managers.

By virtue of close working relationship with the subject advisors, teachers view the district and the subject advisor as initiators of reform type CPTD. However, the second largest number of SMT respondents (16.3%) viewed subject advisors as very instrumental in coordinating the reform type CPTD programmes in contrast with teacher respondents (15.1%) who viewed cluster leaders as initiators (not the line function managers). The responses further attest to this reliance on external people as initiators of teacher professional development rather than the teacher themselves. The fact that only 4.2% teachers viewed the SMT members (which include their HODs who were their direct supervisors) as drivers of reform CPTD bears testimony. These findings from the teacher component seem to suggest that teachers do not rely on their SMT members for curriculum, professional development support and direction as expected but on subject advisors and cluster leaders. Further probing revealed that, because of the line function reporting relationship that the principals have with circuit managers, 11.4% SMT members viewed the circuit manager as crucial in organising reform type CPTD in the District.

According to the National Policy for Teacher Development (DOE, 2006), type 1 CPTD should be initiated by the teacher and from Table 4. 20, only 2.5% of teachers viewed themselves as initiators of CPTD. This then, shows the over dependence on outside agents as observed by Steyn (2008). It is an indication that the Type 1 CPTD was not initiated by teachers as it was supposed to be.

4.3.1.4 The focus of CPTD

Establishing what the focus of recently attended CPTD activities from the respondents was very significant for the study as it indicated whether CPTD was used purely for teachers' professional development or for institutional compliance aspects. The data in Table 4.22 represents the respondents' views.

Table 4.22 Respondents' views about the focus of organized reform type CPTD

Reform type CPTD focus	Frequency		Percentage	
	SMTs	Teachers	SMTs	Teachers
Subject content	66	54	53.7%	45.1%
School Based Assessment (SBA)	32	10	26.0%	8.4%
Method of teaching	10	25	8.1%	21.0%
Orientation of new curriculum	-	12	-	10.1%
Teaching and learning resources	-	11	-	9.2%
Other	10	6	8.1%	5.0%
Not applicable	5	1	4.1%	0.8%
Total	123	119	100%	100%

Table 4.21 indicates that the majority of respondents from both groupings (53.7% SMT members and 45.7% teachers) regarded subject content as what the CPTD dealt with. Another group of consisting of 26.0% of SMTs' respondents viewed the moderation of School Based Assessment (SBA) as a second key aspect that CPTD deals with. Subject advisors supported the view as indicated in 4.3.1.3 about using clusters for SBA moderation. According to the responses obtained, the procedure followed when moderating was that each school sent samples of learners' books accompanying learners' schedules for the designated group to moderate. Data also indicates that 21% of teacher respondents cited methods of teaching as the second aspect that CPTD focuses on. This was in line with the quantitative information obtained from the interviewees highlighting the teaching of subject content as the focus of the content development quarterly workshops at the beginning of each quarter.

4.3.1.5 The consistency of CPTD

Another area that was explored was the determination of whether teacher professional development programmes were a once-off or an on-going activity. This was to establish whether the education department embraced the transformed approach to professional development or not. As discussed in 2.4.1, the traditional in-service training programme is associated with once-off activities that are disjointed while CPTD includes INSET and

JEPD that take place on site, in a collaborative and on-going manner (Fullan et al. 2011). Table 4.23 presents the data on this aspect.

Table 4.23 Respondents' views about the constancy of CPTD

Constancy of CPTD	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Not applicable	-	2	-	1.7%
Once off	23	18	18.7%	15.1%
On-going	100	99	81.3%	83.2%
Total	123	119	100%	100%

The respondents' views from both groups indicate that the occurrence of CPTD was regarded as on-going. The majority of respondents (81.3% SMT members and 83.2% teachers) supported this view. In substantiating the on-going view of CPTD, teacher respondents shed some light on how they engaged in cluster activities and the following were some of the statements made:

TR 13: The cluster meets regularly to develop some understanding of the subject,

TR 20: Cluster leader organising quarterly meetings, phase meetings, class visits and talking to HOD regularly

TR 16: Holding of learner performance discussion, how to develop performance

In the same breadth, the SMT members cited activities that indicated a more holistic view to CPTD and the following comments were made in support for CPTD as an on-going event:

SMT 59A: There are quarterly meetings aimed at diagnosing the difficulties and a way of addressing them.

SMT 89A: Teacher development activities such as coaching, mentoring and lesson study are conducted as an on-going process...

SMT 99B: We hold weekly meetings, fortnight meetings, morning meetings, quarterly meetings pending on time availability.

SMT 101A: *Educators are assisted everyday on their submission of lesson plans, learners' books after moderation of scripts and post moderation during the class visits and IQMS.*

In agreement with the principals' on-going notion, the curriculum managers and subject advisors interviewed attested that the three quarterly subject content workshops provided are run as a continuing entity with the first session targeting standardisation and policy matters. The two following sessions then deal with the real content of the subject.

Data also confirms some occurrence of the traditional, once-off activities in the system. A substantive number of respondents (18.7% SMT members and 15.1% teachers) confirmed that there were still traditional in-service training sessions used in the department as this is recommended by other scholars like Smith and Gillepsie (2007) for the introduction of new methodology but the big question was when does the Department of Education stop using the traditional in-service training. There was a danger of continuing and over reliance on the use of incoherent workshops for teacher development instead of embracing new reform approaches to CPTD.

4.3.1.6 Views on overall effectiveness of CPTD

It was essential for the study to assess the overall effectiveness of CPTD implementation in the district and Table 4.24 presents the data on that.

Table 4.24 Respondents' views on overall effectiveness of reformed CPTD implementation

Rating	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Very poor	1	-	0.8%	-
Poor	4	5	3.3%	4.2%
Average	30	21	24.4%	17.6%
Good	74	69	60.2%	58.0%
Excellent	14	24	11.4%	20.25%
Total	123	119	100%	100%

The respondents' data in Table 4.24 indicates 60.2% SMT members and 58.0% teacher respondents viewing CPTD implementation as good. The second largest frequency for SMT respondents at 24.4% rated CPTD as average, while the second largest frequency (20.2%) for teacher respondents rated CPTD implementation as excellent. The respondents cited various reasons for this high rating. Some pointed at good facilitation and commented as follows:

SMT5a1: The use of slides and question and answer method.

SMT5a2: Group discussion is encouraged.

SMT 7a: We receive hand-outs others referred to the application of knowledge taught thus far.

SMT39a: Improved performance by teachers and learners.

SMT50a: Teachers implementing what we discussed.

SMT36a: Have a good percentage in my subject...

4.3.2 Results of state-led traditional in-service training

As indicated in 4.3, this section assesses the extent to which the department still used the traditional in-service training as an approach for teacher development, as identified from the data presented in Table 4.24. Secondly, the researcher wanted to assess whether respondents differentiated between CPTD and traditional in-service training forms of teacher development which are over and above what has been described already which are externally driven and removed from the classroom (Cinkir, 2007). Tables 4.25 to 4.29 present the relevant results.

Table 4.25 Respondents' views on the number of traditional in service trainings attended over the past 12 months

Traditional in-service training attended	Frequency		Percentage %	
	SMT members	Teachers	SMT members	Teachers
Between 1 and 2	17	21	13.8%	17.6%
3 trainings	20	18	16.3%	15.1%
Between 4 and 5	42	37	34.1%	31.1%
Between 6 and above	41	37	33.3%	31.1%
Never attended any	3	6	2.4%	5.0%
Total	123	119	100%	100%

The respondents' data in Table 4.25 indicates that 34.1% SMT and 31.1% teacher respondents confirmed attending between 4 and 5 sessions of traditional in-service training in the past 12 months. The attendance of 6 and above traditional in-service training sessions was confirmed by 33.3% SMT respondents and 31.1% teachers respondents. These findings confirmed the use of traditional in-service training as an approach in Gert Sibande District of education for professional development of teachers. Table 26 explored who the initiator of these traditional in-service training activities was.

Table 4.26 Respondents' views on who organised the traditional in-service sessions months

Who organized the sessions	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
The District/Curriculum Implementer	84	85	68.3%	71.4%
Cluster Leader	15	13	12.2%	10.9%
Principal	10	7	8.1%	5.9%
School Management Team (SMT)	4	4	3.3%	3.4%
Circuit Manager	9		7.3%	
Yourself as teacher	-	4	-	3.4%
Other	1	1	0.8%	0.8%
None	-	5	-	4.2%
Total	123	119	100%	100%

From the data in Table 4.26, the majority of respondents, both SMT members (68.3%) and teachers (71.4%), posited that the district, through the subject advisors, organized the traditional in-service training; indicating a top-down approach. SMT members (12.2%) and 10.9% teachers pointed to cluster leaders as people who organized the sessions. Since cluster leaders are regarded as peers, by teachers it was therefore, acceptable that they set the agenda for development depending on whether they really set the development agenda or whether the sessions were for SBA moderation.

The analysis of data collected also revealed the importance of the role played by the SMT members in teacher development programmes. According to the SACE CPTD system (DoE, 2008c), type 2 teacher professional development activities are driven by the school so that teachers are also developed to meet the school's needs. Eight point one percent (8.1%) SMT members and 5.9% teachers' respondents maintained that principals initiated and organized these sessions. In the same breadth, 3.3% SMT members and 3.4% teachers indicated that the SMTs were organisers of the training. Only 3.4% teacher respondents viewed themselves as initiators of development to the extent that the activities they engaged in were according to their own needs as identified through the IQMS' Professional Growth Plan (PGPs). Such activities cater for Type 1 activities and teachers claim PD points for them as prescribed by SACE (DoE, 2008c). Table 4.27 depicts the focus of the traditional in-service training.

Table 4.27 Respondents' views on the focus of the traditional in-service sessions attended

Focus of the traditional in service training	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Subject content	66	60	53.7%	50.4%
Methods of teaching	19	25	15.4%	21.0%
Orientation to the new curriculum e.g. NCS/CAPS	31	21	25.2%	17.6%
Other	7	13	5.7%	10.9%
Total	123	119	100%	100%

The data from Table 4.27 presents subject content as the main focus of traditional in-service training according to 53.7% of SMTs' respondents and 50.4% of teachers' respondents. This finding is the same as that in Table 4.23 where the same variable was put forward for CPTD programmes. SMTs' amounting to 53, 7% viewed subject content as the focus for CPTD too. This is an indication that the terms CPTD and traditional in-service were used interchangeably by the participants in the study. SMT respondents (25.2%) and teacher respondents (17.6%) also identified orientation to the

new curriculum as the second biggest focus of traditional in service training; a view that is in keeping with developments in the department with the introduction of the NCS and CAPS (DBE, 2012). Through the quantitative data obtained, the details of the ‘other’ aspect rated by the 5.7% SMTs and the 10.9% teachers could be worked out as:

- Remedial work
 - Discipline, value driven school/teacher
 - Management
 - Policy development and recruitment skills
- . Multi grade teaching
 - . IQMS and exam administration
 - . Leadership skills

The 10.9% teacher respondents rated the choice above. The analysis of the views on the level of satisfaction to the traditional in service training is presented on Table 4.28.

Table 4.28 Respondents' views on the level of satisfaction to the traditional in-service sessions attended

Level of satisfaction to the traditional in service training	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Poor	2	2	1.6%	1.7%
Average	31	23	25.2%	19.3%
Good	81	73	65.9%	61.3%
Excellent	9	21	7.3%	17.6%
Total	123	119	100%	100%

The data in Table 4.28 indicates a high level of satisfaction by both the SMT members (65.9%) and teachers (61.3%) about the traditional in-service training which they rated highly. The second largest variable frequency was average rating for the same variable by 25.2% SMT respondents and 19.3% of teacher respondents.

The analysis of factors promoting or hindering the implementation of CPTD programmes is presented in Table 4.3.3.

4.3.3 Factors promoting the implementation of CPTD programmes.

The section presents the analysis of data on factors promoting and hindering the implementation of CPTD, focusing on the participants' expectations and the usefulness of learnt competences in class. It was the view of the researcher that when participants' expectations are not taken into consideration, this hinders their full participation in CPTD programmes. King and Newman (2001) note that when participants are aware that their needs are being addressed by the CPTD programme and the competences they are empowered on will enhance their teaching; they are willing to participate in the CPTD activity. On the contrary, when participants become conscious that whosoever designs and presents the professional development programme to them does not consider their needs and their expectations from the development programme, their participation in the CPTD activity is hindered. The section 4.3.3.1 further explores the concept of participants' expectations below.

4.3.3.1 Participants' expectations

According to Muste (2014), expectations form part of the conditions that drive the participant to participate in an activity. The learning act demands a positive state of mind and the right attitude. These are brought about by positive expectations towards the learning activity and these become part of the belief system of the teacher. Therefore, the nature of expectations and their fulfilment in the learning activity determines the level of participation. With regard to state-led CPTD, the relevant variables used were an update on current developments, an increase in knowledge of subject matter, an increase in professionalism, and the sharing of experiences with colleagues as indicated in Table 4.29.

Table 4.29 Respondents' views on their expectations when attending CPTD

Expectations when attending CPTD	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
To be updated on current developments	44	26	35.8%	21.8%
To increase knowledge of subject matter	47	69	38.2%	58.0%
To increase professionalism	23	12	18.7%	10.1%
To share experiences with colleagues	8	11	6.5%	9.2%
Other	1	1	0.8%	0.8%
Total	123	119	100%	100%

The analysis of the data in Table 4.29 pointed to increasing knowledge of subject matter being the expectation of the majority of respondents for both groups. SMTs amounting to 38.2% of and 58.0% of teachers indicated this aspect as their expectation. Updating teachers and managers on current developments was also viewed second (35.8% SMT and 21.8% teacher respondents) indicating a stance accepting the introduction of reforms in education as a priority. However, the fact that this was the second rated shows that there could be some resistance when CPTD only focuses on briefing teachers and SMTs on new developments without going further and expanding their subject knowledge. It was therefore, important to couple the new developments with CPTD that focuses on subject knowledge.

4.3.3.2 Usefulness of learnt competences in class

It was important for the study to establish the level of usefulness of learnt competences in class after teachers had been engaged in CPTD as this would determine the importance of teachers' involvement in CPTD. The data on this construct is presented on Table 4.30.

Table 4.30 Respondents' views on the extent to which what they learnt was useful to classroom practice

The extent to which CPTD attended was useful to classroom practice	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Not helpful	1	2	0.8%	1.7%
Slightly helpful	17	8	13.8%	6.7%
Helpful	67	66	54.5%	55.5%
Very helpful	38	43	30.9%	36.1%
Total	123	119	100%	100%

The data on the views of respondents on whether what they learnt was useful to classroom practice or not indicates a positive outcome. More than half of the respondents (54.5% SMTs and 55.5% teachers) indicated that what was learnt was useful and very useful (30.9% SMTs and 36.1% teachers). The interviewed teacher shared her new acquired strategies learnt at one of the recent workshops for teaching reading and further pointed how these had improved her classroom teaching in reading. However, there are also indications of challenges by 13.8% SMTs and 6.7% of teachers who found what they learnt slightly useful in class and 0.8% SMTs and 1.7% of teachers who found such not useful in class at all, a stance suggesting a need for a changed approach in CPTD.

In using the qualitative data to substantiate the said response that CPTD was not useful for classrooms, respondents cited a myriad reasons why they were unable to use what they were taught during the CPTD session. Some of the reasons related to overcrowding of classes, participants not being afforded enough time to practice since sessions only lasted for 2 hours, the negative impact of structural issues like multigrade teaching, and lack of support from the system. The following are some of the comments made by the teachers:

TR92: I tend to revert back to the old

TR42: The workshop in Maths focuses on lesson planning and teaching. These workshops constantly repeat information. I would like to learn new skills.

TR40: Training takes 2 hours

TR59: As a qualified teacher, one does not go to the workshop to be taught how to teach the subject. One expects to be made aware of new developments with regard to the curriculum and what is expected of the teacher.

The SMT respondents raised even more complex issues when accounting for their rating.

The following are some of their comments:

SMT5A1: It is still a challenge to teach learners who cannot express themselves, in a class of 45.

SMT40A: Other educators did not practically go to tertiary. They studied through correspondence

SMT58A: Time is not sufficient and subjects are many because of multigrade classes.

SMT126A: Problems raised in each training are not solved. They are recurring every year.

SMT164A: There is no monitoring by facilitators.

Although the large number of respondents rated this variable positively, there was need to pay attention to what the respondents who rated it negatively said. It was essential for CPTD managers to address the concerns raised especially those that needed attitudinal change from the facilitators. There was also need to take stock of the extent of the problem of the poor quality of teacher training offered by some distance training institutions as raised by respondent SMT40A. This calls for streamlined proper induction programmes for new teachers to enable them to close the gap created by their initial training and raise their capacities to the level where all teachers are.

4.3.3.3 Factors prohibiting attendance or participation in CPTD

This section explores the role of logistical, motivational and external factors in prohibiting or constraining participation in CPTD. The participants were given a list of factors from which to choose one which, in their view prohibits participation in CPTD. The logistical factors listed dealt with long distances to training venue, improper arrangements, late receipt of information about CPTD, lack of interest in CPTD, large workload and unsuitable time choice for CPTD by organisers. . The data is presented in Table 4.31.

Table 4.31 Respondents' views on factors prohibiting participation in state-led CPTD

Factors prohibiting participation in CPTD	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Long distance to training venue	29	18	23.6%	15.1%
Improper arrangements	13	23	10.6%	19.3%
None or late information about arrangements for CPTD activities	22	38	17.9%	31.9%
Unsuitable time of the year	15	15	12.2%	12.6%
Large workload	33	24	26.8%	20.2%
Lack of interest in professional teacher development activities	11	1	8.9%	0.8%
Total	123	119	100%	100%

Although the ranking of the factors by the two groups differed in terms of which factor hindered participation in CPTD most, two factors featured in the top three ranking of both SMT members and teachers. These factors were the large work load and none or late invitations for CPTD sessions. The large workload received the highest frequency with 26.8% of the SMT respondents regarding it as the most prohibiting factor for participation in CPTD, while most of the teachers at 31.9% viewed none or late information about CPTD as the most prohibiting factor in CPTD participation. While both factors were presented as having some bearing on teachers' participation, their impact differed in terms of direct and indirect effect. If an invitation to a CPTD session was received late it directly affected attendance as the teacher would be absent from the CPTD session.

4.3.4 Results on challenges in the implementation of CPTD programmes.

It was important to get the views of the respondents on different aspects of challenges encountered in the implementation of CPTD programmes in the district as such knowledge would shape the researcher's understanding on the aspect. Some of the challenges addressed were lack of consultation when designing CPTD programmes, incompetent facilitators, taught content not relevant to classroom teaching, and

inadequate time allocated to CPTD. The significance of these variables to CPTD implementation cannot be overemphasized. If the participants' voice is not heard in the design of professional development programmes, the programmes offered will be off the mark and will not target participants' needs which will lead to non-implementation of competences transmitted, in the classroom (Broad & Evans, 2006).

Equally defeating is the incompetent facilitators who come to CPTD sessions unprepared and present irrelevant content because they could not do some research adequately to establish areas of need for teachers. Adequate time allocation is also important for CPTD implementation. Each of the challenges is dealt with below.

4.3.4.1 Lack of consultation for input in CPTD programmes design

When teachers are deprived of an opportunity to make input in CPTD programmes designed for them, an opportunity is lost for designing programmes that address their needs. Consultation or allowing participants to make input in the design of a CPTD programme communicate a very important message to the participants and it also makes them feel valued. Caena (2011) maintains that staff decision making on CPTD designs enables the participants to take ownership of their own development process resulting in maximum participation. Providing participants with an opportunity to make input in the design of the programme can be done in various ways. The consultation can be direct-formal (requesting participants to drop inputs on email or in a suggestion box) or indirect-informal (accessing a consolidated IQMS needs report for a specific school, circuit or district and reports containing participating needs). However, whichever mechanism is used, participants must be made aware of this process to ensure transparency. The table below summarises SMTs' and teachers' responses on whether or not they were consulted for input in CPTD programmes

Table 4.32: SMT members and teachers' responses on whether or not teachers and managers were consulted in the design of CPTD

Respondents	Whether or not they were consulted in the planning of CPTD				Total
	Yes	%	No	%	
SMT members	69	56.1%	48	40.3%	123
Teachers	51	42,9%	71	59,7%	119

According to the data in Table 4.32, 56.1% SMT respondents indicated that they were consulted to give input in the design of CPTD, compared to 59.7% teacher respondents who indicated non-consultation. The non-consultation was confirmed by one subject advisor who indicated that teachers are not consulted directly to make an input in training material. However, as subject advisors visit them in schools for support, prevailing challenges are picked and these become the focus in the content workshops. The reason to the different responses could be due to the differing roles played by the two groups in education. School Management Team members, by virtue of them being in management, are exposed to a certain level of consultation for making CPTD input by the district but such privilege does not cascade down to reach teachers at classroom level.

The fact that teachers had not been consulted represents a huge shortcoming because with each new methodology, teachers are more targeted for CPTD than SMT members as they deal with the development of subject content for specific subjects. Interaction with managers during the interviews established that principals attended fewer CPTD activities as compared to teachers since they only dealt with management issues. From the interviews it was established that over the past few months, principals and members of SMT attended CPTD sessions that dealt with curriculum management in order to provide instructional leadership to teachers.

Over and above that, the qualitative research findings gathered indicated mixed views where a large number of respondents shared some views on the kind of involvement

they had and why they had limited involvement in CPTD design. One of the principals described his/her role during the learner performance result process both at cluster and circuit level and commented as follows:

SMT121: As a cluster of principals (10 schools) after the results analysis is done at our respective school the circuit manager does the same for the circuit. All principals are called to meet for the circuit review, then further to clusters... It is where I got a chance to forward my input to the subject leader.

It emerged that some of the CPTD workshops focused on specific issues such as examination results and were driven by district education officials. The next table presents results on how principals and teachers viewed how their input was considered in CPTD programmes.

Table 4.33: SMT members' and teachers' responses on whether their input in the design of CPTD was taken into consideration

Respondents	Whether their input in CPTD design was taken into consideration				Total
	Yes	%	No	%	
SMT members	78	63.4%	45	36.6%	123
Teachers	51	42.9%	68	57.1%	119

The analysis of the data in Table 4.33 still indicated divergent views noted in Table 4.33 where the majority of SMT respondents (63.4%) confirmed participation whereas the majority of teachers 57.1% indicated that their input was never taken into consideration. SMT members, by virtue of being managers, participated in management meetings and made their voice heard in as far as planning for CPTD was concerned. Teachers however, did not have that privilege but could only make input when the facilitator called for input; a scenario which was rare due to time and pressure to implement. The challenge of poor facilitation is dealt with in the following section (4.3.4.2).

4.3.4.2 The challenge of poor facilitation

Good facilitation is associated with an active participatory approach where participants actively take part in their learning. This is done by performing little exercises, predicting the outcome of learning and sharing experiences with the rest of the group. Passive listening should be discouraged at all cost because it does not appreciate the participants and it gives an impression that the participators do not know anything, only the facilitator has knowledge of the subject. The respondents' rating of their experiences with facilitation is presented in Table 4.34.

Table 4.34 Respondents' rating of the programme facilitators on their ability to facilitate the programme and their conversance with the training material

Facilitator's rating	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Very poor	1	-	0.8%	-
Poor	3	3	2.4%	2.5%
Average	41	18	33.3%	15.1%
Good	65	81	52.8%	68.1%
Excellent	12	17	9.8%	14.3%
Total	122	119	100%	100%

The data in Table 4.34 indicates that the majority of respondents rated the facilitators' ability as good with 52.8% of SMT respondents and 68.1% of teacher respondents falling under this category. The second largest category with 33.3% principals' and 15.1% teachers' respondents rated them as average. Nine comma eight percent (9.8%) SMTs and 14.3% teachers rated the facilitators' ability as excellent. From the above data, it is clear that the facilitators were quite competent. The information collected qualitatively where respondents were asked to elaborate on their rating revealed a high level of preparedness displayed by facilitators when they led CPTD sessions and the following were some of the comments made in this regard:

SMT16a: They came prepared for the training they also gave hand outs

TR58 : The facilitators come prepared to workshops. We are also given the curriculum material.

Further to that, participants praised the facilitators for their depth of the subject content knowledge as well as having good facilitation skills. They commented as follows:

SMT22a: The Social Science facilitators are more knowledgeable of the content

TR19 : Very knowledgeable facilitators who have knowledge of the subject content

TR44 : Good, because he has knowledge and he knows how to present

TR45 : They are well trained

Over and above the knowledge and skills comments, respondents remarked about the professionalism and the right attitude that the facilitators had. They commented as follows:

TR22 : Well organised, punctual, professional and had resources

SMT49a: They were approachable and had vast knowledge

SMT57a: Well prepared. Time conscious. Brought hand outs and use teaching aids.

However, the remarks made by a few respondents that rated the facilitators as very poor (0.8% for the SMT respondents) and poor (2.4% for SMTs and 2.5% teacher respondents) pointed to aspects that needed improvement in order to elevate the facilitation to a higher level. Respondents commented about lack of a diversified approach where the facilitators pitch the whole presentation to the level of struggling teachers. These participants commented as follows:

TR24: Facilitator's progress hampered by teachers who lack basics. Spends a lot of time explaining petty things

TR36 : Workshops concentrate on teachers that have difficulty in getting results

The remarks made by TR24 and TR36 point to the need for an integrated approach when dealing with professional development of teachers so that teachers at different levels can benefit in an equitable manner. Equally essential to professional development of teachers is the aspect of on-site support that is put in place as a follow up to complete the face-to-face development process and assist the implementation of acquired skills in class. Although the subject advisors shared that such sessions were

conducted to support teachers, some respondents remarked about the absence of such and one respondent had this to say:

SMT126a : If assistance is needed they say they will come and never show up.

There is a need for further research to establish the extent of the absence of on-site support by the subject advisors as this indicates a loose end that needs to be tied up in the thread of the professional development cycle in the district. Recommendations will be made in this regard in chapter 5. The next section 4.3.4.3 deals with the respondents' responses in establishing the extent to which respondents found what was learnt useful to classroom practice.

4.3.4.3 The usefulness of what was learnt to classroom practice

CPTD is an activity that is designed to enhance classroom practice, and whatever activity that the teachers engage in as CPTD, must eventually have a positive impact on learning in the classroom (Selemani-Meke, 2011). The study intended to assess the extent to which the CPTD activities were relevant to classroom teaching in the district. Table 4.35 presents the views of the respondents on the extent to which what was learnt was useful to classroom practice.

Table 4.35 Respondents' views on the extent to which what they learnt was useful to classroom practice

The extent to which CPTD attended was useful to classroom practice	Frequency		Percentage %	
	SMT Members	Teachers	SMT Members	Teachers
Not helpful	1	2	0.8%	1.7%
Slightly helpful	17	8	13.8%	6.7%
Helpful	67	66	54.5%	55.5%
Very helpful	38	43	30.9%	36.1%
Total	123	119	100%	100%

The data in Table 4.35 indicates that the bulk of respondents (about 85, 4% SMT members and 91.6% teachers) found what they were developed on, useful. They

indicated that the competences they were taken through were helpful (54.5% SMT members and 55.5% teachers) and very helpful (30.9% SMTs and 36.1% teachers). This was supported by both the member of the SMT interviewed and the teacher when indicating that the content sessions generated useful information they used in class. However, further in-depth evaluation needs to be carried to establish how many of these respondents actually got to implement the new practices in line with the assertion in 4.3.4.3. Time allocated and its impact on CPTD is addressed in 4.3.4.4

4.3.4.4 *The challenge of the amount of time allocated to CPTD*

The amount of time allocated to CPTD as a concept is very crucial to teacher professional development as this entails how the system manages the integrated plan for CPTD in the district. The integrated plan would mainly be for all subjects in the FET band and another master plan would be for all subjects in the GET band. It would include the targeted period; weeks, days and hours for CPTD to occur. GET and FET as cohorts had been using one afternoon at the beginning of each quarter to help teachers plan for the rest of the quarter in all content subjects.

According to the curriculum managers interviewed, due to the weak performance displayed by Grade 9 learners in the Annual National Assessment, the national department introduced the 1+4 CPTD model for Grades 8 and 9 Mathematics teachers. The province was the first to implement this model in the country. Teachers attended CPTD sessions at central venues every Monday from 8h00 to 16h00 in their various clusters and prepared lessons for the rest of the week. They then went back to classes to teach for the rest of the week and met again the following week to discuss and share experiences including planning again for the week.

Outside the curriculum management focus, there would be CPTD for specialized services and support such as Inclusive Education (Psychology Services, Career Guidance and Special Schools), Curriculum Enrichment (Life Skills, Library Services, Computers in Education) and the assistance provided to all teachers with registration in the SACE CPTD point electronic system conducted by the Teacher Education and

Development Unit. These units would also provide teacher professional development that takes longer and deviates from the norm. The data on respondents' views on the time allocated is presented on Table 4.36.

Table 4.36 Respondents' views on the length of time allocated to CPTD sessions

Length of time allocated to CPTD/In-service training	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
1 Day	73	50	59.3%	42.0%
2 Days	13	18	10.6%	15.1%
3 Days	13	19	10.6%	16.0%
4 Days	5	5	4.1%	4.2%
5 Days	6	5	4.9%	4.2%
1 Week	5	8	4.1%	6.7%
More than a week	8	14	6.5%	11.8%
Total	123	119	100%	100%

As noted in Table 4.36, the highest percentage of respondents (59.3% SMTs and 42.0% teacher respondents) confirmed an average of one day being set aside for CPTD. This might refer to the 1+4 model discussed above and the CPTD for subject content indicated in 4.3.4.4 as confirmed by the interviews with teachers, subject advisers and curriculum managers. Subject advisers and curriculum managers interviewed confirmed the implementation of the district's scheduled CPTD in subjects' content at the beginning of each quarter. Each subject was allocated 2 hours in the afternoon.

It was also noted from the Table 4.36 that there were small groups of respondents ranging between 10.6% and 16.0% for both groups who indicated 2 and 3 days as time allocated for CPTD. Moreover, the respondents in the rest of the table indicated the duration of 4 days to more than a week which the researcher presumed referred to the duration for CPTD for specialized services. Information obtained through interviews indicated that various CPTD sessions for specialized services, which used time out of the ordinary such as Inclusive Education, Library services, multigrade teaching, took

place in the district. The methods used by the facilitators are discussed in section 4.3.4.5.

4.3.4.5 *The challenge of the methods used by facilitators*

From the questionnaire, respondents were requested to mention facilitation methods commonly used by the facilitators when facilitating CPTD sessions. A range of methods were provided such as, question and answer due to the type of interaction they had with subject advisors. Table 4.37 presents the data on how the respondents rated their responses as per the questionnaire.

Table 4.37 Respondents' views on the methods used by facilitators to impart knowledge

Methods used by facilitators	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Lecturing	24	9	19.5%	7.6%
Question and answer	20	6	16.3%	5.0%
Demonstration	7	5	5.7%	4.2%
Group work	50	22	40.7%	18.5%
Discussion	18	11	14.6%	9.2%
Other (a-e)	4	3	3.3%	2.5%
Group work, discussion	-	13	-	10.9%
Demonstration, group work, discussion	-	12	-	10.1%
Question and answer, demonstration, group work	-	14	-	11.8%
Lecturing, question and answer, demonstration	-	3	-	2.5%
Total	123	119	100%	100%

From Table 4.37 the most common method used by facilitators is group work which 40.7% SMTs and 18.5% teachers rated highly. Lecturing was rated second by 19.5% SMTs while 11.8% teachers rated the combination of question and answer, demonstration and group work. This was in line with what took place during the subject

content CPTD sessions where there would be probing, using questions and answer method and thereafter encourage teachers to share good practices where they demonstrate some lessons to peers. However, it is worth noting that group work featured in all combinations rated by the teachers making it the prominent approach used for CPTD facilitation in the district. The interviewed SMT representative and the teacher confirmed the use of group work as the leading strategy for the content workshops and this was found to be effective as it allowed teachers to engage and share ideas. However, one of the subject advisors interviewed pointed to the time allocated to the content sessions as a limiting and constricting factor to fruitful intense group discussions by teachers during the sessions.

4.3.4.6 *The challenge associated with the implementation of what was learnt*

Implementing what has been learnt is a huge challenge and does not depend on participants' views about the CPTD programme they attended. This was confirmed by Doherty (2011) when interacting with a group of teachers who did a series of CPTD activities in a project called the educational professional development (EPD). The participants gave very positive feedback about their participation indicating that their expectations were met, and also stating how useful the course material was going to be in their classes. When follow-up visits were made, it was found that very few of them had implemented what they had learnt. It was therefore, very necessary to explore the challenges due to their importance to the study. Respondents were asked to provide ratings for how they found the implementation of what they had learnt. They had to choose between easy, very easy, difficult and very difficult. The ratings are presented in Table 4.38.

Table 4.38 Respondents' views on how they found the implementation of what they had learnt

How they found the implementation of what they had learnt	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Easy	71	90	57.7%	75.6%
Very easy	46	28	37.4%	23.5%
Difficult	5	1	4.1%	0.8%
Very difficult	1		0.8%	
Total	123	119	100%	100%

The majority of respondents (57.7% of SMTs and 75.6% teachers) indicated that they found what they learnt in CPTD sessions easy to implement back in class. Thirty seven point four percent (37, 4%) SMTs and 23.5% teachers said they found it very easy while 4.9% of respondents reported to have had difficulty in implementing taught material. It needs to be noted that some further verification of the "easy" and "very easy" ratings in a real classroom might come with a different view as Doherty (2011) warned. There was need to conduct a further study to establish the extent to which teachers in the district used competences learnt in class. The respondents were requested to rank the challenges according to intensity and that is presented in 4.3.4.7.

4.3.4.7 Presentation of challenges ranked

Various challenges affect CPTD implementation and it was of interest to the study to establish how respondents ranked these challenges in terms of intensity and weighting. The biggest challenge would be ranked 1 and the least constraining challenge would be ranked number 6.

Table 4.39 Respondents' ranking of challenges

Challenges and their ranking	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Difficult to apply taught information, in the classroom	33	29	26.8%	24.4%
The training was poorly conducted to an extent that it is difficult for me to implement what was taught in the classroom	19	59	15.4%	49.6%
My class is too large to allow me to implement what was taught	24	24	19.5%	20.2%
There were no resources at school to allow me to implement what was taught in the teacher development session	11	2	8.9%	1.7%
The school environment including management and administration not supportive enough	6	2	4.9%	1.7%
No follow-up visit from facilitators to help me implement what had been learnt from In-service training session	29	3	23.6	2.5%
Total	122	119	99.2%	100%

Table 4.39 indicates some agreement in the two respondent groups (SMTs and teachers) as both groups ranked two of the first three aspects highly as challenges. These aspects made it difficult to apply taught information. Poorly conducted training and too large classrooms were the leading challenges that negatively impacted on the implementation of what was learnt in CPTD sessions. While most of the SMT respondents (27.0%) viewed 'difficult to apply taught information in the classroom' as being the leading challenge, the highest number of teacher respondents (49.6%) highlighted 'poorly conducted CPTD sessions to an extent that it became difficult to implement', as the main challenge. Both groups were in agreement that large classes 20.2% for SMT respondents and 19.5% teacher respondents) prevented the implementation of what was taught in CPTD sessions. This was in agreement with the TALIS 2013 (OECD, 2014)

results which identified teachers' heavy workload associated with large classes as a barrier to effective teaching.

4.3.5 Results on what in teachers' perspectives could be done to enhance the implementation of state-led CPTD programmes.

This section deals with what in teachers' perspectives could be done to enhance state-led CPTD. The aspects that were targeted were the participants' choice for CPTD focus, mode of delivery, venue, duration for the delivery of CPTD, time for delivering CPTD, and structural levels at which CPTD should be organized. Extra information was gathered through the interviews where teachers indicated their perspective focusing on the aspects indicated. Discussion on each variable follows below.

4.3.5.1 Addressing participants' choice in terms of CPTD focus (as indicated by needs)

Although the current research project dealt with state-led CPTD, it was important to understand what teachers would prefer if they were given a chance to choose CPTD focus on the basis of their developmental needs. The needs of the state had to be synergized with the teachers' needs in order for professional growth to take place. Respondents were asked which one aspect they would choose if they were to make a choice between subject content, methods of teaching, assessment of learners, classroom management and other areas of focus. Table 4.40 presents the respondents' responses.

Table 4.40 Respondents' preferred choice for teacher development focus

Preferred choice for teacher development activities	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Subject content	49	62	39.8%	52.1%
Methods of teaching	45	29	36.6%	24.4%
Assessment of learners	8	7	6.5%	5.9%
Classroom management	21	19	17.1%	16.0%
Other	-	2	-	1.7%
Total	123	119	100%	100%

The data in Table 4.40 indicates a preference for subject content by both the teachers (52.1%) and SMT respondents (39.8%) followed by methods of teaching ranked by 36.6% of SMT members and 24.4% teacher respondents.

The choice of subject content was found to be in line with the current trends in the district and in the province. The 2015/16 Mpumalanga Department's Annual Performance Plan (APP) (MDE, 2015a) indicated that supporting all teachers in subject content was the main strategy that the department had adopted to improve learner performance. When teachers are proficient in the content of the subjects they teach, learner performance is bound to improve. The analysis of annual learner performance including the Annual National Assessment (ANA) indicates that learners displayed shallow knowledge in various subjects especially in languages and Mathematics for Grades 1-9 (DBE, 2011) and equipping teachers with subject content would lead to improved learner performance. Moreover, the transformation agenda, with its dynamic curriculum, had gradually effected changes in subject content and respondents summarized that as follows:

SMT27a: As time goes on content changes and method of teaching changes therefore continuous updates is of paramount importance.

TR81 : The subject content change every time from C2005, RCS and RNCS.

In the interviews held, managers and teachers shared information about the national department's 1+4 initiative and fully supported the initiative. The respondents' third choice was classroom management with the frequency of 17.1% for SMT members and 16.0% for teacher respondents. Most of the reasons put forward by the respondents for the choice were that they struggle with discipline in classes and they were unable to manage learners' untoward behaviour culminating in inattentiveness and being disruptive. Some respondents indicated that:

TR7 : Hard to teach when there is no discipline.

TR30: Classroom management because learners are unique and have different challenges that prohibits learning.

TR7 : Some learners are lazy and don't want to learn.

In further probing the preferred approaches to CPTD, the use of an acceptable mode of delivery is discussed below.

4.3.5.2 Preferred mode for delivering CPTD

Another key variable to explore was the preferred mode of delivery for CPTD and the respondents were given an opportunity to choose their preference. They had to choose one variable from, non-residential, residential and the distance mode. Non-residential is a system adopted for the majority of CPTD sessions where no participant sleeps over and basically CPTD is arranged to take place over one day. When a CPTD session continues for more than one day, the issue of vicinity would come to the fore to ensure that the question of accommodation for teachers is eliminated.

The residential mode is the opposite of the above-mentioned mode. The design of such sessions relies on the use of conference facilities with accommodation to ensure that participants sleep over. This mode is characterized by intensive work and long hours and accommodates participants from far flung areas.

The distance mode is where participants don't have a face to face encounter with the trainer. Communication traditionally is by post or by email (which is the latest way of communicating). Table 4.41 presents data collected on the preferred mode for conducting training.

Table 4.41 Preferred mode for conducting CPTD

preferred mode for conducting training	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Non-residential mode	35	48	28.5%	40.3%
Residential mode	82	69	66.7%	58.0%
Distance mode	4	2	3.3%	1.7%
Other	2		1.6%	
Total	123	119	100%	100%

The data in Table 4.42 indicates that the majority of respondents (66.7% SMTs and 58.0% teachers) preferred to sleep over when engaging in CPTD and therefore selected residential mode. The reasons behind this were to get enough time and focus. Substantiating their choices respondents had this to say:

SMT47A: To give teachers more time.

SMT43A: To avoid a lot of travelling at the end of the day. To give them an opportunity to discuss informally after the session into the evening.

SMT25A: This can give teachers enough time to deal with all their problems in teaching.

SMT16A: Teachers will have time to rest and be on time the following day.

SMT5A1: There is a direct contact with the facilitators.

The information obtained through the interviews indicated that the majority of CPTD activities take place in the afternoon after contact time at 13h00 and finish at 15h00 to allow the teachers to drive back home. The district managers interviewed indicated that there was insistence on subject advisors to always prepare prior to the 2 hour sessions so that they can be productive. The group that preferred a non-residential mode cited reasons associated with the protection of family time indicating that:

SMT28A: It cost less to the department. There is less stress to teachers who stay with their kids knowing they sleep at home and are able to monitor and help them.

SMT33A: It is not good to leave your family alone and go to sleep outside

SMT30A: Educators have families to look after.

4.3.5.3 Preferred venue for delivering CPTD

The section sought to establish respondents' preferred venue for conducting CPTD in Gert Sibande as there were a number of options offered. The appropriateness of the venue was essential to the success of CPTD hence, it was also essential to know what worked for teachers. At the time of the research, it was discovered that the district has District Teacher Development Centres (DTDCs) that were equipped with the necessary equipment to support teachers' development and these were widely used as venues for teachers' CPTD. The use of classrooms as CPTD venues occurs when the number of teachers is small or when a big group can be regrouped to fit in different classrooms. When participants are many, school halls are used. These halls are partitioned classrooms while some have been built solely for meetings and are used as assembly points for the learners. Respondents were then requested to choose one preferred venue for the delivery of CPTD from among the DTDC, classroom with learners, and any spacious venue such as a hall, be it a school or any community hall. The inclusion of the classroom with learners being taught was double pronged to assess the extent to which teachers use the job-embedded approaches to CPTD. This is where a teacher collaborates with peers and presents a lesson in lesson study, action research and the PLC. The analysis of data on the preferred venue is presented in Table 4.42.

Table 4.42: Respondents' preferred venue for conducting CPTD

Preferred venue for conducting CPTD	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
District Teacher Development Centre	41	57	33.3%	47.9%
Classroom with learners being taught	43	-	35.0%	-
Any identified Community or School Hall	30	-	24.4%	-
Any identified Community Hall	-	25	-	21.0%
School hall	-	26	-	21.8%
Other	9	11	7.3%	9.2%
Total	123	119	100%	100%

The information in Table 4.42 presents the DTDC as the venue preferred by 47.9% teacher respondents whereas the majority of SMTs' respondents (35%) preferred a classroom with learners being taught. The SMTs' preferred choice indicated their positive disposition towards the job-embedded CPTD (Croft, et al., 2010) sessions where on-site support to teachers is provided by peers, mentors and coaches.

A sizeable number of respondents (24% SMT members and 21% teachers) preferred identified community hall or a school hall as a venue for CPTD. These halls are just gathering spaces with no extra resource to support teacher learning as compared to DTDCs or any conference centre with relevant fittings to support interaction amongst participants. The teachers' and SMTs' preferred suitable duration is presented below.

4.3.5.4 Suitable duration for delivering CPTD

The teachers' and SMTs' preference in terms of length of time for CPTD sessions was of importance to the study for the determination of proper duration

for CPTD. The information gathered through the interviews indicated that the bulk of CPTD sessions conducted for the various subjects' content was done in one afternoon for 2 hours once every quarter. However, cluster activities took place continuously and it was of interest to assess whether the respondents viewed clusters as part of CPTD. Respondents were given five durations to choose from namely, 2 days, 1 week, 2 weeks, 1 month per planned activity and on-going. Table 4.43 presents the analysis of data.

Table 4.43 Respondents' preferred duration for conducting CPTD

preferred duration for conducting CPTD	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
2 Days	17	53	13.8%	44.5%
1 week	36	49	29.3%	41.2%
2 Weeks	5	10	4.1%	8.4%
1 Month	2	4	1.6%	3.4%
On-going or more than a month.	63	3	51.2%	2.5%
Total	123	119	100%	100%

As indicated in Table 4.43, 51.2% respondents from the SMTs group regarded CPTD as on-going and chose 'on-going' as a preferred duration for CPTD, a choice that is in line with the use of the classroom as a site for CPTD indicated in the analysis of Table 4.42 above. The majority of teachers, who responded (44.5%) and viewed CPTD as formal sessions, only chose 2 days as their preferred duration followed by one week with 41.2% teacher respondents. The choice of 2 days seemed to be an improved version of the current CPTD programmes offered in the form of the Mathematics 1+4 programme and the 2 hour quarterly subject content workshops helping subject teachers with preparations for each term's work as submitted by interviewees.

4.3.5.5 Preferred time of the year for delivering CPTD

It has been a common practice in the Department and in schools to use school holidays for either catch up programmes or for intensive CPTD driven by the transformation agenda that effected considerable changes in the curriculum. School holidays were therefore, preferred for running CPTD programmes when there was a need. Six time periods were listed for respondents to choose from and these were the Easter holidays, September holidays, June holidays, school week days, weekends and other. The analysis of respondents' preferences is presented in Table 4.44 below.

Table 4.44 Preferred time of the year for conducting CPTD

preferred time for conducting CPTD	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
During the Easter holidays	7	3	5.7%	2.5%
During the September holidays	19	11	15.4%	9.2%
During the June holidays	31	39	25.2%	32.8%
During school weekdays	54	50	43.9%	42.0%
During weekends	10	14	8.1%	11.8%
Other	2	2	1.6%	1.7%
Total	123	119	100%	100%

The data presented in Table 4.44 indicates a preference for the use of school weekdays for CPTD which was in support of the 1+4 CPTD arrangement for Mathematics teachers run at the time. This also includes the on-site IQMS classroom support that was rendered by peers. Forty three point nine percent (43.9%) SMTs and 42.0% teachers' respondents supported the above mentioned notion. The two groups also indicated support for the use of June holidays (25.2% of SMTs and 32.8% teacher respondents) which could be used for intensive development, citing the advantage of the length of the time associated with these holidays. The respondents who cited reasons associated with the length of the holidays commented as follows:

TR14 : These holidays are long teachers will also have time to rest.

TR17 : June has more days and teaching time will not be used.

TR26: June has more number of days. One week for professional development is worthwhile....

TR32: The June holiday is actually longer to allow teachers to see their families and also attend the workshop....

A conclusion that could be drawn from data in Table 4.45 was that the preferred time for the conduct of CPTD was school weekdays indicating an endorsement of the Mathematics 1+4 programme. Further to that, the respondents also preferred the use of June holidays for intensive CPTD programmes. The discussion and the presentation of the preferred structural levels at which CPTD should be organized as follows hereunder.

4.3.5.6 Preferred departmental structural levels at which CPTD should be organised

It was highlighted that the department has different organisational levels that are fixed and others that are virtual and these become relevant for the organisation of CPTD in the province as well as in the Gert Sibande District. There was the provincial level which was the highest level in the province followed by the district level. The sub-district level was an arrangement that was not documented but consisted of a number of circuits found in the same area and was sometimes used for quarterly learner performance review sessions as well as CPTD sessions for small subjects in Gert Sibande. Gert Sibande has three sub-districts with 5, 6 and 7 circuits attached to them. The next lower level is the circuit; a grouping of an average of 25 schools with large circuits having close to forty (40) schools. The last structure is the cluster which on most occasions uses the circuit boundaries as demarcation especially where distance is a challenge. A cluster is divided into groups of schools found in close proximity. Teachers in a cluster teach the same subject. For the study, participants were asked to indicate their preference for the organization of CPTD from on site at school, cluster,

circuit, sub district and district level. The results for the respondents' preference is presented in Table 4.45.

Table 4.45 Preferred departmental structural levels for the organization of CPTD

preferred structural level for conducting CPTD	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
On site at school	19	12	15.4%	10.1%
At cluster level	41	28	33.3%	23.5%
At circuit level	44	48	35.8%	40.3%
At sub-district level	8	14	6.55	11.8%
At district level	10	14	8.1%	11.8%
Other	1	3	0.8%	2.5%
Total	123	119	100%	100%

The majority of the participants from both groups (35.8% SMTs and 40.3% teachers) chose the circuit level as a preferred structure for organising CPTD. The reason for this choice could be that the circuit was local and therefore, the most recognised structure that all teachers identified with. In the department, it had been a common exercise to present the analysis of learner performance per circuit and circuit managers had to account for the under-performance of schools under their care. Therefore, the choice for circuit seemed to be associated with familiarity and a sense of belonging amongst the teachers. The second most preferred structure was the cluster level (33.3% SMTs and 23.5% teachers) indicating support for job-embedded approach to CPTD. A conclusion; that can be drawn on the basis of the data was that the teachers preferred the local level structure for the organisation of CPTD instead of the district or the other levels. The circuit was the most preferred structure for organizing CPTD precisely because it was local and convenient for travelling to and fro. The determination of preferred forms, of recognising teachers for their participation in CPTD, is discussed below.

4.3.5.7 Determination of forms for teacher recognition for participation in CPTD programmes

Any form of recognition acts as motivation for teacher participation in CPTD. However, motivation levels differ in accordance with the value attached to the form of recognition and acceptance thereof. Hence, it was essential to determine which form of recognition the majority of teachers and principals preferred. Participants were asked to choose one preferred form of recognition for participation among a certificate of attendance or participation, CPTD points, promotion and no award. Table 4.46 presents the respondents' preferred form of recognition for participation in CPTD.

Table 4.46 Respondents' preferred form of recognition for participation in CPTD

Preferred form for participation in CPTD	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
No award	1	4	0.8%	3.4%
Certificate of attendance/participation	47	72	38.2%	60.5%
CPTD Points	58	28	47.2%	23.5%
Promotion	17	15	13.8%	12.6%
Total	123	119	100%	100%

The data presented in Table 4.46 indicates two forms of recognition for participation preferred by the two groups. SMTs (7.2%) indicated that they preferred the use of CPTD points as a form of recognition while 38.2% of them preferred a certificate of participation as a form of recognition. The majority (60.5%) of teacher respondents preferred the certificates of attendance or participation whereas 23.5%, which was the second largest in terms of frequencies for teachers, preferred CPTD points. CPTD points are embedded in the system and all SACE endorsed CPTD programmes are allocated professional development points (PD points) which teachers and principals claim after attending those programmes. It can therefore, be concluded that the certificate of participation was a preferred form of recognition favoured by the

teachers and SMTs followed by CPTD points which indicated the ratification of the SACE CPTD management system. It therefore, became essential to get the participants' views on whether teachers were already at the level where they could voluntarily participate in CPTD instead of being coerced. This matter is discussed in 4.3.7.8 below.

4.3.5.8 *Determining voluntary or compulsory participation in CPTD*

Taking responsibility for one's own professional development is associated with maturity for both the individual teacher as well as the education system. This is evident in developed countries as well as in high performing countries where CPTD is voluntary, as teachers understand why they should continuously engage in CPTD (Darling-Harmond, et al., 2010). It therefore, was essential for the study to establish whether teachers and principals in Gert Sibande were ready to take responsibility for their professional growth as directed by the NPFTED. Respondents had to indicate their preference with regard to whether CPTD should be voluntary or compulsory for teachers. The data collected is presented in Table 4.47 below.

Table 4.47 Respondents' view on whether participation in state-led CPTD should be compulsory or voluntary

Participation in CPTD	Frequency		Percentage %	
	SMTs	Teachers	SMTs	Teachers
Voluntary	54	49	43.9%	41.2%
Compulsory	69	69	56.1%	58.0%
Total	123	119	100%	100%

The data presented in Table 4.47 indicates that the majority of the respondents (56.1% SMTs and 58% teachers) preferred that CPTD be compulsory rather than voluntary. Most of the respondents cited reasons associated with standardization of curriculum at schools and commented as follows:

TR27 : For uniformity in schools.

TR107 : To get an acceptable standard in every school.

TR117: All the teachers must be trained in order to implement what is expected in teaching and learning.

SMT29a: So that every educator will be on the same level for the benefit of learners.

SMT186a: To set an acceptable standard in every school.

Other respondents cited reasons associated with education reforms and commented as follows:

TR30 : Because we get more knowledge in the curriculum....

TR51: Since there are curricular changes now and then, we need to be developed.

SMT119a: So that all teachers being capacitated with current information.

SMT136a: So that all educators will be reskilled in their teaching and stop using outdated method of teaching.

The responses above confirmed that education in the country is still developing and teachers expect someone to organise and compel them to participate in CPTD. This is in contrast to when teachers had reached the stage of development and take responsibility for their own development. Developed teachers know their needs and choose what to attend from the menu of different CPTD activities listed in the departmental calendar. A conclusion that can be reached on the basis of the above findings was that the education leadership had not embraced the theory of learning organization and Wenger's social learning theory which advocate that teachers should take ownership of their own learning. Teachers viewed cohesion by management as a way to conform rather than advocating a self-regulatory approach where teachers voluntarily participate in CPTD.

Section 4.2 and 4.3 presented data and findings on the study regarding the assessment of the implementation of state-led CPTD in Gert Sibande Education District in Mpumalanga. The data emanated from the views held by teachers and

the members of SMTs on the nature of CPTD programmes provided in the district. Data on the factors promoting or hindering the implementation of CPTD programmes was also discussed followed by the analysis of data on the challenges experienced in the implementation of CPTD in the district. The sections concluded by analysing the data on teachers' and SMTs' opinions on what could be done to enhance the implementation of CPTD programmes. Discussion of the findings is done in the following section.

4.4 DISCUSSION OF FINDINGS

The current section further discusses the findings as presented in 4.1, 4.2 and 4.3 with the aim of drawing conclusions on the assessment of the implementation of state-led CPTD in the Gert Sibande District. The discussion of the findings used the theoretical framework as a basis for making sense of the findings while structuring the discussions around the four sub-questions for the study, namely; the nature of state-led CPTD in the Gert Sibande District, the factors promoting or hindering the implementation of CPTD in the district, the challenges experienced in the implementation, and what could be done to enhance CPTD implementation in the district.

4.4.1 The nature of state-led continuing professional teacher development (CPTD)

As presented in Chapter 2, state-led CPTD can take the form of the traditional concepts such as in-service training, staff development and others that have been practised for ages and these mainly concern subject knowledge and teaching skills improvement (Adu & Okeke, 2014). The continuing notion of development embedded in CPTD gives this concept an edge over the traditional in-service training. CPTD entails a holistic and coherent approach to teacher professional development as it addresses attitudes and skills (Adu & Okeke, 2014). The change in teachers' attitudes enables the teacher to grow in personal mastery as promulgated by Senge (1990), which enables a teacher to work for

change and not against it. Such a disposition enables one to implement changes in one's practice preventing what was experienced in Malawian education where teachers failed to implement new approaches in their classrooms after having been taken through professional development training (Selemani-Meke, 2011).

The findings of the study indicated that CPTD implementation in the district had a propensity towards the traditional in-service training approach, with the quarterly subject content training in all subjects dominating the professional development across the board. In this study, it was established that the district runs two (2) hour quarterly sessions for all content subject teachers where they are assisted to prepare lessons for the rest of the quarter. According to the quantitative research findings, the highest number of respondents attended 3-5 CPTD sessions over the past twelve months. However, the study also confirmed the occurrence of other forms of CPTD in the district as some respondents indicated engagement in 6-10 CPTD activities. This also confirmed the existence of, and their participation in, cluster activities. The qualitative research findings revealed the existence of the DBE 1+4 model used for Mathematics teachers who attend training during the first day of every week and go back to teach for the rest of the week. The district was watching this process very closely assessing what works and could be replicated in the provisioning of CPTD in the other subjects lessons to the future.

Despite the room that is provided in the National Policy for Teacher Development for teachers to initiate CPTD, the study established that the main driver for CPTD was found to be the district through its subject advisors even though the NPFTED (DoE, 2006) stipulates that teachers should drive their professional development. It was also observed that principals and the members of the SMT viewed themselves as drivers of CPTD and this could only be attributed to the fact that they are in management positions and they see themselves as initiating CPTD.

The study findings also established that CPTD was viewed as on-going in spite of the attachment of a lot of value to the face-to-face sessions offered for Mathematics and the other subjects' content training. However, the quantitative research revealed that these training sessions conformed mainly to the traditional model which depends on the facilitator, who is regarded as an expert. They also took place off-site, away from the classroom. Except for restricted group discussions due to limited time, none or very minimal teacher driven collaboration took place to enrich professional development.

Concerning on-site CPTD, the study established that there was very minimal occurrence of on-school site CPTD in the district. While it was established that the Japanese MSSl project introduced the lesson study for teachers during the life of the project, from 1999 up to 2004 (Ono & Ferreira, 2010), at the time of the present study, lesson study was used very minimally (statistically insignificant) by selected Grade 8 and 9 teachers in two circuits in the district under study. In the upper grades (Grades 10-12), the study established that clusters are used but these had been institutionalized as observed by Jita and Mokhele (2012). The institutionalization of clusters involves using clusters for the moderation of School-Based Assessment (SBA) and other departmental administrative activities where cluster leaders become moderators. The administrative chores take over the cluster and minimize opportunities to use the cluster for purely professional development. Teachers miss the opportunity to really collaborate and use the clusters as a conduit for holistic professional growth as promulgated by Adu and Okeke (2014) to counteract the one sided effects of the face-to-face training received from the 1+4 and the subject content training.

When respondents were provided with a chance to rate the CPTD offered in the district, the general rating was "good". In substantiating the positive rating, several respondents highlighted good facilitation and the value added by CPTD to classroom practice as the reasons for the rating. However, as mentioned in 4.1

to 4.3, further research is needed to establish the extent of implementation of what is learnt during training in class.

4.4.2 Factors promoting the implementation of CPTD programmes

Research has shown that it is the personal beliefs of the individual that affect how they interpret situations or strive in a particular situation (Opfer et al., 2010). Teachers and their interpretation of learning and professional development situations with regard to CPTD are no exception to this norm. Opfer et al. (2010) suggest that it is the conflict between personal expectations and the sense of efficacy that propels the teacher to be involved in professional development in order to create harmony between the two and solve the cognitive conflict. Such inner conversation within a teacher occurs when a teacher is in possession of personal mastery as noted by Senge (1990). Such mastery is displayed by a knowledgeable and a self-management disposition that deals favourably with factors that prevent the teachers from benefiting in the implementation of CPTD. Teachers with a high degree of personal mastery continually increase their ability to generate the results they seek to achieve and use. The active learning applied results in an interaction between personal mastery and the social competence displayed in their involvement in communities of practice (Wenger, 2000).

The literature study established that when participants have positive expectations and feel that what is to be learnt will be useful in class, such feelings promote their involvement in CPTD. A number of aspects to assess the teachers' expectations as they engage in CPTD were included in the questionnaire and respondents chose the most viable. These included an 'update on current developments', the 'increase of professionalism', the 'sharing of experiences' and the 'increased knowledge of subject matter'. The findings of the study indicated that teachers participate in CPTD because they want to gain increased knowledge of subject matter and where CPTD implementation does not satisfy this expectation; their participation in CPTD is hindered. A slightly disturbing factor from the findings was that the 'sharing of experiences with colleagues' as a

variable got the least frequencies (6.5% for principals and 9.2% for teachers) which indicated that teachers do not have an expectation for sharing experiences with others as they attend CPTD sessions, displaying the perpetuation of the old concept of individualization of knowledge by teachers. According to this observation, it would seem that teachers do not attach value to collaborative learning and this has detrimental effects on the direction that CPTD is taking considering what the ISPFTED directs (DBE & DHET, 2011). Fullan, et al. (2005) propose the formation of PLCs for teachers, especially during the period of education reform, as it is very useful for teacher learning and the development of collective responsibility for the change that teachers are involved in. This point to a need for advocacy of PLCs in the district and the province to guide teachers on what PLCs are and how teachers will benefit from their use. Teachers will then be left with a framework to use when setting up the PLCs and institutionalization (Jita & Mokhele 2012) of such will be avoided at all costs.

Another factor that could hinder or support teachers' participation in CPTD was the usefulness of what was learnt in the classroom. The aim of CPTD implementation is for teachers to transform their classrooms by using the new skills they learn during the professional development sessions to impact their classroom performance. This aspect is about trends on how CPTD is offered and observation of related norms over time. If teachers perceive what is offered at CPTD sessions as difficult to implement in class, that will deter them from attending CPTD sessions. The findings of the study indicated that the majority of the respondents found what they learnt during CPTD sessions useful and therefore, were encouraged to attend CPTD sessions anytime they were requested to attend. The fact that whatever was scheduled at CPTD sessions was rated useful and could be easily implemented in their classes encouraged teachers to take part in CPTD sessions.

A number of logistical factors if not managed, prohibit teachers from attending the CPTD sessions. These included the issue of long distances that had to be

travelled to training venues, late or no information about arrangements, poor timing of CPTD programmes, large workload at school, and lack of interest in professional development. The findings of the study indicated that the late arrival of information about CPTD training was the most common factor that made teachers not to attend CPTD sessions. As the district is mostly rural, it experienced challenges with the delivery of correspondence to schools, especially for those in rural and farm areas. There was need for an improved communication system which would ensure proper communication of plans well in advance. There was also need for the system to plan well in advance and ensure that these plans got to schools for diarizing. Equally important was the need for the system to stick to those plans once done.

The findings also indicated that there were issues with the large workload of teachers which was preventing teachers from benefitting from CPTD implementation. This large workload was related to large classes. Similar experiences were observed by Selemani-Meke (2011) in a study of CPTD implementation for Malawian teachers where it was found that schools had a teacher pupil ratio of 1: 200 and teachers could not cope with teaching. Such large classes compromised the quality of teaching as teachers were unable to pay individual attention to children, especially those with special learning needs. The conduct of formative assessment, which was key for the improvement of learner performance, also experienced hindrances as teachers were unable to control learners' work and provide feedback on time to allow learners to do remedial work. These scenarios usually played at the back of the teacher's mind when participating in CPTD sessions and caused them to be overwhelmed because they knew already that they would not be able to implement the strategies shared at the training session back in their classrooms. There was need for further probing on the extent of this problem and for coming up with ways of dealing with the problems in order to create a conducive classroom environment facilitative of effective and quality learning.

The experiences of a multigrade teacher were also found to disadvantage this teacher more than the negative scenarios mentioned above. While the multigrade teacher has fewer numbers of learners in a class to teach but the spread of learners across many grades and subjects that this teacher had to teach was found to be a challenge. The challenges were found to be exacerbated in the Intermediate and Senior Phase grades where many subjects were offered and this teacher was expected to be the master in all of them. In order for the teacher to develop, the teacher had to attend the two hour afternoon CPTD sessions organised by the department for subject teachers which ran concurrently for various subjects. The multigrade teacher found him/herself torn in between the CPTD sessions and missed some crucial subjects' sessions while struggling with the implementation of the learnt competences gained in the attended sessions. It was found that the department did not make special accommodative arrangements for the multigrade teachers in its CPTD plans.

Although the study indicated minimal frequencies between participation in CPTD and lack of interest by teachers in professional development, research indicates (Fullan et al., 2005) that there is a correlation between the teacher's willingness to make changes in their practice and avail themselves for professional development. This is what makes a difference between a teacher who engages fully during the CPTD session and goes all out to implement learned competences back in class and the teacher who attends CPTD sessions for conformity only. Fullan et al. (2005) note that in order for education reform to take place, teachers have to develop a new culture for learning and there should be willingness to be involved in continuing professional development. Establishing PLCs is one way of ensuring that a culture of learning is set up at school. Learning from one another even during education reform widens the pool of ideas instead of relying on training programmes organized by the state or the department (Fullan et al., 2005). In this way, state-led CPTD can be nourished because the school community can develop an enhanced collective identity of people that 'can do' it instead of waiting for someone outside to tell them what to

do. Teachers in schools can acquire new knowledge by actually teaching and reflecting on it, instead of training (Fullan et. al, 2005).

4.4.3 Challenges in the implementation of CPTD programmes

The study also enquired about the challenges encountered in CPTD implementation in Gert Sibande district and how these challenges affected teachers' participation in professional development. The challenges dealt with were the time allocated for CPTD, inability of teachers to make input when the CPTD programmes were designed, poor facilitation, the usefulness of what is learnt in CPTD in classroom practice, and the methods used by facilitators. As indicated by both international and local research, the aim of continuing professional development for teachers is to enable them to improve their professionalism so that they can teach better (OECD, 2010b; Selemani-Meke, 2011). This aim of CPTD offering becomes more accentuated when education reform is on the cards. According to Reddy (2011), this was the case for South Africa; hence the implementation of state-led CPTD to enable the teachers to deal with changes in education in Gert Sibande District. However, with the state leading the transformation agenda, there tends to be challenges with regard to teachers' input into the design of the CPTD programme. There has been a tendency of central standardization of training material from DBE for uniformity with no local content being allowed, to avoid tempering with the standardized material. This then, led to lack of ownership of the CPTD programmes that were rolled out by teachers.

The present study investigated whether teachers' input was sought during the planning of CPTD in Gert Sibande district. Although the SMT members indicated that there was some form of consultation done with them when CPTD was designed in the district, it was not the case with teachers. The findings of the study established that teachers were not consulted at all when CPTD was designed for them, yet they were very key in implementation in the classroom. This meant that teachers did not have a say in the design of the content of the 2 hour sessions run quarterly for all subjects' content. This lack of consultation

robbed the department of valuable input and collective ownership of CPTD programmes by teachers on the ground. Fullan et al. (2005) also maintain the importance of the teachers' voice in the whole education reform cycle and stress that it widens the pool of ideas and enables the teachers to take ownership of the change process (Mkhwanazi, 2014). When teachers are given a voice during the design stage of CPTD (McDonald, 1988), it displays the department's underlying theoretical framework of embracing teachers as people that can be responsible for their professional growth. It indicates that the leadership in the department recognize teachers as people with personal mastery, having made a choice to work for change and be responsible for their own growth (Senge, 1999). Failure to allow teachers this space reflects a traditional view of leadership viewing themselves as heroes who needed to be worshipped. It reflects a leadership that operates on the basis that the people they lead are powerless and they lack the vision to master forces of change (Senge, 1999).

The study also assessed the quality of facilitation as it could affect teachers' response to CPTD if it was poor. Adu and Okeke (2014) cited improved ways for teacher learning where teachers are involved in sessions and are constructors of their own learning. Such learning enables the participants to tap into their prior knowledge as they interact with the new competences they are taken through. The findings of the study indicated that the facilitators of CPTD at Gert Sibande district were always well prepared for the sessions and presented themselves very well, generally. In the substantiation of their views, respondents further indicated that the subject advisors as facilitators were also knowledgeable in the subjects they led and this enabled them to lead fruitful discussions and conduct active participatory sessions with teachers. However, the whole approach to CPTD in the district was still traditionally based as it was in form of workshops and training. As indicated previously, the institutionalised cluster activities run by upper grade teachers were used for moderation of SBA instead of developing new cultures of learning for teachers, based on their commitment to change (Fullan et al., 2005).

The study also established the extent to which there was usefulness of learnt competences in classroom practice to rationalize teachers' attendance of CPTD sessions. If the correlation was non-existent, it would become a challenge for further participation in CPTD and for the system. The usefulness of learnt competences in class depended upon whether the CPTD learning agenda was in sync with the participants' needs so that teachers would be able to attach meaning to what they were learning. Doherty (2011) refers to this concept as meaningful learning which enables the participant to associate newly learnt concepts with what already exists in their knowledge base. These associations drive the participants to practice learnt competences. However, Guskey (2002) observes that applying what one has learnt in class is the last level in the scale of impact assessment and this is initiated by imitative use, mechanical use and routine use which might happen closer to the development session itself. The next level of integrated use and executive use involves a high level of understanding and independence which displays ownership of the learnt competence. In line with this assertion, Doherty (2011), after conducting a study where teachers were taken through the development of a Web tool, concluded that even if teachers can report positively about their involvement in a development session, indicating that the expectations they had prior to the engagement were met, implementing learnt competences was not guaranteed as teachers in that study were found to not having implemented what they had learnt despite their positive assertions about the training session. In line with the above indication, in the current study, respondents indicated that what they were taught at CPTD sessions was useful to classroom practice but this did not mean that what they said could be accepted at face value. There was need for further investigation to confirm implementation of learnt competencies in the classrooms of teachers that were involved in CPTD in Gert Sibande District of Education, as well as establishing how soon after training the implementation occurred.

Regarding time allocated to CPTD, there has always been a challenge with regard to whether it was enough or whether the time spent in CPTD was

protected by the department. Otherwise the teacher had to feel guilty when attending CPTD because learners are left unattended. Darling-Hammond, et al. (2010) provide a snap shot of how the countries participating in the OECD managed CPTD time within the working hours. The authors noted that the Scandinavian countries provided the whole year for the induction of a new teacher in a teaching school while other countries like Greece, Japan, New Zealand, and Switzerland provided release time for induction where a teacher worked with a mentor. New Zealand provided 20% release time to allow the teacher to be taken through a formal induction programme. Equally so, mentoring teachers were also given time to observe beginner teachers teach in class. Teachers in the United States were given 3-5 hours per week for lesson planning and 15 to 25 hours per week to work collaboratively with another teacher, to analyse learner performance and to observe other teachers teach. The researchers (Darling-Hammond et al., 2010) further noted that other countries like Denmark, Italy, Finland and Norway provided teachers with time to evaluate their own teaching and conduct action research whose findings were shared with colleagues in conferences and in publications. Since the Japanese lesson study was discussed in chapter 2, it suffices to mention that according to Darling-Hammond et al. (2010), teachers in Japan have 10-15 hours for group meetings and lesson study spread over 3 to 4 weeks. They are therefore, given ample time as the school day ends between 13h45 and 14h40. Teachers only dismiss at 17h00, giving them plenty of time to engage in lesson study and make all follow ups with regard to lesson study responsibilities (Darling-Hammond et al., 2010).

Sometimes the system becomes entangled in self-defeating regulations that deprive teachers of quality CPTD time because teaching time cannot be sacrificed. Managers have a responsibility to take trend setting decisions that will ensure a balance between teacher professional development and teaching in class.

In comparison to the above-mentioned good practices, the duration for state-led CPTD in Gert Sibande District was found to be problematic. The current quarterly

subject content workshops run for 2 hours (starting at 13h00 and ending at 15h00) was too short to allow for exhaustive coverage of material. The Department targeted the holidays for intensive and extended interaction with teachers. The study findings supported the use of one day for CPTD training; indicating support for the current 1+4 model used to train Grade 9 Mathematics teachers. However, there was need to make room for school based, teacher driven, sustainable job-embedded approaches which allow teachers room to own the development process. There was also need for the system to show support for CPTD by regulating time for teachers to engage in CPTD in the other content subjects in the same manner as is done for the 1+4 programme. Teachers would attend without feelings of guilt having left the learners in class unattended. There was also need to further explore how the OECD countries managed the learners and their teaching, as well as the teacher's work load while teachers were on CPTD time off so that teachers do not lag behind in their planned work. The following section discusses the respondents' views on how CPTD implementation can be enhanced.

4.4.4 What could be done to enhance the implementation of state-led CPTD programmes?

The study checked the teachers' preferences on selected aspects for the enhancement of CPTD programmes. The study revealed that subject content was a preferred focus for CPTD and if there was any other aspect that needed attention, it would be preferred if it was coupled with the subject content as the context. Mokhele (2014b) views CPTD that focuses on content as of high quality as it adds to the teacher's knowledge. This preference endorses the focus on the current content subject CPTD sessions run once per quarter in one afternoon, for 2 hours per group per grade, and the 1+4 Mathematics workshops for Grade 9 in the district.

On the mode of delivery, the study revealed that the residential mode was preferred. This was in line with the directive provided by the ISPFTED

(DBE&DHET, 2011) with regard to the Provincial Teacher Development Institute (PTDI) which, according to the strategy would be a CPTD delivery site and must have residential facilities for overnight arrangements. However, the policy states that these overnight facilities will be for the development of strategic participants such as mentors, as it is the case in high achieving countries like Singapore (Darling-Hammond et al., 2010). Subject advisors and any persons who are a focussed resource for CPTD would also qualify. Although Selemani-Meke (2011) recommended residential workshops for the Malawian teachers, it cannot be the same in this study because of the economies of scale and economic reasons. The large numbers of teachers involved in CPTD at a time will lead to high cost that cannot be afforded by the department. It would not be strategic to expect the provincial institute to directly service the teachers on the ground when the subject advisors at local structures can do that in terms of capacity. According to the study, non-residential CPTD sessions should be offered at Gert Sibande District and the system should reserve the residential sessions for strategic groupings and intensive development when there is a need identified outside the job-embedded CPTD.

Concerning preferred venues for holding CPTD sessions, the study revealed that the DTDCs were preferred by teachers as venues while the SMTs preferred classrooms with learners being taught, indicating a stance for school-based and job-embedded CPTD. The findings further indicated that any hall was preferred considering that DTDCs were few in Gert Sibande. It would be interesting for research to follow up on the job-embedded classroom venue preferred by SMTs to establish the context of that preference in real implementation.

The study also established that teachers preferred CPTD sessions to be held for at least 2 days and up to a maximum of one week while SMTs indicated the need for some continuity and preferred 'on-going' as the duration. It was encouraging that SMTs seemed ready for change as they embraced on-site professional development in comparison to teachers who were still fixated on the traditional in-service training mode. Key to the 'two days and up to the maximum of one

week's preferred by teachers for CPTD, was the leadership that needed to prevail on the part of the department in coming up with a policy for effective teacher substitutes to continue teaching while the classroom teacher participated in CPTD. From the study, it was clear that the use of on-site CPTD, where teachers work with peers, should be encouraged. For the face-to-face sessions which are needed from time to time due to the introduction of changes in the curriculum that affects subject content, a period of two days up to a week should be the norm, depending on the amount of content that need to be covered.

The findings of the study indicated the use of school week days for CPTD is preferred time instead of weekends or school holidays. If ever for some reason a school holiday had to be used, the findings suggested the use of June school holiday as it was long enough to allow participants to attend CPTD and rest before schools' reopening. The suggestion for the use of week days for CPTD was in line with what was the norm in high achieving OECD countries such as New Zealand, Greece, France and others (Fullan et al., 2005). However, the department had to come up with systems for both learner and teacher support during the period when the teacher was attending CPTD sessions to ensure that the teacher concentrates fully on professional development.

Schools in Gert Sibande District are managed by circuit offices and in terms of the line function, circuit offices report to the district and those offices play a huge role in the implementation of state-led CPTD and in disseminating resources to schools. The study investigated which office or level among the above-mentioned was preferred for the organization of CPTD for teachers. The findings of the study revealed that the level preferred for organizing CPTD was the circuit level and this preference was suitable in terms of locality and accountability. The only problem with the circuit office was that only the circuit manager was the professional official at the office. At the moment this manager is responsible for everything with regard to schools in the circuit. As custodians of the curriculum, circuit managers would assist in the coordination and logistics. However, in the near future there was need for the system to look at curriculum management

functions that could be devolved to the level of the circuit. Once that is done, human resources could be deployed to that local level, especially for curriculum management in primary schools.

On the determination of preferred forms of recognition for participation in CPTD, the study revealed that principals preferred gaining CPTD points while teachers preferred getting a certificate of participation or attendance. The certificate would act as evidence of their participation and could be included whenever the participant applied for a job. This was found to be one of the powerful ways that acted as an incentive for teachers to be involved in CPTD.

With regards to the respondents' preference on whether CPTD should be compulsory or voluntary for teachers, the study findings indicated that respondents preferred CPTD to be compulsory because of standardisation of quality teaching in all schools. However, the stance preferred by the respondents indicated that teachers had not reached the developed stage in terms of their understanding of the department as an organisation and its goals, as they expected to be coerced by management for their development. Wenger's social learning theory and Senge's learning organisations (Senge, 1990; Steyn, 2008) are the theoretical frameworks directing the current study, stress personal mastery as a very important attribute that should drive teachers to high levels of understanding of the organisation's vision which enables the teacher to be self-regulatory instead of being coerced to attend CPTD. The theoretical framework warns against the existence of traditional leadership which compels teachers to attend professional development activities. It further promotes a new leader who, according to the framework, is a designer, a teacher and a steward. Such a leader builds the learning organization that consists of people with a common vision and a disposition to continually and voluntarily learn as they naturally feel their interconnectedness with others and life (Senge, 1994; Smith, 2001). Under the stewardship of the leadership depicted, teachers take charge of their learning and make choices to be involved in CPTD and there is no need to make CPTD

compulsory. The findings of the study also indicated the need to integrate the state-led CPTD with job-embedded approaches like the professional learning communities, the use of mentors, lesson study, action research and others to create a balance in teacher driven CPTD and allow space for teachers to be at the driving seat of their development.

4.5 SUMMARY

The chapter presented the research data and analysed it to reveal the trends in the implementation of CPTD in the Gert Sibande District of Education. The biographical data was presented as well as results on the sub research question. In this chapter the researcher concluded by discussing the findings of the research. In the next chapter the researcher presents the summary, conclusion and the recommendations of the study.

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CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

In the previous chapter the researcher dealt with the presentation and analysis of the results in the study where the results were presented and analysed in accordance with the guiding questions identified earlier. In this chapter the researcher summarises the study's findings by drawing conclusion about the /assessment of the implementation of state-led CPTD in the selected district as per the findings of the study. The researcher also makes some recommendations in the light of research findings and presents a framework for CPTD in Gert Sibande District of Education for effective implementation of CPTD. The research questions are restated below.

5.2 RESTATING OF RESEARCH PROBLEM

The problem that triggered the study was the inability of the department of education to conform to the prescripts of the National Policy Framework for Teacher Education and Development in addressing teacher's needs as teachers participated in state-led CPTD. The framework was meant to guide the department in planning, implementing, monitoring and evaluating professional development programmes for the teachers. Although the department managed to provide state-led CPTD to a large number of teachers since the education reform started in 1996, there were consistent problems raised against state-led CPTD such as:

- The perpetuation of the traditional approach that concentrated on individualistic learning instead of encouraging collaborative learning where teachers drive their own development as they work with peers.
- The external control of the CPTD programmes depriving teachers of their 'voice' (Stacy, 2013: 40) in the training material and compromising their sense of ownership of the programmes.
- The training of teachers off-site robbing teachers of holistic growth and creating a disjuncture when teachers had to implement what they learnt in their classrooms.

These difficulties with training led to non-implementation of what was learnt during training in the classroom. There had been no growth displayed by teachers in their classrooms and their self-concept had taken a dip as they became aware that they were found wanting. The under-performance of South African learners during the international assessments and the Annual National Assements which was dismal nationally, especially for Grade 9 Mathematics, robbed teachers of their professional status. The state of affairs indicated above called for an investigation of the implementation of state-led CPTD in the district in order to come up with recommendations for its effective implementation.

5.2.1 Main Research Question

As indicated earlier, the study was guided by the following main question:

How is state-led continuing professional teacher development (CPTD) implemented in the Gert Sibande District?

The study established that state-led CPTD in Gert Sibande was implemented and driven by the Department of Education in terms of the National Policy Framework for Teacher Education which states that some of the professional development activities should be driven by the state. However, these professional development activities were found to predominantly follow the traditional mode of training where teachers are assembled in a central place for training. The 1+4 model for Mathematics teachers, the quarterly two hour content

subjects training, and the other specialized training offered by other supporting directorates like Inclusive Education and Curriculum Enrichment, were found to be the main CPTD offered for teachers in the district.

5.2.2 Sub-Research Questions

In answering the main research question, the study sought to answer the following sub-research questions discussed in the sub-sections below:

5.2.2.1 *What is the nature of state-led continuing professional teacher development (CPTD) in Gert Sibande District of Education?*

The CPTD activities provided by the department and attended by teachers were mainly traditional in-service training organized by the district subject advisors not by teachers themselves. The majority of teachers attended 3 to 5 sessions on average per year and the researcher could not get evidence that the teachers' needs were considered in the planning of these activities as there had been no formal process for teacher consultation, nor any process of determination of needs from the teachers' IQMS Professional Growth Plans (PGPs). CPTD activities were mainly driven by the system's transformation agenda and the systems' benchmarks emanating from national, provincial and district targets. The basis of the training agenda was also the information emanating from the analysis of responses from provincial common assessments, as well as analysis of learner responses from previous exam papers.

5.2.2.2 *What are the factors promoting the implementation of CPTD programmes?*

The study indicated that high expectations for the increased knowledge gains on the subject matter and the perceived usefulness of competences learnt in class promoted teachers' attendance of state-led CPTD sessions in Gert Sibande District of Education. However, late receipt and non-receipt of invitations to CPTD sessions hindered CPTD implementation as teachers were forced to drop

other planned activities or stay away from what was perceived to be much needed CPTD sessions due to lack of planning.

Structural issues such as large teaching workload caused by either overcrowded classroom or responsibility for many subjects as in multigrade teaching discouraged the subsequent attendance of CPTD sessions after the teacher failed to implement what was learnt previously from a CPTD session. Multigrade teachers, faced with multiple demands to attend CPTD sessions for various subjects that ran concurrently without considering the multigrade teachers' teaching of many subjects made it impossible for them to attend CPTD sessions for some subjects as they chose one subject amongst those that would be offered at the time. No follow-up would be done for those who could not attend because of the mentioned problem above.

5.2.2.3 *What challenges beset the implementation of CPTD programmes?*

The study raised a number of challenges such as the lack of consultation for teachers to enable the department to plan the CPTD sessions on the basis of the needs of teachers. The time for CPTD was indicated as another challenge. Although the Senior Phase Mathematics CPTD was allocated the whole day every first day of the week to do formal CPTD, the majority of subjects, including content subjects for all phases, were only allocated 2 hours in the afternoon. The allocation was once per quarter where teachers were assisted with planning for the whole quarter. This was not enough according to teachers' responses. The use of working time for CPTD versus teachers' time (weekends and holidays) was also raised as a challenge for teachers, and the findings in the study indicated a preference for the use of working time for CPTD; something that the 1+4 model conformed to already. It was of interest to the current study to observe how the department would handle the rolling out of the 1+4 model to all subjects should that decision be taken.

5.2.2.4 *What could be done to enhance the implementation of state-led CPTD programmes?*

The study indicated that there was need for the district and the province to adapt their CPTD approach from being purely traditional, in-service training to job-embedded training. This, while continuing with the focus on subject content as the study and research showed that it was perceived as the best focus for CPTD which encourages teachers be involved in CPTD continuously. Keeping the CPTD sessions to local structures such as the circuits and schools to enable teachers to access the centres easily would enhance the logistical arrangements as well as the quality of sessions. This would also provide for smooth translation of these traditional in-service training sessions into collaborative teacher driven sessions where teachers would begin to work as peers and conduct lesson study in their own classrooms. This is unlike when they attend training sessions with teachers from all over the district.

The use of fully resourced District Teacher Development Centres (DTDC) came out as a preferred option as per the prescript of the NPFTED as it enhanced participation in job embedded CPTD such as the PLCs. This is because the group of teachers can access free internet there as well as use labour saving devices and other resources available in the centre. Although Gert Sibande District has three DTDCs with one centre servicing a cluster of circuits, teachers who are close to these centres are encouraged to fully make use of them especially because DTDCs are tasked with the establishment and rendering of support to PLCs by the ISPFTED. To maximize teacher support, resources can be devolved to some circuits to ensure that PLCs are supported maximally in order to deal with the issue of distance to DTDCs.

5.3 SUMMARY OF FINDINGS

This section presents the summary of findings, focusing on each of the research sub-questions namely; what is the nature of state-led CPTD? What factors promote or hinder state-CPTD implementation? What challenges beset the

implementation of CPTD programmes? The section closes by providing a summary of what is proposed should be done to enhance the implementation of state-CPTD.

5.3.1 The nature of state-led continuing professional teacher development (CPTD)

The study found that traditional in-service training was the type of CPTD that was used in the district. The 2 hour afternoon face-to-face sessions for all content subjects in all grades continued to be offered at the beginning of the quarter where teachers were taken through the work of the rest of the quarter in that particular subject. Coupled with that, the study also revealed that there was the Mathematics 1+4 training that was offered every Monday in the 68 circuits where Grade 8 and 9 teachers were helped to prepare weekly lessons for classroom delivery in the four remaining days of the week. This was a nationally driven initiative directed by the Minister of Education to address the Grade 9 low performance in Mathematics as reflected in the 2014 and 2015 ANA results in the country. Mpumalanga was the first province to implement this initiative. These sessions were facilitated by subject advisors and some appointed lead teachers.

The study found that state-led CPTD in Gert Sibande district used the traditional training model which was confined to the running of workshops, training and taking teachers out of the classroom to some central venue where they were addressed by subject advisors who acted as 'experts' in the subject. The approach of state-led CPTD in Gert Sibande District stifled teachers' innovativeness and their capacity to be at the driving seat of their learning as the NPFTED directs (as it will be noticed in later paragraphs, teachers always have to wait to be organised by the district for CPTD).

The study could not determine the extent to which the clusters set for FET teachers by the 1999-2004 MSSl were used for CPTD. What was apparent was that these had been institutionalised and dealt more with the moderation of SBA.

There had been no in depth professional learning through collaboration for example lesson study, mentoring, action research and coaching that had been noted. The clusters were now used for standardisation of school assessments and more in depth study was needed to evaluate their contribution to subject content and CPTD. There is need for a reconfiguration of these clusters to purely function as PLCs that are being reconceptualised by the Department of Basic Education as directed by the ISPFTED.

On the frequency of CPTD activities, the study indicated that teachers attend 3 to 5 sessions per year. This was in line with the 2 hour quarterly content workshops run at the beginning of each quarter to assist teachers to prepare lessons for the whole quarter. High frequencies of CPTD attendance were also noted in the study representing the fact that Mathematics teachers attend more sessions due to their weekly Monday sessions.

On determining the level that was responsible for the organization or initiation of CPTD considering that the system has the school, the circuit and the district, as possible entities that would initiate CPTD, the research findings indicated that CPTD was mostly organised from outside the school. Most state-led CPTD activities are initiated by the district's subject advisor followed by the principals. The study established that a few activities were initiated by the circuit office, which is the management office on the ground, than the school. The absence of CPTD organized by the teacher himself/herself showed a gap that needed to be closed. Teachers were not taking a keen interest in organising CPTD themselves except the SMT members who viewed themselves as organisers of CPTD by virtue of being managers.

On the determination of the focus of CPTD, the study indicated that most CPTD focused on subject content followed by methods of teaching. This was commendable as literature indicates these foci as characteristic of effective CPTD. Other aspects covered by state-led CPTD in Gert Sibande district were

identified as orientation to the changes in the curriculum. Since the inception of C2005 in 1996, there has been a lot of adaptation in the curriculum which led to the current National Curriculum Statements and these changes need to be communicated. The department used the state-led CPTD run through the workshops, to communicate these changes.

The study had to determine the consistence of CPTD establishing whether they were once-off or on-going and the results indicated that the state-led CPTD was identified as on-going. The context in which CPTD was on-going was associated with the Mathematics 1+4 workshops that took place on weekly basis and the cluster activities occurring from time to time regardless of the quality of engagements at these sessions. The study assessed the overall effectiveness of the state-led CPTD in Gert Sibande District requesting participants to choose from very poor, poor, average good and excellent. The state-led CPTD implementation in Gert Sibande District was rated as good by the majority of participants relating this assessment to the manner in which subject advisors as CPTD facilitators handle themselves. Subject advisors were described as knowledgeable in their subjects, professional, time conscious and possessing good facilitation skills accolades that were commendable for the department.

It was clear that the nature of state-led CPTD in Gert Sibande was that of traditional in-service training which was regularly run centrally by capable subject advisors. Although the subject advisors were envisaged as capable, research indicates that the limitations lay with the model used in state-led CPTD which fails to develop teachers in their totality by addressing their attitudes and beliefs to enable them to change their teaching practice on the basis of the new competences learnt. The extent to which professional teacher development happen in the few clusters mentioned by participants was not clear. There is need to take stock of what exactly is happening during cluster meetings. Instead of having cluster leaders solely focusing of the moderation of SBA for FET schools, there is a need to de-institutionalise these clusters and enable them to

function as proper PLCs where teachers collaboratively deal with subject content competences.

5.3.2 Factors promoting or hindering the implementation of CPTD programmes.

The findings of the study indicated that opportunities providing for the increase of knowledge on the subject matter drove teachers to attend CPTD programmes while the absence of such from the agenda of the workshop for state-led CPTD hindered teachers' attendance. The usefulness of learnt competences in class was also a variable investigated by the researcher. When what was listed on the training agenda was viewed as not so useful to class, attendance was hindered and vice versa. The findings of the study established from the input made by respondents that overall, what was learnt could be used in the classroom and the teachers were encouraged to attend the state-led CPTD programmes. However, being aware that teachers always gave a positive assessment of experiences during CPTD sessions about learnt competences but never or very minimally implemented the strategies learnt (Doherty, 2011), the researcher could not just accept this assertion at face value. There was need for a full investigation of the extent to which teachers implemented the learnt competences in class.

The study also listed factors that had the potential to constrain attendance or participation in state-led CPTD. Respondents were asked to choose one main prohibiting factor amongst them. The finding pointed to the large workload and late receipt of information about state-led CPTD activity as two prohibiting factors that made participants not to attend state-led CPTD. The large workload referred to multiple factors ranging from overcrowded classrooms to teachers being responsible for many subjects in a normal school and teaching in multi-grade classrooms. Teaching in an overcrowded classroom becomes a barrier when a teacher has to try new methodologies especially when the new methodology was learnt off-site in some training room somewhere in a remote site. Reality strikes in an overcrowded classroom and this causes the teacher not to attend future trainings as the newly acquired competences cannot be implemented in his/her

classroom. A teacher who is over burdened with more subjects, whether in a normal school or in a multi-grade classroom gets overloaded as invitations to workshops for which he or she should attend may run concurrently. Even when they do not run concurrently, such a teacher may not have time to concentrate and try one strategy following up on it until she/he is perfect because of the demands from other subjects. Besides, the system's operation does not accommodate the needs of the multi-grade teacher when timelines are set for the department to receive responses and submissions from such a teacher.

5.3.3 Challenges in the implementation of state-led CPTD programmes

The study was interested in getting respondents' views on the challenges associated with the implementation of state-led CPTD programmes. When the researchers enquired whether teachers are consulted when CPTD programmes are designed, the teachers indicated that they were not consulted but members of SMTs indicated that they were consulted which the researcher attributed to them being in management. The fact that teachers were not consulted indicated a huge shortcoming because the bulk of CPTD that has a direct bearing on learners' performance is done by the teacher and if a teacher is not consulted; his/her voice is not added to the development package. This disregard of teacher consultation displays a subtle inclination to a traditional style of organizational leadership that emanates from a belief that only few people need to give direction. The rest of the people are followers who need to do as they are told (Senge, 1990). Contrary to that, the system needs to build the organization by allowing teachers to continually generate ideas that will form the agenda for professional development.

The study needed respondents' views on facilitation skills of the drivers of state-led CPTD in Gert Sibande district and the findings indicated that the facilitation skills displayed by the subject advisors were good, across the board. This finding was very encouraging and actually explained why teachers still showed up in the 1+4 Mathematics workshops and the quarterly content subjects' workshops that were being conducted. Poor facilitation skills can be a deterrent to teachers

attending the workshops. However, as indicated above, the main problem was with the minimal envisaged change effected by the teacher in class because of the limiting approach used in CPTD provisioning.

The study also established the teachers' opinions on the usefulness of what was learnt in the classroom. Developing the teachers on something not relevant for the classroom would deter them from attending CPTD when asked to do so. The findings of the study indicated that an average of 30% of the participants rated what was learnt during CPTD sessions helpful to the classroom.

The findings of the study indicated that respondents believed it was sufficient for a state-led CPTD session to take 1 day. It is the researcher's opinion that this finding was influenced by the 1+4 model for Mathematics that takes place in all circuits to improve the Mathematics performance. Teachers could have used that as a standard unlike the 2hr sessions they held for content subjects once a quarter. The study had established that high performing countries have dedicated time for CPTD. The US allocates 3-5 hours per week for teachers' lesson planning while in other successful countries teachers are given between 15 to 25 hours per week for teacher collaboration and peer interaction. The Japanese lesson study also takes place during working hours, teacher conferencing and preparation for the next leg taking place during school hours and teaching time. (Darling-Hammond et al., 2010). The difference between the situation in the province and that in the countries mentioned was that in those countries, teacher's CPTD is collaborative, on-going and happens on-site while with the state-led CPTD the activity becomes an event and teachers move out of classrooms to central venues for formal training session. There is something to learn from the developing countries.

On the methods used for state-led CPTD, the findings of the study pointed to group work being the most used method. However, the extent to which group work contributes to teacher learning depended on the allocated time. For example, in the case of the 2hr sessions used for content subjects, group work

would just be used as a token due to the limited time assigned to the session. Effective group work is associated with collaborative work that engages participants in active learning and develops deep critical thinking. In the 1 day Mathematics workshop, teachers can benefit on a limited scale, from group work but the more time the groups spend engaging, the more deep critical thinking and interaction is unlocked.

Teachers' perceptions on whether they found the implementation of what they learnt easy or difficult, impact on the constancy of attendance in CPTD sessions. The study established how the teachers found the implementation of what they learnt and the findings pointed that the participants found it easy. However, there was need to conduct an in-depth research to determine the extent to which teachers implemented what they get trained on, in the content subjects CPTD and in the 1+4 model for Mathematics. Research had warned that teachers' articulations and their evaluation on how they find the implementation of what they have learnt should not be taken at face value (Dorhety, 2011).

5.3.4 What could be done to enhance the implementation of state-led CPTD programmes

As the study confirmed participants' preference for subject content CPTD programmes, and because it has been ratified by research as critical among factors characteristics of effective CPTD (Mokhele, 2014b), the district was found to be on the right track in prioritizing subject content. Teachers were encouraged to be at the driving seat of their development and to take ownership of their learning by forming PLCs at their schools and begin to interact among each other.

In 4.4.4, the preferred delivery mode for state-led CPTD was identified as the residential mode not of non-residential (walk in and out) and distance learning. It was observed that the ISPFTED directs that residential facilities be attached to the Provincial Institute for the development of the core groups. These are key groupings such as subject advisors, curriculum developers and other key officials

that are at the centre of rendering support and the delivery of quality CPTD to all teachers in the province. Teachers preferred to sleep over because of convenience for those who come from far flung areas. There was also a very strong opinion against the residential mode with other teachers citing responsibilities towards families making it imperative for them to sleep at home all the time. Using the residential mode for all teachers (over 30 000) in the province is a far-fetched idea that comes with a huge financial burden which cannot be afforded by the department. At the moment teachers meet at circuit level, and sometimes two adjacent circuits combine at their DTDC for workshops during the day and teachers manage to sleep at their homes by the end of the day. This approach needs to be localized further to encourage teachers and schools to form PLCs so that they do not leave their schools at all, as development will take place right at school in class. The core team that is centrally developed, such as subject advisors and mentors, will be on standby to support teachers at their local sites and schools so that the transmissive model (workshops) is gradually done away with.

On the preferred venue for holding CPTD, the study established that the DTDC was the preferred venue because it was equipped with resources. As per the directive of the ISPFTED, the DTDCs need strengthening and beefing up in their resources in order to support the PLCs. In the district, the DTDC houses the subject advisors and this enables them to add value to any meeting held at the premises.

The findings of the study indicated the preferred duration for CPTD as on-going while the teacher groupings, influenced by their experiences of the Mathematics model and the content subjects CPTD, indicated 2 days. On-going CPTD is in keeping with the spirit of the current study as it addresses education reform. Real reform approach to CPTD should be adopted by the district and the province by shifting to on-site development for teachers using lesson study, action research and other collaborative teacher driven CPTD activities.

The study enquired about whether teachers would like state-led CPTD to be voluntary or compulsory and the findings were that teachers preferred CPTD to be compulsory in order to be enforceable. However, international literature indicated that in most countries leading in education, CPTD is voluntary. These countries mostly use the job-embedded models where teachers work collaboratively with peers resulting in a high level of motivation. It is incumbent upon management to develop a culture of trusting teachers who are expected to behave professionally by voluntarily involving themselves in collaborative CPTD for the improvement of their teaching.

5.4 CONCLUSIONS OF THE STUDY

5.4.1 *Nature of state-led continuing professional teacher development (CPTD)*

State-led CPTD was regarded as CPTD that is used by the state to achieve its mandate of ensuring that teachers are up to speed with developments in education. In keeping with the NPFTED as the policy that directs teacher education and nominates the state as one of the initiators of teacher professional development, the district conformed and provides professional development to teachers as the representative of the department and the state. However, the fact that the nature of the state-led CPTD offered in Gert Sibande district was traditional in-service training which confined itself to equipping teachers only with skills for the job they are appointed for, compromised teacher learning. The training pack did not develop teachers holistically to include their attitudes, beliefs and values. Addressing teachers' attitudes, beliefs and values in professional development, enables teachers to change their old ways of doing things and embrace the new approaches to teach better and shape the learner's future better. This culminates in improved learner performance. The study therefore, observes that state-led CPTD in Gert Sibande district equals traditional in service training which is obsolete and needs to be replaced by job-embedded approaches as it is neither sustainable nor consistent with education reform directives.

5.4.2 Factors promoting or hindering the implementation of CPTD programmes.

The study found that if teachers' expectations are not aligned with the CPTD programme at hand, the non-alignment tends to hinder participation. However, when expectations made prior to the CPTD engagement are met, this motivates all future participation. Apart from expectations, other factors that hinder CPTD implementation are the large teacher workload, late receipt of invitations to the workshops, unsuitable time of the year for the CPTD programmes like holidays, and long distances travelled to CPTD venues.

5.4.3 Challenges in the implementation of CPTD programmes

The investigation of the impact of facilitation in the study indicated that this challenge was not rife in the district as the majority of respondents indicated that facilitators were professional and knowledgeable about their subjects which was commendable. On consultation for CPTD programme design, this element was found missing in Gert Sibande district yet it was key for the study. Its absence pointed that CPTD was not informed by teachers' needs. It also exposed the fundamental theoretical framework that formed the basis from which the departmental leadership as a collective operated. This theoretical position affected the decisions taken, the directives given and the approach chosen for the development of teachers. The decision taken for the use of traditional state-led CPTD where teachers are subjected to workshops, on-going training, off-site sessions driven by experts who are subject advisers, reflected a leadership that did not believe in the capacity of teachers to bring change to their practice. Management operated from the "deficit mentality" which assumed that teachers needed to be fixed as there was something wrong with them, hence the on-going training. Over and above that, this challenge indicated that the department operated from a premise that the teachers had nothing to contribute to the design of CPTD; hence, they could not be consulted for the design of CPTD, something that needed to change.

The positive findings on the usefulness of what was learnt to classroom practice as a challenge cannot be taken at face value. It cannot be said with certainty that all aspects trained at CPTD sessions were very useful based on what research established that teachers presented a different positive verbal presentation on what was learnt praising how useful it was, yet whatever they mentioned never received actual implementation in class (Doherty 2011). There is need to conduct further study to determine whether the new competences learnt are being implemented and determine the extent to which that was being implemented, if it was ever implemented.

5.4.4 What could be done to enhance the implementation of state-led CPTD programmes?

The preference for the use of week days for CPTD is supported by research (Darling-Hammond et al. 2010) because CPTD has to take place on-site and on an active site for that matter, in order for lesson study and action research to be conducted. There is need to change how state-led CPTD is run in the district. CPTD run over the weekend cannot be relevant anymore because the teachers need learners to teach while peers observe during the CPTD. There is also strong evidence that when teachers as peers practice new methodologies and render collaborative support to each other through networks and PLCs, the new methodology gets strengthened in its implementation. The implementation of the Mathematics 1+4 model was highly supported. The whole day dedicated to CPTD influenced the participants' preference of one to two full days for content CPTD. This duration was viewed as enough to allow teachers to internalize good teaching practices as opposed to the quarterly 2 hour CPTD sessions. There is a need for policy makers to give a directive for the other subjects' CPTD too.

5.5 RECOMMENDATIONS

On the basis of the findings of this study, the following recommendations are made to the department with regard to the implementation of state-led CPTD in Gert sibande Education district and in Mpumalanga province:

5.5.1 Adoption of the Social Learning and Learning Organization theories

It is recommended that the Head for Education leads the process which will ensure that the management of Mpumalanga Education adopts Wenger's social learning and Peter Senge's learning organization theoretical framework to form the basis for the department's decision making and directives in key aspects such as CPTD implementation. This will enable the leadership of the Mpumalanga Education to re-define itself as leaders responsible for 'building the organization' (Senge, 1990:340) where teachers as employees will no longer be regarded as passive recipients of planned CPTD but will be viewed as willing participants who provide the agenda for teacher learning as they collaborate with peers. This participatory view of teachers will be driven by the fact that the department shall have embraced all principles of Senge's (1990) learning organization theory including the principle of personal mastery with regard to the teachers' disposition. Teachers will be viewed as those who are in possession of personal mastery enabling them to embrace and understand the vision of the department to an extent that they choose to continuously work for change to improve learner results as the output of the department as an organization. Hence teachers will choose to continuously develop themselves through collaborative CPTD in order to teach better and produce high achieving learners that take their rightful place in the society. The adoption of these two theoretical frameworks will enable the management of the department to issue clear CPTD engagement directives that direct that teacher needs form the basis of CPTD. The teacher unions should be brought in to support this stance. The school based activities should be integrated with periodical workshops that will be held when teachers have identified an area for intervention during their PLCs to strengthen teacher learning in their quest for taking ownership for their own learning.

5.5.2 Subject content as focus

It is recommended that the focus of teacher learning and CPTD continue to be subject content based as improvement in subject content directly link with high

learner performance. This focus must be central in teachers' engagement in PLCs, lesson study sessions, clusters, mentoring, coaching and other job embedded CPTD activities. It is suggested that the head of the Curriculum Branch through the involvement of the curriculum team manage this recommendation.

5.5.3 Elimination of institutionalization in FET clusters

It is also recommended that the FET manager deals with de-institutionalization of FET clusters in the province as this has robbed the district and the province of opportunities for real teacher collaboration in professional development. FET clusters should be used purely for professional teacher development and teacher collaboration instead of moderation of SBA.

5.5.4 Modification of the 1+4 Mathematics Model

It is further recommended that the 1+4 Mathematics model implemented in the district as guided by the province be modified by gradually fusing in the concept of the lesson study where teachers as peers, work on-site in one week, generating an agenda for sharing at the face-to-face workshop in the following week. The current use of the first day of the week for the workshop should be protected at the beginning, but gradually, management will spread the hours spent on CPTD over different days of the week. Progressively, the lesson study will be done more frequently using three Mondays while gradually minimizing the workshop arrangements to once per month and ultimately once quarterly. It is further recommended that the face-to-face sessions (workshop) be used as vehicle for advocacy of collaborative learning that share information on PLCs, how they operate, the use of mentors and coaches. This link between the workshop shall be maintained at first so that it is used to strengthen and drive the whole process of onsite collaborative learning. Subject advisors are to play the role of mentors and coaches performing their guiding role in schools, clusters and in lesson study sessions. They should identify highlights and key aspects

during lesson study conferencing as well as good practices in videos, in preparation for the sharing in the face-to-face sessions.

5.5.5 Introduction of job-embedded CPTD

It is therefore further recommended that the department through the head of the Curriculum Branch issue a clear directive that the job-embedded approach to CPTD be adopted in the province. The directive will specifically direct that the lesson study be introduced to support the quarterly 2 hour subject content workshops and enable teachers to collaboratively support and learn from each other in between the subject content, face-to-face CPTD sessions. Teachers will also engage in other job embedded collaborative CPTD activities such as the action research and PLCs in their schools targeting all content subjects. The subject advisors will resume a mentoring and coaching role.

5.5.6 Development of a pool of mentors and coaches

It is further recommended that the department (under the leadership of the Curriculum Branch Manager) develop subject advisors and lead teachers to mentor and coach teachers on site during their participation in job-embedded CPTD activities particularly in the lesson study, action research and PLCs. The department should ensure that mentors and coaches are equipped with proper skills to support the job-embedded CPTD activities. Senior teachers, heads of departments and other experienced teachers can be added to this pool. The provincial institute, as tasked by the ISPFTED, must undertake the responsibility for the development and functioning of this identified group. All new teachers and newly appointed managers must be inducted and attached to mentors for support in their careers. The framework for the effective implementation of CPTD is presented on Figure 5.1.

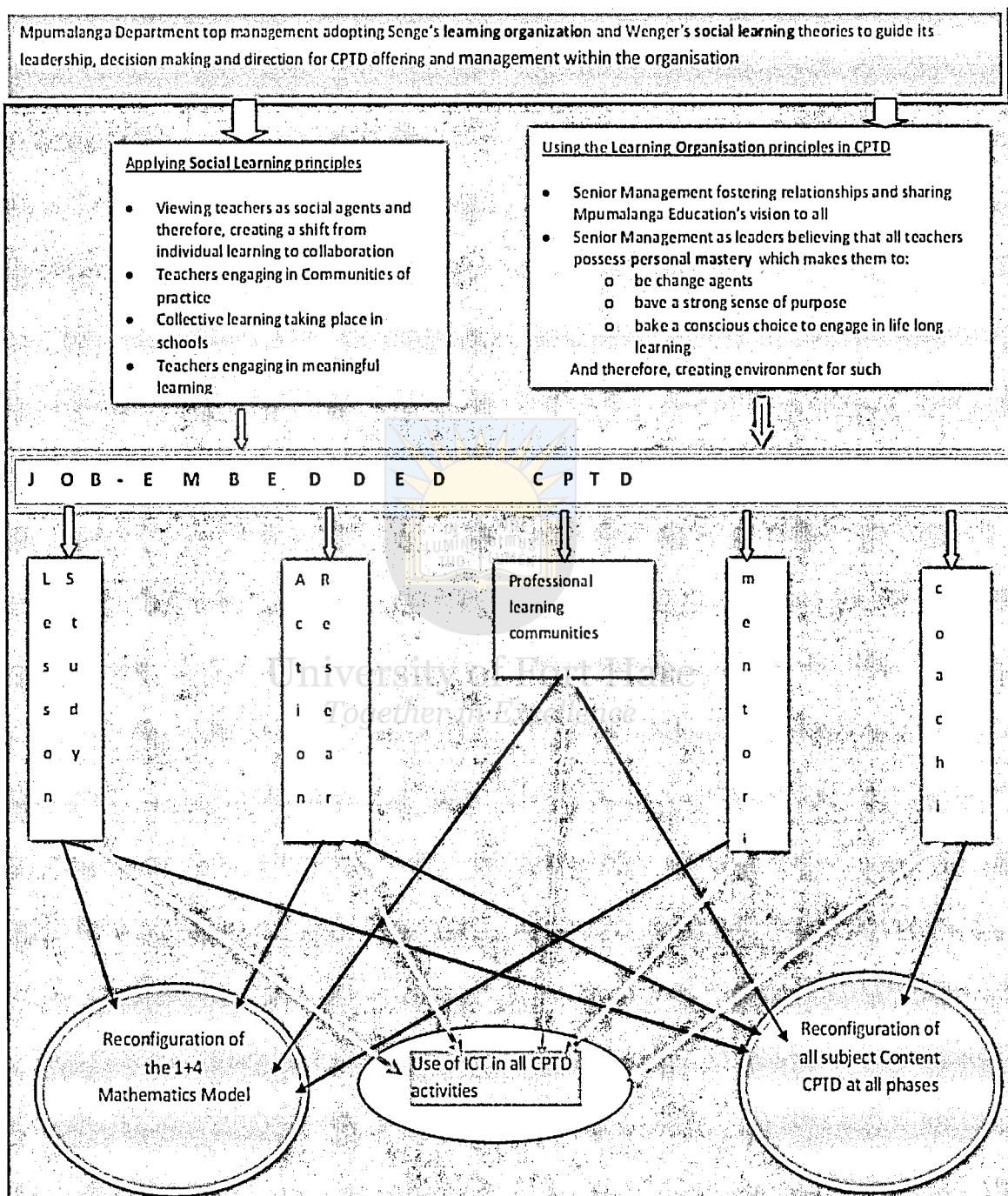


Figure 5.1 The framework for CPTD Implementation in Gert Sibande District of Education

5.5.7 The Framework

5.5.7.1 Adoption of Senge's learning organization and Wenger's social learning theories by the Department of Education's top management

The starting point in the proposed framework is the adoption of a theoretical framework by the department as an organization. Every organization should have a theoretical base which guides its identity and shapes its decisions for major approaches in the organisation. The principles embedded in the adopted theoretical framework explain the relationship between the lowest person in the organization and the leaders at the top. This relationship finds expression when managers take decisions that regulate behaviours of employees in the organisation. The suggested theoretical framework for the Department of Education in Mpumalanga is one that embraces teachers as active lifelong learners who will shape their own beings as professionals as they collaborate with other teachers. Senge's (1996) learning organization and Wenger's (1999) social learning theory will benefit the department in the conduct of its important functions in the delivery of quality education as the two theoretical frameworks' principles transform organisations and devolve change to be driven by the lowest person in the organization. As the department's main function is curriculum delivery to all learners and teachers, if teachers are not up to the required standard to enable them to efficiently teach, the department cannot succeed in its mandate. Of importance is how the department keeps teachers fit for this assignment and this affects the strategy used by the department for teachers' CPTD.

It is proposed that the department adopts Senge's (1990) learning organization and Wenger's (1999) social learning theories. The learning organization theories elevate the role of leaders in organisations higher and regard them as instrumental in determining how high an organization can rise through their behaviours and leadership style. The learning organization theory stresses five

principles: systems thinking, the use of mental models, team learning, shared vision, and personal mastery. In depth discussion for all five principles were done in Chapter 2. Only personal mastery is elevated in the framework because of its direct relevance to CPTD implementation. When leaders in the department believe that teachers possess personal mastery, teachers will be embraced as agents of change, people with a sense of purpose, people that have made a conscious choice to continuously learn and people that recognize their connectedness to others. The organization should adopt a CPTD approach that accentuates this disposition. Fullan (2011) labels such leaders as change knowledgeable leaders who strive for any little sign of achievement by the foot soldiers in the organization. Fullan (2011) further describes these leaders as those that encourage action, and support those they lead to become risk takers that are not afraid of little mistakes that occur along the way as they believe that it is in implementation that strategies are tested (Fullan, et al., 2005).

Wenger's (2007) social learning theory, as discussed in chapter 2, regards learning as a social activity. Communities of practice are a precondition for meaningful learning where members of the group define the agenda for learning and interact mutually on the basis of their experiences to shape their competence. Therefore, as the department designs its CPTD approach, it should create an opportunity for teachers' needs to inform the CPTD agenda and shy away from traditional approaches where teachers are trained as if they have nothing to offer. Job-embedded approaches that include teacher collaboration activities should be the main focus, as teachers learn better with peers.

5.5.7.2 Introduction of job-embedded approaches

The framework proposes the use of job-embedded approaches such as PLCs within which the lesson study, action research, mentoring, coaching and other teacher collaborative approaches for CPTD will be conducted in schools. Teachers are directed to organize themselves in PLCs according to phases,

subjects and grades right from school level which is the entry point for the formation of a PLC. Once PLCs have been established, the collaborative activities such as action research, lesson study, mentoring and coaching will be used for collaborative learning by teachers to address their needs as they are raised in their IQMS Professional Growth Plans (PGPs). Crucial in the formation of PLCs is the nomination of the person to lead the particular PLC by the teachers themselves. This person coordinates and leads the activities of the PLC. The support of school managers and head of departments is very key in making time available for teachers to meet and support these initiatives. It is important for the Department to create an ICT space where each PLC will be encouraged to register and post all activities that the PLC engages in, including requests for support by subject advisors and other resourceful persons. This ICT space is created for collaboration and sharing with the system to avoid the conservative way of monitoring. The ICT space will also be used to post generic information and resources for use by all teachers when they feel like using them, without any obligation.

5.5.7.3 Customisation of the 1+4 Model

The study recommends the adoption of an integrated approach to 1+4 by introducing job embedded approach activities in the model. Because this model is well organized already, the introduction of the lesson study to allow teachers to collaboratively prepare a lesson and observe it taught in class, critique it and adopt the final product, is recommended. The suggested lesson study approach is to be done in between the face-to-face sessions. This can start with one week at school and the following week at the centre for face-to-face sessions. Gradually, more weeks will be spent in schools and eventually starting by having face-to-face sessions once a month to once a quarter as per the teachers' needs. The Mathematics teachers can form a PLC according to their schools and circuits, and practise these lesson studies. The ICT resources attached to the DTDCs can be used for taking videos of these lessons to use as highlights when the whole group meets. It is recommended that Subject Advisors take the role of

mentors and coaches who will work with teachers who have set the professional agenda, on-site capturing highlights and good practices for sharing during the face-to-face sessions. Again, this model is to be linked to an ICT space where teachers can post their highlights, get supportive resources and chat with other teachers in a professional space.

5.5.7.4 *Content Subject CPTD*

The Lesson Study approach, conducted by the PLC members and driven by teachers, should be introduced for all subjects at all levels. Teachers participate in a collaborative lesson preparation and thereafter, observe a lesson being presented by one of them in that particular subject, followed by conferencing. The lessons learnt during these sessions should be documented and form the agenda for the once quarterly face-to-face sessions for sharing with the broader teaching community. The quarterly content subject workshop will be used for sharing good practices from the teachers' communities of practice and the lesson study sessions must provide input on the agenda of the face-to-face sessions. Subject advisors should act as mentors and coaches who work with teachers on-site and during their PLCs and the lesson study. The ICT space for all subjects should be created so that PLCs for all subjects can post their information and be supported by experts in the specific subjects.

5.5.7.5 *Capacity building for mentors and coaches*

The Department is to capacitate all subject advisors and other identified mentors in the system in their new roles as mentors. The mentoring role envisaged in the job-embedded approach is different from the role currently played by subject advisors and therefore, needs a paradigm shift from the subject experts. There is also a need to appoint mentors for all new teachers and newly appointed managers in order to support them in their roles, to ensure productivity. All principals' and teachers' induction programmes should include how to conduct the lesson study, action research and participate in a PLC at school. ICT

enhancement must form the basis of all CPTD offerings, including the training of mentors and coaches.

5.6 ACHIEVEMENT OF RESEARCH OBJECTIVES

5.6.1 Research objective 1: The nature of state-led CPTD in Gert Sibande District

The study achieved this objective as it was found that the nature of state-led CPTD is traditionally oriented as it takes the form of expert driven, off-site workshops and courses.

5.6.2 Research Objective 2: Identification of factors promoting or hindering state-led CPTD

This objective was also achieved as the findings of the study indicated that when teachers have expectation for increased content knowledge from CPTD participation, they become motivated to participate. The study also found that what teachers learnt in CPTD was useful. However, flouted logistics, as in late invitations to CPTD sessions, hindered participation.

5.6.3 Research Objective 3: Ascertaining challenges in CPTD implementation

This objective was also achieved. The study managed to identify some challenges associated with CPTD such as the duration of time for CPTD which was too short for the content subjects as it was only 2 hours once per quarter. The non-consultation of teachers when the CPTD was designed was also found to be a huge challenge which points to the department not being well grounded as far as its theoretical framework and its definition of teachers' attributes is concerned.

5.6.4 Research Objective 4: Enhancement of CPTD implementation

This objective was also achieved. On the basis of the findings of the study, it was proposed that the traditional model of state-led CPTD be replaced by the reformed, job-embedded CPTD. Job-embedded CPTD should equally focus on subject content enhancement as the study and research indicates preference for this focus.

5.7 RECOMMENDATIONS FOR FURTHER STUDY

It is recommended that further study be undertaken to determine the extent to which teachers implement the new skills they learnt in CPTD sessions. The study also needs to determine how soon teachers implement learnt competences after CPTD workshops. Focus should be on the practical observation instead of listening to teachers describing how useful they find what they have learnt. The study should get evidence of implementation in order to determine the extent of implementation. It is also advisable to establish the extent to which clusters operate as CPTD support entities in Mpumalanga, with special reference to the actual activities that are a focus in clusters.

5.8 SUMMARY

In this chapter the researcher presented the summary and conclusions of the study that was conducted in Gert Sibande Education District. It is hoped that the recommendations will assist the department to transform from conducting traditional CPTD to implementing teacher driven job-embedded professional development. Because the ISPFTED is being implemented as the recommended framework for teacher development, implementing the recommendations will place the province at an advantage as compared to other provinces. It is hoped that the implementation of job-embedded models suggested by the study will produce more professional, effective and high performing teachers in the district and in Mpumalanga Education Department as a whole.

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APPENDIX A: SCHOOL MANAGEMENT TEAM QUESTIONNAIRE

SECTION A: DEMOGRAPHIC DATA

1. Your gender

Male	2.Female
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2. Kindly provide your work experience in the spaces provided

No	Work experience in years
1	Less than one (1) year
2	1-5
3	6-10
4	11-15
5	16-20
6	21-25
7	26+

3. Kindly provide your age range in the space provided

No	Age range in years
1	Less than 20 years
2	21-25
3	26-30
4	31-35
5	36-40
6	More than 40 years

4. Nature of appointment?

1 Permanent	2. Acting
-------------	-----------

5. If you are acting, how long have you been in the acting capacity?

No	In years
1	Not applicable
2	0-1
3	2-3
4	4-5
5	6 and more

6. Please indicate your current post

- a) Principal
- b) Deputy Principal
- c) Head of Department
- d) Other (Please specify)



7. Please indicate years in the current post.

- a) 1-5 years
- b) 6-10
- c) 10 and above
- d) Other (specify)

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8. Type of your school

- a) Farm school
- b) Township school
- c) Town school
- d) Other (specify)

9. Please indicate your highest qualification (cross the number box provided)

No	Highest Academic Qualifications
1	Lower than Grade 12 (matric)
2	Grade 12 (Matric)
3	Post-school diploma
4	B-degree

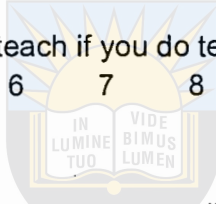
5	Honors degree or equivalent
6	Masters or equivalent
7	PhD
8	Other (specify

10. Please indicate your REQV

REQV 12	REQV 13	REQV 14	REQV15	REQV16	Above REQV17
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11. Please circle the Grades you teach if you do teach

1 2 3 4 5 6 7 8 9 None



12. Please indicate subjects that you are responsible for or teach

English	FAL	Mathematics	Vernacular (please state)	Other	None
	HL				

SECTION B: Implementation of Reform type of Continuing Professional Teacher Development (CPTD) programmes

(Note: Continuing Professional Teacher Development (CPTD) is lifelong learning that the teacher engages in to improve his/her teaching practice.

Reform type of CPTD are those teacher development activities where teachers work collaboratively on site in the classroom while teaching developing with their peers. Some of the example of such but are not limited, will be the use of clusters for subject content development, lesson study, mentoring, coaching, professional learning communities or communities of practice etc.

13. How many reform type CPTD activities have taken place in your school over the last 12 months?

- a) 1
- b) Less than 3
- c) Between 3 and 5
- d) Between 6 and 10
- e) Above 10
- f) None



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14. Who organized these activities?

- a) Not applicable
- b) The Principal
- c) The Deputy Principal
- d) The Head of Departments at school
- e) The Circuit Manager
- f) The Curriculum Implementer
- g) The Cluster Leader

15. What did the reform type CPTD deal with on average?

- a) Not applicable
- b) Subject Content
- c) School Based Assessment (SBA) moderation
- d) Method of teaching
- e) Other (Please specify)

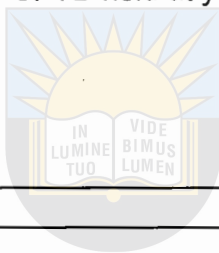
16. Please indicate your opinion on the overall effectiveness of these sessions by using the 5 point scale indicated below. **(Choose one)**

1	2	3	4	5
Very Poor	Poor	Average	Good	Excellent
Reason for rating:				

17. How regular is the reform type CPTD held at your school?

- a) Once off
- b) On-going

Please explain your choice



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SECTION C: IMPLEMENTATION OF TRADITIONAL IN-SERVICE TRAINING

Traditional In-service training is the professional teacher development activities that take place away from the classroom and they are delivered in form of trainings, workshops, courses, conferences etc.

18. How many traditional in-service trainings you or teachers in your school attended over the past 12 months?

Between 1 and 2	3 Trainings	Between 4 and 5	Between 6 and above	None
-----------------	-------------	-----------------	---------------------	------

19. Who organized the training?

The District/Curriculum Implementer (CI)	Cluster Leader	Principal	SMT	Circuit Manager	Other
--	----------------	-----------	-----	-----------------	-------

20. What did the training focus on?

- a) Subject content.
- b) Methods of teaching.
- c) Orientation to the new curriculum e.g. CAPS/NCS
- d) Other (specify)

21. Please indicate your level of satisfaction to the professional development mentioned above by rating in a scale of 1-5 as provided below:

1	2	3	4	5
Very Poor	Poor	Average	Good	Excellent
Reasons for your rating				

SECTION D: GENERAL QUESTIONS ON THE IMPLEMENTATION OF CPTD/ IN-SERVICE TRAINING

22.What is expected when teachers attend CPTD and In-service training? (Choose one)

- a) To be updated on current developments
- b) To increase knowledge of subject matter
- c) To increase professionalism
- d) To share experiences with colleagues.
- e) Other (specify)

23.Please indicate the extent to which the professional teacher development attended had been useful to classroom practice in your school

- a) Not helpful
- b) Slightly helpful
- c) Helpful
- d) Very helpful

Please give reasons for your choice



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24.Were you at any stage consulted to give input in the design of the In-service training programme arranged for teachers in your school?

i) Yes/No

If yes,

What were your inputs?

ii) Were your input taken into consideration?

a) Yes

b) No

25. Please rate the facilitators or trainers on their ability of training and their conversance of the training material

1	2	3	4	5
Very poor	Poor	Average	Good	Excellent

Please give reasons for your choice



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26. On average how much time is allocated in the professional teacher development programme provided for teachers? (Choose one).

- a) 1 Day
- b) 2 Days
- c) 3 Days
- d) 4 Days
- e) 5 Days
- f) 1 Week
- g) More than a week

27. Which of the following methods were used by the facilitators to impart knowledge and skills to teachers during the In-service training in the district (circle all that is applicable).

- a) Lecturing
- b) Question and answer
- c) Demonstration
- d) Group work
- e) Discussion
- f) Other (specify)

28. Indicate how teachers find the implementation of what is learnt from the professional teacher development session (Choose one).

- a) Easy

- b) Very easy
- c) Difficult
- d) Very difficult

Please give reasons for your choice

29. Please indicate whether the following statements with reference to CPTD and in-service training are true or false.

	Statement	True	False
A	All the in-service training that teachers took part in were successful		
B	The facilitators/trainers made follow up visits to schools to support teachers and see if what was learnt was implemented in the classroom		
C	Teachers were supplied with resources or material to take to their schools to assist them implement what they have learnt		
D	The school environment including me in my role as a manager assisted in making sure that teachers implement what they have learnt from professional teacher development sessions		
E	The facilitators started the session on time		
F	At all sessions a chance is provided to give feedback on how the in-service training session had been conducted		
G	The reform type CPTD is better than the traditional In-service training		

30. Rank the following challenges faced in the implementation of what is learnt from in-service training programme in the school setting. Please use numbers 1-6, prioritizing your challenges as follows: 1 should be your biggest challenge; followed by 2 which is the 2nd biggest challenge; 3= 3rd biggest challenge and 6 which is the last challenge.

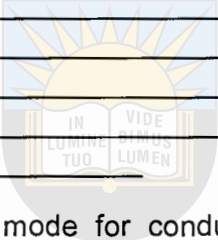
Challenge	Ranking
Difficult to apply taught information, in the classroom	
The training was poorly conducted to an extent that it is difficult for teachers to implement what was taught in the classroom	
Classes are too large to allow teachers to implement what was taught	
There are no resources at school to allow teachers to implement what was taught in the training session	
As a manager, I struggle to create a conducive environment and to support teachers to implement what they have learnt	
No follow up visit from facilitators to help teachers implement what had been learnt from in-service training.	

Please list other challenges if there are:

- 31.If you were to give an advice on a choice to be made between the following professional teacher development focus, which one would you encourage? (Choose one)
- a) The one on subject content
 - b) Methods of teaching
 - c) How to assess learners
 - d) Classroom management
 - e) Other (please specify)

.....

Please give reasons for your choice



- 32 Please indicate your preferred mode for conducting In-service training (**Please choose one**)
- a) Non-residential mode (where teachers don't sleep over)
 - b) Residential mode (where teachers are provided with accommodation for the duration of the training)
 - c) Distance mode (where teachers do not meet trainers face to face but use print and electronic media to communicate)
 - d) Other (specify).

Please give reason for your choice

- 32.Indicate your preferred venue for conducting professional teacher development (**Please choose one**)
- a) District Teacher Development Centre (DTDC)
 - b) My classroom with learners being taught
 - c) Any identified Community or school Hall
 - d) Other

Please give reason for your answer

33. Please indicate your preferred duration for conducting professional teacher development training (**Choose one**)

- a) 2 Days
- b) 1 Week
- c) 2 Weeks
- d) 1 Month
- e) On-going

Please give reason for your choice



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34. Please indicate your preferred time for conducting professional teacher development (**Choose one**)

- a) During the Easter holidays
- b) During the September holidays
- c) During the June holidays
- d) During school week days
- e) During week ends
- f) Other (specify)

Please give reasons for your answer

35. Please indicate how the professional teacher development should be organized in Gert Sibande District? (**Choose two**)

- a) On site at school

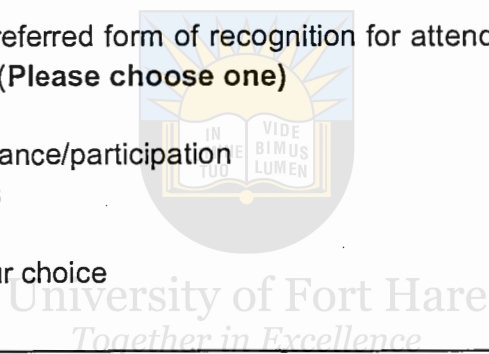
- b) At cluster level
- c) At Circuit level
- d) At Sub-district level
- e) At district level
- f) Other (Specify)

Please give reason for your choice

36. Please indicate your preferred form of recognition for attending professional teacher development sessions (**Please choose one**)

- a) No award
- b) Certificate of attendance/participation
- c) SACE CPTD Points
- d) Promotion

Please give reason for your choice



37. Please indicate your preferred nature of CPTD

- a) Voluntary
- b) Compulsory

Please give reason for your choice

38. Please indicate the most prohibiting factor that prevents teachers from participating in professional development (**Please choose one**)

- a) Long distance to training venue
- b) Improper arrangements

- c) None or late information about arrangements for professional teacher development activities
- d) Unsuitable time of the year
- e) Large workload
- f) Lack of interest in professional teacher development activities

39. Apart from providing teachers who attend professional teacher development activities with allowances, please suggest other ways on how best to implement/deliver professional teacher development that will benefit all schools in Mpumalanga



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Questionnaire is complete. Thanks for your time and for providing this valuable information

APPENDIX B: TEACHERS' QUESTIONNAIRE

QUESTIONNAIRE: TEACHERS

PART A. GENERAL INFORMATION TO DETERMINE THE PROFILE OF THE PARTICIPANTS

1. Your gender

1.Male	2.Female
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2. Kindly provide your work experience in the spaces provided

No	Work experience in years
1	Less than one (1) year
2	1-5
3	6-10
4	11-15
5	16-20
6	21-25
7	26+

3. Kindly provide your age range in the space provided

No	Age range in years
1	Less than 20 years
2	21-25
3	26-30
4	31-35
5	36-40
6	More than 40 years

4. Nature of appointment?

1 Permanent	2. Acting	3. Temporal
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5. If you are acting, or temporal, how long have you been in the acting capacity?

No	In years
1	Not applicable
2	0-1
3	2-3
4	4-5
5	6 and more

6. Please indicate your highest qualification (use the spaces provided)

No	Highest Academic Qualifications
1	Lower than Grade 12 (matric)
2	Grade 12 (matric)
3	Post-school diploma
4	B-degree
5	Honors degree or equivalent
6	Masters or equivalent
7	a) PhD
8	Other

Please circle the correct answer

7. Are you

- a) A qualified teacher
- b) Unqualified teacher

8. Please indicate your REQV

REQV 12	REQV 13	REQV 14	REQV15	REQV16	Above REQV17
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9. Please circle the Grades you teach

1 2 3 4 5 6 7 8 9

10. Please indicate the nature of school you teach at

- a) Farm school
- b) Township school
- c) Town
- d) Other (Please specify)

11. Please indicate the subjects you teach in the list

English	FAL	Mathematics	Vernacular (please state)	Other
	HL			

SECTION B: IMPLEMENTATION OF REFORM TYPE CONTINUING PROFESSIONAL TEACHER DEVELOPMENT (CPTD)

Note: Reform types of CPTD are those programmes where teachers work collaboratively on site in the classroom while developing with their peers. Some of the example of such but are not limited, will be the use of clusters for subject content development, lesson study, mentoring, coaching, professional learning communities/communities of practice etc.

12. How many reform type CPTD activities have you been involved in over the past 12 months?

Less than 3	Between 3 and 5	6 to 10	Above 10	Never attended any
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13. What is the last reform type CPTD you have been involved in? (Please choose one)

- a) Cluster activity
- b) Lesson Study
- c) Communities of Practice
- d) Coaching
- e) Mentoring
- f) Other (Please specify)
- g) None

14. Who organized the reform type CPTD activity?

The District/Curriculum	Cluster Leader	Principal	SMT	Yourself	Other	None
-------------------------	----------------	-----------	-----	----------	-------	------

Implementer (CI)						
------------------	--	--	--	--	--	--

- 15.What did the reform type CPTD activity focus on?
- a) Subject Content
 - b) Methods of teaching
 - c) Orientation to new curriculum e.g. CAPS or NCS
 - d) Teaching and learning Resources
 - e) Moderation of learner performance
 - f) Other (Please specify)

- 16.How regular do you hold the CPTD activity you mentioned above?
- a) Once off
 - b) On-going

Please explain your choice



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- 17.Please indicate your average level of satisfaction to the reform type CPTD activity you were part of and give reasons for your rating

	Rating	Reason for rating
A	Less than 25%	
B	Between 25% and 50%	
C	Between 51% and 75%	
D	Over 75%	

SECTION C: IMPLEMENTATION OF TRADITIONAL IN-SERVICE TRAINING/OFF-SCHOOL SITE TRAINING

Note: Traditional in-service training is teacher development activities that take place away from the classroom and they are delivered in form of trainings, workshops, courses, conferences etc.

18. How many traditional in-service trainings have you attended over the past 12 months?

Between 1 and 2	3 Trainings	Between 4 and 5	Between 6 and above	Never attended any
-----------------	-------------	-----------------	---------------------	--------------------

19. Who organized the training?

The District/Curriculum Implementer (CI)	Cluster Leader	Principal	SMT	Yourself	Other	None
--	----------------	-----------	-----	----------	-------	------

20. What did the training focus on?

- a) Subject content.
- b) Methods of teaching.
- c) Orientation to the new curriculum e.g. CAPS/NCS
- d) Other (specify)

21. Please indicate your level of satisfaction to the trainings that you attended in a scale of 5 as provided below:

1	2	3	4	5
Very Poor	Poor	Average	Good	Excellent
Reasons for your rating:				

SECTION D: GENERAL QUESTIONS ON THE IMPLEMENTATION OF IN-SERVICE TRAINING

22. What was the main reason/expectation for participating in In-service training of your choice? (Choose one)
- a) To be updated on current developments
 - b) To increase knowledge of subject matter.
 - c) To increase professionalism
 - d) To share experiences with colleagues.
 - e) Other (specify)

23. Please indicate the extent to which the In-service training activity you have attended have been useful to your classroom practice and overall learner achievement.
- a) Not helpful
 - b) Slightly helpful
 - c) Helpful
 - d) Very helpful

Please give reasons for your choice



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24. Were you at any stage consulted to give input in the design of the In-service training you participated in?
- a) Yes
 - b) No

If yes,

What was your input?

- c) Was your input taken into consideration?
- d) Yes
- e) No

25. Please rate the facilitators or trainers on their ability of training and their conversance of the training material

1	2	3	4	5
Very poor	Poor	Average	Good	Excellent
Please give reasons for your choice				

26.On average how much time was allocated in the In-service training activity you attended?

- a) 1 Day
- b) 2 Days
- c) 3 Days
- d) 4 Days
- e) 5 Days
- f) 1 Week
- g) More than a week



27.The following are the methods used by the facilitators to impart knowledge and skills to teachers during the In-service training (circle all that is applicable).

- a) Lecturing
- b) Question and answer
- c) Demonstration
- d) Group work
- e) Discussion
- f) Other (specify)

28.Indicate how you found the implementation of what you learnt from the In-service training.

- a) Easy
- b) Very easy
- c) Difficult
- d) Very difficult

Please give reasons for your choice

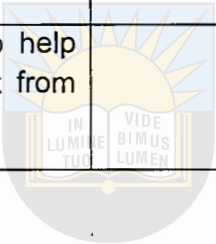
29. Please indicate whether the following statements with reference to In-service training are true or false.

	Statement	True	False
A	All the In-service training I took part in were successful		
B	The facilitators/trainers made follow up visits to support me and see if I'm implementing what I have learnt in my classroom		
C	Teachers were supplied with resources or material to take to their schools to assist them implement what they have learnt		
D	The school environment including the school management assisted in making sure that teachers implement what they have learnt from In-service training		
E	The facilitators started the session on time		
F	There was a chance provided to give feedback on how the In-service training session had been conducted		
G	On-school site based CPTD is better than In-service training		

30. Rank the following challenges that you might have faced in the implementation of what you have learnt from In-service training programme in your classroom setting. Please use the following ranking, prioritizing your challenges as follows: 1= biggest challenge; 2= 2nd big challenge; 3= 3rd biggest challenge etc.

Challenge	Ranking
Difficult to apply taught information, in the classroom	
The training was poorly conducted to an extent that it is difficult for me to implement	

what was taught in the classroom	
My class is too large to allow me to implement what was taught	
There were no resources at school to allow me to implement what was taught in the teacher development session	
The school environment including management and administration not supportive enough	
No follow up visit from facilitators to help me implement what had been learnt from In-service training session.	



Please list other challenges if there are:

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- 31.If you were to make a choice between the following teacher development activities, which one would you attend? (Choose one)
- a) The one on subject content
 - b) Methods of teaching
 - c) How to assess learners
 - d) Classroom management
 - e) Other (please specify)

Please give reasons for your choice

- 32.Please indicate your preferred mode for conducting professional teacher development (**Please choose one**)
- a) Non-residential mode (where teachers don't sleep over)

- b) Residential mode (where teachers are provided with accommodation for the duration of the training)
- c) Distance mode (where teachers do not meet trainers face to face but use print and electronic media to communicate)
- d) Other (specify).

Please give reason for your choice

33.Indicate your preferred venue for conducting professional teacher development **(Please choose one)**

- a) District Teacher Development Centre (DTDC)
- b) School Hall
- c) Any identified Community Hall
- d) Other

Please give reason for your answer



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34.Please indicate your preferred duration for involvement in CPTD or In-service training **(Choose one)**

- a) 2 Days
- b) 1 Week
- c) 2 Weeks
- d) 1 Month
- e) More than a month

Please give reason for your choice

35.Please indicate your preferred time for conducting CPTD or In-service training **(Choose one)**

- a) During the Easter holidays

- b) During the September holidays
- c) During the June holidays
- d) During school week days
- e) During week ends
- f) Other (specify)

Please give reasons for your answer

36. Please indicate how the professional teacher development should be organized in Gert Sibande District? **(Choose one)**

- a) At school level
- b) At cluster level
- c) At Circuit level
- d) At Sub-district level
- e) At district level
- f) Other (Specify)



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Please give reason for your choice

37. Please indicate your preferred form of recognition for attending professional teacher development activity **(Please choose one)**

- a) No award
- b) Certificate of attendance/participation
- c) CPTD Points
- d) Promotion

Please give reason for your choice

38. Please indicate your preferred nature of professional teacher development

- a) Voluntary

b). Compulsory

Please give reason for your choice

39. Please indicate the most prohibiting factor that prevents you from participating in professional teacher development (**Please choose one**)

- a) Long distance to training venue
- b) Improper arrangements
- c) None or late information about arrangements for professional teacher development activities
- d) Unsuitable time of the year
- e) Large workload
- f) Lack of interest in professional teacher development activities

40. Apart from providing teachers who attend professional teacher development activities with allowances, please suggest other ways on how best to implement/deliver professional teacher development that will benefit all schools in Mpumalanga

The Questionnaire is complete. Thanks for your time and for providing this valuable information.

APPENDIX C: Interview Schedule for District Curriculum Officials

1. Please indicate what CPTD programmes do you conduct for teachers in Gert Sibande with special reference to:
 - a) Focus of the CPTD
 - b) The nature or type of such
 - c) Logistical arrangement for the CPTD programmes
 - d) How often do the programmes take place
 - e) How is the content of the CPTD training programme put together?
2. Do you receive any formal capacity building preparing you for the conduction of the CPTD sessions with the teachers? If so how long does it take?
3. On average what is the duration of the sessions with the teachers?
4. Briefly share the method(s) you use in conducting the CPTD session.
5. Please share if any need assessment for teachers is conducted before each session. If so how are their needs met in the CPTD programme? Please provide examples.
6. Please indicate if teachers have a chance to input to the programme of training if so please share instances where their input was incorporated.
7. In your view what are the teachers' expectations from these CPTD programmes? Are these expectations generally met?
8. What challenges do you encounter when facilitating these sessions and how do you handle them?
9. Please indicate the extent to which teachers implement what they learnt from the sessions? Give reasons for your response.
10. Please share how you provide onsite support to teachers after the training? Are there any challenges associated with this aspect? If so, indicate how do you handle these challenges?
11. Please make suggestions on how CPTD should be conducted in order for it to be efficient and impact positively on learner performance.

APPENDIX D: Interview Schedule for Teacher and SMT Representative (adapted from Selemani-Meke: 2011)

1. What is your understanding of Continuing Professional Teacher Development in terms of
 - a) The concept itself
 - b) How many CPTD programmes have you attended in 2014
 - c) What the programmes focused on (e.g. subject matter, teaching strategies, orientation of the new curriculum)
 - d) Who organized the programmes
 - e) Whether the CPTD addressed your needs
2. Was access to the CPTD programmes organized easy? (For example: starting time, duration, transport, distance to venue etc.)
3. Generally what are the expectations for attending these programmes? Were these expectations met over time?
4. Please share insight on the expertise of the facilitators of the CPTD programmes.
5. Had you at some stage be provided with an opportunity to make inputs on the content of the CPTD programme before you participate?
6. Did the CPTD programme assist your classroom practice? If yes, please indicate how.
7. Please indicate challenges experienced in implementing what you have learnt.
8. What support have you received in your classroom from the CIs after you attended the CPTD programme? Was the support beneficial?
9. Please share your understanding on job-embedded CPTD (CPTD that occur on site collaboratively with peers e.g. lesson study, coaching, mentoring, and analysis of learners' work and designing strategies for redress).
 - a) Have you ever participated in such forms of CPTD?
 - b) What are the benefits of these?
10. Are there any suggestions that you can share on how to improve the offering of CPTD programmes in Gert Sibande in order to achieve efficiency and value for money.

APPENDIX E: LETTER OF PERMISSION

APPROVAL TO CONDUCT RESEARCH FOR MRS N.V. MTHETHWA: PhD (EDUCATION)



education
DEPARTMENT: EDUCATION
MPUMALANGA PROVINCE

Private Bag X 11341
Nelspruit 1200
Government Boulevard
Riverside Park
Building 5
Mpumalanga Province
Republic of South Africa

Litiko leTsimfundvo Umnyango weFundo Departement van Onderwys Umnyango wezeMfundo
Enquiries: H.A. Baloyi (013) 766 5476

Mrs N.V. Mthethwa

P. O Box 94,

Badplaas,

1190



RE: APPLICATION TO CONDUCT RESEARCH: MRS N.V. MTHETHWA

Your application to conduct research was received on 30 October 2014. The title of your study is: "A framework for state-led continuing professional teacher development (CPTD) to promote improved learner performance." The objectives and the overall design of your study give an impression that the outcomes of the study will be of paramount and beneficial to the way teaching is conducted in schools. Your request is approved subject to you observing the content of the departmental research manual which is attached. You are required to discuss with the principals of the sampled schools regarding the approach to your observation and data collection as no disruption of tuition will be allowed. You are also requested to adhere to your University's research ethics as spelt out in your research ethics document.

In terms of the attached manual (2.2. bullet number 4 & 6) data or any research activity can only be conducted after school hours as per appointment. You are also requested to share your findings with the department so that we may consider implementing your findings if that will be in the best interest of the department.

For more information kindly liaise with the department's research unit @ 013 766 5476 or a.baloyi@education.mpu.gov.za. The department wishes you well in this important project and pledges to give you the necessary support you may need.

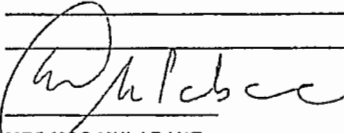
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APPROVAL TO CONDUCT RESEARCH FOR MRS N.V. MTHETHWA:
PhD (EDUCATION)

APPROVED/~~NOT~~APPROVED:



MRS MOC MHLABANE
HEAD OF DEPARTMENT

03, 11, 14
DATE



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Sisonke Sifundzisa Sive



APPENDIX F: INFORMED CONSENT FORM



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Ethics Research Confidentiality and Informed Consent Form

I Nokuthula Mthethwa enrolled with the University of Fort Hare for a PHD is asking Gert Sibande District curriculum managers and subject advisors, principals, heads of departments and teachers, some questions in relation to Continuing Professional Teacher Development (CPTD) which will benefit the District and Education as a whole in the near future. The framework that will be produced will improve the engagement of CPTD in Gert Sibande District and the province.

The research I am conducting had been authorized by the University of Fort Hare Research Ethics Committee and at any given time this committee might inspect the research records. This committee can withdraw the research project anytime should it be found that there had been some noncompliance issue involved. The researcher can be contacted at this number 083 653 7176 and should there be any issues to be raised on the management of the research process the supervisor can be contacted at this number: Professor K. Mammen (043) 704 7178. The research topic is as follows:

The assessment of state-led Continuing Professional Teacher Development (CPTD) in Gert Sibande District of Education in Mpumalanga Province.

I am interested in finding more about the nature of CPTD offering in the District and Education as a whole. I am carrying out this research to help the Department manage its state-led CPTD to such a way that it impacts positively on learner achievement and the target is grade 6 (Intermediate Phase) Mathematics and English teaching.

Please understand that you are not being forced to take part in this study and the choice whether to participate or not is yours alone. However, I would really appreciate it if you do share your thoughts with me. If you choose not take part in answering these questions, you will not be affected in any way. If you agree to participate, you may stop at any time filling the questionnaire or tell me that you don't want to go on with the interview. If you do this there will also be no penalties and you will NOT be prejudiced in ANY way. Confidentiality will be observed professionally.

I will not be recording your name anywhere on the questionnaire and no one will be able to link you to the answers you give. Please do not write your name on the questionnaire. Only the researcher will have access to the unlinked information. The information will remain confidential and there will be no "come-backs" from the answers you give.

The interview will last around 45 minutes. I will be asking you a questions and ask that you are as open and honest as possible in answering these questions. Some questions may be of a

personal and/or sensitive nature. In both the interview and the questionnaire I am asking some questions that you may not have thought about before, and which also involve thinking about the past or the future. I know that you cannot be absolutely certain about the answers to these questions but I ask that you try to think about these questions. When it comes to answering questions there are no right and wrong answers. When I ask questions about the future I am not interested in what you think the best thing would be to do, but what you think would actually happen. In the case of the questionnaire please choose the answer closest to what you think amongst the choices provided.

If possible, I would like to come back to the district once I have completed my study to inform you and the District of what the results are and discuss the findings and proposals around the research and what this means to teacher professional development in the District. Please fill in the fill in the section below:

INFORMED CONSENT

I hereby agree to participate in research regarding I understand that I am participating freely and without being forced in any way to do so. I also understand that I can stop filling the questionnaire or this interview at any point should I not want to continue and that this decision will not in any way affect me negatively.

I understand that this is a research project whose purpose is not necessarily to benefit me personally.

I have received the telephone number of a person to contact should I need to speak about any issues which may arise in the process.

I understand that this consent form will not be linked to the questionnaire or the interview and that my answers will remain confidential.

I understand that if at all possible, feedback will be given to my District on the results of the completed research.

.....
Signature of participant

Date:.....

I hereby agree to the tape recording of my participation in the study in case of an interview

.....
Signature of participant

Date:.....

APPENDIX G: ETHICAL CLEARANCE CERTIFICATE



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ETHICAL CLEARANCE CERTIFICATE
REC-270710-028-RA Level 01

Certificate Reference Number: MAM061MTH01

Project title: A framework for state-led Continuing Professional Teaching Development (CPTD) to promote improved learner performance

Nature of Project: PhD

Principal Researcher: Nokuthula Varsity Mthethwa

Supervisor: Prof KJ Mammen

Co-supervisor:

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby give ethical approval in respect of the undertakings contained in the above-mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

The Principal Researcher must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

Special conditions: Research that includes children as per the official regulations of the act must take the following into account:

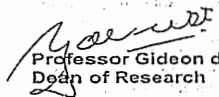
Note: The UREC is aware of the provisions of s71 of the National Health Act 61 of 2003 and that matters pertaining to obtaining the Minister's consent are under discussion and remain unresolved. Nonetheless, as was decided at a meeting between the National Health Research Ethics Committee and stakeholders on 6 June 2013, university ethics committees may continue to grant ethical clearance for research involving children without the Minister's consent, provided that the prescripts of the previous rules have been met. This certificate is granted in terms of this agreement.

The UREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
 - Any unethical principal or practices are revealed or suspected
 - Relevant information has been withheld or misrepresented
 - Regulatory changes of whatsoever nature so require
 - The conditions contained in the Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project.
- In addition to the need to comply with the highest level of ethical conduct principle investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to the Dean of Research's office

The Ethics Committee wished you well in your research.

Yours sincerely


Professor Gideon de Wet
Dean of Research

17 April 2015

PPENDIX H: LANGUAGE EDITING CERTIFICATE

Wits University:
Faculty of Humanities
Wits School of Education



LANGUAGE EDITING CERTIFICATE

To whom it may concern

I hereby confirm that I have proof read and edited the following PhD thesis using Windows 'Tracking' System to reflect my comments and suggested corrections for the author to action:

AN ASSESSMENT OF THE IMPLEMENTATION OF STATE-LED CONTINUING PROFESSIONAL TEACHER DEVELOPMENT (CPTD) IN THE GERT SIBANDE EDUCATION DISTRICT OF MPUMALANGA PROVINCE IN SOUTH AFRICA

BY
NOKUTHULA MTHETHWA

Although the greatest care was taken in the editing of this document, the final responsibility for the product rests with the author.

Sincerely

A handwritten signature in black ink, appearing to read 'J. Sibanda'.

SIGNATURE

DATE: 13.01.2017

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E jabulani.sibanda@wits.ac.za

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