Action Research Training as a Professional Development Strategy in Primary Schools

A Case Study of Bikita District in Zimbabwe

by

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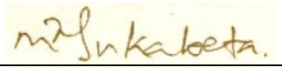
DECLARATION

I, Moses Tapfumaneyi Mukabeta, Student number 51509342, declare that **Action research training as a professional development strategy in primary schools – a case study of Bikita District in Zimbabwe** is my own work and has not been previously submitted in any form whatsoever, by myself or anyone else, to the University of South Africa or at any other educational institution for any degree or examination purposes. All the sources that I have used or quoted have been indicated and acknowledged accordingly.



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Signature Date

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ABSTRACT

Teachers, like all professionals, need continuous professional development and learning to keep improving on their practice. However, teacher continuous professional development and learning can be elusive if the modalities to provide it are not well thought out and provided for. In the context of this research study, the modalities for continuous professional development have included a few hours, half a day, one day to three or so days. Thereafter, teachers return to their schools and classrooms. As there is evidence that this modality has not led to significant impact on teacher practice in the classrooms, this study was aimed at developing a proposal for a framework for continuous professional development for teachers rooted in action research.

The thesis presents a conceptual framework of teachers as professionals, learners, researchers and reflective practitioners. Teacher efficacy, transformative learning, social constructivism and action research theories underpinned this research study. All have influence on teacher continuous professional development but with different impacts. The research study, framed in a qualitative case study, situated in Bikita District, Masvingo Province in Zimbabwe, collected data using semi-structured interviews, focus group discussions and document analysis. The participants were purposively selected from school inspectors, head teachers and teachers who took part in a pilot project that trained participants and supported them in using action research to better understand and appreciate the dynamics in their schools and classrooms. To make sense of the data collected, NVivo software was used.

The research findings confirm the benefits in existing literature about action research in addition to indicating further benefits novel to the case study. The benefits of engaging in action research include empowering the teacher on several fronts such as problem identification and resolution, professional growth, reflective thinking, self-critique, solution-oriented thinking, self-criticism and taking responsibility for their actions. Training in action research expanded the teachers' pedagogical repertoire and enabled them to collect their own data to use in making decisions about their schools and classrooms. When the competence based curriculum was introduced, the action research trained teachers reported that they had confidence to face the challenges as solution seekers. Research participants suggested making action research school-based, anchored in collaborative Communities of Practice and crucial to enhance the promotion of action research, followed up on in the Narrative Supervision Instrument for the Teacher.

These findings speak well to the proposed Action Research Continuous Professional Development Framework (ARCPDF) for primary school teachers.

Key terms: professional learning, professional development, continuous professional development, teachers as learners, teachers as researchers, action research, reflective teaching

ACRONYMS

ARCPDF	Action Research Continuous Professional Development Framework
ARTPDF	Action Research Training Professional Development Framework
BSPZ	Better Schools Programme for Zimbabwe
GCSE	General Certificate Secondary Education
CFS	child friendly schools
CoP	Community of Practice
CPD	Continuous Professional Development
CPTD	Continuous Professional Teacher Development
CRT	Cluster Resource Teachers
DoE	Department of Education
DSI	District School Inspector
DTE	Department of Teacher Education
EDC	Education Development Centre
FGD	Focus Group Discussions
GCSE	Geography General Certificate Secondary Education
GPE	Global Partnership Education
HTSP	Heads Training and Professional Support
MoESAC	Ministry of Education, Sports, Arts and Culture
MoEST	Ministry of Education, Science and Technology
MoPSE	Ministry of Primary and Secondary Education
MSSI	Mpumalanga Secondary Science Initiative
MUSTER	Multi-Site Teacher Education Research
NCATE	National Council for Accreditation of Teacher Education

NCTE	National Council for Teacher Education
NGO	Non-Governmental Organisation
PCK	Pedagogic Content Knowledge
PLAP	Performance Lag Address Programme
QEP	Quality Education Project
SACE	South African Council of Educators
SACMEQ	The Southern African Consortium for the Monitoring of Educational Quality
SDG	Sustainable Development Goal
SI	Statutory Instrument
SI	School Inspector
TICs	Teachers-in-Charge
TMPS	Teacher Management and Professional Support
TMS	Teacher Management and Support Programme
ToT	Trainer of Trainers
TPS	Teaching Professional Standards
TSLN	Thinking School, Learning Nation
UK	United Kingdom
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
USA	United States of America
UNICEF	United Nations International Children's Fund

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CHAPTER 1

INTRODUCTION TO THE STUDY

1.1 INTRODUCTION

The aim of this research was to investigate the use of action research training as a professional development strategy for primary school teachers in the Bikita District, Masvingo Province, Zimbabwe as a case study. The study emanates from two triggers.

The first trigger is in the findings from studies compiled by Burns (2007:11), which suggest that short period in-service training workshops for teachers have little impact and rarely lead to improved classroom practices of teachers and improved learning outcomes. The in-service Continuous Professional Development (CPD) practices in Zimbabwe and many other countries use short courses lasting one to three days where participating teachers are introduced to new ideas and practices. At the end of the training, the teachers return to their schools where they are expected to use the new ideas in their teaching as well as inform other teachers. The conclusion by Burns (2007) questioned the effectiveness of the short training workshops.

The second trigger arises from the experiences I encountered in a project that sought to train a group of teachers in action research over a period, 2005-2008, in the Bikita District, Zimbabwe. The training in action research was an attempt to influence the teachers in being reflective about their own classroom practices. According to Harber and Stephens (2010:84), the use of action research on own classroom practice has proved to have longer lasting changes to classroom practice for improved learning outcomes of learners. My experiences seemed to offer an approach that had a more positive impact on professional development and training of teachers.

These two triggers lead to the main aim or purpose of this research study, which is to propose an Action Research Continuous Professional Development Framework (ARCPDF) for primary school teachers. Such a framework can engender continuous professional development, reflective practices and improved learning outcomes. The study explored, with a focus on a group of primary school teachers in Bikita District, Zimbabwe, the proposed framework. The group of teachers in the research study were trained in action research and they used it in their continuous professional development for four to eight years prior to the study, in the period 2006 to 2013.

1.2 BACKGROUND TO THE STUDY

In Zimbabwe, as in many countries in Africa at present, there is a model of Continuous Professional Development (CPD) used to improve teacher professional practices and address concerns of the type of teaching and learning taking place in classrooms. The model consists of a two to three-day workshop or training comprising sessions of a few hours, after which the teachers return to their schools, ostensibly to put into practice what they have learned during the training. The question arises about whether these short training sessions are effective enough to equip teachers improve on their classroom practices for improved learning outcomes, even though research has indicated that such an approach is unlikely to influence teacher practice or student achievement (Wei, Darling-Hammond & Adamson, 2010).

The concern with improved learning outcomes can be traced from a number of angles in the recent past. In 2000, the World Education Forum held in Dakar issued the *Dakar Framework for Action on Education for All: Meeting our Collective Commitments* communiqué at the end of the *World Conference on Education for All* that had met to review achievements and challenges since the World Education Conference held in Jomtien, Thailand in 1990. In the communiqué, UNESCO stated that literacy rates had not improved significantly from the levels they were in 1990 in many countries (UNESCO, 2000). In other words, UNESCO was concerned that there was little learning taking place in the classrooms despite the increase in enrolment since the World Education Conference held at Jomtien, Thailand in 1990 (UNESCO, 2000). UNESCO (2004) stressed the quality of learning outcomes as requiring attention and action.

Another concern on the learning outcomes was made in an evaluation study by Johannessen (2000:72) of the Save the Children Norway Basic Education programme. The evaluation study in thirteen developing countries found evidence of little learning (as measured by end of primary school examination pass rate) taking place in classrooms where Save the Children had interventions helping communities build classrooms and provide short term training for teachers on child-centred teaching methodologies. In this study, the developing countries for the Save the Children Norway study were in Africa, Asia and Latin America and included Angola, Niger, Mozambique, Uganda, Zambia and Zimbabwe in Africa (Johannessen, 2000). The evaluation study found that the infrastructure upgrade and teacher training interventions did not necessarily result in improved learning outcomes as measured by the final examination

results at the end of the primary school education (Johannessen, 2000). This scenario begs the question: What was missing in these interventions to improve learning outcomes?

The Southern African Consortium for the Monitoring of Educational Quality (SACMEQ) I and II studies conducted with 15 Ministries of Education in Southern and Eastern African regions with Grade 5 learners assessed in reading proficiency. As per the SACMEQ I and II studies, the five aspects of reading tested were phonics, phonemic awareness, vocabulary and reading comprehension (Murimba, 2005). The results of the reading tests established poor reading levels (Murimba, 2005:75-89) with the majority of children found to be operating at lower levels than their grades in the primary school. Findings from the SACMEQ II studies showed that about 50% of pupils could barely read at the expected minimum level, identifying a mere seven out of 46 words from the test. The studies further established that on average, only 18% percent of the Grade 6 learners had acquired desirable readings skills (Murimba, 2005). The SACMEQ studies, in a way, raised the question that the continuous professional development strategy for teachers was not effective enough to improve learning in schools. Again, this finding leads to the question: What form of CPD strategy will enhance the capacity of teachers to improve the learning outcomes?

The table below, published by the Ministry of Primary and Secondary Education (MoPSE), illustrates the extent of the problem of low learning outcomes as measured by the national pass rate of Zimbabwe for end-of-year of primary school examinations, the provincial pass rate and the district pass rate, for the period 2007 to 2012.

Table 1.1: Zimbabwean national, provincial and district pass rates 2007-2012

Year	National	Masvingo Province	Bikita District
2007	70.5%	68.2%	57.6%
2008	51.5%	50.1%	49.0%
2009	39.7%	35.0%	35.6%
2010	42.0%	41.2%	47.6%
2011	45.7%	46.2%	49.8%
2012	49.6%	48.6%	55.1%

Source: Ministry of Primary, Secondary Education Annual Statistical Report (MoPSE, 2013:92)

The table above depicts the slow decline in the pass rates of end-of-year primary school examinations over six years with the national pass rate ranging from a high 70.5% in 2007 to a very poor low 39.7% in 2009. In the Bikita District, the picture on learning outcomes has remained poor with the lowest results (35.6%) recorded in 2009; however, there has been a steady improvement from 2010 (47.6%), 2011 (47.6%) and 2012 (55.1%). Of concern though, is that despite the investment in short term CPD activities designed and facilitated by school inspectors, a large number of Grade 7 learner results in the national examinations indicate low learning outcomes. The key question is: What could be contributing to this scenario?

As previously indicated, studies compiled by Burns (2007:11) concluded that short-term in-service training for teachers rarely lead to improved classroom practice of teachers and improved learning outcomes. The CPD training, like those in Zimbabwe, use short courses lasting one to three days where participating teachers are introduced to new ideas and practices. At the end of the training, the teachers return to their schools where they are expected to use the new ideas in their teaching as well as inform other teachers. These short-term teacher in-service interventions lead to little or no improvement in classroom practices as teachers return to their old habits and practices before such training (Burns, 2007:11; Johannessen, 2001:75).

The scenario presented above and examples given, show that there is a problem that needs to be addressed in the kind of model used to provide continuous professional development (CPD) for teachers. There is no doubt that teachers are at the frontline on improving quality of learning in the classrooms, as any education system is as good as its teachers. Teachers need to be learning continuously. But, what model of CPD can have a greater chance to influence teacher classroom practices so that they are reflective of their classroom practices? This is the central question of the research study on the use of action research training provided over a four-year period to a group of primary school teachers in Bikita District.

1.3 PROBLEM STATEMENT

While teachers need to be learning continuously, the use of short-term training sessions lasting one to three days rarely leads to improved teacher classroom practices. The recent MoPSE (2018) formative evaluation report on the implementation of the new curriculum for Zimbabwe

found that many teachers felt they were not fully capacitated by the short-term training sessions on how to teach the new curriculum. The short-term training sessions in the name of continuous professional development do not really make an impact in developing teacher confidence and thus classroom teaching. This problem persists due to the shortcomings of the current strategy used to build capacity teachers, which aligns with the studies mentioned above. Short-term training sessions without a strategy for continuous support for teachers lead to little impact on classroom practice. Thus, there is a major question mark on their effectiveness to improve the quality of teaching and learning, which begs the questions: What strategy for continuous development of teachers can engender reflective and effective primary school teachers? Could building capacity in action research in the continuous professional development be part of the answer to contribute to effective classroom teaching?

1.4 RESEARCH QUESTIONS

The primary research question of the proposed study was: *How can action research training be used as a professional development strategy to enhance effective classroom practices of primary school teachers?* The research study examines action research training as a CPD strategy used to engender reflective and effective primary school teachers over a period 2006-2013.

To respond to this question, the research study examines action research training used as a Continuous Professional Development strategy used to engender reflective and effective primary school teachers over a period of four years, 2006-2013 in the Bikita District, Masvingo Province in the south-eastern part of Zimbabwe. The research study is limited to Bikita District in Masvingo Province, south-eastern part of Zimbabwe and is further limited to primary schools in that district. In addition, the research engages primary school teachers, school heads and school inspectors in that district who participated in action research training as a professional development strategy to improve on classroom effectiveness.

The following sub questions were derived from the main research question and formulated towards addressing that question:

1. How has action research training of primary school teachers empowered them?
2. How have primary school teachers applied action research knowledge to deal with the Competence Based Curriculum?

3. What challenges do primary school teachers face when applying action research and supporting other teachers in learning and practising action research?
4. What strategies can be used to promote action research among primary school teachers?

1.5 PURPOSE AND OBJECTIVES OF THE STUDY

The aim of the research study is to obtain evidence to justify the proposal of an Action Research Training Professional Development Framework (ARTPDF). This framework will propose a strategy to empower primary school teachers to become competent and reflective practitioners.

In order to achieve the overall aim of this study, the following specific objectives formulated for the purpose of conducting this research study are:

- To explore how action research training of primary school teachers empowered them in their continuous professional teacher development and promotion of reflective practices;

- To establish how primary school teachers applied action research knowledge to deal with the Competence Based Curriculum introduced in 2016 and rolled out to all school grades thereafter;

- To explore challenges that primary school teachers face when applying action research, and supporting other teachers in learning and practising action research; and

- To use the literature review and findings from the research study to inform the development of an Action Research Continuous Professional Development Framework (ARCPDF) routed in engaging in action research to improve on classroom practices and learning outcomes among primary school teachers.

This research study has two main expected outcomes. The first outcome is to learn from the processes through which the primary school teachers in Bikita District, Zimbabwe constructed new meaning to their practice of teaching as a result of action research training in their CPD. This involves an exploration of the perspectives, changes and developments that the teachers, trained in action research, ascribe to the training received on their exposure to and practice of action research. The area of using action research as a tool to engender reflectiveness in teachers has not been researched in the public domain in Zimbabwe, and hence is quite grey with not much known of its effectiveness as a strategy. The second outcome is proposing an

Action Research Continuous Professional Development Framework (ARCPDF) for primary school teachers. This framework is a contribution to promoting reflective teachers in their continuous professional development.

1.6 RATIONALE FOR THE STUDY

This research study was premised on the view that teachers should identify the problems in their classrooms by themselves and not be told by others 'what is wrong with them'. It is not unusual in Zimbabwe for school inspectors, during their school supervision exercises, to identify 'gaps' which they recommend to be addressed through short-term training for teachers lasting a few hours to a few days, for example, two or three days. However, no matter how well meant, Nagel (1992; 2008) argues that this top-down approach leads to resistance by the target group of teachers. The teachers do not own what is externally identified for them. Identifying training needs for teachers externally is probably the reason why so much short-term training seem to be wasted time and ineffective, since the participants have not acknowledged the need for such training (Burns, 2007).

It is in these circumstances that the advantage of engaging teachers in action research on their work helps them identify for themselves the changes they need to effect in their teaching so as to make improvement and thus ensure effectiveness of classroom teaching (Hopkins, 2002; Koshy, 2010).

Education is about human growth and knowledge construction processes (Nagel 1992; 2008). Teachers should learn from their work experiences, constructing new meanings from the challenges and success they have in their work. Hence, developing as a reflective teacher is important to achieve quality education and improved learning outcomes. One possible way to do this is through Continuous Professional Development (CPD) where teachers learn to take the responsibility for the learning, as well as the failure of their learners but developing the necessary reflective teaching skills. It should give teachers the opportunity to build the trust in themselves so that they can make the required change on their own. Engaging in action research offers teachers an avenue to become reflective in their practice so as to bring about the needed change in the education system in search of quality education and improved learning outcomes.

Action research is part of a growing movement in CPD of teachers. Hendricks (2006) describes action research as a form of long-term teacher professional development with the potential of

enabling teachers to be transformed in their practice. Elliot (1991) sees action research as being transformative to the culture of teachers and making them creative in dealing with challenges faced in the classroom. A similar message on transformation of practice, perceptions about own practice was made by the teachers in the Bikita District action research project snap evaluations reported by Brock-Utne, Banda, Matafwali and Dirwai (2014:9-10) and Harber and Stephens (2010:13). Through conducting action research, the teachers uncovered the complexity of teaching and that this process leads them to improve the quality of their learners' performance.

McNiff (1993) explored what action research consists of as well as its importance on whole school development. McNiff (1993) argues that action research makes the individual teachers adopt an investigative attitude towards their work in that they will seek to improve their practice in the classroom. This attitude enables the teacher to produce research-based evidence to support whatever claims they may make about their professional knowledge and the expertise they develop.

Hopkins (2004) presents a case where action research makes teachers become researchers, and that this is fundamental to improving their competencies as they constantly seek to improve their teaching and thus, the outcomes of their learners. Thus, conducting classroom-based research enables the teachers to enhance their own work.

1.7 RESEARCH METHODOLOGY

Creswell (2013), as well as Brennen (2017) define a research paradigm as a broader view or perspective that guides the direction of a study. Qualitative research methodology was specifically chosen for this research study as it was considered helpful in understanding the reality of teachers' practice and their 'lived experiences' in their schools and classrooms. This was important as in the interpretivist approach, social actors create social reality through social interaction (Bogdan & Biklen, 2007). In a nutshell, interpretivism promotes the use of qualitative data and values the uniqueness of a particular situation and places particular emphasis on contextual depth (Bryman & Bell, 2015).

This study embraced the interpretivism paradigm and adopted the inductive approach to reasoning. Denzin and Lincoln (2000) define qualitative research as a method of studying the significance that people attach to a phenomenon. In this regard, a major justification for qualitative research, provided by Punch (2005), is that it is 'naturalistic' and it endeavours to

study people, things and events in their 'natural settings'. Qualitative research is primarily used to gain an understanding of underlying reasons, opinions and motivations. As posited by Glaser and Strauss (2017), it provides insights into the focus of the study and it helps to develop in-depth appreciation of the perceptions of the participants in the research on action research and its use in the continuous professional development of teachers.

Thus, in this study, I used a qualitative research methodology focusing on a case study comprising teachers, school heads and school inspectors who undertook training in action research in the Bikita District, Masvingo Province, Zimbabwe. This group of teachers undertook action research training and used it to improve own practice over a period of eight years prior to commencement of the study. Using qualitative research methodology provides a way of investigating and understanding meaning that individuals or groups assign to a social phenomenon (Creswell, 2006:25). A good justification for the qualitative research methodology, in the case study of action research training as a professional development strategy for primary school teachers in the Bikita District, is that it is naturalistic and it strives to study people and events in their natural settings (Punch, 2005:141).

In this regard, taking the case study approach enabled understanding of the phenomenon in its context. Thus, the qualitative approach is key in giving a holistic understanding of the thought processes the group of teachers, trained in action research, developed as a consequence of that training on their professional development.

A case study design was considered most appropriate for this study. McMillan and Schumacher (2010) define a case study as a design that examines a single case, which employs various sources of data found in the natural setting. A qualitative case study design was deemed most appropriate for this study because case studies are known to give rich and vivid description of events supported by several sources. It also supports the researcher in obtaining implicit and explicit data from documents used for the study and from the participants as well. Moreover, it enables the researcher to construct criteria for building credibility and trustworthiness in the process of data gathering (Creswell, 2012). The case can be an organisation, a programme, an event, an activity or a set of individuals bounded in time and place (Cohen, Manion & Morrison, 2007). In this study, data were collected using interviews, focus group discussions and document analysis.

A constructivist phenomenological approach was used in carrying out the research (Van Niekerk, 1995 in Higgs, 1995). Social constructivism is a sociological theory of knowledge according to which human development is socially situated and knowledge is constructed through interaction with others (Howell, 2013). In this regard, the constructivist approach seeks to interpret, understand as well as explore socially constructed phenomena in its context. Thus, in data collection for the research study, I had extended contact with the group of teachers, school heads and school inspectors who were trained in action research so as to elicit their perspectives and interpretations of their world of work. This approach helped obtain a rich description from the research participants that assisted in uncovering and explicating the ways in which the teachers come to understand, account for and take action as they manage their day-to-day situation in their work environments (Boglan & Biklen, 1982:20; Chisaka, 2007:25). The focus was on understanding and developing deeper insights into perspectives, feelings and opinions of the teachers, school heads and school inspectors developed from their training in action research. In the process of this research study, I developed a proposed framework of CPD based on action research. Emerging from the findings were strategies, which assisted in developing the proposed Action Research Continuous Professional Development Framework (ARCPDF) for primary school teachers.

1.8 LIMITATIONS AND DELIMITATIONS OF THE STUDY

The research study was limited to a selection of participants of an action research training programme carried out in Bikita District, Masvingo Province, Zimbabwe. The participants were of similar experience in terms of training in action research to improve their own education practice. They underwent the training together as a strategy for Continuous Professional Development and each undertook an action research project focusing on their own challenges experienced in the classroom or work at their specific level.

The participants were primary school teachers, school heads and school inspectors located at the Bikita District, Masvingo Province during the *Save the Children Norway* programme which supported the Bikita Quality Education Project (QEP). The research study was limited to collecting data on the 'lived experiences' of the participants during the training in action research, carrying out an action research project during and after the project. The research study was limited to one geographic area, one district in Masvingo Province. It was limited to primary

school teachers, school heads and school inspectors in Bikita at the time of the Bikita Quality Education Project (QEP).

1.9 DEFINITION OF KEY TERMS AND CONCEPTS

Action research is a process of systematic inquiry that seeks to improve social issues affecting the lives of people every day (Koshy, 2010). Historically, 'action research' has been associated with the work of Kurt Lewin who viewed it as cyclical, dynamic and collaborative in nature. Action research has repeated cycles of planning, observing and reflecting. Individuals and groups engaged in action research, can implement changes required for social change and improvement. Other notions of action research are that it can be collaborative or participatory (Koshy, 2010).

Professional development is the continuous process of acquiring new knowledge and skills that relate to one's profession, job responsibilities or work environment. The primary role of professional development is to maintain trained, informed and motivated employees (Hendricks, 2006:188). In the context of teaching, professional development encompasses the development of pedagogic content knowledge (PCK).

Professional learning refers to both formal and informal learning opportunities to deepen knowledge and refine skills and practice for the benefit of learners (King, 2019).

Reflective teacher is a teacher who thinks over their classroom practice, analysing how something was taught and how practice might be improved or changed for better learning outcomes (Hendricks, 2006:41; Hopkins, 2006:104-105).

Teacher as a researcher can be characterised as a practitioner who attempts to understand their practice and its impact on the learners by researching the relationship between teaching and learning (Hendricks, 2006:34-35 citing Lawrence Stenhouse, 1984)

Lived experiences are the experiences that occur in one's direct acquaintance with different set ups and, scenarios. It can be considered the interaction between a person and their life experiences (Bogdan & Biklen, 2007:63-64; Hopkins, 2004:31).

1.10 ORGANISATION OF THE STUDY

The thesis is organised in seven chapters as follows:

Chapter 1 provided an introduction and overview of the research topic. This chapter covered the background to the problem, statement of the problem, research questions, aim of the study significance of the study, research methodology overview, limitations and delimitation of the study, definition of key terms, summary and conclusion.

Chapter 2 presents and integrates two related issues for the research study: the theoretical framework and the conceptual framework. The conceptual framework comprises the concepts professional development, professional learning, reflection and reflective practice, teacher professionalism and teachers as researchers. This section of this chapter offers a commentary on the shortcomings of the dominating approach to professional development for teachers in the context of the research study circumstances in the Bikita District, Masvingo Province in Zimbabwe. On the theoretical framework, the chapter explores four theories: teacher efficacy theory, transformational learning theory, social constructivist theory and the action research theory.

Chapter 3 reviews the conceptualisation of continuous professional development of teachers as outlined in the Statutory Instrument (SI) of 2000 and the Better Schools Programme of Zimbabwe (BSPZ) at the time of the study. The chapter covers the search for effective alternatives to the status quo on continuous professional development; for example, the Bikita Quality Education Project (QEP) that promoted action research, similar work done in Namibia and South Africa and the initiatives to put in place continuous professional development policy frameworks in Malawi and South Africa.

Chapter 4 presents the research methodology. This chapter describes the research paradigm, research design, study population, sample and sampling, research tools and data gathering procedures. The ethics of the research are outlined to protect the identity of participants and their confidentiality.

Chapter 5 presents the findings from the data analysis. In addition, the chapter presents the emerging themes, sub-themes and substantiating statements in accordance with the research sub questions. The NVivo software programme was used to make sense of the data collected.

Chapter 6 presents a discussion of the research findings as well as a synthesis of the main issues emerging around the research sub questions. The discussion captures the findings that reflect the literature and theoretical frameworks reviewed in the study and points out the new

issues emerging from the study that make a contribution to extend frontiers of knowledge on the main research question and proposed framework for action research continuous professional development for primary school teachers. In the discussion of the findings, an endeavour is made to point out where the findings speak to the methodology discussed in Chapter 4, the theoretical frameworks discussed in Chapter 2 and practice of action research within the proposed Action Research Professional Development framework in Chapter 7. Related questions and issues to the research study are pointed out for further research.

Chapter 7 is the final chapter of the research study. In the chapter, the proposed Action Research Continuous Professional Development Framework (ARCPDF) is given and situated in the theoretical framework that is outlined in Chapters 2 and 3. Action research skills and practice are emphasised for continuous professional development and empowering of the primary school teachers. The teacher is central to the proposed framework for Continuous Professional Development and needs the school-based staff development sessions to keep learning alongside fellow teachers in collaboration, especially on similar challenges.

1.11 CONCLUSION

This chapter presented the proposed topic and provided a rationale and background for the study. It also presented the main research question, sub questions and the objectives of the study. A brief discussion of the challenges with the Continuous Professional Development strategy for teachers was given, the challenges and shortcomings given. The question was raised for the need to have a Continuous Professional Development strategy that engenders reflective and effective primary school teachers. The chapter indicated the use of the qualitative research methodology for the case study design. The research study focused on the case of the Bikita Quality Education Project (QEP) that took place in Bikita District, Masvingo Province in south east Zimbabwe. The Bikita QEP was active, with the support of Save the Children Norway Zimbabwe Country Office in training teachers, school heads and school inspectors during the period 2006 and 2013 (Save the Children International Zimbabwe, 2014). In 2010, Save the Children Norway Zimbabwe Country Office merged with Save the Children UK Zimbabwe Office to form the Save the Children International Zimbabwe Country Office and currently works in the education, health, child protection and emergency response sectors. The chapter ended with an outline of chapters comprising the study.

CHAPTER 2

AN INTEGRATED CONCEPTUALISED THEORETICAL FRAME

2.1 INTRODUCTION

This chapter has two distinct but complimentary sections, which comprise the conceptual framework (section 2.2) and the theoretical framework (section 2.4). Both frameworks inform and contribute to the research study. The first section (2.2) introduces a review of existing scholarly literature and debates around the concepts of professional development, continuous professional development, and the idea of professionalism as a 'restricted' or 'extended' practice. These concepts form the anchor of the thesis *Action Research Training as a Continuous Professional Development Strategy for Primary School Teachers – A Case Study of Zimbabwe*. The concepts are defined, explained and linked to the thrust of the research study and the conceptual framework. The literature reviewed forms the basis to inform action research training as a professional development strategy for primary school teachers.

In reviewing the available literature, I made an attempt to establish gaps not previously focused on in Continuous Professional Development (CPD) of primary school teachers in Zimbabwe and to some extent in the neighbouring countries in Southern Africa. This chapter, therefore, focuses on the variables at play as teachers continuously undergo professional development.

The second part (section 2.4) of the chapter explores four theories with a bearing on teacher professional growth and development. These are the teacher efficacy theory, the transformative learning theory, the social constructivist theory and the action research theory. While there are some subtle differences in these theories, they have relationships and overlap to some extent including forming a continuum in teacher professional growth and development (Rhodes & Houghton-Hill, 2000).

2.2 CONCEPTUAL FRAMEWORK

This section comprises a number of sub-sections in an attempt to develop a conceptual framework. Teachers as professionals is presented in sub-section 2.2.1 and teachers as researchers in sub-section 2.2.2. Professional learning is outlined in sub-section 2.2.3 which lead onto reflection and reflective practices being described in sub-section 2.2.4. Professional

development is discussed in sub-section 2.2.5 and thereafter shortcomings of a specific continuous professional development model are argued in sub-section 2.2.6.

2.2.1 Teachers as Professionals

In Zimbabwe, the majority of the primary school teachers are trained at teacher training colleges. The fifteen teacher training colleges are part of the Scheme of Association with the Department of Teacher Education, Faculty of Education of the University of Zimbabwe (Department of Teacher Education Handbook, 2015). In the Scheme of Association, the University of Zimbabwe provides quality control, monitors and supports the teacher education curriculum leading to the awarding of the Diploma in Education. The teacher education programme consists of four main areas, namely, theories of education (philosophy, psychology and sociology of education); professional studies, including teaching methodologies, main teaching subject and a research project (Chiromo, 2007; Department of Teacher Education Handbook, 2015). A teacher qualifies when he/she satisfies internal and external examiners in the four areas (Department of Teacher Education Handbook, 2015). This is the initial teacher education programme leading to the certification of primary school teachers and foundation for teacher professionalism.

Once placed in a teaching position at a school, the novice teacher begins his/her practical development as a teacher and depending on his/her competency and performance, can be slotted into three broad overlapping categories of teacher professionalism, as described in the works of Davies, Harber and Schweisfurth (2005:35-39). The three categories are unprofessional, restricted professional and extended professional with the overlapping categories presenting a continuum of ideal and real classroom behaviours of teachers. A teacher categorised as unprofessional shows characteristics of lack of caring for the learners and their learning, while other characteristics include absenteeism, unplanned lessons and prone to be hostile to the children. The restricted professional meets the mere basic expectations of a teacher, remains routine, and hardly questions themselves for purposes of improving. The restricted professional teacher is concerned with the mastery and exercise of technical skills in the classroom. The teacher is concerned with basic competence, is teacher-centred and tends to blame children for not learning. There is unimaginative or routine teaching, occasional use of corporal punishment and psychological punishment with the teacher being rigid and instrumental.

In contrast, the extended professional teacher goes beyond the call of duty, is reflective and seeks to be at his/her best in the teaching and learning situation. The extended professional teacher uses autonomous and independent judgement to reflect on what they are doing. This teacher does not follow rules but takes active responsibility for his/her teaching, is child-centred, uses a variety of methods, is collaborative, trusting and uses no corporal punishment. He/she is adaptive, flexible and is aware of the need for continuous professional development.

Harber and Stephens (2010) suggest that the three categories overlap, forming a continuum where teachers move up or down as they develop their practice to ensure quality education. Quality education is not to be defined as a set of inputs into the education system; it is more than new buildings, furniture and resources or identified learning outcomes. Quality is concerned with the interaction between the teacher, learner and the curriculum (Harber & Stephens, 2010). Nagel (1992:31) defined quality as:

> It is in the pedagogical meeting between the teacher, student and the content that quality is constituted. This meeting must have such a character that it 'vibrates with energy', to such an extent that those involved are absorbed in what they are talking about or are doing.

While Nagel (1992) stresses the role of the interaction process in teaching and learning, there is growing evidence that suggests learning outcomes are a key indicator of the quality of education as well (UNESCO, 2003). Hence, it is prudent to see quality in terms of both the teaching-learning processes and the learning outcomes. In this regard, quality is a combination of both, the interaction process and learning outcomes.

There is evidence that teacher education could be part of the problem of poor quality in education (Harber & Stephens, 2010) and shares the responsibility of the state of teaching and learning in schools. It is argued that teacher education perpetuates traditional and unreflective practice focusing on teacher-centred pedagogy (Harber & Stephens, 2010), thus sending teachers to the schools, most of whom lack reflection skills and as such, do not question themselves on what they do and do not do well in the classroom.

Harber (1997), Stringer (2008) and Hine (2013) identified that there was a gap between what teacher educators say and do and the perception of student teachers they train. In teacher education, Harber (1997) and Hine (2013) found that teaching is largely lecture-based with

most of the teaching following the transmission style with delivery of content, and then questions and answers. This scenario is at odds with the principles of participatory, learner-centred and enquiring pedagogy found in curriculum documents of teacher education institutions and expected in schools. Schweisfurth (2002), in reviewing the Multi-Site Teacher Education Research (MUSTER) Project in Ghana, Malawi, Lesotho and South Africa, found predominance of the lecture-method, transmission teaching with emphasis on recall and very little independent learning and reflective practice. According to Schweisfurth (2002), student teachers were found to say 'project work' was difficult and group work was 'less helpful'.

The MUSTER findings showed that classroom observation confirmed transmission-orientation with little emphasis on independent learning, critical analysis, creative thought and learning to exercise professional judgement. The interaction between student teachers and their lecturers/tutors during lectures involved a question and answer approach and in addition, questions were found to be restrictive, which did not allow for independent thinking.

The MUSTER findings relate to what Lewin and Stuart (2003) saw as a distinction between a teacher as a 'technician' and as 'reflective practitioner'. A 'technician' teacher has a restricted role, seeing to role to deliver the curriculum as prescribed, whilst the reflective practitioner plays a more extended role that includes developing the curriculum to suit the context, employing a wide range of methodologies, working on improving own practice and supporting and mentoring other teachers.

The discussion above demonstrates the importance and need for teachers to continuously develop themselves as professionals to improve their classroom practice in order to move up the continuum to extended professionalism, to move from being classroom technicians to professionals who see and understand the need for continuous learning.

2.2.2 Teachers as Learners

The concept of professional learning is central to this research. Teachers, once qualified need to continue to develop in their profession. This sustained professional learning is what makes it a continuous growth. When teachers come together, they form what are called professional learning communities. Thus, a learning community is a group of people who share common goals and attitudes, meet from time to time to collaborate on their work in the classrooms. According to Pirtle and Tobia (2014), the use of such learning communities has the potential

to offer an effective, learning-focused process that can foster improvement in teaching and learning.

Burns (2012) presents the argument that competent teachers are learners; they need to be continuous learners and that professional development should be teacher-centred. Burns (2012) further says that a lack of awareness that teachers, like their learners, are also learners, represents the greatest impediment to improved professional development for teachers. Improvement in teacher professional development for teachers needs to adopt a new approach and as their learners, they need the same high-quality instruction advocated for their learners with learning opportunities that are teacher-centred (Koshy, 2010). Thus, both Burns (2012) and Koshy (2010) advocate for teacher-centred professional development. According to Burns (2012), teacher-centred professional development compliments the learner-centred instruction in that it is grounded in research on effective professional development and adult learning with. five characteristics of teacher-centred professional development being identified (Burns, 2012).

The first characteristic is that teacher-centred professional development recognises that teachers, like their learners, are unique in how they learn. Thus, teacher-centred professional development aims to provide teachers with the same high-quality learning that learners receive. Burns (2012) says that teacher learning, like learners in classrooms, works well when it focuses on the needs of teachers as learners, and connect to teachers' work. Teacher learning, to be effective, should include scaffolding and support by a trained support person and should be differentiated and active (Garet, Porter, Desimone, Beirman & Yoon, 2001).

The second characteristic is that teacher-centred professional development should recognise that instruction for teachers, as for learners, must begin with where the teacher is and targets interventions to meet this reality. This is important to avoid resistance to any new ideas and build towards new ideas by starting from where the teachers are (Burns & Dimock, 2007). The third characteristic is to recognise that teachers, like their learners, need ongoing support to implement and internalise what they have learned (Burns & Dimock, 2007; Hendricks, 2006). The most successful professional development programmes support teachers so they can transfer learning from the training to the classroom (Burns & Dimock, 2007). Burns and Dimock (2007) found this kind of support led to a 98% of teachers in their research group in Indonesia implementing the guidance and support for an Education Development Centre

(EDC) mathematics and science professional development programme project. The participating teachers' take-up rate in implementation was higher than in another research group within the same context. Burns and Dimock (2007) attributed the success to changes in the beliefs of the teachers in the more successful group of teachers.

The fourth teacher professional development characteristic recognises that teacher learning, like learners' learning, must move teachers along a continuum of higher-level thinking (Burns, 2012). Burns (2012) drew this characteristic from another study she carried out where a teacher study group, which focused on improving learners' writing skills, deepened the teachers' understanding of the writing process, moving from a simple belief that writing is something assigned and grounded in mechanics and grammar to a deeper awareness that writing must be nurtured and that good writing often involves hard-to-teach skills like voice and flow. In writing themselves, many teachers discovered that they, like their learners, did not like to write, nor were they particularly good at it. This reflection on writing, grounded in teachers becoming writers themselves, resulted in greater empathy for struggling student writers, greater understanding of the complexities involved in writing well and subsequent re-evaluation and revision of many writing assignments (Burns, 2012).

The fifth characteristic of teachers' continuous professional development recognises that teachers, like their learners, learn best as part of a community. Burns (2011) says that the most powerful learning opportunities occur when teachers form communities in which they collaborate, share knowledge and support one another in the implementation of new learning. Thus, in her argument, a teacher-centred professional development approach combines sufficient time for team or group learning, a collaborative structure where the teacher moves through stages of community development. The stages are from *communities of interest* where teachers first connect to one another via a shared professional interest to *communities of learning* where teachers discuss instructional practices or analyse work to the final stage of a *community of practice* in which teachers plan together, teach together and work together (Burns & Dimock, 2007; Burns, 2011).

On reflection, the five stages discussed above, support *teacher learning* and make the concept of teacher-centred professional development important to ensure that it is situated in a framework that promotes teachers' collegiality and working together. Further, this is done in a

way that builds teachers' confidence regardless of the time spent, cost involved to be relevant and useful to the teachers (Burns, 2011; Burns, 2012; Burns & Dimock, 2007).

McKay and Kember (1997) have pointed out that the purpose for which teachers engage in learning has a bearing on the approach they take to continuous professional development. The argument by McKay and Kember (1997) was that the outcomes of engaging in teacher continuous learning and professional development depended on what purposes they attached to it. McKay and Kember (1997) suggested two categories of teacher learning as something new to improve on what they already do or something to help them think differently about some aspects of their practice. The two categories they proposed are either simply learning something new so that they are efficient, which they called 'surface learning' or a more long-term approach that leads to modifying practice and underlying what is called 'deep learning'. Similar thoughts on the purpose of further teacher learning were echoed by Piggot-Irvine (1998). Piggot-Irvine (1998) says that surface learning is concerned with implementing actions to make change with minimal effort. It is an efficiency approach. One example is where a teacher chooses to go to a two-hour course on questioning skills to improve the way they communicate with learners in teaching and learning. Another example is where the same teacher informally asks a colleague for some ideas that will help to address issues that they have on a particular problem, such as classroom communication (Piggot-Irvine, 1998).

However, in contrast, deep learning, focuses on gaining understanding in substantial and long-term ways, which modify both practice and underlying values. It is an action research approach to professional development (Kemmis & McTaggart, 1988). An example is where a teacher gathers data to determine what currently happens with the ways he/she communicates with learners in the classroom, then implements several strategies to bring about change and evaluates how effective these have been. In all phases of this process, the teacher reflects on actions and their outcomes. In this regard, the element of reflection is crucial in the action research process. In this, the teachers are conscious of what they are doing, why they are doing it and then asks about the actions that they take and the decisions that they make (Hendricks, 2006; Kemmis & McTaggart (1988). Achieving deep learning, which leads to change through action research, involves discrete processes, like information gathering and reflection, which need to be taught and modelled by another expert.

2.2.3 Teachers as Researchers

Teachers have been discussed as professionals, as learners and now teachers as researchers is considered. One of the eminent educationists, Lawrence Stenhouse proffered the concept of 'teachers as researchers' in the 1960s and 1970s, a concept that has remained in the education arena. In essence, Stenhouse argued that good teachers should be researchers. Researchers ask questions; they are not satisfied with the status quo - they want to understand the phenomena. They want to interrogate and understand what is happening in their classrooms in order to have a positive influence. Research is, therefore, a basis of 'good teaching' and continuous learning and development. Through research, a teacher comes to understand what works and what does not work, and with what effect. Thus, being a researcher is a necessity in order for the delivery of quality education.

Ruddock (1998:30) explains that Stenhouse's work became popular during the days of the 'Humanities Project' in the United Kingdom (UK) in the 1960s and 1970s. Stenhouse contributed to a debate about knowledge and control as well as the structure of curriculum development and professional learning of teachers. Stenhouse believed that education has an emancipatory role for the learner. He believed in the liberation of young learners from uncritical dependence on the teacher and other authority figures. He wanted teachers to instil in learners the importance of doubt. Similarly, Stenhouse extended this notion to the teachers as well. His view was that the school should not give learners their political ideals or religious faith but the means with which to discover it for themselves, and thus the scepticism to develop the ability to doubt and not just accept things at face value. Hence his concern to liberate learners from a disempowering dependency on authority figures in the school ran parallel to his interest in liberating teachers from dependence on 'academic researchers' and from a view of themselves as 'mere practitioners'. Stenhouse believed that the teacher is central to the educational enterprise. The teacher should have 'doubt' and therefore should seek to find out for himself/herself. The teacher should be inquisitive, asking questions and seeking more understanding. Thus, he/she should be an investigative teacher.

Stenhouse worked in the era of large-scale externally funded curriculum development projects, such as the Humanities Project in the UK. He did not subscribe to top-down models that characterised many curriculum projects. To him, curriculum development is not a means of regimenting teachers in a set of routines but a way of extending their individual and communal power (Ruddock, 1998). A new curriculum framework was not a solution worked out by others

and offered to teachers to merely apply it. A new curriculum framework is a diagnostic and experimental tool designed to help teachers examine some of the fundamental issues in the curriculum. Hence, this is an opportunity to try out and evaluate new approaches in a spirit of continuous professional learning. Ruddock (1998) said Stenhouse had a strong belief that teachers, not curriculum packages, are the agents of change and the function of a new curriculum framework was to service the professional learning of teachers.

In this regard, Ruddock (1998) as well as Kemmis, MacTaggart and Nixon (2014), following Stenhouse ideas, take the view that teachers have an opportunity to learn from one another among themselves in the context of their own classrooms. Ruddock (1998) suggests that each teacher turns their classroom into a laboratory as he/she becomes part of an inquiring community, investigating what works and what does not work, trying out different ways to make things work and catalyse learning. Within the same context, Kemmis *et al.* (2014) encourage teacher collaborative research for mutual benefit. This approach to the work of the teacher places the curriculum framework provided by curriculum developers under scrutiny as teachers investigate what they are supposed to be doing in the classroom. Teachers thus become co-developers of the curriculum and learning.

The notion, introduced by Stenhouse, of a teacher as a researcher in their own classroom has found favour and support in many quarters. There is a strong relationship between research and teaching, as engaging in these aspects creates an environment of continuous learning and development for the teacher. In an article on understanding the relationship between research and teaching, the United States of America (USA) National Council for Accreditation of Teacher Education (NCATE, 2010) introduced the view that research does and should influence teaching. However, the National Council for Teacher Education (NCTE) notes that even though the gulf between the two aspects of research and teaching is wide, it can be closed. As classrooms are multi-dimensional and dynamic places because of the many influences that shape learners' learning, these various dimensions are better understood through research and the dynamic classroom environment is better appreciated when the teacher carries out a systematic process to understand the situation for informed and sound decisions.

In essence, research serves the purpose of informing the teacher on how to handle complex and varied backgrounds and particularly the needs of learners. In addition, research can stimulate rich conversations amongst teachers, administrators and policy makers. In this way, research

findings and evidence can lead practitioners to question assumptions, reaffirm or challenge convictions and even raise new questions. On reflection, the ideas by Stenhouse laid the basis for a paradigm shift in that teachers can develop the capacity to contribute to a generation of knowledge as opposed to remaining consumers of what has been researched elsewhere.

2.2.4 Teachers as Reflective Practitioners

Desta, Chalchisa, Mulat, Berihun & Tesera (2009) pointed out that Schon (1983, 1987) and Kolb (1984) were the prominent philosophers who brought Dewey's idea of reflective practice into the field of adult education. To extend the discussion in this section of the chapter, it is important to briefly discuss the terms reflection, reflective practice and critical reflection. Reflection is a broad term, which refers to approaches in understanding what is happening in one's life and experience. Moon (2013) says that reflection is a systematic enquiry into one's own practice and deepens what one understands of it. Thus, reflection is a deliberate action. This makes reflective action an active persistent and careful consideration of any belief or any form of knowledge in light of the grounds that support it (Calderhead & Gates, 2005). This understanding takes us to reflective practice. When all this is considered, reflection is about becoming aware of one's own thinking processes, actions and being able to conduct self-assessment. For a practitioner, reflection is an integral part of the continuous learning process. To the researcher, the practitioner is able to identify mistakes and correct them through being a reflective practitioner.

Fook (2007) argues that critical reflection is a subset of reflective practice. In other words, reflective practice is a process where learners examine and re-evaluate their cognitive, emotional and experiential learning, linking them with the personal, social, cultural and professional origins (Fook. 2007). In essence, critical reflection leads to reflective practice (Fook, 2007; Moon, 2006). Smith (2008) goes on to say that critical reflective learning allows the practitioners to examine individual uniqueness and specific identities that encourage them to perform in their own way in a particular context. One of the perceptions of critical reflection implies that it is thinking that occurs beyond the already established and accepted social procedures. For example, reflective knowing attests to the already-established professional practices to enquire why trained experts have particular ways of doing. This in turns aids in identifying what specific areas of training should be included in professional development (Leitch & Day, 2000:189).

As has been pointed out by Moon (2006), critical reflection contributes to professional development in adult education. Thus, the critical reflection path should be carefully planned to encourage the practitioners to take a critical approach towards their own work and position themselves in relation to the performance they exhibit (Leach, Neutze & Zepke, 2001:12). In this sense, reflection includes not only questioning how to perform, but it is also about critically analysing the status of the performance, the degree of achievement and identifying gaps in the way forward to find solutions. Schon (1991 as cited in Pockett & Giles, 2008) describes this as a level of reflection that promotes professional capability and professional progress. Smith (2011:203) made a point that critical reflection supports the practitioners in becoming constructive learners when they give criticism on and emphasis to personal and social influences on their actions.

The definition of critical reflective thinking indicates that assimilation, accommodation-reframing and learning occur during the process of critical reflection. According to Dewey's definition (cited in Illeris, 2009:23), experience as a learning process happens when habitual acts and thinking are disturbed and result in inquiry. Then, the inquiry grows into an investigative enquiry in which ideas, hypotheses, perceptions and theories are used as instruments, leading to creative and potentially inventive action. On the other hand, in constructivist theory, knowledge is always viewed as a socially constructed phenomenon. Therefore, it is linked to the people and the social contexts where it is created or modified (Foucault, 2002:69; Hsiung, 2008:214). The constructivist theorists suggest that reflection enables the professionals or the learners to construct new knowledge from what they have experienced (Sybil & Nahida, 2012:47). Thus, critical reflection is considered as a thorough process which considers methodical responsiveness to personal, interpersonal and contextual aspects influencing practice, action and performance in a particular context (Smith, 2008:39).

However, critical reflection, as a learning theory, is criticised for certain aspects related to implementation. Smith (2011:211) identified an important aspect about critical reflection on its potentially unconstructive self-regulatory role. For example, in portfolios, learners emphasise the circumstances and impacts of personal knowledge, perceptions, skills and behaviours. This implies that their reflection is largely self-critical. Under such circumstances, learners become overly critical of their own performance rather than adopting a reasonable critical perspective of their opinions and actions within theories and social contexts to which they belong (Johnson & Cassell, 2001:785). As a consequence, to such self-criticism, learners

may develop negative feelings about their own performance. This in return can create barriers to learning, disfigure critical thinking and weaken the will to continue learning from reflection.

However, from another angle, this is also the reason that Mezirow (2009:126) considers critical reflection as a contributor to transformative learning, which promotes mental readiness for change. Critical reflection provides learners and practitioners with the opportunity to examine and question their beliefs, opinions and values. Here, reflection involves observation, asking questions and putting facts, ideas and experiences together to derive new meaning.

Turning to continuous learning of teachers, reflective teaching is a self-assessment of teaching, wherein the teachers examine their pedagogy, articulate reasons and strengths for their strategies and identify areas for revision or improvement (Hendricks, 2006). Teachers who explore their own teaching through critical reflection develop changes in attitudes and awareness, which they believe can benefit their professional growth as teachers, as well as improve the kind of support they provide their learners. In this regard, reflective teaching is a process where teachers think over their teaching practices, analysing how they taught their learners and how the practice might be improved or changed for better learning outcomes.

The idea of reflection and reflective practice, as espoused by Schon (1983) and Elliot (1991), is crucial in Continuous Professional Development (CPD) in a wide range of professions including the teaching profession. The key point is that reflection and reflective practice contribute to continuous learning and change for the better. In essence, reflective practice is related to how a professional thinks and acts in action (Elliot, 1991; Schon, 1983).

Lewin and Stuart (2003) make the distinction between a teacher as a ‘technician’ and a teacher as a ‘reflective practitioner’. A reflective practitioner is more than a technician whose actions are largely routine. However, a reflective practitioner has the ability to reflect on one's actions so as to engage in a process of continuous learning and in order to improve (Lewin & Stuart, 2003). According to Kolb (1984), reflective practice involves paying critical attention to the practical values and theories, which inform everyday actions, by examining practice reflectively. Kolb sees this as cyclical with reflections on observations on concrete experiences, forming abstract concepts, generalising them to practice and testing implications and reviewed ways of doing things in new situations. The diagram below (Figure 2.1) illustrates the cyclical format of reflective practice.

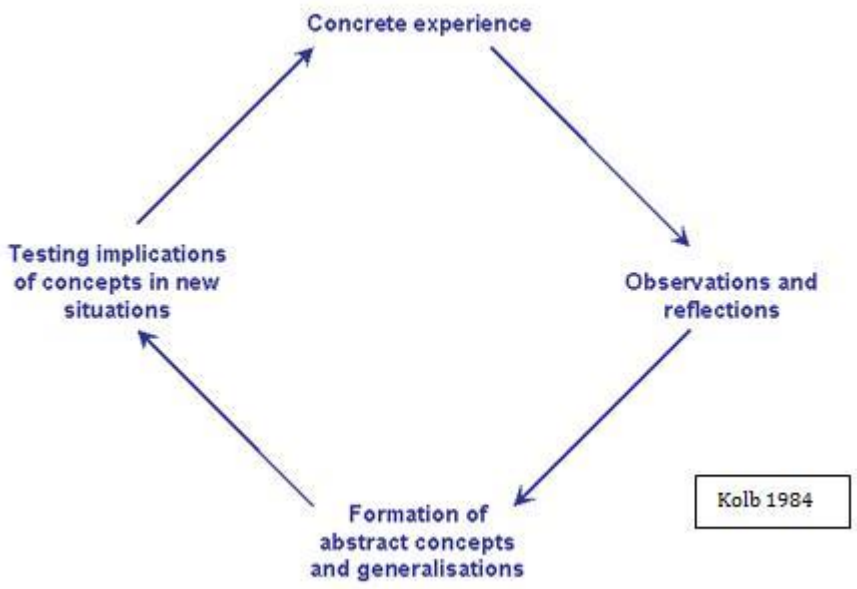

Figure 2.1: Experiential learning cycle (Kolb, 1984:38)

Following diagram above, the practitioners make observations and note the patterns emerging. They reflect on them and in so doing, form abstract concepts and generalisations on what is happening. Related to the concepts and generalisations, they develop proposals on how to address the situation leading to ways of testing the proposals. Consequently, this leads to concrete actions and experience within the practice. At this point, the cycle is completed but then it has the ability to repeats itself with further cycles.

Schon (1983) introduced the concepts of 'reflection-on action' and 'reflection-in-action'. These concepts have helped to explain how practitioners deal with challenges with which they are faced in their work. In essence, these concepts lead the practitioners to improve on practice. While Schon brought these concepts into the limelight, John Dewey, according to Elliot (1991) was amongst the first thinkers to write about reflective practice and thereafter the work of Kurt Lewin and Jean Piaget pursued similar thinking by developing human learning theories that promote reflective practice. Koshy (2010) and Hendricks (2006) argue that even in ancient religious thought, such as that of Buddhists, reflective practice was promoted and encouraged. Thus, reflection is an age-old practice used in the process of learning and developing.

From the foregoing, reflective practice and reflective theory are based on the view that theory and practice are integrated. There is a cyclical pattern of experience and consciousness of a practitioner applying lessons learnt from their practice and experience. From the 1970s and

1980s, literature has focused on experiential learning and the development of reflective practice (Hendricks, 2006). This means that reflection-in-action and reflection-on-action have been important human activities for many years wherein practitioners recapture their experiences for learning by thinking about it, mulling over it and evaluating it; in other words, employing implicit learning. Thus, when a practitioner rethinks events, actions, emotions and ideas and compares them to the intended purpose of the actions with the results of those actions, this is stepping back from the action and contributing to critical reflection.

Schon (1983) built on the notions of 'reflection-on-action' and reflection-in-action' around the recognition and correction of a perceived fault or error in one's practice. Reflection here makes the practitioner learn from the first attempt to review strategies when a situation arises and then to modify or change them in order to improve on practice. In this regard, Schon took the position that the notions of 'reflection-on-action' and 'reflection-in-action' enable the practitioners to respond to problematic situations, solve problem and draw on practical knowledge gained form experience. This view of reflective practice resonates well with views expressed by John Dewey (Elliot, 1991).

The notions of 'reflection-in-action' and reflection-on-action' are fundamental to the thought processes for practitioners (Schon, 1983). Reflection-in-action can be described as the ability of a practitioner to 'think on his or her feet'. This means that when faced with a professional issue, the practitioners immediately take a step back, and connect with their prior experiences of a similar nature to attend to the situation. On the other hand, reflection-on-action, is the idea that after an experience, the practitioners take some time to analyse their reactions to the situation, explore reasons around it and examine the consequences of the actions. This kind of reflection goes beyond just looking back on experiences but explores the reasoning behind the actions taken. According to Schon, these two notions show the practitioners' ability to think through, explore, examine and deal with problematic situations and/or experiences in problem solving, based on practical knowledge and experience.

Thus, according to Schon, professional growth begins when practitioners start to view their practice with a critical lens. The practitioners doubt their actions and question the way they act. However, through a process of careful thinking and questioning the actions taken, they affirm their knowledge of the situation, think of possible ways to resolve the problems and take the right action for a positive outcome. This is what has come to be called reflective practice. The

concept of reflective practice is now widely used in both teacher education and teacher professional development (Hendricks, 2006; Koshy, 2010). Many initial teacher education programmes espouse reflective practice and critical thinking ensuring that teachers as classroom practitioners, employ reflective practice by studying their own teaching strategies, determining what works best for their learners and considering consequences of their teaching procedures and practice in the classroom. In this regard, reflective practice is a form of metacognition.

Schon's point of view has not been taken without criticism. According to Hendricks (2006), the phrase 'reflective practice' may carry diverse meanings and there is no consensus at times. In addition, teaching and learning are complex processes, and there is no one right approach as it were. This criticism however, does not take away the fact that reflecting on different approaches to teaching and understanding, past and current experiences, can lead to improvement in teaching practices. Nevertheless, Schon's reflection-in-action can help teachers make choices and incorporate them in the professional knowledge they gain from their experience as they practise reflection-in-action and reflection-on-action.

One benefit of reflective practice is that teachers move from their knowledge of distinct skills to a stage where they are able to modify their skills and practices to use in specific contexts or situations. In implementing the process of reflective practice, teachers will be able to move themselves and their practice from existing theories to more effective strategies. Elliot (1991) and Hendricks (2006) argue that teachers should resist maintaining a classroom culture without reflective practice, continuous engagement in critical reflection and dynamic practice. Elliot (1991) as supported by Hendricks (2006), recommends that continuous learning from practice and experience is key to making teachers accountable in their practice, which results in them being poised to be reflective, objective and accountable for their practice.

Reflective practice and critical thinking are equally espoused in Continuous Professional Development programmes. This section of the chapter will tie together the concepts of professionalism, professional learning, and reflective practice with continuous professional development of teachers in order to develop characteristics of an 'extended professional' and move up the continuum of CPD.

2.2.5 Teachers and Continuous Professional Development

Professional development starts from the principle that an effective teacher is a developing teacher (Kennedy, 2005). Professional development helps teachers meet the challenges of their work and achieve the goals of their work. In this regard, professional development incorporates the idea of reflective practice.

Harding (2009) describes four characteristics of CPD. The first characteristic is that professional development is continuous. Professionals should always be looking for ways to deal with challenges they meet and improve on their performance. The second characteristic is that it is the responsibility of teachers to identify their own needs and find ways to meet those needs. The teachers need to be creative or innovative in dealing with challenges they meet on the job. The third characteristic is that CPD is evaluative. Here, teachers should be evaluative of themselves, asking questions around their practice to help fully appreciate the impact of the actions taken in the course of duty. The fourth characteristic is that CPD is essential to professional life, it is not extra. In addition, CPD helps to build professional relationships among co-workers by developing a collegial relationship.

According to Kennedy (2005), the area of teachers' continuing professional development is receiving a much attention. In exploring this important area for education systems, Kennedy (2005) identified nine models of how the continuous professional development is being handled which include training, award-bearing, deficit, cascade, standards-based, coaching or mentoring, community of practice, action research and transformative. She found that in practice, characteristics of two or more models were brought together to define how teacher continuous professional development is offered and conducted. It is important to note that the models are neither exhaustive nor exclusive. In this section of the chapter, I turn to these models and explore the theoretical underpinnings for them as well as their pros and cons.

According to Kelly and Williamson (2002), the training model has been the dominant form of continuous professional development for teachers. This model is skills-based and has a technocratic view of teaching. In this model, the teacher is provided periodically or when necessary with an opportunity to upgrade their skills in order to improve their competence (Kennedy (2005:237). In this model, the training is delivered by an expert, and in many cases the training is delivered 'off-site' away from the school or the work place. In this regard, Kennedy (2005) points out that because of the off-site training, this model lacks connection

with the classroom context where the teacher is based most of the time. Despite its weakness, the training model is seen as effective and quick to introduce new knowledge and skills to practitioners (Hoban, 2002). However, it falls short on how that knowledge and skills are implemented in practice, as teachers are passive recipients of that new knowledge and skills (Kennedy, 2005).

The award-bearing model is focused on providing participants with awards achieved through engaging in a study over a period of time leading to an academic award or recognition (Kennedy, 2005). This route has met the criticism of academic work undertaken, for example in universities, without the much-needed practice-based element gained in work-based continuous professional development (Matthew, 2017). The deficit model is when professional development is designed to address a perceived deficit or weakness in performance of the practitioner (Kennedy, 2005). One key criticism of this model is its presumption that the individual teacher's weaknesses are remedied by targeting him/her and yet there could be systemic issues that need improving at the work place or the school (Boreham, 2004; Rhodes & Beneicke, 2003). Thus, the weakness of the deficit model is its failure to recognise the interdependency of practitioners in a workplace and the management of the work place.

The cascade model involves teachers or practitioners attending training and then going on to train other teachers or practitioners (Kennedy, 2005; Marker, 1999). This model is used largely where resources are limited, and therefore it provides an efficient use of limited resources. Nevertheless, it has its challenges, as articulated by Day (1999) and Nieto (2003). Day (1999) reports on a case study where teachers involved in a cascade model learn new knowledge and skills but do not experience the principles of participation, collaboration and ownership which should characterise their learning. In addition, the cascade model involves skills and knowledge focusing on the 'what' and 'how'. Nieto (2003 cited in Kennedy, 2005:240) indicates that there is need for the additional question of 'why' the new skills and knowledge influence attitudes and professional practice.

The standards-based model relies on the behaviourist theory of learning and it begins with defining and setting standards to be achieved in the professional practice, which is in the teaching (Kennedy, 2005). However, Beyer (2002) raises a criticism of this model for narrowing the expectations for teachers to the standards set, as professional practice is complex and has many dynamics that require flexibility. Kirk, Beveridge and Smith (2004) note that

focus on standards can be limiting in that they encourage uniformity which may not be the best in a complex learning environment. The sixth model is the coaching or mentoring model. The defining characteristic of this model is the one-to-one relationship (Kennedy, 2005), which depicts the model as skills-based, with a counselling element between the mentor and the mentored (Rhodes & Beneicke, 2003). The model provides for collegial support for each other with continuous dialogue between practitioners. In this model, continuous professional development depends on good interpersonal relationships and a high level of confidentiality ((Rhodes & Beneicke, 2003).

The seventh model is the community of practice (CoP) model. According to Kennedy (2005), this model is linked to the coaching or mentoring model. In the coaching or mentoring model there are two practitioners helping and supporting each other, while in the community of practice model there are more than two people working together in a mutual engagement, understanding their practice and developing a repertoire of practices for improved performance (Wenger, 1998). The strength of the model is the value of learning in communities and the richness of the connections between individuals in the community. Wenger (1998) sees the strength of this model in its capacity to promote transformative practice, but warns of the possibility of the community promoting dominant uncritical discourse among the members.

The eighth model is the action research model, built on the understanding of action research as a study of a social situation with the view of improving practice within that situation (Weiner, 2002). Weiner (2002) goes to say that this model works well in a community of practice where there is a high level of collaboration among practitioners. This model leads to research-based professional development, making it relevant to practitioners to improve their practice (Kennedy, 2005). Further to this view, Burbank and Kauchack (2003) point out that collaborative action research in the community of practice ensure that practitioners are active in their continuous professional development as opposed to the passive role they have towards their development in other models discussed above. This is what makes the action research model have capacity to transform the practice of teachers and give them professional autonomy (Kennedy, 2005).

The transformative model is the ninth and last one to be discussed in this section of the chapter. This model of Continuous Professional Development combines a number of aspects that are drawn from other models but with the distinct characteristic of contributing to transforming

practice (Hoban, 2002). In this model, teachers, as part of a community of inquiry, have their practice transformed through a balance between teacher-centred, skills-based and knowledge-focused models and action research oriented, collaborative and partnership-based formations (Hoban, 2002; Kennedy, 2005). The discussion of these models has a bearing on the proposed framework for this research study as it builds on the characteristics of these models, in particular those that promote transformative learning such as the type of knowledge acquisition the model promotes (transformative). The models focus on collaborative learning as opposed to individual development. They focus on accountability as one of the pillars of the professional development, supporting professional autonomy, and transforming or facilitating transformative practice. These characteristics make a case for a progressive continuous professional development where teachers, as practitioners, keep learning and improving practice (Kennedy, 2005).

In addition, these characteristics complement what Harding (2009) stressed for continuous professional development and underlined as essential in professional work. Thus, CPD ought to be part of every teacher's practice. In this, continuous learning, evaluating and developing as a professional, becomes the norm. Hence, CPD ought to be designed to move the teacher up the continuum from a non-professional to an extended professional (Davies *et al.*, 2005). This study explored and proffered a model for Continuous Professional Development that can engender teachers who go beyond the call of duty and exhibit extended professionalism for the benefit of the learners and creating quality learning environments. The centre of CPD is the notion of improving the quality of teaching and learning (Harding, 2009).

2.3 REFLECTIONS ON THE CONCEPTUAL FRAMEWORK

This first part of the chapter examined some of the key concepts on which this research study is anchored. These are the teacher as a professional and the continuum of teacher professionalism, the teacher as a learner, the teacher as researcher, reflective practice and the development of the reflective practitioner leading to the concept of continuous professional development.

One other key aspect discussed earlier is the continuum in which professional practice falls. Davies *et al.* (2005) presented three categories of professional practice: unprofessional, restricted professional and extended professional practice. Effective CPD should strive to support teachers with moving along the continuum into extended professionalism. This is

where Nagel (1992:19) talks of quality teaching and learning "vibrating" with both learners and the teacher being engaged. Extended professionalism does not just happen, it is a characteristic that develops and grows in teachers through CPD. It is in this context that this study sought to explore and propose a model that could contribute to achieving extended professionalism and improve the quality of teaching and learning in the schools.

The first sections of the chapter also explored other concepts in the realm of CPD from the work of Donald Schon and John Elliot. Both Schon (1983) and Elliot (1991) encourage teachers to develop reflective practice, which will make them, move away from being 'technicians'. Schön (1983; 1991) used the terms 'reflection-in-action' and 'reflection-on-action'. The benefit of being reflective of one's work is that it scaffolds practice from a conscious learning on reflection-in-action and reflection-on-action.

Harding (2009) provided four characteristics of CPD which should empower practitioners to improve on performance, deal with emerging challenges creatively, evaluate own practice, ask questions around own practice and build relationships with colleagues. This ensures that CPD becomes part of every teacher's professional life and work. Teachers, through CPD, build professional learning communities as they come together to share the learning from their work.

This chapter also made reference to the importance of initial teacher education in laying the foundation for effective CPD. Initial teacher education needs to engender an inquisitive mind; a questioning mind in the teacher. This calls for a move towards teacher education using approaches that make teachers more questioning of their own practice and seek to learn and improve on their work. To sum up, a conceptual presentation of the continuous professional development framework for teachers as professionals is offered in Figure 2.2.

Figure 2.2: Proposed Conceptual Framework for Continuous Professional Development (Mukabeta, 2020)

2.4 THEORETICAL FRAMEWORK

The second section of this chapter explores four theories that provide a theoretical framework that informs this integrated conceptualised theoretical frame for this study. The four theories which underpin this study are teacher efficacy (2.4.1), transformative learning (2.4.2), social constructivist theory (2.4.3) and action research theory (2.4.4). These theories carry philosophical assumptions and world-views about teaching and learning and how a teacher develops professionally. The theories were considered appropriate for this study and have the potential of helping to understand the professional development of teachers and the impact on teacher learning and professional development. As such, an attempt to explain what the theories suggest and offer in understanding professional development of teachers was made, as well as how these theories influence the study. This section of the chapter therefore provides some background that will be useful to understand, explain and interpret data that is gathered in the study on teacher professional development.

2.4.1 Teacher Efficacy Theory

Bandura (1997) defined self-efficacy as the belief about one's own capabilities to organise and execute a certain task. Teacher self-efficacy is a construct that has developed within the context of Bandura's social cognitive theory. Teacher self-efficacy is important because it refers to the teachers' confidence in their ability to bring about success from all learners, resting on a belief that when teachers believe, learners can achieve (Zee & Koomen, 2016). Tschannen-Moran, Hoy and Hoy (1998) refer to teacher efficacy as the extent to which teachers believes that they have the capacity to affect learners' performance. Teachers believe that they can influence how well learners learn, including learners who may be difficult or unmotivated. According to Zee and Koomen (2016), a number of studies have shown a strong linkage between teacher self-efficacy and learner outcomes. In this regard, Tschannen *et al.* (1998) argue that learner motivation and performance is a significant reinforcement for teaching behaviours by teachers.

Bandura (1977) identified teacher efficacy as a cognitive process in which people, in this case teachers, construct their beliefs about their capacity to perform to a given level of attainment. Teacher efficacy relates to teachers' beliefs to perform and influence the performance and attainment of their learners (Goddard, Hoy & Hoy, 2000). However, one could query what contributes to the development of strong and positive teacher efficacy. Thus, one needs to investigate and uncover the knowledge and beliefs inherent in teachers' roles and the

expectations that are important in the construction of those teacher beliefs. Teachers' sense of efficacy is related to a number of variables which include school climate, school leadership, school-community relations and decision-making structures in the school (Tschannen *et al.*, 1998). The importance of these variables is that they create an environment for the development of efficacy. Research study reviews conducted by Zee and Koomen (2016) as well as by Tschannen *et al.* (1998) have found that when teachers work to find ways to address learning, motivation and behaviour problems of their learners, they are likely to enhance their feelings of efficacy.

Bandura (1977) refers to the concept of self-efficacy where individuals believe in their own ability to do what is expected of them to produce the specific performance or outcomes, which is an important trait for teacher quality (Bandura, 1977, 1986, 1997). Bandura found that where there is low efficacy in teachers, there is low performance of learners and the opposite is true in that where teachers' sense of high efficacy has proved to be a powerful construct, this links to learner achievement outcomes. In addition, teachers with a strong sense of efficacy are open to new ideas and are more willing to experiment and try out new initiatives. Bandura (1986; 1997) has identified four sources of teacher efficacy: mastery experiences, physiological and emotional states, vicarious (mediated/indirect) experience and verbal persuasion. These four sources assist the teacher in developing self-perception.

Mastery experiences are a powerful source of teacher efficacy as the feeling that performance has been successful, raises belief in efficacy and contributes to the expectation of proficient performance. Teacher beliefs are strengthened when success is achieved. However, Tschannen-Moran *et al.* (1998) warn that not all successful experiences encourage efficacy. For instance, efficacy is not enhanced when success comes as a result of extensive external assistance. The feeling that one's performance has been a failure lowers efficacy and results in an assault on efficacy. Nevertheless, mastery of experiences is a strong driver of teacher efficacy (Gavora, 2010). In actual teaching situations, teachers recognise their strengths and weaknesses as they manage, instruct and evaluate a group of learners.

The level of the emotional and physiological state the teachers finds in a teaching situation contributes to teachers' self-perceptions of their teaching. Where the teachers feel relaxed and have positive emotions, this is a signal of not just assurance but anticipation of future success. Emotions, such as increased heart beat and respiratory rate that the teachers experience, create

negative feelings due to being anxious and under stress, depending on the circumstances. When teachers watch others teach, this experience enriches impressions about the nature of teaching and they learn to what extent they can make a difference with their own teaching. The mediated or indirect experiences such as observations of classroom practice and modelling of teaching helps teachers realise that the teaching task is manageable and it can influence their teaching styles. Observing others make them believe they too can do it and succeed.

Verbal persuasion, which can be general or specific, provides information about the nature of teaching. It can give encouragement and offer strategies that can be used to overcome any obstacles and challenges. Verbal persuasion can be used to give teachers feedback on their performance, which helps in the developing of further skills that form part of the teaching repertoire. New skills learnt or acquired this way may not necessarily lead to improved teacher practice but when these are successfully used to enhance student learning, verbal persuasion in the form of feedback from supervisors, fellow teachers and even learners become a potent source of information to enhance teacher performance. However, harsh feedback may lower teacher performance; however, focused and constructive feedback may help build confidence and lead to improving learner performance (Bandura, in Zee & Koomen, 2016).

Research by Bandura (1997 cited in Tschannen- Moran *et al.*, 1998) has warned that producing positive changes in established teacher efficacy beliefs requires compelling feedback that is able to challenge one's existing capabilities. This is even more difficult when the teachers are in-service. This view has been found to be even more important on teacher efficacy to implement inclusive education practices in their classrooms. Sharma, Loren and Forlin (2012) found that teachers with high teacher efficacy, in implementing inclusive practices, would believe that a student with special learning needs can be effectively taught in a regular classroom situation. Alternatively, teachers with low efficacy would believe that there is very little that they can do to include a student with special learning needs in a regular classroom and in this regard, may be disinclined to try. Teachers with high self-efficacy were found to persist with low achieving learners using more appropriate teaching methods and strategies, better questioning techniques that allows each student to learn more effectively and less criticism for incorrect answers. On the other hand, teachers with low self-efficacy tended to use less effective methods and strategies that hinder student learning. Other researchers, such as Chan and Lam (2010 cited in Sharma *et al.*, 2012) found that teachers, with high efficacy used more hands-on approaches and were more humanistic. Thus, high efficacy is a key

ingredient to create successful inclusive classroom environments. In this regard, it can be argued that CPD that fails to address and develop teacher efficacy is unlikely to be effective. In western countries, there is research (for example, Sharma *et al.*, 2012; Zee & Koomen, 2016), to show the relationship between teacher efficacy and improvement of learner achievement. These studies have demonstrated that teacher efficacy affects the success of routine classroom activities in creating an inclusive classroom environment that is supportive of all kinds of learners and their diverse backgrounds.

2.4.2 Transformative Learning Theory

In this section of the chapter, I turn to the transformative learning theory and explore its relationship with the theoretical framework of the study. The work of three notable researchers are explored in terms of the theoretical framework they provide, Jack Mezirow, Robert Boyd and Paulo Freire. Mezirow's transformative learning theory (1991) follows a process of transformative learning through three key stages. The first stage is psychological and understanding of the 'self'. The second stage is conviction following a revision of one's beliefs while the third stage is behavioural where changes in one's lifestyle are seen (English & Irving, 2012). This scenario helps to appreciate the understanding of transformative education as a process of using prior interpretation to develop a new or revised understanding of the meaning of one's experiences, in order to guide or influence future action. Prior experiences inspire shifts in viewpoints or perspectives.

According to Mezirow (1991), transformational learning has a transformative pedagogy which combines the elements of constructivist and critical pedagogy that empowers teachers to examine their beliefs, values and knowledge. This examining develops a reflective knowledge base and gives teachers a different perspective on their work in teaching in the classroom and brings about transformative learning where education transforms the learner and brings about social transformation (Freire, 2000). According to Freire (2000), learning is a process of using prior interpretation to develop a new or revised understanding of one's experience in order to guide or influence the future. In this lies what Freire termed transformation.

Mezirow (1991) argues that transformative learning explains one's expectations as framed within cultural assumptions and presuppositions that directly influence the meaning attached to experiences. The meanings are acquired often uncritically from childhood through the

process of socialisation with parents, siblings, mentors and teachers. The meanings become perspectives that are ingrained in the psyche.

Mezirow (1991:58) identified ten phases of perspective transformation based on a study carried out with women who had returned to academic studies after exiting at some point. The stages were:

- A disorienting dilemma,
- Self-examination with feelings of guilt or shame,
- A critical assessment of assumptions,
- Recognition that one's discontent and process of transformation are shared and that others have negotiated a similar change,
- Exploration of options for new roles, relationships and actions,
- Planning of a course of action,
- Acquisition of knowledge and skills for implementing one's plans,
- Provisionally trying out new roles,
- Building of competence and self-confidence in new roles and relationships, and
- A reintegration into one's life on the basis of conditions dictated by one's new perspective.

There are three common themes emerging from this realisation by Mezirow (1991). These are firstly, the importance of experience, secondly, the importance and role of critical reflection and thirdly, rational discourse in the process of meaning restructuring and transformation. This is so because experience is a social construct and it can be deconstructed. In this regard, according to Mezirow (1991), transformative learning is an outcome of adult development. It is a process where meaning is continually revised and clarified. Transformative learning is the very essence of adult education.

Boyd (1991) offers yet another perspective on transformative learning theory. He says that transformation to the individual occurs as a fundamental change to one's psychological development. According to Boyd, the individual only transforms when they have realised their unconscious self and then are able to change and adopt new perspectives. This happens when the individual has explored the unconscious self and conducts dialogue with the unconscious self so that transformation is possible.

Paulo Freire (2000), which was first published in 1970, was a radical education reformist working in Brazil. He portrayed a practical approach to emancipation through education. His major interest was adult learners who had limited literacy skills. His work in teaching these adults consisted of a method where he motivated them to constantly reflect and act on the transformation of their world, their experiences. It is on encouraging social transformation that he differed with Mezirow (1991) who encouraged personal transformation. Freire's methodology has come to be linked to and called emancipatory transformation. In his own words, Freire sought to make the adult learner enter reality, know it better, and then he could transform it. Freire was more radical in that he wanted the adult learner to confront his world, enter into dialogue with it, and then seek to change it, thus improving it for the better. He called this process conscientisation of the 'oppressed' to realise their socio-political and economic contradictions which then enabled them to take action against the oppressive elements. For Freire, education is never neutral; it has certain values that are passed on.

Like Mezirow, Freire emphasised the importance of critical reflection but he went further to say the more that learners develop critical awareness, the more they are able to transform society and their reality into something different. In contrast, Mezirow (1991) suggested that transformation is a personal experience that empowers a person to act on their world if they choose to do so. However, Freire, from his methods of engaging the adult learner, attacked the 'banking approach' for encouraging memorising facts without serious processing. According to Freire (2000), the banking approach is where the teacher gives information and expects this to be given back in tests and exercises. Freire was critical of this approach for making learners passive and uncritical of what they learn. To this, he proposed a liberation approach achieved through a dialogic approach that encourages reflection and acting on one's circumstances and experiences. Problem posing would encourage a questioning mind and continual search for new interpretations, and as a result, Freire's philosophy has been seen as fostering emancipatory transformation.

The transformative pedagogy that Freire encouraged leads learners to critically examine their beliefs, values and knowledge with the goal of developing a reflective knowledge base and an appreciation of multiple perspectives (Huber, Fruth, Avia-John. & Lopez-Ramirez, 2016). Thus, the transformative pedagogy contributes to our understanding of how learning and professional development of teachers take place. Finally, professional development of teachers

should be viewed in light of what we know about adult learning theory, usually referred to as andragogy.

2.4.3 Social Constructivist Theory

The key concept in the social constructivist theory is constructivism. Constructivism is a theory of knowledge that argues that human beings generate knowledge and meaning from an interaction between their experiences and their ideas. Some of the key thinkers associated with constructivism include John Dewey, Maria Montessori, Jean Piaget, Lev Vygotsky and Jerome Bruner. Dewey emphasised learning by doing which is important for acquiring and developing practical skills (Hendricks, 2006). Montessori is famous for the Montessori Method which encourages hands-on learning and collaborative play among young learners with appropriate teacher guidance (Hendricks, 2006). Piaget is well known for his cognitive development theory where he argued that children pass through four levels of cognitive development (sensorimotor, preoperational, concrete operational and formal operational). Teachers need to be aware of these development stages that are part of their learners' biological maturation, taking cognisance of these stages and building on them for effective teaching and learning. At a formal stage, learners construct meaning during the interaction with their environment (Archer & Hughes, 2011). Both Vygotsky and Burner are well known for their ideas on scaffolding and social constructivism. Scaffolding, which helps learners become problem solvers (Archer & Hughes, 2011; van de Pol, Mercer & Volman, 2018), refers to instructional techniques that are used by the teacher to move learners progressively toward a stronger understanding and eventually greater independence in their own learning.

One common thread amongst these thinkers is that through processes of accommodation and assimilation, learners construct new knowledge from their experiences. This means that people construct their own understanding and knowledge of the world through experiencing things and reflecting on those experiences. In principle, when we encounter something new, we reconcile it with our previous ideas and experiences. Sometimes we change what we believe or we discard the new information as irrelevant. This makes us active creators of our own knowledge. In doing this, we ask questions, explore and assess what we know. In terms of assimilation, we incorporate the new experience into an already existing framework while on accommodation, we reframe the way we see the world working.

In Singapore, Nie, Tan, Liau, Lau and Chua (2012) reported on their implementation of instructional innovation. They examined roles of teacher efficacy in implementing innovative constructivist instruction. The results of their study showed that there is a strong correlation between teacher efficacy and constructivist instruction. The study showed that policy makers and school leaders should try to improve teachers' efficacy beliefs so that teachers can effectively implement innovative instruction. Singapore has a competitive edge over many nations in several spheres. Since 1997, Singapore implemented a programme named Thinking School, Learning Nation (TSLN), which prepared learners for a more competitive and innovation-driven future. This approach sought to enable teachers to use a student-centred constructivist approach. Learners were encouraged to learn independently with school curricula being designed to allow and facilitate learners to think, explore, innovate and reflect so as to develop mindsets and skills to cope with the growing complexity and ambiguity in the nation/world today.

It has increasingly been recognised that teacher-centred didactic approaches to instruction have not maximised learners' potential to be active, creative and reflective, self-directed learners. As an alternative, Nie *et al.* (2012) have observed that student-centred constructivist approaches have been suggested in educational reforms worldwide. This is so because of several empirical studies which have shown the strengths of using constructivist instruction in improving learners' learning as a motivational strategy (Zehetmeir, Andreitz, Alercher & Rauch, 2015). In practice, however, teachers who are trained in, and familiar with, traditional pedagogy have found it a challenge to switch to constructivist pedagogy (Edwards-Groves & Kemmis, 2016). It is in this purview that Bandura (1997) explains the role of teacher efficacy in influencing the implementation of constructivist instruction.

Nie *et al.* (2012) suggest that teachers are challenged in implementing constructivist instruction. In the last few decades, constructivism has received a great deal of attention globally. Over the years, psychological theories of learning have influenced instructional practices and constructivism is emerging as a dominant learning theory. Using constructivist notions, many educators have suggested that instruction should engage learners in knowledge construction in real-world situations. Consequently, these notions encourage instructional innovations that move away from the traditional didactic teacher-centred, knowledge transmission approaches to learner-centred knowledge construction approaches.

To date, a constructivist approach has been proposed (Perkins, 1999 in Nie *et al.,* 2012). However, there are some common threads and aspects in the approaches. Learners are treated as active learners, social learners and creative learners. Constructivist-oriented programmes emphasise deep understanding of knowledge, substantive and elaborated communication to make connections with real-world situations. Nie *et al.* (2012) note that it is a challenge for teachers to adopt a more constructivist approach if they have been using traditional didactic approaches and as a result, they resist the change as they experience a shift of their roles in teaching and learning.

Nie *et al.* (2012) report on a study they undertook on understanding teacher efficacy and instructional motivation for teachers. They carried out a study that sought to enrich understanding of the relationship between teacher efficacy and different instructional practices of teachers. The study found that teachers used didactic instruction more frequently than constructivism instruction. A reason for this was that it was found to be more challenging for teachers to adopt constructivist instruction over didactic instruction as teachers are required to change their approaches and mindset if they employ constructivist approaches. However, the same study reported a willingness amongst teachers to adopt the constructivist approach to teaching and learning. Hence, teacher efficacy does influence the use and implementation of innovative instruction. Teachers with a high sense of efficacy tended to adopt and use constructivist instruction.

This research has some implications for policy, teacher training and teacher capacity building. It is important for teachers to realise that maintaining the old traditional practices and beliefs would not be adequate to prepare learners for the future. While there are many programmes and activities to promote constructivist instructional practices, there are many obstacles to implementing these practices. It therefore seems important to understand the conditions and antecedents that underpin the teachers' choice and use of instructional practices. Nie *et al.* (2012) have amply illustrated the issues around teacher efficacy, the beliefs that the teachers has and carry into their work. The study showed that teachers with high efficacy are more likely to adopt a constructivist rather than a didactic approach to instruction. Hence, it is important for school leaders to promote learning that is beyond rote memorisation of facts towards a system that makes learners think, understand and communicate, which is advocated in constructivist instruction. Schools should look into ways to enhance teacher efficacy (Nie *et al.,* 2012:74). These findings have implications for professional development activities, and

more so for continuous professional development, which is the core of the present study. The main reason for this position is that CPD has a dual function, that of facilitating instructional skills development and fostering teacher efficacy.

Nie *et al.* (2012) demonstrated a strong relationship between teacher efficacy and constructivist instruction. The higher the teacher efficacy, the higher the frequency of teacher use of constructivist instruction. Thus, to promote constructivist instruction, policy makers and school leaders should seek to improve teacher efficacy beliefs by having a balance between didactic and constructivist instructional approaches in practice. On the other hand, learning is an active process in which learners construct new ideas or concepts based upon their current/past knowledge. Vygotsky (1978) called this process scaffolding on previous and new experiences. Hence professional development requires the teachers to be active in their learning process as they construct own meaning from their experiences.

2.4.4 Action Research Theory

In this section of this chapter, I introduce and describe action research. I give an overview of its processes and principles and situate it within a praxis paradigm that has a close link with continuous professional development of teachers, practitioners. The phrase 'action research' corresponds to phrases such as 'participatory research', 'collaborative inquiry', 'emancipatory research', 'action learning' and 'contextual action research' but each name carries its own variation.

In action research, a researcher or a group of people identify a problem, do something to resolve it, see how their efforts have been, and if not satisfied, they try again (Kemmis & McTaggart, 1988). O'Brien (1998) believes that action research is learning by doing and Hopkins (2002), Hendricks (2006), Hine (2013) and Bolghari and Hajimaghsoodi (2017) all put across the view that action research is a process of a systematic inquiry that seeks to improve everyday practice for better results. According to Hine (2013:151), the term action research has been associated with the works of Kurt Lewin, among others, who saw action research as cyclical, dynamic and collaborative in nature.

Action research has been part of educational work in the United States of America (USA), United Kingdom (UK), Australia and other western countries for over 50 years (Cohen & Manion, 1996). A widely accepted definition of action research is given by Kemmis and McTaggart (1988:5):

> … action research is a form of self-reflective inquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices and the situations in which these practices are carried out.

In this regard, action research bridges the gap between practice and research in transforming an educator into a teacher-researcher (Cohen & Manion, 1996; Hendricks (2006); Hine, 2013). The teacher-researchers seek for solutions to their challenges, questions or problems by means of a research cycle, which has four key stages: planning around the challenge, question or problem, acting on the plan, generating data on the actions and reflecting on the outcomes and/or processes. This process of action research ensures that the role of a teacher-researcher leads to professional development which is effective (Hendricks, 2006).

While the four stages given above may suggest a very neat cyclic approach and process, Hendricks (2006) and Hine (2013) suggest that the process may not be that neat where teacher-researchers proceed step by step. In reality, the process may require backwards and forwards, repeating and/or revising procedures, rethinking interpretations and sometimes taking radical changes in different directions. The planning stage includes considering the involvement of other people and the role they would play, as well as deciding on the research procedures and instruments. The planning stage involves carrying out a scholarly review of available studies. The generation of data involves the use of appropriate instruments such as interviews, observations and/or focus group discussions. The fourth stage, which is central to action research (Shumba & Zireva, 2013) and is embedded in all the stages, involves evaluating the experiences in all the stages to identify the strengths, weaknesses, opportunities and threats in integrating new knowledge learnt from the actions taken. The evaluation is a reflection, which will lead to a new way of doing something, clarification of an issue, development of a new skills and /or resolving a problem.

According to O'Brien (1998:2), certain attributes of action research ensure that this methodology differs from everyday common problem-solving as action research

> aims to contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously … pp 2).

When researchers accomplish these twin goals, which require active collaboration between the researcher and research participants, this stresses the importance of co-learning and having sound theoretical considerations. What separates action research from everyday problem solving is that action research is marked by emphasis on a scientific, systematic problem research (Kemmis, 2006). In addition, the action researchers willingly apply what they have learnt.

Kemmis (2006) developed an action research model that is cyclical in nature with key steps of planning, action, revised planning, action with observations and reflections to inform the next steps. Others such as Susman, (1983 cited in O'Brien, 1998) have shared a five-step action research cycle. It begins with diagnosing or identifying and defining a problem. The second step involves developing an action plan, which calls for considering alternative courses of action research. The third step is taking action after selecting a course of action. The fourth step is evaluating and studying the consequences of an action and the fifth step consists of identifying general findings and specifying new learning. Both suggestions by Kemmis (2016) and Susman (1983) present the unique principles of action research, which are reflexive critique, dialectical critique, collaboration in nature and continuous transformation. Action research makes one reflect on issues and processes through a back and forth process in trying to understand relationships between phenomena and constituent elements of an action. Ultimately, what emerges from the action research informs practice, helps to refine theory and enhances theoretical knowledge and justifications for actions.

Logical positivism, based on objective reality, is knowledge that is gained from making sense of the data that can be directly experienced and verified by independent observers. According to O'Brien (1998), this has been the main research paradigm for the last two centuries and relies heavily on quantitative measures where relationships among variables are shown and verified with figures. However, over the last century, a new research paradigm has emerged especially in the social sciences and is generally called the interpretivist paradigm. This paradigm is characterised by a belief in a socially constructed reality, one that is influenced by culture and history (O'Brien, 1998). Nonetheless, this paradigm contains the ideals of researcher objectivity and interpreter of data.

However, what is more important in action research, is that it brings up the paradigm of praxis, meaning that it is acting on conditions in order to change them for the better. This is not

knowing something for its own sake but for a purpose to better the situation. Here, knowledge is derived from practice and practice is informed by knowledge. This is the cornerstone of action research, which is used in real situations and it is applied by practitioners (Kemmis, 2006) as its primary focus is solving problems. Practitioners thus, who apply action research improve understanding of their own practice.

Kurt Lewin is one of those generally considered as the 'father' of action research (Zehetmeir *et al.,* 2015). He was a German social psychologist who was concerned with social problems and thus focused on participative group processes to address conflict, crises and bring about change. He first coined the phrase 'action research' in a paper written in 1946 (O'Brien, 1998). In his research, Lewin used several spiral steps for investigations. Each step consisted of circles of planning, action, fact-finding about the result of action. Thomas Dewey, the great American educational philosopher in the 1920s and 1930s, is credited as being amongst the first professional educators to become involved in community problem-solving (Hine, 2013). Over the years, this thrust has led to the creation of communities of professionals working to address challenges in their work and improve on their practice. Hence, action research has grown to be a methodological approach to solving social and work-related problems with a clear epistemology on knowledge creation.

In a study conducted by Zehetmeir *et al.* (2015) in Austria, the impact of professional development programmes for teachers was investigated. They used the concepts of action research, constructivism and systems theory as their theoretical framework to analyse the professional development for teachers. They found that professional learning requires experience in acting in complex practical situations. They also found that professional action and professional learning coincide and go together. As professional learning occurs in practical situations, these processes require reflection and further development, knowledge and skill development.

Zehetmeir *et al.* (2015) argue that professional development has four inter-dependent dimensions of action and reflection, which they cite, from the work of Krainer (1998). The dimensions are autonomy, action, networking and reflection. Autonomy suggests that teachers have self-initiative, are self-organised and take self-determination to work on a situation faced in their work. Action implies that teachers are driven by the attitude they have towards their work and the situation faced. Thus, they are goal-directed and seek to try out new ways to deal

with the situations faced. Networking implies that teachers are prepared to communicate and cooperate with others in their working space and joint learning with others. The dimension of reflection carries an attitude towards a competence in self-criticism of one's own actions and experiences. One major finding was that for sustainable impact, professional development programmes for teachers need to be built on the four dimensions of autonomy, action, networking and reflection to promote sustainable teacher professional development Zehetmeir *et al.* (2015).

The idea of reflective, critical professionalism can be traced back to the work of Stenhouse (1975), which demonstrated that central to the three elements of classroom pedagogy, curriculum, learning and assessment, are the teacher and the learners (Wood & Butt, 2014). Hence, classroom practitioner action research revolves around teachers and their learners with reflective practice being the foundation of all action research. The planning of action research is more open-ended in order to accommodate any emerging outcomes that could not be foreseen at the stage of planning and executing the action research. Wood and Butt (2014) argue that action research has the characteristic of applying a broader and holistic open-ended view of research. This perspective by Wood and Butt (2014) buttresses the view of action research, promoting practitioner development, focused on promoting a generative process, which brings change through reflection. Such change has a high chance of being sustainable in practice.

In a study conducted by Wood and Butt (2014) on exploring the use of complexity theory and action research as frameworks for curriculum change, a contextualised framework for innovative pedagogy emerged for the Geography General Certificate Secondary Education (GCSE) pilot programme. Wood and Butt found that learners became more active partners in their learning with their teachers with three clear benefits emerging. Firstly, the learners were more active participants in their own learning as they worked individually or in groups and arranged the learning as they wished. Secondly, the focus of the curriculum and learning became more process-driven and this emphasised the development of understanding as opposed to cramming of facts. Thirdly, the process-driven learning led to higher order thinking in the learners and the development of metacognition through meaningful discourses or discussions. Wood and Butt (2014) found that this awakening led to innovative pedagogy on the part of teachers and understanding and learning for learners. Consequently, teachers in the

pilot programme encouraged the inclusion of an action research mechanism to be built into the GCSE curriculum.

The discussion above shows the benefits of using action research in continuous professional development. Hopkins (2002), Hendricks (2006) and Hine (2013) argue that the benefits of using action research makes the teachers research-minded, which means that teachers will continually look for practical solutions to their problems, as well as informing and improving their practice. The results of their research improve them professionally and ensure that their work environment is conducive for purposeful teaching and learning. Further to this, Hine 2013) points out that action research is practical in that it queries how to perform better, is relevant and it is practised in the teacher's environment. In addition, Rhodes and Houghton-Hill (2000) argue that engaging in action research does not only support continuous professional development, but enables teachers to contribute to development of theory and knowledge to enhance practice as well as building a collegial network with other teachers in their setting and beyond. Thus, action research has the benefit of helping to improve professional practice, promote professional growth, expand teachers' pedagogical repertoire and makes him/her in charge of their practice.

While there are clearly well-documented benefits of action research in continuous professional development, it is also important to note that the use of action research has been resisted. Romano (2006) and Zireva (2017) point out resistance to change and lack of questioning one's practice in that teachers look for placing blame elsewhere rather than looking inward for solutions.

In winding up this section of the chapter, action research refers to investigative and analytical research designed to diagnose problems or weaknesses, whether organisational, academic or instructional, and help teachers develop practical solutions to address challenges quickly and efficiently (Hendricks, 2006). From the literature reviewed above, action research is a powerful tool that can improve the quality of a professional's performance. In the case of the teaching profession, there are three types of action research which include individual teacher research, collaborative action research, and school-wide action research. Engaging in action research, educational practitioners contribute to assessment and improvement of their own practice. Thus, action research is a tool that helps teachers reconsider

their teaching methods or adapt in order to solve problems for the benefit of their learners and improve their practice.

2.5 REFLECTIONS ON THE THEORETICAL FRAMEWORK

In the second part of the chapter, I explored four theories that provide a theoretical framework that informs the study. The four theories, teacher efficacy (*cf.* 2.4.1.), transformative learning (*cf.* 2.4.2.), social constructivist theory (*cf.* 2.4.3) and the action research theory (*cf.* 2.4.4), carry some philosophical assumptions, world-views about teaching and learning and professional development of teachers. The theories which underpin this study have basic ideas on how teachers continue to develop on the job. I have attempted to explain what the theories suggest and offer in terms of understanding professional development of teachers. In this regard, these theories inform the study and have the potential of helping to understand the professional development of teachers, have an impact on the way teachers views themselves as regards their teaching and consequently, the way they view their professional development.

These four theoretical frameworks influence teachers in different ways. Thus, each teacher can react in different ways and with different impact on learners. Each theoretical framework can cause teachers to deal with learners in different ways. For example, teachers can use moderately difficult or challenging tasks so as to encourage and support learners who are struggling. Teachers can use 'peer-to-peer' approaches to build confidence within the learners, build on the interests of learners, always encouraging learners to try, giving frequent and focused feedback and capitalising on learners' interests. These approaches can support the struggling learners gain confidence and improve. But the key to this is that teachers need to believe in themselves, have own self-efficacy and exude confidence to improve own performance.

2.6 CONCLUSION

This chapter has presented two complimentary sections, one outlining the conceptual framework and the other outlining theoretical framework informing and underpinning this research study. In the context of the research study, teachers are professionals as they are certificated following a rigorous period of study with internal and external examination (Department of Teacher Education Handbook, 2015). However, once they enter the profession and practise as teachers, three overlapping categories of teacher professionalism can be observed depending on the continuous professional development they engage in. Davies *et al.*

(2005) described the stages as unprofessional, restricted professional and extended professional. One extreme is the unprofessional where the teacher shows lack of caring for the learners and their learning, while other extreme is the extended professionalism where the teacher goes beyond the expected to support learners. This expended professionalism occurs when teachers continually present as lifelong learners, researchers and above all reflective practitioners (Fook, 2007).

The theoretical framework for this research study is informed by four theories that talk to how learning take place. The theories have implications to continuous professional learning and development for teachers. The teacher self-efficacy theory emphasises teachers building confidence in their ability to support the learners to achieve (Bandura, 1997). In this regard, self-efficacy is critical to the teachers' professional responsibility and commitment to understanding the effects of their teaching and enhancing learners' learning (Chan & Lam, 2010). The transformative learning theory leads to a transformative pedagogy that empowers teachers to critically examine their beliefs, values, and knowledge with the goal of developing a reflective knowledge base and an appreciation of multiple perspectives (Hopkins, 2002). This is especially important for teachers in their professional development to question their beliefs and values. The social constructivist theory of learning proffers that social interaction is critical in constructing and scaffolding knowledge and meaning from experiences (Vygotsky, 1978). Thus, teachers are continually learning by constructing own meaning from their experiences in their professional practice.

The action research theory is the fourth theoretical framework informing this research study. In engaging in action research, teachers investigate and analyse their teaching with a view to understanding strengths, weaknesses, challenges in a systematic manner and seeking solutions to improve (Elliot, 1991; Hopkins, 2002). Thus, teachers, individually or as a community of practice with others, use action research develops practical solutions to challenges they meet or face in their work (Hendricks, 2006; Hopkins, 2002).

CHAPTER 3

CURRENT AND NEW APPROACHES TO CONTINUOUS PROFESSIONAL DEVELOPMENT

3.1 INTRODUCTION

This chapter outlines the conceptualisation of Continuous Professional Development (CPD) (*cf.* 3.2) implemented by the Ministry of Primary and Secondary Education in Zimbabwe through the Better Schools Programme for Zimbabwe (BSPZ) (BSPZ, 1995; Chiome, 2011) and through the Quality Education Project (QEP) (*cf.* 3.6). The BSPZ is a professional development programme very strong at district, cluster and individual school levels (Chiome, 2011). A cluster of schools consists of six to eight schools where teachers and school head teachers meet periodically to work together on professional development matters. The Quality Education Project (QEP) was implemented in the Bikita District in Masvingo Province in the southern part of Zimbabwe district with the support of *Save the Children* Zimbabwe Office during the period 2005 to 2013.

This chapter carries a critique of both the BSPZ (*cf.* 3.3 and *cf.* 3.4) and the QEP approaches (*cf.* 3.6) to continuous professional development and seeks to lay a foundation for developing and proposing a model for CPD that will enhance the notion of a teacher as a researcher and a strong foundation for a teacher who is always learning (Kemmis *et al.*, 2014). In addition, the chapter examines CPD policy frameworks and practices in some of the countries in Southern Africa, such as Malawi, Namibia and South Africa.

3.2 PUBLIC SERVICE COMMISSION REGULATIONS AND CONTINUOUS PROFESSIONAL DEVELOPMENT

The Ministry of Public Service in Zimbabwe introduced a general Public Service Regulations document, known as the Statutory Instrument (SI) of 2000 (Ministry of Public Service, 2000), which covers teachers who are considered part of the public service sector. The Statutory Instrument (SI) of 2000 provides for professional development for public service workers, granting ‘manpower development leave’ defined as leave that is granted to a member of the Public Service to engage in study or training. The study or training is through the medium of any of the following reasons: work exchange programmes, work entitlements, short courses,

professional training, academic courses, examinations above the secondary level of education and training, and development seminars and conferences (Ministry of Public Service, 2000).

The purpose of the training engagements is to enhance the efficiency, effectiveness and/or motivation of the public service. Members who intend to undertake training and courses to develop themselves, apply for leave through the head of their ministry. The Public Service Commission considers and grants such leave when they are convinced that this will add value to the performance of the member. Teachers have used this avenue to advance themselves and study for first degrees and postgraduate qualifications such as Master's degrees. However, in instances where such leave is granted, it is only a small number of teachers who are granted leave to study and the Public Service Commission bonds them to return and serve for a specified period. The bonding period is generally two to three years before they can resign and leave the Public Service, should they wish to do so. The Ministry of Primary and Secondary Education (2016) annual national education statistics report indicates that 350 teachers out of a teaching force of 127 000 were granted leave to embark on staff development for first degree courses. This batch consisted of 0.28% of the teaching force, which was granted external funding through the Global Partnership Education (GPE) programme for Zimbabwe during the 2015-2019 period (Ministry of Primary and Secondary Education Annual Statistics Report, MoPSE, 2016).

While this provision for capacity development of the Public Service including teachers is appreciated, there are obvious challenges. Those who benefit from the professional development in terms of numbers, will remain small and insignificant and are unlikely to make a major impact in the classrooms of many schools. In addition, the kinds of professional development opportunities offered under the manpower development for public service workers are long-term and carried out in environments outside the classroom and the school (Kennedy, 2005). As Kennedy (2005) points out, this model of professional development leads to awards or certification more for academic purposes rather than impacting classroom practice. It is argued in this study that teachers need more opportunities to keep learning on the job, continually developing both their knowledge and their skill to improve their classroom professional practice. In this regard, a search for an alternative approach to continuous professional development that reaches out to the majority of teachers in their classrooms becomes relevant.

3.3 SCHOOL CLUSTER AND SCHOOL-BASED CONTINUOUS PROFESSIONAL DEVELOPMENT

In the communique at the end of the World Conference on *Education for All* in Jomtien, Thailand in March 1990, officials of education ministries, United Nations (UN) international agencies and Non-Governmental Organisations (NGO) working in the educations sector agreed on action plans to ensure that every person, child, youth and adult should be offered the opportunity to basic learning (UNESCO, 1990). The focus of the communique aimed at overcoming inequality and offering opportunities for eradicating poverty (UNESCO, 1990). The communique not only aimed to offer access to basic education, but also to improve the capacity and performance of schools (UNESCO, 1990). The action plan was to provide the highest quality of education to the learner within the context of shrinking resources and increased demands on education personnel for the delivery of improved teaching and learning. Such decisions needed concrete actions for follow-up. In October 1990, the Commonwealth Ministers of Education and the Commonwealth Secretariat elected to collaborate and share information and strategies on common issues and problems in the education sector. In their discussions, they targeted the head teacher as the Ministers of Education in the Commonwealth believed that the head teacher needed this professional support most particularly as it is the responsibility of the head teacher to create an environment conducive for effective teaching and learning (Commonwealth of Learning Secretariat, 1993).

One outcome of the Commonwealth Ministers of Education meeting in 1990 was the establishment in 1993 of the Commonwealth Training and Support programme for school head teachers in Africa (Commonwealth of Learning, 1993). Zimbabwe, then a member of the Commonwealth of Nations, launched a chapter of this programme. Materials to support the professional development of head teachers were developed, prepared, printed and distributed to head teachers with the support of the Commonwealth Secretariat. The school head teachers studied in groups and in school clusters providing peer support to each other. It did not take long for the countries in this programme to realise that addressing the needs of the school head teachers partly reduced the systemic problems, but an even larger need remained to be addressed, namely the professional development of the teacher at classroom level. It was critical to address the teacher if the real solution in search of quality learning was to be achieved (BSPZ, 1995).

The Commonwealth Secretariat was again instrumental in bringing together member countries and international agencies to create the Teacher Management and Support Programme (TMS) (BSPZ, 1995). In Zimbabwe, the Better Schools Programme for Zimbabwe (BSPZ) was established to spearhead school improvement programmes including continuous professional development support for teachers for improved performance of teachers and quality of learning and achievement by learners. The BSPZ took on board the TMS, in addition to the school head professional development programme.

3.4 THE BETTER SCHOOLS PROGRAMME (BSPZ)

In the aftermath of the newly independent Zimbabwe in 1980, the main thrust of the educational policy was establishing schools and increasing enrolment at all levels of the education sector. With massive expansion at primary and secondary school levels and increased enrolment, the teaching workforce had to be expanded so that the numbers of teachers matched the escalating enrolment (BSPZ, 1995; Chiome, 2011). However, in 1990, the government shifted its focus from quantitative expansion to quality and relevance of education (Chiome, 2011). Hence, Zimbabwe, as a signatory of the Jomtien Conference 1990 communique, renewed its commitment to education in terms of providing basic education, removing disparities, focusing on learning and learning outcomes, strengthening partnerships between national, regional and local education authorities as well as increasing the participation of stakeholders in educational decision-making (Zvobgo, 1986). It is critical to note that in the midst of this new thrust, the concept of quality and relevance is complex, multi-dimensional, relative and at times controversial (BSPZ, 1995). A system of education, emphasising quality and relevance, has some of the following attributes: learners acquire basic knowledge, skills and relevant attitudes to make them better citizens and all students, both the gifted and non-gifted, realise their full potential. Consequently, there is a close match between what schools produce and the expectations of the public, private sectors, parents and teachers (UNESCO, 1990).

The theory underlying the BSPZ concept is drawn from research on effective schools (Chivore, 1994). Effective schools have the characteristics of motivated and task-oriented leaders, teachers and learners (Townsend & MacBeath, 2011). They have a unique culture that drives both teachers and learners to successful teaching and learning, effective teacher-student interaction in the classroom and teachers and school heads who are committed to continuously

improving their knowledge of subject matter, of students and of effective teaching practices (Chivore, 1994; Townsend & MacBeath, 2011).

The theory that underlines the BSPZ is that the external and internal environment affect teacher and head teacher morale, motivation and performance (Chiome, 2011). Within the external environment, teachers need to be well-rewarded for their services, and work in a situation where they have the necessary resources as well as support. However, these variables are to a large extent, beyond the control of teachers and school heads and represent the extrinsic and material conditions for the teacher's work. On the other hand, the internal environment is equally important. This environment is made up of in-school professional support. The personnel, made up of teachers and the school head, work best when they can deal with problems with which they are faced either among themselves or within their community (Chivore, 1994). This partly explains the differences in effectiveness of schools that have similar external environments. "Teachers feel good in a good school environment" (BSPZ, 1995:21). These factors, found in the external and internal environment, affect the attainment of teaching and learning and the objectives of the entire education system.

The BSPZ has two major components comprising the Heads Training and Professional Support (HTSP) and Teacher Management and Professional Support (TMPS). The objectives of the BSPZ are to improve the effectiveness of the education service nationally, locally and at school level (BSPZ, 1995). The BSPZ strives to improve the quality of teaching in the schools and the learning experiences available to students and develop competencies of teachers and school heads that will enable them to assume greater responsibility concerning school management and professional development. The BSPZ does this through the national, regional, district and school cluster centres where teachers and head teachers access resources and professional support to improve their teaching (Chiome, 2011). The resource centres provide professional support, create opportunities for professional self-development that includes school-based activities such as self-study, peer group study as well as distance learning (Chiome, 2011). School and cluster-based management and staff development teacher learning activities provide a foundation for improving the school tone, its learning environment and it enhances the skills of its teachers (BSPZ, 2000).

The purpose of school clusters, with formation and operation being guided by the Chief Education Officer Circular 1/94 (MoESAC, 1994), was to localise professional support to

schools in a specific area. Visits to schools by Cluster Management Committees made up of selected head teachers and Cluster Resource Teachers were to assess management practices, assist teachers in the schools and assess the school's progress in fulfilling its objectives, targets and then suggest corrective measures where necessary. Within clusters, workshops for staff development were organised and these were funded by the schools from BSPZ levies on learners (BSPZ, 2000). This approach made school-based training needs-driven as the initiative to engage in staff development comes from the teachers themselves. In principle, the BSPZ was an intervention to support teacher professional development in the work place setting, in the schools (Chiome, 2011).

3.5 THE NEW COMPETENCE-BASED CURRICULUM

Zimbabwe, through the Ministry of Primary and Secondary Education (MoPSE), began the implementation of *The Curriculum Framework for Primary and Secondary Education 2015 – 2022*, a competency-based curriculum, in 2017 for primary and secondary schools (MoPSE, 2015a). This curriculum introduced new learning areas such as Visual and Performing Arts, Mass Displays and Family and Heritage Studies in the primary school (MoPSE, 2015a) and as a result, there was a need for new textbooks and other teaching and learning materials. The curriculum change has also resulted in the introduction of Teacher Professional Standards (TPS) (MoPSE, 2015b).

The TPS have been elaborated extensively with the outlining of the three key domains, sub-domains, expected professional standards, their descriptors and examples. The three domains outlined are academic and professional knowledge and understanding, professional skills and abilities and professional values and personal commitment. Each domain has sub-domains; for example, the sub-domains for professional skills and abilities are teaching and learning, curriculum organisation and management, learner assessment and professional reflection and communication (MoPSE, 2015b). The outlining of these standards has come with proposed action for improvement when the standards are not achieved or found lacking in the teacher during teacher supervision of lessons. It was at this point that the TPS document introduced the notion of action research by teachers and brought this into teacher professional development.

One of the sub-domains under academic professional knowledge and understanding is curriculum with one of the expected standards under this domain being "the teacher is competent in the use of appropriate language and can confidently teach his or her subject areas"

(MoPSE, 2015b:3). The teacher is expected to demonstrate knowledge and understanding of effective teaching strategies with the standard being "the use of appropriate teaching and learning strategies including ICT to engage learners in their learning" (MoPSE, 2015b:3).

Another standard under the domain curriculum is "the teacher has research skills relating to teaching and learning and a critical appreciation of the contribution of research, including teacher classroom-based action research to education in general" (MoPSE, 2015b:3). The descriptor to this standard is that teachers can confidently use research to inform their own practice. An example of this standard is that the teachers' solutions to challenges in their teaching and learning are evidence based. Thus, the teacher should exhibit evidence of self-introspection and reflective teaching. The teacher's schemes of work and lesson plans should be adjusted or show adjustments to meet the existing challenges. Thus, the teacher is expected to exhibit reflective thinking with the proposed action when the standard is not achieved, engaging in action research and other research to help reflect on practice in order to make improvements.

The Curriculum Framework for Primary and Secondary Education 2015 – 2022 and the recently elaborated Teaching Professional Standards are very positive and encourage teachers to engage in action research as part of their Continuous Professional Development in order to improve their classroom practice (MoPSE 2015b:6). This is a positive step; however, the documents elaborating the Teaching Professional Standards, do not provide teachers with guidance on how to develop and enhance their action research capacity. The TPS document (MoPSE, 2015b) presents the notion of a reflective teacher, which is both encouraging and promising because of what it means for teaching and learning. However, the TPS document (MoPSE, 2015b) does not explain how a teacher becomes reflective, nor, does it provide means and ways in which teachers can develop reflective teaching. In this regard, it is not clear how at school level, reflective teaching should be encouraged, as well as developed. The long and short of it is that including reflective teaching in strategic documents and guides for the new curriculum is not sufficient. There is a need to go beyond and put staff development mechanisms in place to support the professional growth of teachers in reflective teaching and reflective practice. I argue that a Continuous Professional Development (CPD) model holds a promise to support teachers' use of action research to improve their practice in the classroom. To achieve this, there is a need to have a clear model that can be useful to catalyse teachers to

work collaboratively in their schools, in their school clusters to help each other develop reflective teacher skills.

In the next sections of this chapter, I explore an attempt through the Quality Education Programme (QEP) to use the Better Schools Programme (BSPZ) of Zimbabwe structures to foster reflective teacher skills and trace the impact this has on both CPD and learning outcomes

3.6 THE QUALITY EDUCATION PROJECT (QEP)

Between the years 2006 – 2013, *Save the Children* International Zimbabwe Country Office initiated the Quality Education Project (QEP) in conjunction with the Ministry of Primary and Secondary Education and the University of Zimbabwe, Department of Teacher Education (DTE). *Save the Children* is an International Non-Governmental Organisation (INGO) committed to "improving the quality of education for all" (Chisaka, 2016:3).

The QEP project, implemented in the Bikita District in Masvingo Province in the southern part of Zimbabwe, was designed to promote reflective teaching in teachers, lecturers and school inspectors. The project provided training to a group of practicing teachers, education inspectors and teacher educators training in and using action research skills and reflective professional practices in their work (Harber & Stephens, 2010). The main objective of developing reflective teachers was to address the issue of quality in basic primary education through improving teaching and learning in the classrooms.

To inform the Bikita Quality Education Project interventions, *Save the Children* Zimbabwe Country Office sponsored a study in 2003, which established that teachers generally use traditional methods and approaches to teaching, with little or no reflection (Chisaka & Mavundutse, 2003). Similar findings on teacher practice were made and reported in other countries such as Ethiopia, Mozambique, Zambia and Zimbabwe (Chisaka, 2016). The approaches that teachers were found to be using promoted mechanical routines where learners were treated as passive recipients of knowledge and skills. Chisaka (2016:4) described these approaches, as informed by philosophies of teaching, as associated with "shaping" and "transferring" where learners were seen as "malleable" and could be "shaped" into a particular mould: they are empty vessels that need to be filled up with knowledge and content (Chisaka, 2016:4). These approaches to teaching and learning often resulted in negative effects on the

learners as these approaches are limited and in addition, do not promote reflection and positive action in teachers' practices.

The QEP project was set up to address the situation revealed by Chisaka and Mavundutse (2003) in their study. The project sought to improve the instructional strategies of teachers through training in action research and using this approach to promote reflective professional practices on their work in the classrooms. Reflective professional practice in teachers borrows from the theories of "travelling" where the learners are treated as novice fellow travellers, exploring the terrain of "knowledge" alongside a more experienced traveller, who is the teacher (Chisaka, 2016:5). This approach to both teaching and learning makes learning a more pleasurable pursuit of sharing the inquiry process and making discoveries together with the teacher. In this teaching and learning relationship, the teacher takes on the role of a gardener and the learner takes on the role of a plant that requires both cultivation and nourishment to support its independent growth and development (Chisaka, 2016).

The Quality Education Project (QEP), piloted in four countries, Ethiopia, Zambia, Mozambique and Zimbabwe, focused on both in-service for practicing teachers and pre-service for student teachers, targeting teachers in schools and teacher education college lecturers. Through teacher educators, the project also reached student teachers in pre-service teacher training. The pilot project involved teachers, school heads, school inspectors and teacher educators (lecturers in teachers' colleges). In the case of Zimbabwe, the QEP started with 40 participants (six from the Ministry of Education at inspector level, nine from teachers' colleges, six primary school heads and 19 cluster resource teachers). The Cluster Resource Teachers (CRTs) have a professional leadership role in their clusters in terms of supporting the rest of the teachers to deal with the challenges they meet in their day-to-day work in the classrooms. The CRTs, in the original design of the BSPZ programme, occupy a central role in cultivating a spirit of continuous professional development in teachers within the settings of their day-to-day work with their role being envisioned as leading and supporting professional development activities of the teachers in their clusters in a collegial manner (Harber & Stephens, 2010).

The QEP placed emphasis on the role of the teacher in the teaching and learning process. Thus, the QEP focused on helping teachers acquire knowledge and skills to reflect on their own practice, attitude and beliefs and determine the extent to which their attitudes and beliefs impacted positively or negatively on the learning of their pupils. Then they worked on

positively changing the status quo. When learning was not taking place, the action research focused on questions such as ‘What can I do to create learning opportunities for my pupils’ or ‘What is it that I am not doing to create learning opportunities for my pupils’ or ‘How can I improve on creating learning opportunities for my pupils?’

The importance of this new direction of questioning meant that the teacher focused on their own practice and not on what was wrong with the learners. Such questioning often leads to a ‘blame game’, blaming shortage of teaching and learning materials or blaming the school for not making the teaching and learning materials available. The QEP approach helped to develop innovative minds so that the teachers looked into themselves more in order to become proactive. This project promoted ‘inward looking’ for solutions in a challenging environment in order to ensure that effective teaching and learning was taking place (Harber & Stephens, 2010). Thus, the approach pushed teachers to feel challenged to create learning opportunities for their learners, and not to look for solutions from outside.

This project was not all smooth sailing as it required the participating teachers, lecturers and Education Officers to self-introspect; it required them to learn about action research and what it involves and then implement it in their classrooms and teaching practice (Chisaka, 2016). This project required a paradigm shift and took some continuous engagement with facilitators conversant with qualitative research and action research over a period of four years. Alongside the external facilitation, the teachers engaged in action research and learnt from each other through the planned project activities, which brought them together for learning episodes periodically until the termination of the project.

According to Harber and Stephens (2010), the QEP project yielded positive results following five years of QEP implementation with a group of teachers, school heads and school inspectors in Bikita District, Masvingo Province. The findings showed lessons learnt with positive changes and interactions in the classroom and offering a great potential for empowering teachers with action research skills and promoting reflective practices. In addition, Harber and Stephens (2010) proposed that the QEP was a positive strategy for Continuous Professional Development (CPD), facilitated by the powerful tool of action research.

The Quality Education Project resulted in a change of teachers’ attitudes, beliefs and classroom practices. Teachers adopted learner-friendly instructional approaches, which improved learning opportunities for the learners. QEP, in a way, empowered teachers to take ownership

of their teaching behaviour, reflect on own practices and take action on their everyday practical situations through action research (Chisaka, 2016). In all the four countries where QEP was piloted, teacher participants learnt the basics of action research methodologies, reflection and focused on the 'self' as they conducted research on their own work, practice and performance in the classroom.

While this finding was positive and encouraging, a key question of whether reflective practice would continue to grow and become the main characteristic of teacher practice and the epitome of classroom practice for the teachers in the pilot project, remains to be asked. The current study seeks to explore and understand the classroom practice of teachers trained during the QEP period and thereafter. It seeks to follow up on some of the teachers involved in the pilot project and explore whether they still draw inspiration from what they had learnt and experienced during the pilot project to deal with the current circumstances and challenges in the classroom experienced in their day-to-day work. Above all, it seeks to draw inferences from this project, lessons that could be used to develop and propose a model for Continuous Professional Development based on the use of action research to improve own practice.

Research has been conducted on the QEP project, and the emerging evidence of the effects and impact of the training of teachers in action research has been reported in three studies. These studies were commissioned by *Save the Children* to document the project and evaluate its impact and potential. The first study, conducted by Harber and Stephens (2010), encompassed the six years of the life of the QEP. The overall purpose of the evaluation was to assess if participatory action research, as applied in QEP, is an effective method to achieve sustainable change and improvement in the quality of education in the classroom. More specifically, the purpose was to assess if the QEP has resulted in reflective practice by teachers and teacher educators and improved teaching and learning, and help *Save the Children* understand if, how and why changes are taking place, and if not, why.

Harber and Stephens (2010) report that the evaluation found that teachers were becoming more professional and that children were learning in more teacher-supportive environments. The project led to capacity building in teachers in relation to developing skills that are more reflective. Teachers who wanted to, and could, improved their classroom practice. There was evidence that QEP could improve the quality of teaching and learning, as well as learning

outcomes and teachers developed more strongly towards what the evaluators called **extended professionalism**.

The strength of QEP was in its ability to work within the existing staff development structures of the Ministry of Education and the schools (Harber & Stephens, 2010). The involvement of school inspectors and school heads helped to integrate the QEP philosophy and the participatory action research approach into the schools through routine interaction and monitoring. In addition, the project worked within the Scheme of Association between the University of Zimbabwe and the teachers' colleges and teacher educators, which enabled the teacher educators to work with teachers in the schools on this approach. These structures were to ensure sustainability beyond the project.

Harber and Stephens (2010) found that the project had led to teachers enhancing their skills, confidence and assertiveness. This finding is very encouraging as the *Save the Children* supported intervention was to train teachers in action research and empower them with skills to look into their own practice for the purpose of improving their teaching. However, Harber and Stephens (2010) warned that the change found in the evaluation could be superficial rather than a change in reality, and therefore this finding needs to be followed up on.

On another positive note, Harber and Stephens (2010), found the project influenced teacher training curriculum review and action research was included in the training of pre-service teachers for Zimbabwe. Above all, Harber and Stephens (2010) noted that if there was consistent support and follow-up for teachers and other educators following the initial training in action research, there was consensus that teacher behaviour and practices would change in the longer term for the better.

This study sought to explore if the findings presented by Harber and Stephens (2010) are still relevant. If reflective practices are still being practised by the teachers who were in the pilot project, this will be critical to developing a CPD model built on action research as a critical skill for the teacher. Thus, this study, in part, was an attempt to follow up on this finding.

The second study was carried out by Brock-Utne *et al.* (2014) resulting in a report called *From Blaming to Reflecting. An evaluation of the Quality Education Project (QEP) in Zimbabwe and Zambia*. The findings on the QEP Zimbabwe implemented in Bikita District in Masvingo Province are reported and reflected on below.

The Brock-Utne *et al*. (2014) report found that the Bikita Quality Education Project fell into the Cambridge Action Research network format. The Cambridge Action Research network was inspired by the work of Lawrence Stenhouse and that of John Elliot and informed by the view that educational action research was concerned with training teachers in looking at their own classrooms and the classrooms of their colleagues in a critical manner. In classic work from Stenhouse (1975) and Elliot (1991), the 'teacher as researcher' became an important concept.

The Brock-Utne *et al.* (2014) report tested the effects of QEP on learning outcomes with a number of hypotheses. One of their hypotheses was 'pupils who have been taught by QEP trained teachers, will perform at the same level as pupils who have not been taught by QEP trained teachers'. On this hypothesis, they examined results in Grade 4, Grade 6 and in national examinations in Grade 7, respectively. Grades 4 and 6 pupils were tested in English and Mathematics whereas the Grade 7 results from the National Composite Examinations were obtained from the schools. In their study, for the purpose of consistency in the trend analysis therefore, they considered results covering the period 2008 to 2012. These results are found in Figure 3.1 below.

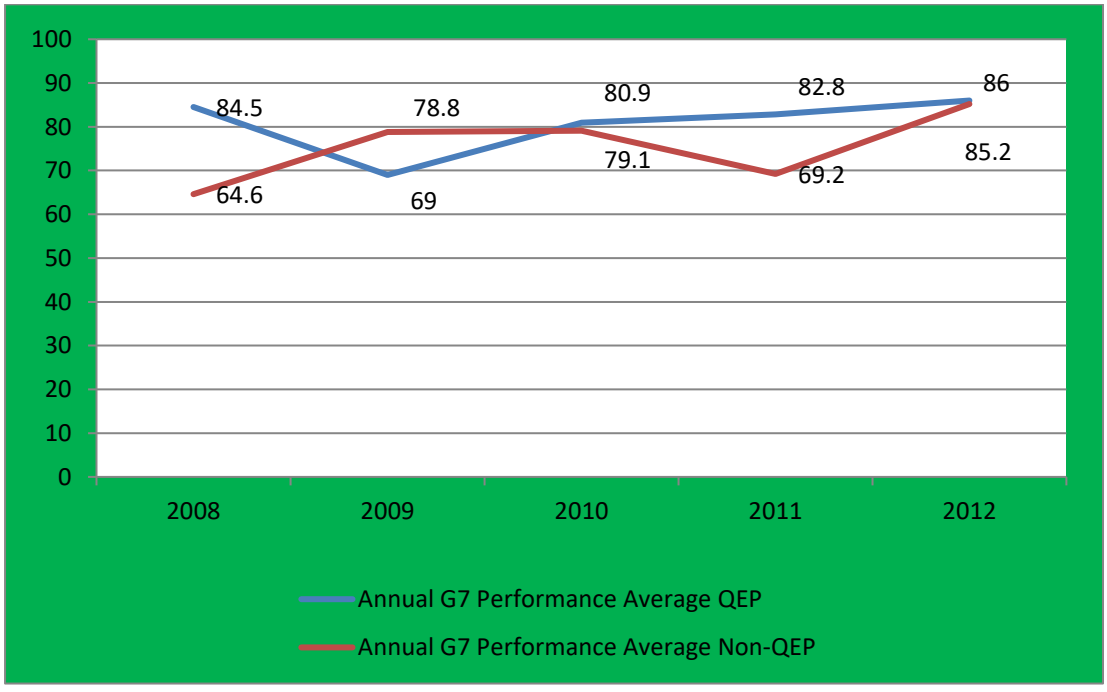

Figure 3.1: Grade 7 results trend analysis 2008 – 2012 (Brock-Utne *et al.*, 2014:28)

The results of Grade 7 examinations supported the notion that schools, which had more QEP trained teachers and formally known as QEP schools when the programme was being piloted,

performed better than those in schools with non-QEP trained teachers. The perceptions of both QEP trained and non-QEP trained teachers but who were familiar with the QEP philosophy, is that the progression, retention, completion and achievements rates in the QEP schools, were better than those in the non-QEP schools.

The Brock-Utne *et al.* (2014) study followed up on a number of the teachers, school heads and education officers who took part in the QEP pilot and were trained in action research and carried out action research on their work. The study found that they had become great promoters both of the QEP philosophy and action research as a research paradigm. This group went on to train 124 more teachers and school heads in their school clusters in the Bikita District (Brock-Utne *et al.*, 2014.

The Utne-Brock *et al.* (2014) report also compared pupils taught by QEP-trained teachers located in a sample of schools in Bikita with a sample of schools in a nearby district, Zaka, in more or less similar settings. The researchers treated the sample of schools in the Zaka District as their control group. They observed teaching and learning, as well as conducting focus group discussions (FGDs) with both teachers and learners. In the Bikita District, Brock-Utne *et al.* (2014) observed teachers who were QEP trained and interviewed school heads, teachers as well as learners who were taught by QEP trained teachers. Brock-Utne *et al.* (2014) found that in the Bikita District, QEP-trained teachers exhibited more self-critique than non-QEP trained teachers. The learners had positive comments on their teachers in the Bikita district as being very supportive, encouraging and going the extra mile to ensure they learn. In the Zaka District, they found that some teachers through their networks, had picked up on ideas related to action research and teachers as researchers being practised in the Bikita district. The likely explanation for this influence was as the QEP pilot was being implemented in Bikita, a neighbouring district to Zaka, news of the pilot had filtered through to school clusters.

The Brock-Utne *et al.* (2014) study found that other organisations and agencies, such as UNICEF Zimbabwe, were sponsoring continuous teacher professional development activities on child friendly schools (CFS). They were encouraging teachers to investigate ways to improve on their classroom practice, though not entirely based on the action research philosophy. The overall conclusion in the Brock-Utne *et al.* (2014) study was that QEP had some positive impact in supporting the continuous professional development of teachers in the

Bikita District and that it had the potential to continue doing so as it was rooted in school clusters.

The third study was reported in the Chisaka (2016) report. Chisaka (2016) engaged teachers who had participated in the Quality Education Project (QEP), learnt action research and used it to improve their teaching. He reported that teachers felt that:

- Action research makes practitioners to look inward (self) for solutions to own challenges. *'There are big differences in my classroom as a result of action research. In most cases we used to externalize problems we encountered …. The first change is to recognise the problems in our own and not to externalize them and blame others. These are problems related to my practice … I resolve problems through utilising the action research I have learnt'* Chisaka, 2016:6)
- Action research gives practitioners self-confidence and love for own work and seeing its worth. *'When I joined action research training way back in the first group of teachers to be trained, I was not ok with the profession. In fact, I was planning to quit, but after the participation in action research training, I saw a new light about my work as a teacher … I was very autocratic, I am now sensitive to how I treat children when they face challenges in learning, and grasping concepts'* Chisaka, 2016:7)
- Action research makes practitioners develop interest in research and develops research skills in them. *'Children are now motivated to learn, because we now handle them differently and according to their needs … now I go to familiarise with the children to investigate why the children were absent from class.' 'I have learnt a lot form QEP. I have learnt to do action research. We practise it now. We are practising it and resolving problems we encounter … problems cannot be externalized any longer'* (Chisaka, 2016:7).
- Action research improves attitudes of practitioners towards learners and their work. *'I can now see learners' problems from different directions. I have learnt to think about myself, my methods and my teaching. My relationships with other teachers have changed. We discuss our job and challenges and learn from each other'* (Chisaka, 2016:8).
- Action research improves quality of education and quality of professionals. *'From a personal point of view, the benefits that accrue from action research*

project are that I have developed to be a critical analyst and reflect on whatever I do in class with learners … this is a paradigm shift from the old practices, for me' (Chisaka, 2016:9)

- Action research develops practitioners into quality leadership. *'I have gained a lot of skills in my educational practices, both in curriculum, instruction and administration. I have also gained a lot of respect due to the impact I make in staff development meetings.' 'Because of action research training and practice, I feel my performance as education Inspector has improved in the office … I have moved from the blame game syndrome to the self-introspection'* Chisaka, 2016:10).
- Action research increases knowledge base of practitioners, their practical research experiences and improves interpersonal relationships. *'Action research has given me practical experience in research. It has created ideas on how to handle challenges I encounter in my profession. I also improved my relationship with other key stakeholders'* (Chisaka, 2016:10).

According to Chisaka (2016), other themes that emerged included the argument that action research and reflective practice promoted personal and professional growth. Action research assisted teachers in improving their work performance and build leadership qualities. Action research transformed the teachers and developed a self-consciousness about their beliefs and values. Consequently, it can be argued that action research contributed to a positive transformation of the QEP project participants and led to a change in their personal philosophies, values and beliefs with regard to their perspectives on teaching and learning.

Given the findings of the three studies, it is argued that the Quality Education Project (QEP) pilot proved a success. In as far as the participants of the pilot project, the project made some contribution towards the revolutionising of their classroom practices. It made the participants interrogate and reflect on their self-perceptions, self-beliefs, attitudes and behaviour. Hence, with this as the background, I argue in this study that this kind of perception begins when the practitioner doubts their traditionally held values and practices.

One main weakness of QEP was that it was a project with a clear timeline (Harber & Stephens, 2010). As a project, the threat of it dying as soon as the funding ended was strong. However,

this was mitigated by infusing action research into pre-service education for teachers, teacher education curriculum and Continuous Professional development of teachers in service.

In the following section, Continuous Professional Development (CPD) programmes for teachers in South Africa and Namibia are explored which will assist in informing the development of a model for Continuous Professional Development based on the use of action research to improve own practice.

3.7 DEVELOPING REFLECTIVE TEACHERS IN NAMIBIA AND SOUTH AFRICA

In recent years, there has been interesting work done in Namibia and South Africa with initiatives to build on action research as a tool to improve the quality of teaching and learning in schools.

In Namibia, this work is reported in the National Report of Action Research initiative in 28 case study schools that focused on pre- and lower primary grades (Steukers & Weiss, 2014). The action research initiative in 28 case-study schools was implemented by UNESCO, the University of Namibia and the Ministry of Education through a grant from the China Funds-in-Trust. The project brought together the education community, who at times work in isolation, and involved educators to investigate and create a shared vision for improving primary education teaching and learning.

On making changes in classroom practices, the project encouraged knowing and understanding existing practices. These practices were subjected to a cyclical action research model based on the work of Coghlan and Brannick (2005) to support the research process. Essentially, this was an action research project to empower teachers, University of Namibia lecturers and ministry officers and enhance young children's learning, build trust among professionals and learn from experiences. The participants in this research case study had an excellent opportunity to acquaint themselves with the situation on the grounds that it allowed an opportunity to rethink their classroom practice in response to learners' needs. The participants worked together, learning from each other as they took part in the project, collected information, analysed it and made recommendations for change in teacher classroom practices.

The Namibian case study, apart from empowering teachers, university lecturers and ministry officers, revealed capacity gaps in the participants. Research had not been an integral part of

their work and practice; hence, this case study became a personal capacity building one for the participants (Steukers & Weiss, 2014:11). The main conclusions of the case study were the need to establish and promote a community of practitioners to facilitate discussion and joint learning from their practice and experiences with the objective of improving classroom practice. The project created a 'virtual space' for continuous professional development activities for teachers.

Ono and Ferreira (2010 citing Tatto, 1997), noted that professional development of teachers had always followed the traditional paradigm in South Africa. This professional development consisted of in-service education or staff development where the approach is 'trainer-of-trainers' (ToTs). The teachers who took part in the ToTs and then cascaded the information to others. The traditional paradigm of professional development has four categories: for certification of unqualified teachers; to upgrade teachers; to prepare teachers for new roles; and curriculum-related dissemination of certain information or offering refresher courses. The traditional form of continuous professional development is done through workshops, seminars or conferences. Ono and Ferreira (2010) cite a range of sources where these efforts have been found to be fragmented, incoherent encounters that are out of context and isolated from real classroom situations. Ono and Ferreira (2010:60 citing Fullan, 1991) stated:

> Nothing has promised so much and has been so frustratingly wasteful as the thousands of workshops and conferences that led to no significant change in practice when the teachers returned to their classrooms.

Ono and Ferreira (2010) report that this dissatisfaction was observed in the research on professional development of teachers in developing countries. They found that in many developing countries in-service professional development of teachers is done using the cascade model or what has been called the 'multiplier' approach. The cascade model is used to transmit information from the top to groups of teachers. This approach often begins with a 'trainer-of-trainers' (ToTs) to ensure the message is passed down and made to 'flow down' to teachers in the classrooms. While this approach allows training in stages and quick dissemination of information to a large number of teachers, and in theory is cost effective, there is a high chance that in the cascade dissemination the crucial information may be watered down or misinterpreted. Ono and Ferreira (2010 cited Fiske & Ladd, 2004) who point out that the cascade model was developed in the developed world under a paradigm of teacher professional

development criticised for treating learners as ‘passive receivers’ of knowledge known as the is the transmission model.

Taking into consideration professional development of in-service teachers and development efforts that have been used in the past, Ono and Ferreira (2010) tried out an alternative form of Continuous Professional Development where they used a Japanese lesson study model, which they proposed as a possibility to contribute to teacher learning. The case study involved the Mpumalanga Secondary Science Initiative (MSSI) 1999–2006. The project aimed at improving mathematics and science learning using lesson study for adequate teacher development.

The case study was carried out during the implementation of the Outcome Based Education curriculum reform of the late 1990s to 2000. The case study was one of the responses to the challenge of adequate teacher professional development and training. The lesson study model got teachers to work together on three aspects of a lesson, ‘plan-do-see’. Teachers collaborated on planning the lesson; they understood the learners’ needs, their pre-knowledge and misconceptions as well. One of the teachers taught the lesson while the others observed and the whole group of teachers met during the post-lesson phase to reflect on the planning, lesson execution and outcomes. The post-lesson phase was a reflection and learning exercise for all teachers as they reviewed the teacher’s intentions, lesson outcomes, the strengths and the challenges, which were all learning points for improved practice in the future. Thus, the whole school lesson study approach was a collaborative professional development activity characterised by classroom-situated, context-based, learner-focused, improvement-oriented and teacher-owned process. An evaluation of the lesson study approach revealed that teachers who were involved in the project improved on their teaching. However, the evaluation noted that any form of professional development was not an overnight wonder but would need a long-term gradual progression to everlasting change (Ono & Ferreira, 2010).

According to Ono and Ferreira (2010), an alternative professional development model has emerged based on a different paradigm, the constructivist paradigm. Advances on brain research support an increasing understanding that the human brain is always searching for meaning and seeking new patterns and connections. Building on this notion, the implication is that learners always construct meaning of their own as they deconstruct what they knew, interpret, and reconstruct when engaged in new experiences of learning and discourse. In other words, knowledge is a social construct, situated in the social and cultural context of the learner.

This emerging paradigm, as argued by Ono and Ferreira (2010), has a new perspective of teacher continuous professional development. This perspective includes the aspects that CPD is best based on constructivism, is a long-term process, occurs within a particular context, is intimately linked to school reform, should be a collaborative process and is diverse from one school setting to another (Villegas-Reimers, 2003).

The long and short of the emerging paradigm is that Continuous Professional Development of teachers has the potential of developing teachers who are reflective practitioners, can make informed professional choices, are empowered professionals, and become engaged in active and participatory learning.

3.8 CONTINUOUS PROFESSIONAL DEVELOPMENT FRAMEWORKS FOR TEACHERS IN MALAWI AND SOUTH AFRICA

Countries in the Southern Africa region are challenged with issues of teacher quality, teacher education and teacher in-service education including continuous professional development. In this section of the chapter, recent developments in Malawi (Ministry of Education, Science and Technology, 2018) and South Africa (Steyn, 2011) concerning Continuous Professional Development of teachers is explored. These developments have a bearing on the present study as they provide alternative ways of looking at Continuous Professional Development and making provisions for it.

The Ministry of Education, Science and Technology (MoEST) in Malawi adopted a Continuing Professional Development Framework for Teachers and Teacher Educators in 2018. The framework was developed over a period of time with the cooperation of various stakeholders and included the Malawi Teaching Service Commission, teacher unions, academia, teachers, teacher educators, civil society organisations, faith-based organisations and development partners (MoEST, 2018). The framework was developed to be a mechanism to improve the quality of teaching and learning so as to raise the student learning outcomes at all levels of the education system. The framework is linked to UNESCO's Sustainable Development Goal (SDG) number four (4) that requires all governments to provide for their citizens quality education and lifelong learning for all (UNESCO, 2015). The framework recognises that teachers are the most significant resource in schools for raising education standards. The mantra that no education system is higher than the quality of its teachers holds true for this

framework, which sets the platform to ensure that teachers are highly skilled and motivated to deliver quality education.

In Malawi, the Ministry of Education, Science and Technology and stakeholders in the education sector realised the futility of their support to teachers and teacher educators in their professional learning, which incorporated learning through the modalities of seminars, workshops and conferences at national and local levels (MoEST, 2018). They realised that the teacher professional support activities were isolated from each other and with no system of monitoring and evaluating the learning that teachers and teacher educators received through the activities. The knowledge and competences learnt and gained did not contribute to career progression in a recognised fashion because of the absence of policy guidelines on how this could be done

Hence, the Continuous Professional Development Framework for teachers and teacher educators introduced in Malawi, lays out guidelines for the provision of continuous learning for teachers and teacher educators (MoEST, 2018). The framework enables teachers to aspire to access continuous professional development to promote their own professional growth that will be recognised through a process of teacher licensure. The framework is a tool that will ensure that teachers and teacher educators constantly keep abreast with new developments, methodologies and strategies for teaching as well as new solutions to challenges they encounter in their day-to-day teaching practice. It is expected that, based on the framework, teacher knowledge, skills and attitudes regarding teaching and learning will improve and have a positive impact on student learning outcomes. The Malawian CPD Framework outlines the following areas: teacher career structure; needs based CPD provision; nature of CPD; governance of CPD; teacher development centres and schools; evaluation of CPD; and monitoring and evaluation (MoEST, 2018).

The Malawian CPD Framework provides clear career paths separating administrative and professional routes. Thus, the framework clarifies career routes for teachers, advisers and those who choose to take careers in administrative roles as school heads, district and provincial education managers. The framework provides for a needs-based continuous professional development identified through bottom-up approaches. This CPD framework builds on self-reflection of teachers as the basis for individual professional development plans that are implemented in school-based CPD plans, and then scaled up to zonal and district levels. As the

teachers engages in CPD activities, they earn points that contribute to maintaining their licence to teach and its renewal.

In addition, CPD is district, zonal and school based. This position has led to the Malawian CPD governance structure creating the position of a CPD Coordinator at district level, manning teacher development centres for collaborative and sustained CPD. The District Coordinators, alongside provincial and national leaders, run coordinated evaluation and monitoring of the quality of CPD (MoEST, 2018).

In South Africa, the Department of Education developed and adopted a National Policy Framework for Teacher Education and Development (DoE, 2006). The policy document spells out the context of teacher education in South Africa, recognising the complexity of the teacher task, the apartheid legacy and the social inequality that exists in the South African education system which the government programmes are addressing. The policy document further explores the teacher qualification routes in South Africa. It then spells out the Continuing Professional Teacher Development (CPTD) conceptual framework, system, rewards and sanctions, as well as the management of the continuous professional teacher development system. The policy provides for an overall strategy for professional development of teachers. The CPTD policy document (DoE, 2006:23), built upon the Norms and Standards for Educators that South Africa adopted in 2000 (DoE, 2006), restates the standards required for a teacher to be:

- a specialist in a particular learning area, subject or phase;
- a specialist in teaching and learning;
- a specialist in assessment; curriculum developer;
- a leader, administrator and manager;
- a scholar and lifelong learner; and
- a professional who plays a community, citizenship and pastoral role.

One critical component of the policy is its inclusion of a teacher as a ‘scholar and lifelong learner’. This norm introduces an interesting dimension that requires the teacher to be always learning from their work by reflecting on own practice and learning from the learners’ experiences of being taught. This requirement is the assumption that teachers will have an environment where they are challenged to keep learning by themselves, alongside others to continue improving. In a way, this implies that the teacher belongs to a community of learners.

However, one needs to query what is contained in this policy document to create an enabling environment for teachers to continue learning as part of their continuous professional development and in addition, what is contained in the policy document to encourage and develop reflection skills. I argue that policy documents need to go beyond stating **what should be** but clearly spell out **what should happen** for the ideals therein expressed to be achieved or realised, as teachers participate in the continuous professional development activities.

The South Africa Continuous Professional Teacher Development (CPTD) consist of four types or categories, namely school driven programmes; employer driven programmes; qualification driven programmes; and other programmes offered by NGOs, teacher unions, community-based organisations or private companies and organisations. Some CPTD activities are compulsory while others are self-selected for the teachers. The Department of Education at national and provincial levels provides the resources for the compulsory programmes where teachers earn Professional Development points for participating per year. Teachers are required to register with the South African Council of Educators (SACE) and this body manages the CPTD system. Providers of professional development programmes are registered with SACE who then work with the Department of Education to monitor the CPTD system.

The policy framework for CPTD in South Africa has been closely monitored. On reviewing literature on professional development, Steyn (2011) points out that workshops, seminars and conferences constitute traditional approaches to professional development. Steyn (2011 citing Boyle, Lamprianou & Boyle, 2005 and Lee, 2005) states that these traditional approaches have a simplistic and technical view of teaching. The approaches show a belief that teachers' knowledge and skills are improved by using external experts. Furthermore, Steyn (2011 citing Birman, Desimore, Porter & Garet, 2000) indicates that traditional approaches have been criticised for not being effective enough to strengthen teachers' knowledge and pedagogical skills. Even more succinct on this issue on teachers' continuing professional development, Mundry (2005:14) suggests that policy makers and education managers should "abandon outmoded approaches to staff development and invest in 'practice-based' approaches to professional learning and development of teachers".

Steyn (2011) further argues that professional growth in teachers occurs when the professional development programme acknowledges personal and professional needs of teachers. This implies that strategies should be used to determine the areas where teachers are lacking in skills.

This leads to needs-based professional development activities for teachers. Given this point of view, Steyn (2011:8) explains that:

> professional development is most effective when it is based on the needs of teachers and it is a continuous process that is formal, systematic and planned development through supportive observation, feedback, dialogue and peer coaching.

This argument speaks to Wenger's social learning theory where teachers work together in 'communities of practice' (Wenger, 1998). Schools lend themselves to this model and approach with teachers working together collaboratively supporting each other. Steyn (2011) warns that the South Africa framework for CPTD is silent on communities of practice for teachers and places much emphasis on individual teachers earning points from their involvement in continuous learning.

From the observations and arguments by Steyn (2011), who cites Wenger's social learning theory, it is important for continuous professional development activities to recognise schools as communities of practice where teachers engage in a process of collaborative learning as a shared human endeavour as they experiment separately but deliberately reflect on what has happened as a result of individual and team efforts. Teachers reflect on their experiences and the whole system so that they learn how to improve their practice. This collaboration contributes towards the development of a positive school culture that has commitment to change and creation of environment for better learning opportunities for all learners.

The warning by Steyn (2011) is that the South African Continuous Professional Teacher Development Framework contains a barrier to teacher collaboration by emphasising earning individual points at the expense of collaboration and support from one another. Steyn (2011 citing Rhodes & Houghton-Hill, 2000:432) argues that there is a strong relationship between components of training and the impact of that training on teachers' performance. The table showing the relationship is presented below:

Table 3.1: The relationship between components of training and impact on teachers' performance

Training components and combinations	Impact on teachers' job performance		
	Knowledge	**Skill**	**Transfer**
Theory	Low	Low	Nil
Theory and demonstration	Medium	Medium	Nil
Theory, demonstration and practice	High	Medium	Nil
Theory, demonstration, practice and feedback	High	Medium	Low
Theory, demonstration, practice and feedback	High	Medium	Low
Theory, demonstration, practice, feedback and coaching	High	High	High

Source: Steyn (2011:12 quoting Rhodes & Houghton-Hill, 2000:432)

From the table above, it is argued that the duration of continuous professional development activities influences the depth of changes that take place in the participating teachers. So is the form of the professional development initiatives. The longer they are, the more likely they are to influence change in teaching behaviour. Lee (2005:47 cited by Steyn, 2011:14) encouraged a team approach for CPTD so that teachers have time for reflection in a collegial atmosphere and evaluation of the effectiveness and impact of their activities. This approach implies teachers continuously undertake school-based action research which ensures active members are collaborating and learning to improve own practice together. When all else is considered, the challenge is how to effectively encourage a collaborative culture in communities of practice where teachers are involved in joint activities, discussing together, and assisting one another to improve own practice.

Davids (2014) points out that the Norms and Standards Policy for Educators (2000) requires teachers to be transformative. Higher education institutions in South Africa have had to respond to the Norms and Standards Policy for Educators by introducing a compulsory module on action research in teacher education studies curricula (Davids, 2014). Davids (2014) acknowledges the potential of action research in offering a transformational teaching model for teachers. As part of the module, a research study was carried out on the value of using action research in the teaching of History for a Grade 10 class. Findings revealed that engaging in action research sensitises the teacher to alternatives, more democratic practices and methodologies, and a critical reflection disposition.

> … after completion of the action research Master's Degree at the University of the Western Cape, I gained a different sense of myself and a different philosophy of teaching (Davids, 2014: 2).

Davids (2014) concluded that action research provides a suitable pedagogical framework for professional practice that is consistent with the Norms and Standards Policy requirements for teacher education programmes. Armed with the evidence Davids collected in his use of action research in the teaching of History projects, he concluded that "if action research can stimulate an emancipated and democratic pedagogical practice as shown in this case study, then action research is coming of age" (Davids, 2014:18).

Thus, Davids (2014) argued strongly for action research in teacher professional development strategies as being in line with the teacher Norms and Standards Policy in South Africa. The positive results of the use of action research in contributing to continuous professional development point to the possibility of developing a CPD model, which has the potential to contribute immensely to continued professional development and growth of teachers.

3.9 SUMMARY

In this chapter, a number of issues around the conception of Continuous Professional Development (CPD) were explored in Zimbabwe, Namibia, Malawi and South Africa. In the context of Zimbabwe, the Statutory Instrument (SI) of 2000 was examined. This legal instrument defines staff development for civil servants, teachers included. It goes further to outline the nature of the staff development and conditions under which staff development is offered. It is clear from the provisions in the SI of 2000 that only a small number of teachers are supported every year to engage in further professional learning. This number is deemed insignificant to make a mark and therefore, the SI instrument of 2000 falls short of what would meet standards for continuous professional development that will enhance teacher extended professionalism.

The Better Schools Programme for Zimbabwe (BSPZ) programme is school cluster based and holds a great deal of potential to advance teacher professionalism through activities for continuous professional development. Its genesis is found in the response to the communique from the World Conference on Education for All in 1990 at Jomtien in Thailand that called for improved quality of education, teaching and learning (UNESCO, 1990). Within the

Commonwealth, the grouping of countries that were former colonies, dominions and protectorates of the British Empire, the ministers of education, United Nations (UN) agencies and Non-Governmental Organisations put together a programme to enhance the performance of school heads which then moved on to include school teachers.

By 1994, the Ministry of Education, Sports, Arts and Culture in Zimbabwe promulgated a Chief Education Officer Circular 1/94 that provided guidelines on the formation and operations of school clusters. Indeed, this was a useful mechanism to get teachers engaged in some systematic manner on continuous professional development. Teacher professional development was localised, school based and responsive to the challenges the teachers faced in their daily work (BSPZ, 1995; 2000). While the BSPZ contain many positives such as teachers as researchers, and teachers collaborating to improve their practices, the programme needs to take on board emerging thoughts and practices on continuous professional development such as action research being central to teachers' own initiatives to improve own practices.

The development and adoption of a competency-based curriculum in the schools has brought in new dimensions important to consider as regards continuous professional development of teachers (MoPSE, 2015b). The Ministry of Primary and Secondary Education has worked with stakeholders to develop Teacher Professional Standards (TPS), which define what is expected of the teacher in terms of competencies. The standards are explicit in encouraging the teacher to engage in self-appraisal and take on action research to help themselves reflect continuously on own practice in the classroom. As argued in the chapter, this scenario is both positive and ideal for continuous professional development. However, the TPS document does not advise teachers on becoming reflective. I argue that teachers need further support and advice to develop reflection skills.

In the chapter, I explored processes and outcomes of a project in Bikita District in Masvingo province in Zimbabwe. This was the Quality Education Project (QEP) which trained a group of teachers, school heads, college lecturers and school inspectors in action research on own work. The idea was to use action research as a way for continuous professional development and always seeking to improve own practice in the classroom. The project ran for about eight years between 2006 and 2013 and consisted of training workshops for the participants, practice and meeting again for reflection and learning sessions as a group. Individual participants in the

group carried out action research on their work and produced write-ups on their experiences and its impact on their classroom or work practices. The QEP project was set up to work with the Ministry of Primary and Secondary Education to address a growing concern of poor performance of learners in the final examinations, such as at end of primary school. This project has had external evaluations on three separate occasions to follow up on the impact it has had on the participating teachers' practices, reflection and perceptions of teaching and learning.

Harber and Stephens (2010) found that the QEP trained teachers in action research had moved strongly towards the characteristics of extended professionalism. The skills of the teachers were enhanced; they were found to be confident and assertive in their understanding and analysis of their classroom situations. The critical factor in as far as the project was concerned, was its demonstration of the possibility of building continuous professional development on action research training and practice. Hence, the current research study so as to contribute to developing a model built around action research. It is noted that Harber and Stephens' (2010) findings needed to be checked and tested in follow-up evaluations to establish if training teachers in action research and encouraging them to use this methodology has really contributed to sustainable continuous professional development.

The second evaluation study carried by Brock-Utne *et al.* (2014) examined teachers trained on action research in the Quality Education Project (QEP) and another group that was not trained in action research. Their findings were indicative of a positive impact of action research training. They concluded that the teachers who were trained in action research had tools to support them and carry out action research on their work. They talked to the learners taught by the QEP trained teachers at the time of the evaluation study and heard evidence of positive comments on the teachers' approaches. The teachers engaged the learners a lot more and were supportive, always searching for ways to teach more effectively. Brock-Utne *et al.* (2014) followed up on performance of the learners and found the learners taught by the QEP trained teachers performing much better. It is important to note that the Brock-Utne *et al.* (2014) found that there were other agencies such as UNICEF that were engaged in sponsoring professional development activities for teachers that generally sought to improve teacher performance. This was especially so in the Zaka District, which is a neighbouring district to Bikita where they engaged non-QEP, trained teachers.

The third study by Chisaka (2016) engaged QEP trained teachers in Ethiopia, Zambia and Zimbabwe. The findings indicated that action research and reflective practice promoted personal and professional growth in the practitioners. In a way, action research transformed the practitioners in terms of their values and beliefs as regards their perspectives on teaching and learning. Action research, the QEP-trained teachers claimed, developed a self-consciousness on their beliefs and values. On reflection, I argue that these evaluation findings were consistent on positive benefits for engaging teachers in action research. Hence, this research study seeks to propose a model for CPD for teachers built on engagement in action research.

The chapter ended with a close look at Namibia, South Africa and Malawi. The activities and developments covered in this chapter further prove the growing concern with the professional development of teachers and the linkage with teaching and learning. In Namibia, a small-scale study in some 28 primary schools demonstrated the contribution of action research training to promoting communities of learners among teachers and more interactive teaching and learning (Steukers & Weiss, 2014). Malawi has recently developed and adopted a Continuous Professional Development Framework that provides a clear career path, needs-based in-service training whose priorities are determined in the school, zone and district.

In Mpumalanga province in South Africa, the study by Ono and Ferreira (2010) demonstrated that a pragmatic approach to classroom-based action research is a more positive alternative to workshops which led to little or no impact at all after the training. South Africa developed a National Policy Framework for Teacher Education and Development. This policy includes the teacher as a scholar and lifelong learner. In this regard, the policy outlines the South Africa Continuous Professional Teacher Development framework where this is made up of school, employer and qualifications driven opportunities. This framework requires all teachers to take part and earn points that are mandatory for continuous professional development. Steyn (2011) notes that this has come with its pros and cons.

3.10 CONCLUSION

This chapter notes that the area of teachers' continuing professional development (CPD) is of growing interest in Zimbabwe, the region and internationally. In the context of Zimbabwe where this research study was situated, Public Service Commission regulations are outlined in Statutory Instrument (SI) 2000 (Ministry of Public Service, 200), which recognises the need for continued professional learning. The SI 2000 provides for both long- and short-term

programmes, at work or at institutions. The Better Schools Programme for Zimbabwe was introduced and provided modalities for teachers' engagement in professional learning in school clusters utilising resource centres (Chiome, 2011). This has provided for Communities of Practice where teachers learn among themselves (Kennedy, 2005; Steukers & Weiss, 2014).

The Quality Education Project (QEP) implemented in Bikita district in Masvingo Province in Zimbabwe in the period 2006 to 2013 was found to promote reflection skills in teachers (Harber & Stephens, 2010; Chisaka & Kurasha, 2012; Brock-Utne *et al.*, 2014). The QEP intervention outcomes and findings provide an approach that offers pointers for developing a model for continuous professional development of teachers. The chapter explored outcomes of the Mpumalanga Secondary Science Initiative (MSSI) in South Africa that showed the value of using the constructivism paradigm in teacher continuous professional development (Ono & Ferreira, 2010). In Namibia, a similar initiative of 28 case study schools in Namibia focused on encouraging and developing skills in action research in teachers in pre and lower primary grades and the outcome showed the benefits of this approach (Steukers & Weiss, 2014). At national levels, South Africa and Malawi have developed frameworks for continuous professional development of teachers with modalities for acknowledging teachers' participation in CPD activities (DoE, 2006; MoEST, 2018). The next chapter presents the research methodology used for the research study.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

In Chapter 3, different approaches to Continuous Professional Development were explored and discussed. The approach of training teachers using action research was described and discussed in some detail as well. Examples of training teachers in action research in different contexts were explored and their outcomes discussed.

This chapter first presents the qualitative research paradigm and the research design (*Cf.* 4.2 and *Cf.* 4.3) that the researcher used in order to address the key research questions outlined in Chapter 1. In addition, the chapter further provides a comprehensive description of the study population and sampling techniques that were used, as well as the data collection strategies and tools used. The data collection instruments comprised interviews and focus group discussions with teachers, school head teachers and school inspectors, and finally, document analysis of documents pertaining to the teachers in the research sample. The chapter also presents how the data were then analysed and the key merits from the use of QSR NVivo v12 (2018) software in order to establish meaning from the emerging themes, and its role towards facilitating the interpretation of the data. Lastly, the chapter covered how credibility and trustworthiness of the data was ensured as well as ethical considerations during the process of data collection and analysis.

4.2 RATIONALE FOR EMPIRICAL RESEARCH

This study embraced the empirical research approach with the need to collect the data directly from the custodians and practitioners of action research, and obtain knowledge directly from their experiences. According to Creswell (2013), the carrying out of empirical research has the advantage of increasing internal validity as well as the credibility and practicality of the study findings. This is further corroborated by Bryman (2015), who adds that pragmatic research drifts away from theoretical issues to focus on the pragmatic aspects of the research, and thus making it possible to research into real-life situations and help towards deriving solutions to real-life problems (Patton, 2015).

In the case of this study, the focus of the research was how action research training can be used as a professional development strategy to enhance effective classroom practices of primary school teachers. The study sought to do this by asking how action research training of primary school teachers empowered them; how action research-trained teachers applied their action research knowledge to deal with the Competence Based Curriculum; what challenges the action research trained teachers faced when applying action research on their work; and what strategies can be used to promote action research among primary school teachers. The case study sought to contribute to developing a continuous professional development strategy for teachers to continuously improve teacher classroom practices and learning efficiency in the context of Zimbabwe.

The foregoing were pragmatic objectives, which could best be addressed by ensuring the study was empirical in nature. In this regard, the research was centred around teachers, school head teachers and school inspectors who had extensive experience with action research. This is the reason why the study was conducted in Bikita District, in the Masvingo province of Zimbabwe, where an extensive pilot action research training had been done over a period of eight years from 2006 and 2013. Teachers, school head teachers and school inspectors within that district had been empowered in the use of action research in groups in the Bikita Quality Education Project (QEP). The training that the research participants would receive was to motivate and empower them to become researchers and develop a culture of always learning from their work environment and finding ways in which to address the challenges they face in their work on a day-to-day basis. The teachers, school head teachers and school inspectors attended training in action research in small groups over a 2-year period, punctuated with learning theory, application of practice in their schools and reflecting as a group guided by facilitators. This current empirical research was conducted with a sample from the same group of teachers, school heads and school inspectors after their training in action research some years later. The motivation for the researcher was to try and draw knowledge from their experiences and use that towards developing empirical solutions through continuous professional development to the ever-burgeoning challenges within the teaching and learning environment.

4.3 RESEARCH METHODOLOGY

According to Strauss and Corbin (1998) and Creswell (2013), research methodology refers to a way of thinking about and studying social reality. The qualitative research methodology was specifically chosen to help in studying the phenomenon, the reality of teachers' practices and their 'lived experiences' in their schools and classrooms. As the focus of the study was the use of action research in their work and striving to improve on their teaching and the learning of their learners, this was examining the social reality for teachers. In this regard, the overall methodology employed for the research study was qualitative. In the following sections, the research paradigm (*Cf.* 4.3.1), research approach (*Cf.* 4.3.2) as well as the research design (4.3.3) are presented and discussed.

4.3.1 The Research Paradigm

An understanding of the main paradigms in the field of research forms the bedrock of a research study as it clarifies and specifies the general features of the way one views the world such as the nature of knowledge, mind, matter, and overall research strategy (Brennen, 2017; Marshall & Rossman, 2014). Saunders, Lewis and Thornhill (2007) further argue that it is imperative for researchers to understand the philosophical commitments of their study through the choice of a research strategy. This has a bearing not only on what researchers do in their research areas but also how much they understand the areas they are studying in the quest to unearth new knowledge (Leedy & Ormrod, 2013). In this regard, Saunders *et al.* (2007), Creswell (2013) along with Brennen (2017), define a research paradigm as a broader view or perspective that guides the direction of a study.

According to Dudovskiy (2015), research paradigms have many branches and span a variety of disciplines. However, most education-related researches recognise the two main branches, that is, positivism and phenomenology (also referred to as interpretivism). Dudovskiy (2015) further argues that the researcher's choice between positivism and phenomenology depends on the research approach as well as the researcher's orientation in terms of their perceptions of reality and the conception of reality. Generally, depending on the philosophical position of one's study, all these concepts relate to each other. Literature on philosophical approaches contends that no philosophical approach is better than the other, they are all 'better' at doing

different things, (Merriam, 2009; Merriam & Tisdell, 2015). Thus, the question of which approach is better, basically depends on the research questions one is seeking to answer.

Positivism is the main assumption adopted by natural scientists (Saunders *et al.,* 2007). According to Bryman (2015), positivists believe that things can be studied as facts that eventually establish scientific laws. Positivists prefer working with an observable social reality where the researcher exists outside reality and is a mere observer to produce law-like generalisations. The basic endeavour of the positivist researcher is to identify causal relationships and regularities (Bernard, 2013). In other words, positivism cannot account for how social reality is either constructed or maintained. For this reason, the researcher did not adopt positivism because it is mainly associated with quantitative researches as it dwells on the logic and ways in which scientific studies are conducted from the natural scientist's perspective.

The interpretivist philosophical standpoint, on the other hand, is antagonistic to the positivist standpoint as it argues that revealing insights into a complex world can be lost by creating law-like generalisations (Saunders *et al.*, 2007). According to the interpretivist approach, social actors create social reality through social interaction (Bellamy, 2012; Bogdan & Biklen, 2007; Lampard & Pole, 2015). This viewpoint argues that it is imperative to understand the whole, in order to get further insights into the phenomenon. The researcher is therefore not removed from the study, but through interaction, is actively involved in the creation of reality, which itself is relational. The realities do not exist in a vacuum, as they can be changed by time, circumstance, interaction, and place (Saunders *et al.*, 2007; Yin, 2018). In a nutshell, interpretivism promotes the use of qualitative data and values the uniqueness of a particular situation and places particular emphasis on contextual depth (Bryman & Bell, 2015). Hence, interpretivism was the chosen research paradigm to inform the research study.

To ensure that the social and human lived experiences' side of the participants regarding action research would be reported in the real and actual words of the participants, the researcher chose to embrace the interpretivism research paradigm (Yin, 2018; Cohen, Manion & Morrison, 2017). The study, which sought to construct knowledge regarding action research from the participants' view, therefore embraced the philosophical research viewpoint with the interpretive research paradigm. The interpretivist paradigm, according to Lampard and Pole (2015), supports the view that there are many truths and multiple realities all of which depend

on the context and the participants involved. This was the reason why the study focused only on participants who underwent a formal orientation and training in action research during the Bikita Quality Education Project (QEP). In this study, using the interpretivist paradigm, the researcher managed to establish the practices, benefits and concerns regarding the application of action research in primary schools, out of which new knowledge was derived on promoting action research in the continuous professional development of primary school teachers.

4.3.2 The Research Approach

According to the theorists Miles, Huberman and Saldaña (2014) as well as Brannen (2017), there are two types of approaches available to researchers in answering their research questions and solving the problem statement, which are the inductive approach as well as the deductive approach. According to Cohen, Manion and Morrison (2011) and Mason (2017), deductive and inductive reasoning are antagonistic in relation to how knowledge about a worldview is arrived at. The deductive approach applies to quantitative research where the researcher develops a hypothesis or theory, which they can later test (Brannen, 2017). Researchers that adopt the deductive approach believe that the first source of knowledge is theory (Creswell & Poth, 2017; Strauss & Corbin, 1998). On the other hand, the inductive approach is linked to qualitative research where data are collected, analysed and lead to the development of a theory following an analysis (Creswell, 2013; Saunders *et al.*, 2007; Silverman, 2015; Yin, 2018). According to Myers (2000), the inductive approach seeks to gain knowledge through discovering meaning and improving comprehension of the whole.

This study, having embraced the interpretivism paradigm, adopted the inductive approach to reasoning. It is on the same basis that this study adopted the qualitative methodology. Denzin and Lincoln (2000) define qualitative research as a method of studying the significance that people attach to a phenomenon. In this regard, a major justification for qualitative research provided by Punch (2005), is that it is 'naturalistic' and it endeavours to study people, things and events in their 'natural settings'. Qualitative research is primarily used to gain an understanding of underlying reasons, opinions and motivations. As posited by Glaser and Strauss (2017), it provides insights into the focus of the study and it helps to develop in-depth appreciation of the perceptions the participants in the research have on action research and its use in the continuous professional development of teachers. There are several sources of qualitative data, including participant observation, interviews, focus groups, field notes,

diaries and document study (Bazeley, 2013; Bernard, 2013; Silverman, 2016). The researcher used observation, interviews, focus group discussions and document study in this research study.

Lofland, Snow, Anderson and Lofland (2004) along with Flick (2018), further note that qualitative research is carried out in the habitat of the participants. In this regard, qualitative research is referred to as 'naturalistic' research since it minimises the presuppositions with which the researcher approaches the phenomenon being studied. Thus, qualitative research has the natural setting as the direct source of data. It is concerned with life as it is lived, things as they happen, and situations as they are constructed in the day-to-day, moment-to-moment course of events (Crotty, 2014). Likewise, in this research study, the researcher sought an exhaustive understanding of the lived experiences of the teachers, school head teachers and school inspectors in their real-life work situations regarding action research.

Qualitative research is descriptive in nature and the data collected is always in the form of words (Thorne, 2016). Thorne (2016) further argues that a qualitative researcher is concerned with the process rather than simply with outcomes, or products. The qualitative researcher is interested in how understandings are formed, how meanings are negotiated and how roles are developed. In this regard, the researcher sought to understand how teachers become effective in using action research in their day-to-day work and in particular, addressing challenges they face in their work. This is important as Denzin and Lincoln (2008) as well as Chisaka (2008) point out that insights and understanding of the data gathered are developed from patterns in that data. Chisaka (2008), Eisner (2017) and Flick (2018) further argue that theory is developed from bottom-up, not from top-down. Abstractions are built as particulars that have been gathered and grouped together through the creation of themes (Creswell & Poth, 2017; Lorelli, Norris, White & Moules, 2017: Silverman, 2016). In this regard, thematic analysis has an advantage in examining perspectives of different research participants bringing out similarities and differences, in addition to helping summarise key features of a large data set (Lorelii *et al.*, 2017). Lorelli *et al.* (2017) further point out the need for a purposeful approach to thematic analysis as a way to increase traceability and verification of the analysis.

Qualitative research is embedded mainly in three theoretical research frameworks that are namely: phenomenology, hermeneutics and ethnography. Phenomenology requires the

researcher to describe vividly or thickly the lived experiences of the participants by using their own words. In this study, the researcher was interested in the emic (insider's viewpoints) perspectives of the situation that both Chisaka (2006), along with Bazeley and Jackson (2013), emphasise as being critical in a qualitative study. Thus, I was interested in 'insider' viewpoints of action research participants and how they used and applied the gained knowledge and skills in their Continuous Professional Development since completion of the training. During the research study, it was clear that the Ministry of Primary and Secondary Education (MoPSE) had brought on board new developments and policies that have required teachers to become lifelong learners and thus continue with professional development.

According to Higgs and Smith (2002), hermeneutics is the science of understanding, the art of interpretation and a science of communication. As the researcher, I systematically analysed and interpreted data gathered to communicate the findings as comprehensibly as possible. Hoberg (2001) defines ethnography as the study of a group's culture. In this study, through data collecting methods, I captured, interpreted and explained specific aspects of classroom practices and teacher behaviours of a sample of teachers, school head teachers and school inspectors trained in action research as they dealt with their day-to-day work activities and challenges.

4.3.3 Research Design

The research design refers to the plan or the proposed course which the research ought to take (Crotty, 2014; Saunders *et al.,* 2007). Yin (2018) further described a research design as a logical plan for getting from one point to another implying that a research design, therefore, is the overall plan that a researcher follows from the beginning to the end. According to Bogdan and Biklen (2007) and Bellamy (2012), the major research designs commonly used include the survey design as well as the case study design.

Bernard (2013) and Denzin and Lincoln (2008) contend that whereas survey designs are best suited for quantitative studies, case study designs are best suited for qualitative studies. Berg and Lune (2012) noted that while this is true, however, qualitative studies may as well apply to survey designs and to case study designs. With this in mind, while survey designs seek to get a generalised perspective across various attributes in a population (Creswell, 2013), case study designs, according to Cohen *et al.* (2011:289), are regarded as studies that entail "the in-

depth study of instances of a phenomenon in its natural context and from perspectives of the participants involved in the phenomenon". This research, focused on a specific group of participants from Bikita who had prior action research training, and these were teachers, head teachers and school inspectors who had been trained in the Bikita Quality Education Project (QEP). Having a specific target location, and a specific attribute, that is prior action research training, entailed the need to embrace the case study design in lieu of the survey research design (Creswell, 2013; Creswell & Poth, 2017; Flick, 2018; Strauss & Corbin, 1998; Yin, 2018).

Further, Silverman (2016) noted that there are three kinds of case studies. The first is the intrinsic case study, and this is the study of a case for its interest and there is no attempt to generalise beyond the single case to build theories. The second one is the instrumental case study, in which a case is examined to provide insight into an issue and build a generalisation. The third one is a collective case study where a number of cases are studied in order to investigate some general phenomena. This study fell into the intrinsic case study due to the researcher's intrinsic interest in action research training as a viable alternative to the prevailing model for continuous professional development of teachers (Lofland *et al.,* 2004; Miles *et al.,* 2014). The researcher was intrigued by emerging Bikita QEP evaluation evidence that indicated that action research training promoted reflective skills in teachers (Chisaka, 2008).

As the main objective of the research study was to find out how action research training and practice can be used in a framework for continuous professional development of teachers, the researcher used participants from the Bikita Quality Education Project (QEP) project to gain a rich and vivid description of the experiences and reflections by the teachers who participated. Through this intrinsic case study, the researcher delved into issues relating to teachers' beliefs, practices and perceptions on their continuous professional development since their participation in Bikita QEP. This is what justified the use of a case study research design and purposive sampling to ensure that research participants, trained in action research, were able to offer that in-depth information about their experience.

4.4 RESEARCH METHODS

This section presents the attributes of the study population and sample, along with the demographic attributes of the research participants. The sampling technique chosen by the

researcher, along with the data collection instruments developed and the implementation process of the data collection done, are presented below.

4.4.1 Population and Sample

The setting of the research study and case study was Bikita District in Masvingo Province in the south east of Zimbabwe. The population comprised of a group of 150 education practitioners who were trained in action research over a period, 2006 to 2013 in the Bikita District. This group consisted of school inspectors based at the Bikita District Education Office, school head teachers and classroom teachers in schools in the district. The ultimate sample of the research study comprised 48 participants from the 150 who were trained in action research during the Bikita QEP. Of the sample, 38 participants comprised of 24 teachers, nine heads of primary schools and five school inspectors who took part in interviews and focus group discussions (*cf.* Table 4.1)

Table 4.1: Demographics of the sample

Participants	Male	Female	Total
Classroom teachers	17	8	25
School head teachers	5	4	9
School inspectors	3	1	4
Total	25	13	38

The researcher sampled 38 participants who were engaged through interviews and focus group discussions. The 38 participants consisted of 25 males and 13 females all with an average of 17 years in their teaching career. During the period of data collection, the researcher carried out document analysis on documents used by 10 teachers who were among the those interviewed or took part in the Focus Group Discussions. Table 4.2 below presents the distribution of teachers whose documents (scheme-cum-plan and other records) were analysed.

Table 4.2: Distribution of participants by gender

Participants	Gender		Total
	Male	Female	
Teachers	4	6	10

Participants	Gender		Total
	Male	Female	
Percentage	40.0%	60.0%	100%

4.4.2 Sampling Methods

Consistent with phenomenology and a case study setting, purposive sampling was used to select participants for the research study and was considered most suited for obtaining the participants in this qualitative study (Creswell & Poth, 2017; Silverman, 2015; Strauss & Corbin, 1998). The purposive sampling approach is mainly used where you want to gain access to 'knowledgeable people' with in-depth knowledge about certain issues by virtue of their professional role, expertise or experience. Thus, sampling was deliberate and it was done with a purpose to allow the researcher to select participants with unique qualities critical for the investigation, as stressed in such a study by Punch (2005), Cohen *et al.* (2011) and Patton (2015). This type of sampling technique enabled the researcher to select and study a small number of cases who are 'information rich' and gain access to 'knowledgeable people' with in-depth knowledge about the issues under investigation (Cohen *et al*, 2011). Cohen *et al.* (2011) emphasise that the primary benefit for using this sampling approach, is to obtain in-depth information from those who are in a position to give it. In this regard, purposive sampling allowed the researcher to select participants who have 'lived' the unique experience of action research training, carried out action research on own work, and can articulate their experiences. Cohen *et al.* (2011) point out that the main concern in purposive sampling is not generalisability but rather to acquire in-depth information from those who are in a position to give it.

Thus, in this study, purposive sampling enabled the researcher to select participants who had the unique experience of action research training and using it in their Continuous Professional Development over the years since the completion of the Bikita Quality Education Project (QEP) in 2013. It was expected that participants would be able to articulate their experiences on what they had learnt from the Bikita QEP in applying it in their work as teachers, school head teachers and school inspectors. This made the research participants a legitimate source of data.

Creswell (2013), Marshall and Rossman (2014) as well as Cohen *et al.* (2017) argue that for a phenomenological study, a sample size of five to 25 participants should be adequate to obtain information to develop meaningful themes and interpretations. There are other authorities in qualitative research sampling who say size should not be too large, as too large a size impedes the obtaining of thick and rich data; however, it should not be too small to extract rich data. In this research study, participants totalled 48 and this was considered adequate to explore a range of perspectives and portrayal of elements of action research as a strategy to enhance and strengthen Continuous Professional Development (CPD).

4.4.3 Data Collection

In this qualitative research study, three methods of data collection were used to gather data from the participants, forming the foundation of the study to answer the research question. The methods included face-to-face individual interviews, focus group discussions and document study. These methods, it was felt, would yield qualitative data in the form of notes and transcriptions with thick descriptions and allow for triangulation of data. Each method of data collection is presented in the sections below and explanation given on the procedures of data collection.

4.4.3.1 Interviews

The research interview can be defined as a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information (Hoberg, 2001). It is the method of generating data through direct verbal interaction between individuals. The types of interviews that can be used are structured, unstructured and the non-directive interviews. The structured interview is the one in which content and procedures are organised prior to the interview. Every necessary detail such as wording of questions, sequence of questions and timing of the interview are scheduled in advance. In contrast, it is the unstructured interview which has greater flexibility. The research purpose guides the questions asked but the content, sequence and the wording of the questions are determined by the situation (Hoberg, 2001). In the non-directive interview, there is minimal control of the interview by the interviewer. The interviewee has freedom to express his/her views as fully and as spontaneously as he/she chooses or is able.

Interviews are a predominant method of generating data (Hopkins, 2004). Researchers interview because they are interested in other people's stories. Stories are important to the researcher since they are a way of knowing. The root of the word story is the Greek word 'histor' which means 'one who is wise and learned' according to De Vos, Strydom, Fouche and Delport (2003:292). The researcher used face-to-face semi structured individual interviews to elicit interviewee information about the Biketa QEP action research training and how participants were using and applying it in their work in the classroom, the schools and the district.

In this research study, the researcher used semi-structured interviews to engage the participants on their thoughts and stories on action research as a tool they can use for their continuous professional development. Upon consent, the full interviews were recorded on audio, using an Olympus audio recorder owing to the high audio quality that was guaranteed by the noise cancellation feature. According to Kowal and O'Connel (2014) as well as Silver and Lewins (2014), the quality of the audio ensures minimal transcription errors. The interviews varied in length, but by and large, the researcher ensured that they fell within one hour in line with the prescribed limits set by Mason (2017) and Yin (2018), who argued that longer interviews were not recommended, as participants tend to lose interest and attention, thereby potentially affecting the quality of the outcome.

The in-depth interviews were a way of encouraging the participants to reflect on their use of action research as a tool to enhance and strengthen their continuous professional development. The focus of the interviews were reflections on the participants' training in action research, how they were using action research in their day-to-day work in view of the new curriculum and the challenges it has and the kind of framework that would help make using action research a culture in their work as teachers. The engagement provided in-depth information to support the development of a framework for continuous professional development built on the use of action research to look into self and own practices.

A total of 9 in-depth interviews were conducted. There were four in-depth interviews done with the teachers, another four with the heads, and only one in-depth interview was done with an inspector, as shown in Table 4.3 below.

Table 4.3: Distribution of interview participant

	Teachers	Heads	Inspectors	Total
Interview 1	Teacher 1			**1**
Interview 2	Teacher 2			**1**
Interview 3		Head 1		**1**
Interview 4		Head 2		**1**
Interview 5		Head 5		**1**
Interview 6	Teacher 18			**1**
Interview 7			Inspector 4	**1**
Interview 8	Teacher 25			**1**
Interview 9		Head 9		**1**
Total	**4**	**4**	**1**	**9**

All the interviews conducted were guided by an interview guide, and because there were three profiles of participants, three interview guides were developed, one for the teachers, another for the school head teachers and another for the school inspectors (*cf.* Appendices I, J and K respectively).

4.4.3.2 Focus group discussions (FGDs)

Focus group discussions (FGDs) can be defined as the discussions in which three or more participants talk about a topic of special relevance to a study under the guidance of the researcher, who plays the role of moderator (Cohen *et al.*, 2011; Strauss & Corbin, 1998). The focus group discussion may have a flexible nature in that the questions asked for the focus group may encourage the participants to disclose their behaviour and attitudes they might not have disclosed during individual interviews. Participants tend to feel more comfortable and secure in the company of people who share similar opinions and views than in the company of an individual interviewer (Hoberg, 2001; Miles *et al.*, 2014). During the focus group discussions, the participants may comment on the responses of others, ask other participants questions or respond to comments by others, including the moderator or researcher. Yin (2018) further recommends that the focus group should be small enough for all the participants to have the opportunity to share insights but big enough to provide diversity of perceptions. During the data collection, focus group discussions brought together participants who were familiar with

each other and had trained in action research either in the first or second groups. Thus, they knew each other and had had interactions during the training at Bikita QEP.

Before the focus group discussions, the researcher created an atmosphere of trust, friendliness and openness by having a purposeful small talk with the participants. The talk was about how the discussions were to be carried out. To ensure that the discussion flowed, the researcher encouraged all members to speak and follow-up responses of others and in addition using probing questions. Flick (2018) and Patton (2015) note that these probes are used to elicit additional information when participants make vague comments or simply say, 'I agree'. In such cases, the researcher can ask; 'Can you please tell us more', 'Could you please share experiences that made you feel that way?' and 'I don't quite understand. Can you explain what you mean?' This was found very useful to elicit more understanding of the nuances that action research training and practices have contributed with regard to continuous professional development of teachers.

For this study, a total of eight focus group discussions were conducted. The number of participants in each of the focus group discussions varied, depending on the location of the schools with the minimum being 2 participants and the maximum being 6. The distribution of the participants by the focus group discussion are presented in Table 4.3 below.

Table 4.4: Participants in FGDs

	Teachers	**Heads**	**Inspectors**	**Total**
FGD 1	Teachers 3, 4, 5, 6			**4**
FGD 2		Head 3	Inspector 1,2 ,3	**4**
FGD 3	Teachers 7, 8, 9, 10, 11	Head 4		**6**
FGD 4	Teachers 12, 13, 14			**3**
FGD 5	Teachers 15, 16, 17	Head 6		**4**
FGD 6	Teachers 20, 21, 23	Head 7		**4**
FGD 7	Teachers 19, 22			**2**
FGD 8	Teacher 24	Head 8		**2**

The researcher conducted the focus group discussions to engage a group of sampled teachers who were teaching in the same school. FGD 1 comprised of 4 participants, who were all teachers. The second FGD comprised of three inspectors and one head. The third FGD had the

largest number of participants, six, and comprised of five teachers and one head. The fourth FGD comprised of three teachers only, while the fifth had three teachers and one head, and this was the same distribution in the sixth FGD where there were three teachers and one head as well. The seventh and eighth FGDs had the least number of participants, two, with the only distinction being that the seventh FGD was comprised of just two teachers, while the eighth FGD comprised of one teacher and one head.

The focus group discussions were guided by a semi-structured set of questions for teachers, school heads and school inspectors (*cf.* Appendices F, G and H respectively). As with the in-depth interviews, the focus group discussions were digitally recorded using the Olympus audio recorder. There was no stipulated time, but the researcher tried to limit the discussions to an hour in line with the guidelines by Mason (2017) and Yin (2018).

4.4.3.3 Document analysis

Document analysis is content analysis of words, pictures, symbols, ideas, themes or any message that can be communicated (Cohen *et al.*, 2011). It is the systematic process of evaluating and reviewing documents both digital and print-based or anything written or visual that serves as a medium for communication. Text includes plan books, official documents, video clips, photographs and artefacts (Neuman, 1997). The documents that are created in a teaching-learning situation that can be used for research purposes are schemes of work, lesson plans, written assignments and records of pupils' performance that are put together by the teacher (Hendricks, 2006).

When the documents, such as the ones mentioned above, are studied and analysed for the purpose of scientific research, this constitutes document analysis as a data generation method. Document analysis could both be a primary and/or a secondary data generation method (Silverman, 2016). It is a primary data generation method when the documents being analysed were created for purposes of teaching and learning. Document analysis is secondary when documents under study were compiled from other methods directly aimed at generating data about a particular study. For example, the analysis of interview transcripts is a secondary document analysis data generation method, while the interview was the primary data generation method (Silverman, 2016).

For document analysis, the researcher looked at the scheme-cum-plans and teacher records such as the Test Record Book and Individual Record Book for the 10 research participants that were observed teaching. The focus was to develop deeper insights into thoughts and reflections of the research participants from their training on action research and practice. The use of document analysis served the purpose of triangulation with data from interviews, focus group discussions and observations. This triangulation ensured cross-checking information and contributed to trustworthiness of data gathered for analysis and learning lessons of the research participants. The researcher examined the teachers' schemes of work and lesson plans with a focus on the reflections that the teacher recorded in the evaluations and plans to address any emerging challenges and/or taking forward any unusual, unique and promising practices and outcomes of teaching and learning for the research study participants. These records constituted primary data. In addition, the researcher reviewed an action research project write-up that the research study participants produced during their training in action research in addressing challenges they had faced in their day-to-day work. The document analysis was done using a guide (*cf.* Appendix M).

4.5 DATA ANALYSIS

In qualitative research, data generation and data analysis occur simultaneously; for example, the responses given in an interview can be analysed and interpreted as the interview proceeds. The methods of data gathering used in this research study were interviews, focus group discussions and document analysis. These yielded qualitative data in the form of notes and transcripts, which are text with thick descriptions.

4.5.1 Data Management

Having recorded the face-to-face interviews as well as the focus group discussions, the audio files generated, were collated. The next procedure was the transcription of the audio files into text files. The researcher transcribed the interviews, with the assistance of three Master's research students. The transcribing was done along the principles of transcription set forth by Folley (2012). The researcher listened three times to the audio recording while checking the transcription. Careful attention was made during the process, with the main goal being to retain key communicative elements, other than the voice. Based on Yin's (2018) suggestions, the

researcher also annotated the distinctive body language postures and facial expressions of, among other things, doubt or confidence in response in the transcripts.

Having transcribed, the data was imported into QSR NVivo v12 (2018). According to Silver and Lewins (2014), NVivo is a qualitative analysis software that assists with identifying words and working out word frequencies. The software helps to identify patterns in the content across various text and data sources and is helpful in finding connections and understanding underlying themes and patterns that help inform interpretations of the data using text search and word frequency queries (Brennen, 2017; QSR, 2018). In addition, QSR NVivo (2018) is helpful in organising text and content looking for themes and insight. Prior to the analysis, the researcher used NVivo to manage the transcribed data and this involved both case classification and file classification. With respect to file classification, the researcher assigned two categories, that is, Focus Group Discussions and Interviews, and the respective files were classified accordingly. On the other hand, with regards to case classifications, the researcher assigned categories based on the participant's position, that is, whether the participant was a teacher, school head or school inspector. These classifications allowed for the comparison of the extracted themes across the different categories created.

4.5.2 Data Analysis Approach

Principally, the researcher considered content analysis as the optimal approach to the extraction of themes. To extract the themes, the summative approach was used. According to Bryman and Bell (2015), three approaches can be used to extract the themes, that is, the conventional method, the directed method or the summative method. The conventional method entails the extraction of themes from the raw data, while the directed method is based on pre-defined themes from literature, otherwise known as template coding (Boeije, 2010), with the summative being a combination of both. To this effect, in this study, the themes were extracted from the data, as well as other themes from the existent related literature. Thus, categories and concepts were developed when the data were being generated (Hoberg, 2001).

The transcripts of field notes from the observations were also analysed using QSR NVivo (2018) software, looking for emerging themes and the statements that substantiate them (Hoberg 2001; Neuman 1997). The act of identifying themes and connections is in part useful

to understand the motivation, beliefs, perspectives and actions of the research study participants from within their experiences, which Chisaka (2008) refers to as the emic interpretation.

4.5.3 Data Analysis Process

Having considered the data analysis approach as outlined in the preceding sub-section (4.5.2), this section explains the complete process that the researcher used in order to identify themes and to code them. This process is illustrated in Figure 4.1 below.

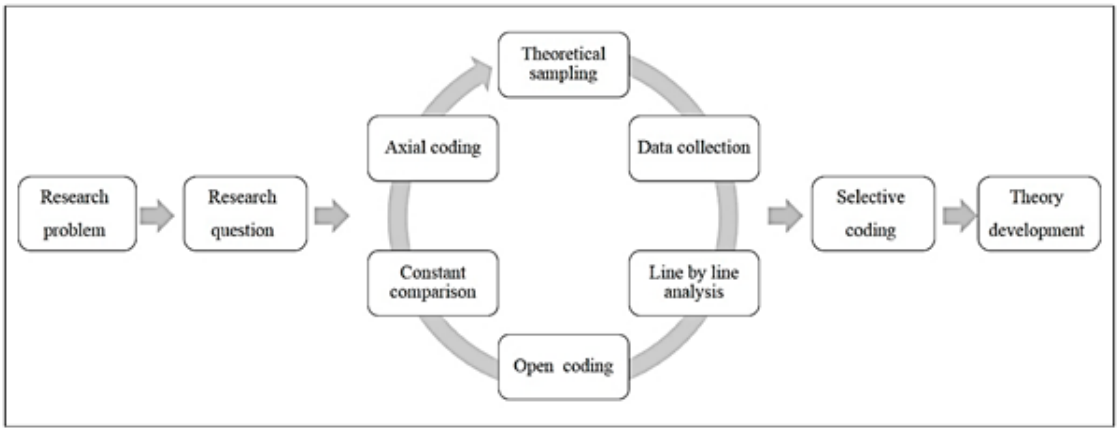

Figure 4.1: Qualitative Conventional Method Data Analysis Process

(Source: Adopted from Silverman, 2016)

To be able to extract contextually relevant findings, the researcher dwelt heavily on the *research problem* as well as the *research questions*. This was important as it ensured that only contextually relevant themes were extracted to address the problems which the researcher undertook to solve. The process, also encompassed *sampling* and *data collection*, as earlier described herein above in sub-sections 4.4.1 and 4.4.3 respectively. According to Creswell (2013), qualitative data analysis is heavily dependent on the need to attain saturation, that is, the point when any additional data collected do not lead to the extraction of new themes. In this regard, typically, the failure to attain saturation entails further data collection, until saturation has been achieved. In this study, however, the data collected was rather exhaustive and saturation was achieved using the data collected from the first phase, and thus, no further data collection phases were necessary.

As an exploratory way to extract preliminary themes, automated thematic extraction using QSR NVivo (2018) was done first. This helped to explore the possible themes that were predominant. However, according to Yin (2018), *line by line analysis* is vital, and the automated approach cannot be a substitute. This *line by line* analysis was used to achieve a posteriori *open coding*, a process through which the new themes were extracted from the data without due attention to the relationships and linkages between the pre-extracted themes (QSR, 2018). These open codes were not just done based on the data alone, but thematic extraction using the coding template, that is, a priori *open coding*. This coding template was created from the extant education discourse (Cohen *et al.*, 2017; QSR, 2018).

After the open coding, through *constant coding comparison*, relationships and linkages between the extracted open codes, this led to *axial coding*, where the tree nodes, otherwise known as hyper-nodes or super themes were created and sub-nodes classified within (Silverman, 2016). The thematic coding template was also handy as it guided the researcher in the identification of the major themes and their respective sub-themes from already existing literature, as explained by Yin (2018) and Silverman (2016). The researcher leveraged on the computational data mining capabilities of NVivo software to generate and present the corresponding illustrations. For this study, since saturation was attained in the first cycle, no further *theoretical sampling* and *data collection* was necessary. In this regard, the researcher proceeded to the next process, which was *selective coding*. This *selective coding* was carried out largely with reference to the literature to guide the process of identifying the principal themes that were useful towards the *theory development* by the researcher.

As the qualitative data were analysed using the NVivo software, its interpretations were made and linkages to the research questions extrapolated. The term interpretation is derived from the Latin word, ‘interpres’ which means ‘explain’. In the context of research work, it means explaining the meaning of research data. Neuman (1997) called this ‘the assignment of coherent meaning’. Neuman (1997) goes on to say that the researcher interprets data by giving it meaning and making it understandable. Neuman (1997) further says that the meaning the researcher gives begins with the point of view of the people being studied. The interpretation of the findings is presented in Chapter 5 and then these research findings are used to develop a framework for continuous professional development for teachers in Chapter 7.

4.6 MEASURES FOR TRUSTWORTHINESS

In qualitative research, trustworthiness has become an important concept because it allows researchers to describe the virtues of the qualitative research approach. Golafashani (2003) argues that in qualitative research, what is important is the trustworthiness of the research in establishing four characteristics of credibility, confirmability, dependability and transferability of the research exercise and process. Each of these measures is discussed in the subsequent paragraphs.

Credibility is how confident the qualitative researcher is in the truth of the research study's findings (Cohen *et al.,* 2017). As the researcher, it is important to find sources for research that are credible. In this regard, using unreliable sources will hurt the credibility and make arguments seem less powerful. Thus, it is important to be able to identify which sources are credible for a case study. Credibility refers to the extent to which a study's results represent the meaning of the research participants. It is the extent to which data collection and data analysis are believable and trustworthy. Guba and Lincoln (1985:102) emphasise that credibility serves as internal validity which deals with the question of 'how the findings make sense'. It evaluates whether or not the representation of data matches the opinions of the participants. As a result, the interview discussions were audio recorded to allow cross checking of the transcripts to confirm the information. If the findings hold true, qualitative research is seen to be valid for the researcher. A qualitative researcher establishes rigour of the inquiry by adopting credibility strategies and these include prolonged and varied field experience, time frame, intensive field notes, triangulation, member checking, peer examination, interview technique, establishing authority of researcher and structural coherence (Graneheim & Lundman, 2004:108).

In this regard, selecting research participants, the teachers, school heads and school inspectors, who participated in the Bikita Quality Education Project implementation, learnt action research and used it in their work, contributed to developing credibility based on their responsibilities and work experience. In addition to their experience and participation in the Bikita Quality Education Project, this group was expected to have depth, objectivity and purpose to share their reflections on learning action research and using it to improve themselves.

Confirmability is the concept whereby research confirms and verifies that the findings are shaped by participants based on their experience and drawn from documented training in action research and work in their work stations (Cohen *et al.*, 2017*).* Confirmability refers to the extent to which the results of an inquiry could be confirmed or verified by other researchers (Baxter & Eyles, 1997:519). In this regard, confirmability ensures the adequacy of information reported from the research questions, for data collection protocol, raw data, through different stages of the data analysis, up to the interpretation of results. In addition, confirmability confirms, as far as possible, that findings are the result of the participants' experiences and ideas rather than the researcher's preferences. The interviews and FGDs were used to obtain as much in-depth data from the participants, and guided by the data collected and not the researcher's own opinions to extract the findings. Hence, the researcher ensured confirmability through the use of intensive field notes that the researcher used to record all information and phenomena that arose during the research. This helped minimise unnecessary researcher's interferences. Lastly, the thesis was submitted to the Turnitin Originality Report System (*cf.* Appendix Q) to ensure that it exceeded the international benchmark in terms of originality and to ensure that plagiarism was avoided.

The concept of *dependability* in trustworthiness of the data is drawn from the view that the data should show consistency of findings. This implies that the data are found to be stable over time, across the participants, and even in different conditions (Denzin & Lincoln, 2008). The findings should be found consistent, not only with what is said during interviews and focus group discussions, but should be reflected in the thoughts found through documents analysis as well. Guba and Lincoln (1985:88) use the concept of dependability to indicate the idea of reliability. The researcher ensured dependability of the findings of the qualitative phase of data collection by describing in-detail the research methods used for conducting the study (Tobin & Begley, 2004:390). The research design and its implementation were thoroughly checked to account for the research process by providing detailed information on how the fieldwork was carried out and the ethical considerations adhered to as part of the fieldwork. The researcher also conducted checks to ensure the effectiveness of the methods used in studying the implementation of reflective practice in teachers and their related challenges (Glenn, 2009:27). Description of the sample selection and the data collection processes, the semi-structured interviews, together with the analysis of documents and inside the classroom and observation

data, serve as a major platform to ensure the dependability of the study. Apart from this, the sample of research participants was purposive.

The fourth characteristic is *transferability*. Transferability refers to the degree to which the results of qualitative research can be transferred or related to other contexts or settings. The key question here is whether there are similar studies with similarities on findings. While each context is peculiar to itself, it will be useful to find out if there could be issues for generalising. Transferability is how the qualitative researcher demonstrates that the research study's findings are applicable to other contexts (Bryman, 2015). In Chapter 3, examples of similar studies in the neighbouring countries of Namibia and South Africa, to the context of the research study were discussed and their findings presented.

The characteristics discussed above lead to a very important aspect of qualitative research. This is triangulation of data from different angles so as to show the research study's findings are credible. Triangulation of research data is tested using different lenses. In this research, the triangulation was ensured from a variety of methods to gather data such as interviews, focus group discussions and document analysis which helped to build reliability and trustworthiness of data gathered. The triangulation of data that was gathered through the use of three data collection tools contributed towards trustworthiness and checking for convergence. Thus, triangulation brought in multiple ways to establish trustworthiness, rigour and quality of data as a way to establish truth (Bryman, 2015; Creswell, 2013).

4.7 ETHICAL CONSIDERATIONS

Qualitative research involves, to some extent, an intrusion into the lives of the participants, their interests and rights. Given this reality in research, Bogdan and Biklen (2007) underline the need for research ethics codes that need to be adhered to so as to protect participants in research. In addition, some data gathering tools and methods such as interviews, focus group discussions involve keeping of records on tape. In this regard, these techniques and approaches to gathering data certainly impinge on participants' privacy and confidentiality (Patton, 2015). This context is the reason why it is important to follow ethical principles and procedures in the research design. These are important benchmarks relating to the researcher with the responsibility to protect the research participants (Cohen *et al.*, 2011).

Before going into the field to gather data, I sought ethical clearance from the University of South Africa through the College of Education Ethical Clearance Committee (*cf.* Appendix C). This step was vital to ensure that there would be ethical clearance to ensure ethical treatment of participants in the study. In addition to the ethical clearance with UNISA, I requested for permission from the Ministry of Primary and Secondary Education (MoPSE), the government ministry in charge of all schools, district and provincial education offices to conduct research in Bikita District, Masvingo Province (*cf.* Appendix A). MoPSE granted permission to carry out the research (*cf.* Appendix B).

Hendricks (2006:32) emphasises that the privacy of teacher participants in research be respected and maintained. In this regard, the participants in the research were informed of the study (*cf.* Appendix D) and what it involved and once they consented to participate, they were engaged to make informed written consent to be part of the research (*cf.* Appendix E). This engagement entailed providing the research participants with information on the nature, purpose and procedure of the research. Participants were informed on the purpose to which data was put, their role in the study, why they were selected, the time that would be taken by their participation in the research study and their right to withdraw from the research, should they wished to do so during the data collection exercise (*cf.* Appendix D). Thus, the researcher explained the purpose of the research, and participants made informed consent to take part by signing a consent form.

The information the participants provided and what the researcher collected was treated in confidence. Further to the measures outlined above, the participants were given pseudonyms and so were their schools. This approach ensured a 'do no harm' policy and ensured both confidentiality and anonymity for the participants. The data collected were protected by a password and kept safely, under lock and key in addition to being treated in accordance with the UNISA research policy.

4.8 CONCLUSION

This chapter presented the chosen research methodology for the research study. The research was carried out using a qualitative research approach supported by an interpretivist paradigm with the research design being an intrinsic case study. The research study engaged participants in their 'natural' environment, in their schools and work places. The methodology used allowed

for an in-depth understanding of the research participants' views, perceptions and opinions as regards the use of action research in their continuous professional development. The case study in this research engaged a purposively selected sample of teachers, school heads and school inspectors on the action research training they undertook, their experiences, ideas and reflections on teaching in the classroom in the Bikita District of Masvingo Province in Zimbabwe. This research approach helped obtain rich and thick descriptions that assisted in unravelling and explicating ways in which the teachers come to understand, account for and take action as they manage their day-to-day situation in their work environments (Boglan & Biklen, 1992:60; Chisaka, 2006:38).

Three data gathering instruments were used. These were interviews, focus group discussions and document analysis which allowed for triangulation of data. The data gathered was analysed using the NVivo software, looking for emerging themes and statements that substantiate them. These methods yielded qualitative data in the form of notes and transcriptions with thick descriptions. The transcripts of field notes were analysed using NVivo software, looking for emerging themes and the statements that substantiated them (Neuman 1997; Hoberg 2001). The act of identifying themes and connections was useful to understand the motivation, beliefs, perspectives and actions of the research study participants from within their experiences, which Chisaka (2008) refers to as the emic interpretation.

Trustworthiness of the data gathered was ensured by having in the research sample credible participants. Ethical considerations were adhered to so as to protect the privacy of the participants, anonymity and confidentiality in the handling of information provided.

CHAPTER 5

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

5.1 INTRODUCTION

Following the methodological framework laid out in the preceding chapter (c*.f.* 4.4 and *c.f.* 4.5), the researcher successfully collected the data using four different qualitative data collection tools, namely interviews, focus group discussions (FGDs), observation and documents analysis. For the interviews and focus group discussions, the data were recorded in audio format and then transcribed verbatim into text format. For the observation data, the researcher recorded the key observations and annotating the main observations in text format. For document analysis, the researcher reviewed the scheme-cum-plan, test records, individual record books for the teachers and other records of the learners in the classrooms of those teachers and the key findings emerging from this analysis were documented.

This chapter analyses the data collected by using several techniques. To minimise researcher bias and mitigate the inevitable subjectivity (Yin, 2018), a computational qualitative data tool, QSR NVivo v12 was embraced to assist with the thematic extraction. Open coding was done initially, whereby the themes were extracted without due attention to the relationships and linkages between them. This was followed by axial coding, whereby the open nodes were classified into common ideas, that is, tree nodes, otherwise known as hyper-nodes or super themes (Silverman, 2016). Lastly, selective coding was then carried out using defined inclusion and exclusion criteria and the principal themes were identified and presented.

This chapter is presented in seven key sections, the first section being this introduction (*Cf.* 5.1). The second part (*Cf.* 5.2) presents the demographic attributes of the participants. The third (*Cf.* 5.3) presents the research trustworthiness and the fourth part (*Cf.* 5.4) presents the data management and thematic extraction. Sections 5.5 to 5.8 present the findings from each of the research objectives. In these sections, the themes and sub-themes that emerged from the data collected are presented, analysed and interpreted. In the understanding and interpretation of the data collected and analysed, the researcher kept in focus the contribution by Steyn (2011) who built on work of Rhodes and Houghton-Hill (2000:432). This work highlighted training components that have an impact on teachers' performance in the classroom; an aspect that was covered in Chapter 3 of the research study report. Concisely, Steyn (2011) showed that where

the training, and in particular continuous professional development programmes, combined theory, demonstration, practice, feedback and coaching resulted in a high acquisition of knowledge. Skills were enhanced and this has had a major impact on the teachers' performance in the classroom (Rhodes & Houghton-Hill, 2000). The findings from this study bring in an additional dimension on training components such as critical thinking and reflection into the training for a high and sustainable impact on teacher performance.

5.2 RESEARCH PARTICIPANTS' INFORMATION AND PROFILE

The researcher engaged thirty-eight (38) participants through interviews and focus group discussions (FGDs). Table 5.1 below shows that nine in-depth interviews and seven focus group discussions were held. In all cases, the research participants were given pseudonyms. The thirty-eight (38) participants consisted of twenty-five (25) teachers, nine (9) school heads and four (4) school inspectors, as shown in Table 5.1.

Table 5.1: Distribution of research participants

TOOL	**PARTICIPANTS**			
	Teachers	**Heads**	**Inspectors**	**Total**
Interview 1	Teacher 1			**1**
Interview 2	Teacher 2			**1**
Interview 3		Head 1		**1**
Interview 4		Head 2		**1**
Interview 5		Head 5		**1**
Interview 6	Teacher 18			**1**
Interview 7			Inspector 4	**1**
Interview 8	Teacher 25			**1**
Interview 9		Head 9		**1**
FGD 1	Teachers 3, 4, 5, 6			**4**
FGD 2		Head 3	Inspector 1, 2, 3	**4**
FGD 3	Teachers 7, 8, 9, 10, 11	Head 4		**6**
FGD 4	Teachers 12, 13, 14			**3**
FGD 5	Teachers 15, 16, 17	Head 6		**4**
FGD 6	Teachers 20, 21, 23	Head 7		**4**
FGD 7	Teachers 19, 22			**2**

TOOL	PARTICIPANTS			
FGD 8	Teacher 24	Head 8		**2**
Total	**25**	**9**	**4**	**38**

The distribution of these participants by gender is presented in Table 5.2. From the foregoing analysis, the majority of the participants were male (65.79%) while female participants comprised just 34.21%. This proportion is rather consistent with the ZIMSTAT (2016) women/men report, which cites that there are more male head teachers and inspectors than females.

Table 5.2: Distribution of interview and FGD participants by gender

PARTICIPANTS	GENDER		TOTAL
	Male	**Female**	
Teachers	17	8	25
School Head Teachers	5	4	9
School Inspectors	3	1	4
Total	25	13	38
Percentage	**65.79%**	**34.21%**	**100%**

The distribution of the participants by their qualification is presented in Table 5.3. All the participants were qualified teachers. This data is consistent with the findings reported in the Ministry of Primary and Secondary Schools (MoPSE, 2017) annual schools census report. Zimbabwe has 85% qualified teachers in the schools, with some districts having 100% qualified teachers. Bikita District is one such district.

Table 5.3: Qualifications of research participants for interviews and FGDs

Highest professional qualification	PhD	Master's	First Degree	Diploma	Total
Teachers	1	4	5	15	25
Head Teachers	-	-	7	2	9
Inspectors	-	4	-	-	4
Total	**1**	**8**	**12**	**17**	**38**

In addition to the interviews and FGDs, further data for the research study was collected during document analysis. This data collection involved 10 teachers whose demographic analysis is presented in Table 5.4.

Table 5.4: Distribution of document analysis participants by gender

PARTICIPANTS	**GENDER**		**TOTAL**
	Male	**Female**	
Teachers	4	6	10
Percentage	**40.0%**	**60.0%**	**100%**

Table 5.5 below shows that all 10 teachers whose documents were analysed, were qualified. The data further shows that the research participants were qualified, experienced teachers with either a first degree or a teaching diploma, thus equipping them with the basics of the teaching profession from their teacher training as well as experience in the teaching field.

Table 5.5: Qualifications of research participants for document analysis

Highest professional qualification	**PhD**	**Master's**	**First degree**	**Diploma**	**Total**
Teachers	-	-	2	8	10

The documents analysed were the teacher's scheme-cum-plan book, Test Record Book, Performance Lag Address Programme (PLAP) record book, Individual and Remedial Record books. The researcher carried out document analysis for the teachers. A checklist for guiding document analysis (*cf.* Appendix M) was used to document the findings from the write-up and evaluations in those records. Ten (10) participant documents were analysed in this exercise. The participants were six (6) female and four (4) male participants.

In presenting the findings from the interviews, focus group discussions and documents analysis, the researcher provided an analysis, discussion and interpretation related to the main research question and its sub-questions. This was an important procedure in an attempt to find an answer to the main research question and build a case for the Framework for Continuous

Professional Development of Teachers using action research as a key tool. Table 5.1 in Section 5.2) presented an overview of the research participants in terms of their positions and roles.

5.3 RESEARCH TRUSTWORTHINESS

Qualitative studies are known to be subjective in nature (Patton, 2015). This alone presents challenges to the trustworthiness of the findings. However, with the view of ensuring that the trustworthiness aspect would be guaranteed, a number of factors were considered. Firstly, the researcher prioritised those participants who had ample experience with the subject topic of action research, as prescribed by Silverman (2016) and Yin (2018). It was in this light that the thirty-eight participants were purposively selected to be part of the research study based on exposure to action research and experience. Of these 38 participants, 18 had been trained in action research in the first group of teachers in the period 2006 to 2009. The other 10 participants were from the second group trained in action research during the period 2010 to 2013. Collectively, these participants were key informants by virtue of their training in action research and years of practising as teachers as well as their experience in supporting other teachers learning action research on the job. Such an approach ensured that the study findings would be anchored in informed trustworthy sources, thereby strengthening the credibility of the findings (Creswell, 2013; Fisher, 2010; Yin, 2018).

To help evaluate the potential bias among the participants that could possibly affect the trustworthiness of the findings, cluster analysis of sources by word similarity was done in NVivo using the Pearson's similarity coefficient, as prescribed by Bernard, Wutich and Ryan (2017) as well as by O'Neill, Booth and Lamb (2018). The resultant outcome is illustrated below.

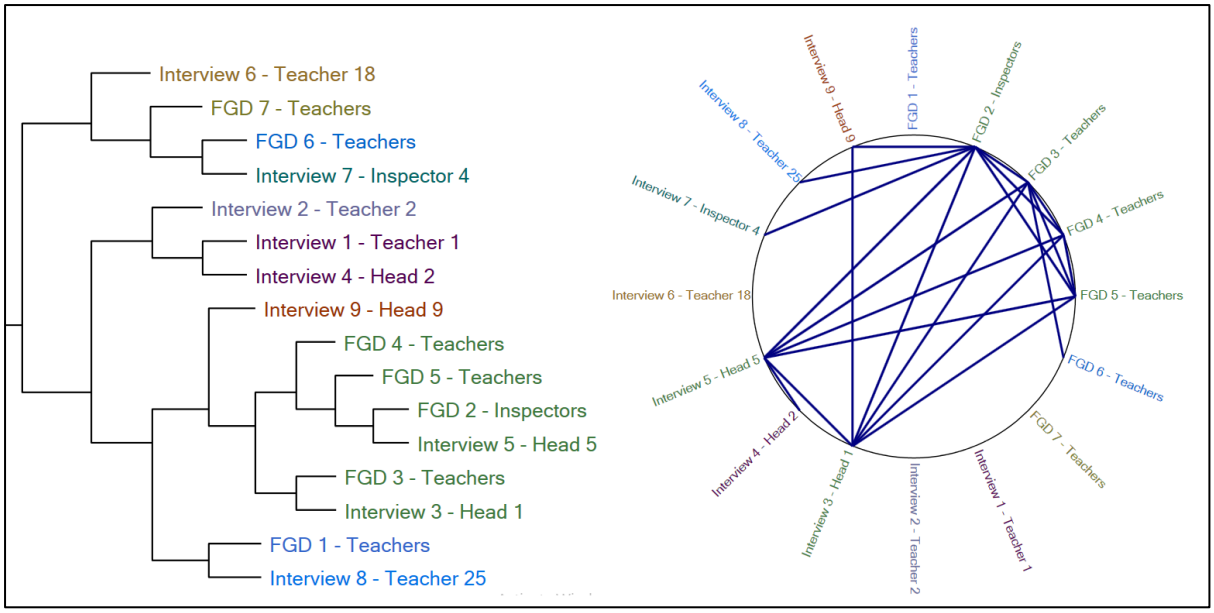

Figure 5.1: Cluster Analysis of Sources

Source: NVivo 12

From the findings above, the feedback from the participants were broadly clustered into two main dendrogram branches, suggesting the very high polarisation of views. However, what is important to note was for the first branch, the polarisation was evident from Interview 6 and FGD7. This is also evident from the circular dendrogram where there were no common themes observed between Interview 6 and the rest of the other participants, as well as FGD7 and the rest of the other participants. According to Bloomberg and Volpe (2012), Bazeley and Jackson (2013) and QSR (2018), this was a strong indication that Interview 6 and FGD7 had views that tended to differ with the rest of the participants. On the other hand, with respect to the second branch, the main polarisation was observed for Interview 2, Interview 1 and FGD1, as also indicated in the circular dendrogram. Thus, there were no common ties between each of the three sources and the rest of the participants. This was an indication of the uniqueness of the input from these participants (QSR, 2018). More objectively, the researcher used the Pearson correlation coefficient that was generated by NVivo. The bottom five are presented below.

Table 5.6: Least Pearson Correlation Coefficients – Source Clustering

Source A	Source B	Pearson correlation coefficient
Files\\Interview 6 - Teacher 18	Files\\Interview 4 - Head 2	0.4517
Files\\Interview 6 - Teacher 18	Files\\Interview 9 - Head 9	0.4389
Files\\Interview 2 - Teacher 2	Files\\FGD 7 - Teachers	0.4082
Files\\Interview 6 - Teacher 18	Files\\Interview 1 - Teacher 1	0.3918
Files\\Interview 6 - Teacher 18	Files\\Interview 2 - Teacher 2	0.3776

Source: NVivo 12

According to O'Neill *et al.* (2018), the correlation coefficient ranges from -1 to +1, with coefficients greater than 0.70 signalling strong positive correlations, and those between 0.50 and 0.7 signalling moderate positive correlations, while those less than 0.50 signalling weak positive correlations. From the above output, the least correlation was observed between Interview 6 and Interview 2, with a weak correlation coefficient of 0.3776. This finding does support the lack of linkages between both sources, as explained earlier in the Figure 5.1 dendrogram. The second least correlation was observed between Interview 6 and Interview 2, and the respective coefficient was 0.3918, which was again a weak correlation as also explained by the dendrogram. From the bottom five list, it is evident that the most common source dominating the list was Interview 6, and this was strong confirmation that this source was a key outlier which had rather unique and uncommon themes.

Nevertheless, there was a notable coherence in the themes that were extracted from Interview 3 (Head), Interview 5 (Head), FGD 2 (Inspectors), FGD 2 (Teachers), FGD 4 (Teachers) and FGD 5 (Teachers). This was observed from the multiple interconnectedness of the linkages in the circular dendrogram in Figure 5.1, the similar colouring, and more importantly, the Pearson correlation coefficient that NVivo generated, as shown in Table 5.7 below.

Table 5.7: Top 20 Pearson Correlation Coefficients – Source Clustering

Source A	Source B	Pearson correlation coefficient
Files\\Interview 5 - Head 5	Files\\FGD 2 - Inspectors	0.7766
Files\\Interview 5 - Head 5	Files\\FGD 3 - Teachers	0.7666
Files\\Interview 5 - Head 5	Files\\FGD 5 - Teachers	0.7493
Files\\FGD 5 – Teachers	Files\\FGD 2 - Inspectors	0.7483
Files\\FGD 5 – Teachers	Files\\FGD 4 - Teachers	0.7470
Files\\Interview 3 - Head 1	Files\\FGD 2 - Inspectors	0.7450
Files\\Interview 7 - Inspector 4	Files\\FGD 2 - Inspectors	0.7425
Files\\Interview 5 - Head 5	Files\\FGD 4 - Teachers	0.7401
Files\\FGD 4 – Teachers	Files\\FGD 2 - Inspectors	0.7357
Files\\FGD 3 – Teachers	Files\\FGD 2 - Inspectors	0.7353
Files\\Interview 5 - Head 5	Files\\Interview 3 - Head 1	0.7304
Files\\Interview 3 - Head 1	Files\\FGD 5 - Teachers	0.7296
Files\\Interview 3 - Head 1	Files\\FGD 3 - Teachers	0.7264
Files\\Interview 9 - Head 9	Files\\FGD 2 - Inspectors	0.7237
Files\\Interview 3 - Head 1	Files\\FGD 4 - Teachers	0.7233
Files\\FGD 4 – Teachers	Files\\FGD 3 - Teachers	0.7142
Files\\FGD 5 – Teachers	Files\\FGD 3 - Teachers	0.7123
Files\\Interview 8 - Teacher 25	Files\\FGD 2 - Inspectors	0.7100
Files\\Interview 5 - Head 5	Files\\Interview 4 - Head 2	0.7062

Source: NVivo 12

The above table presents the top 20 similar sources, while the full list of the correlation coefficients extracted from NVivo is presented in Figure 5.2. From the findings, the sources, which had similar themes, were Interview 5 (Head) and FGD 2 (Inspectors) as seen with the highest correlation coefficient of 0.7766. This was seconded by Interview 5 (Head) and FGD 3 (Teachers), whose correlation coefficient was 0.7666, again another very strong correlation, and the third highest correlation was 0.7493 between Interview 5 (Head) and FGD 5 (Teachers). Apart from the strong linkage between Interview 3 (Head), Interview 5 (Head), FGD 2 (Inspectors), FGD 2 (Teachers), FGD 4 (Teachers) and FGD 5 (Teachers), another key pair that stood out was Interview 7 (Inspector 4) and FGD 2 (Inspectors). Figure 5.1 indicated

that Interview 7 had a single linkage and as only with FGD 2, and in Table 5.5 this correlation was ranked 7th, with a coefficient of 0.7425, which meant that there was a very strong correlation between the two sources. Another strong linkage, from the ones previously mentioned, was between Interview 9 (Head 9) and FGD 2 (Inspectors), and the correlation coefficient was very high, being 0.7237. Figure 5.2 provides an exemplar graphical depiction of the similarity in the coding of the third highest correlation between FGD 3 (Teachers) and Interview 5 (Head).

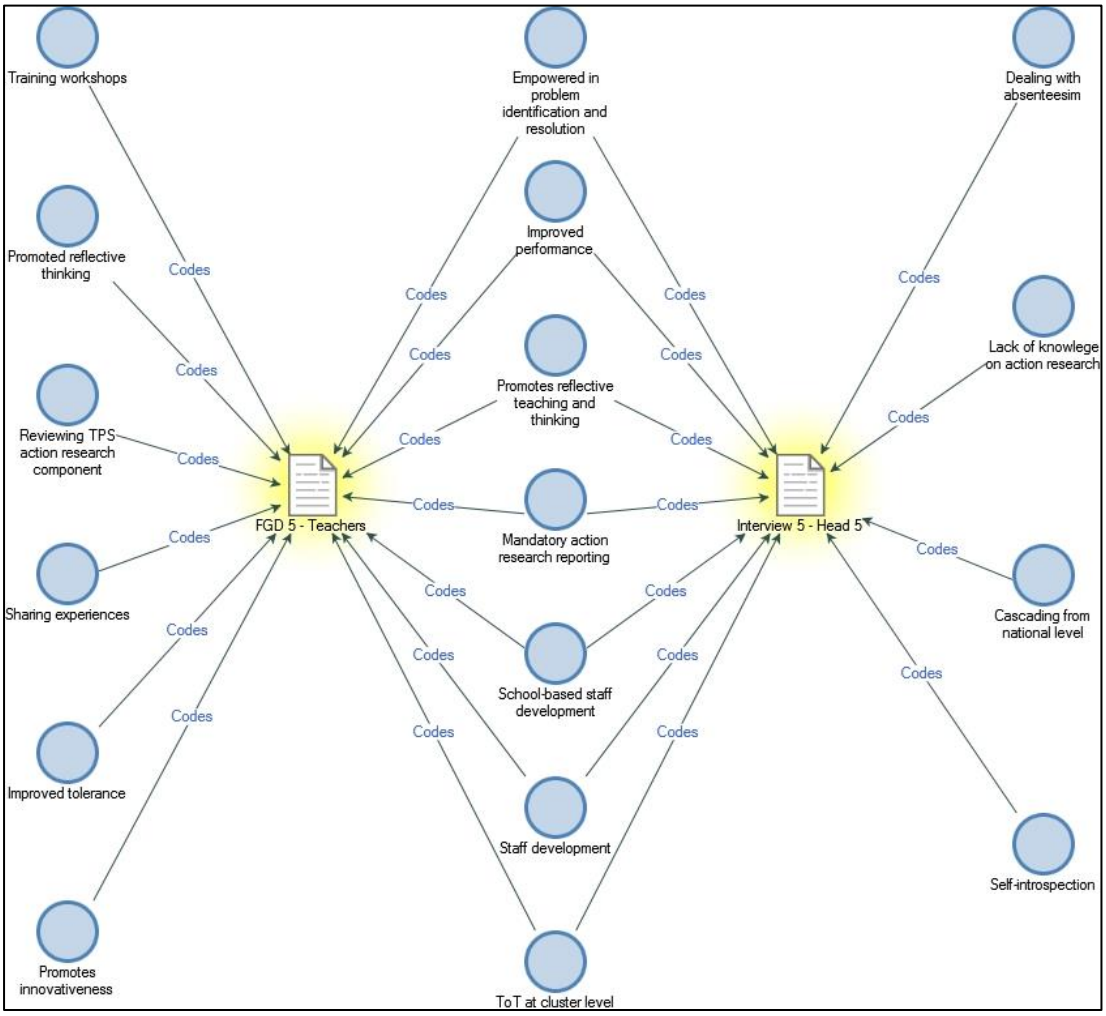

Figure 5.2: Comparison Diagram – FGD5 and Interview 5

Source: NVivo 12

From the above comparison diagram, out of the 13 axial codes for FGD 5, and 11 for Interview 5, seven were common, that is, empowered in problem identification and resolution, improved performance, promotes reflective teaching and thinking, mandatory research reporting, school-based staff development, staff development and Trainer of Trainers (ToTs) at cluster level.

From the above comparison diagram, it also followed that Interview 5 had four unique axial codes, while FGD 5 had six unique axial codes. The foregoing is a strong validation of the trustworthiness of the themes extracted from these participant interviews as there was a significant overlap. More importantly is the fact that from Table 5.5, the sources with the highest correlation coefficients had significant overlaps with either inspectors or heads. The latter were more knowledgeable with the subject topic, and hence were trustworthy sources, and their predominance amongst the top 20 source correlations meant that the trustworthiness of the findings was very high (QSR, 2018). On the other hand, from the dendrogram, and from the full list of correlations (*cf.* 5.2), there were a total of five sources with rather divergent perspectives and these were Interview 1, Interview 2, Interview 6, FGD1 and FGD7. With a view to mitigating the potential error of just accepting possibly erroneous themes, the trustworthiness of the themes extracted from these sources was evaluated against the existing body of knowledge, as prescribed by Bloomberg and Volpe (2012) and Silverman (2016).

Overall, the fact that there were strong linkages with trustworthy key-informants, which were the school heads and the school inspectors (Figure 5.1), and that these linkages outweighed the non-linkages, the researcher confirms that the trustworthiness of the themes there from was very strong.

5.4 DATA MANAGEMENT AND THEMATIC EXTRACTION

This section details key data management procedures followed by the researcher and provides an insight into the major themes extracted from the analysis of data collected through interviews, FGDs and document analysis. Four main data management procedures were undertaken to manage the data to the thematic extraction stage including data collection, data transcription, data cleaning, data attribution, data analysis and data visualisation.

Data Collection: The data obtained from document analysis were documented as text by the researcher. On the other hand, the data obtained from interviews and FGDs were recorded using an audio tape recorder following informed consent that allowed the recording of the sessions from the research participants.

Data Transcription: For interviews and FGDs, the next step involved listening to the recordings repeatedly followed by the verbatim transcription of the recordings in line with the prescriptions of Creswell (2013) and Yin (2018). This process was done directly in Microsoft

Word, using the conventional media player playback settings in lieu of the more specialised packages such as F5.

Data Cleaning: Having transcribed the data, the next step involved the cleaning of the data, and during this process, the transcripts were rechecked for accuracy and all incorrectly transcribed sections were corrected, while inaudible sections of the recordings were cleaned out (Kothari, 2016). In addition, all the communication in vernacular language was translated into English, as recommended by Kumar (2011).

Data Attribution: After data cleaning, the next step involved the importation of the raw data sources into QSR NVivo. The source attributes were defined under file and case classifications. In the context of this study, the file attributes considered were the source types, that is, whether they were interviews, focus group discussions or secondary documentation. The case classifications were defined by gender and designation, that is, whether male or female, and whether the participant was a teacher, or a school head or a school inspector.

Data Analysis: Thematic extraction was used as the main data analysis technique and this was done using the hybrid summative approach (Silverman, 2016). This approach entailed the use of both the conventional method in which themes were derived from the raw data in line with Silverman (2016), as well as the directed method, which employed pre-defined themes from the extant literature, in line with Merriam and Tisdell (2015). This procedure was applied to each and every research question resulting in open codes. In the analysis of the relationships between the extracted themes, axial codes were identified and defined in line with the procedure prescribed by Silverman (2016) and Yin (2018). Lastly, selective coding was applied to clean out contextually irrelevant and invalid themes (Cohen *et al.,* 2011; Merriam & Tisdell, 2015; Yin, 2018).

Data Visualisation: One major advantage of the use of SQR NVivo over the traditional methods is its ability to visualise qualitative aspects. Following the thematic extraction, the key findings were visualised using the word cloud, which presented key themes by the size of the themes, with the most dominant themes being larger in size than the less dominant ones (QSR, 2018). To further compare the dominance of several themes, the researcher used hierarchical charts. These two approaches were complemented by the use of word trees, which provided a richer illustration of the context surrounding selected themes. Other visualisations used were dendrograms, thematic maps and comparison diagrams.

The Table 5.8 below presents an overview of the questions asked, the broad themes and sub-themes/child nodes that were classified under the axial codes.

Table 5.8: Summary of the broad themes and sub-themes extracted

	RESEARCH QUESTIONS	AXIAL CODES	SUB-THEMES/CHILD-NODES
1	How has action research training of primary school teachers empowered them?	Empowered in problem identification and resolution	• Action research applies outside the school • Action research helpful on conflict resolution • Action research helps in dealing with absenteeism • Action research helps in evaluating and validating solutions • Action research helps in handling child behaviour • Action research helps with helping learners who lag behind
		Empowered professional growth	• Exploring areas learners are not well versed in • Improved emotional intelligence • Improved performance • Improved relations • Improved research skills • Improved tolerance • Reinforced collaborative research
		Promoted reflective thinking	• Self-criticism • Self-introspection • Taking responsibility
2	How have primary school teachers applied action research knowledge to deal	Promoted solution-oriented thinking	• Facilitated research • Promoted innovativeness
		Made change manageable	• Streamlined change management

	RESEARCH QUESTIONS	AXIAL CODES	SUB-THEMES/CHILD-NODES
	with the Competence Based Curriculum?	Promoted reflective teaching and learning	• Improved reflective teaching and learning
		Promoted talent management	• Talent identification, promotion and development
3	What challenges do primary school teachers face when applying action research, and supporting other teachers in learning and practising action research?	Lack of training in action research	• Deficiency in knowledge and practice of action research at higher level in the ministry • Inadequate knowledge of action research by teachers
		Lack of monitoring	• Poor action research documentation
		Shortage of resources to learn action research	• No reference material on action research
		Teacher apathy towards action research	• Not all teachers are comfortable with action research • Documenting action research is time consuming • Resistance to change • Challenge to time-tabling action research
4	What strategies can be used to promote action research among primary school teachers?	Institutional initiatives	• Decentralising problem solving to teachers • Developing simplified action research materials • Promoting CPD that embraces action research • Incentivising action research CPD • Institutionalising research • Making action research reporting mandatory • Publishing articles on action research experiences • Sharing action research experiences during staff development sessions

	RESEARCH QUESTIONS	AXIAL CODES	SUB-THEMES/CHILD-NODES
			• Putting in place mechanisms for continuous professional support • Building a strong action research support structure • Providing resources e.g. reading resources • Promoting collaborative research
		Staff development	• Having action research as part of the induction of school head teachers • Making AR part of the mandatory training on research for teachers • Making action research part of school-based staff development • Trainer-of-Trainers at cluster level to support school-based staff development • DSI and SIs to spearhead AR training in refresher courses for teachers

5.5 RQ 1: How has action research training of primary school teachers empowered them?

The first research question, investigating how action research training of primary school teachers had empowered them, used data from both the interviews and FGDs. The thematic map in Figure 5.3 presents an overview of the key themes and sub-themes that emerged from the findings.

Figure 5.3: Thematic Map – Empowerment of Teachers through Action Research

Source: NVivo 12

From the thematic map above, three axial codes were extracted and these include the empowerment in problem *identification and resolution*, *empowered professional growth* and *promoted reflective thinking*. To help in establishing the key benefits from the three axial nodes,

the hierarchical chart was generated based on the number of code references in NVivo and the resultant illustration is illustrated in Figure 5.4 below.

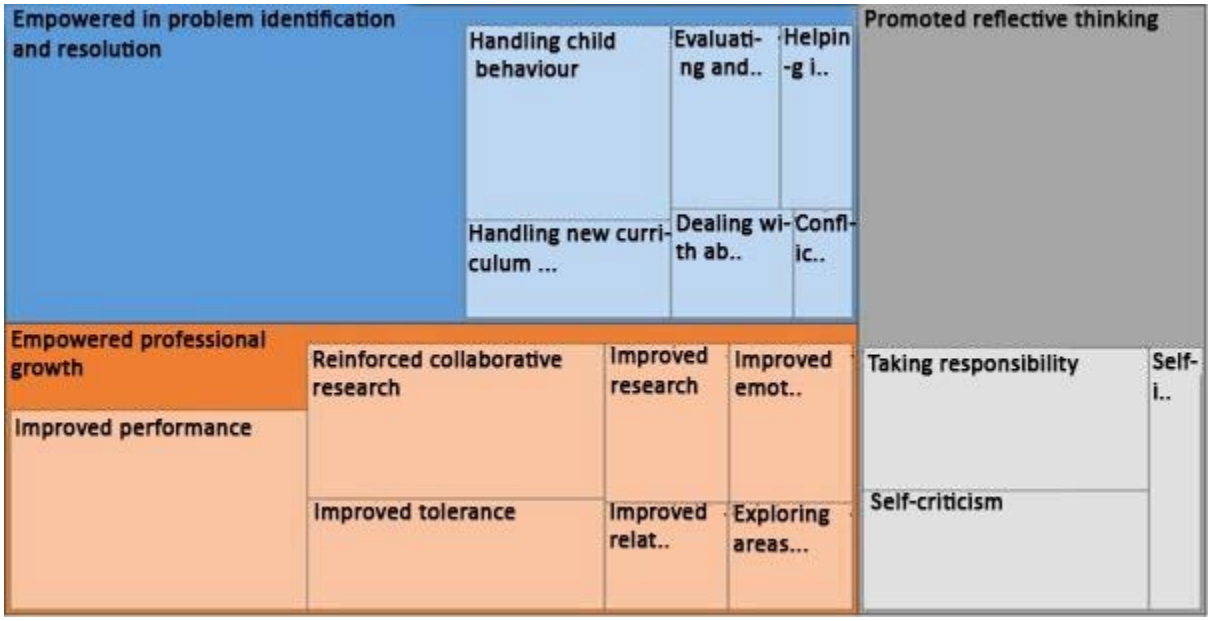

Figure 5.4: Hierarchical Chart - Empowerment of Teachers through Action Research

Source: NVivo 12

From the foregoing, the major benefits derived from the application of action research by teachers were problem identification and resolution, as well as professional growth. A further benefit was the promotion of reflective thinking. To further explore these benefits, the word cloud analysis of the quoted citations for the first research question was done and the outcome is illustrated in Figure 5.5.

Figure 5.5: Word Cloud - Empowerment of Teachers through Action Research

Source: NVivo 12

The most prevalent word was *research* followed by *problem.* Other key words extracted were *helped, find, school, work, think* and *reflection.* Comparing this output with the hierarchical chart, broadly confirms that there were three main benefits from the application of action research. The *research* aspect that is dominant in the word cloud and classified under professional growth in the hierarchical chart, and the key words *problem, find, look* classified under problem identification and resolution in the hierarchical chart. On the other hand, the keywords *think* and *reflection* from the word tree were classified under the promotion of reflective thinking in the hierarchical chart. Effectively, the parallelism in the principal keywords and themes extracted from the word cloud and hierarchical chart, confirm that with respect to the benefits from action research, they could best be classified into three.

5.5.1 Benefit 1: Problem Identification and Resolution

One key broad finding from the participants was that action research had empowered them in problem identification and resolution. The statements from the participants demonstrate this, as summarised in the word tree below.

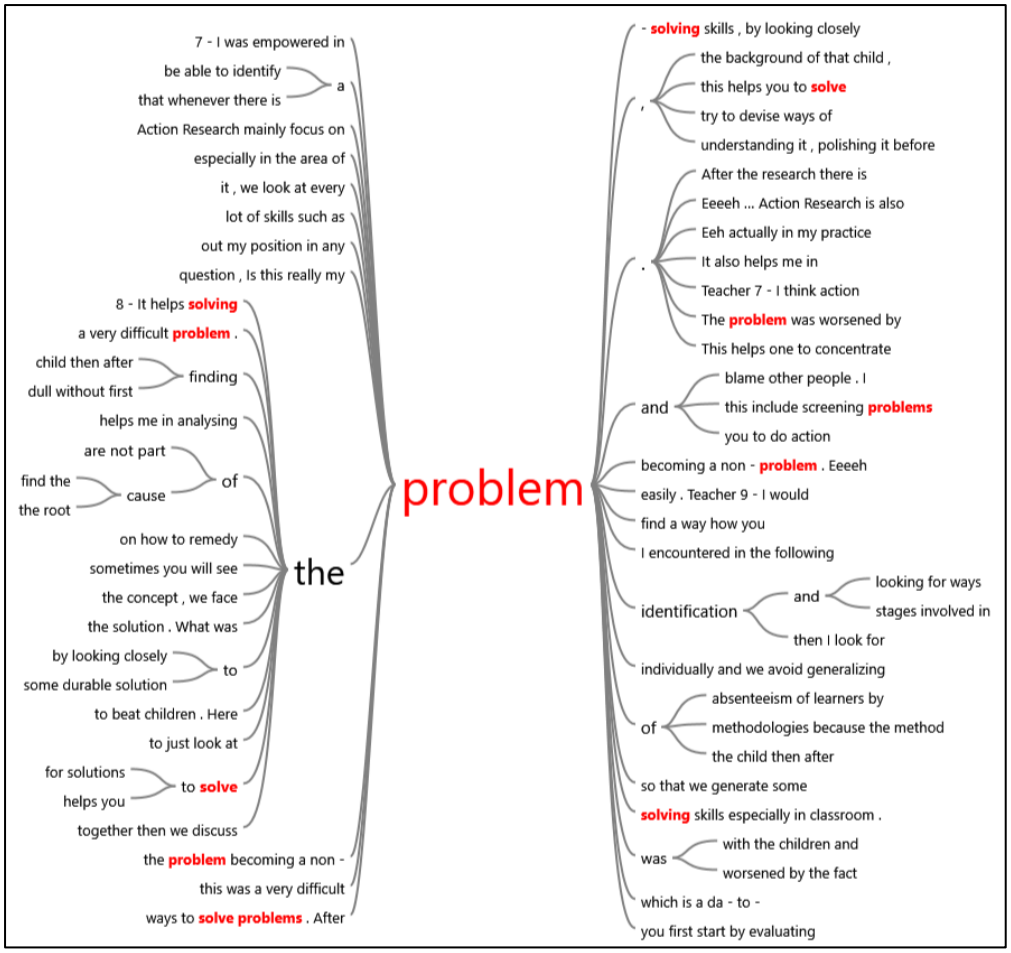

Figure 5.6: Word Tree - Problem Identification and Resolution

Source: NVivo 12

Head 9 in an in-depth interview confirmed that action research empowered him with problem identification skills citing that:

> **Head 9:** *I feel empowered in that **I am able to identify problems*** [**problem identification**] *in my day-to-day work in the school as head and supervisor of teachers in my school. When I identify problems or challenges, I look for possible causes of the problems or challenges at hand.*

Head 7, who was part of the sixth focus group discussion, further highlighted that he had been empowered through action research to streamline problem resolution.

> **Head 7:** *To me, I felt empowered with the training in Action Research in various ways. One being **that I am now very empowered in finding solutions*** [**problem resolution**]

in my work as a teacher and now as an administrator. It has helped me to find out my position in any problem I encountered … with learners, teachers, parents, my supervisors and any stakeholders in my daily operations.

From the foregoing quotes, Heads 7 and 9 felt empowered as they could now reflect on their performance and identify the mistakes analysed through their work and thus find solutions to problems they had encountered. It may be argued that the issues raised by the research participants would be issues with which they had been faced while they were in their initial teacher training on joining the teaching profession. Teacher 3 from the first focus group also noted the role that action research had played towards problem resolution, as teachers were now able to find ways to solve emerging problems in the classroom.

Teacher 3: *I can just say the training I received helped me to be empowered in the sense that* ***I managed to manoeuvre many avenues*** [**problem resolution**] *to address children's problems in the class.*

In this FGD, the teachers raised issues of empowerment in that they were capacitated to understand the children's problems better and could, to quote Teacher 3 words, 'manoeuvre many avenues' to address children's problems. Teacher 4 raised an even a more intriguing issue when the teacher mentioned that they used to blame children for their failures without investigating the reasons:

Teacher 4: I also benefited a lot from Action Research because in most cases as professionals ***we used to cast the blame on the children*** *maybe upon their failures and difficulties here and there. But after attending this Action Research we benefited a lot in some area for example you should not run into labelling pupils that this one is dull without first finding the problem* [**problem identification**] *of the child then after finding the problem find a way how you can help the child* [**problem resolution**]. *What is interesting is that as the Teacher, you may actually find you are causing the child not to perform well.*

Teachers 5 and 6 further pointed out that the training motivated them to engage in reading, particularly related to catering for children with different abilities. However, what seems to be emerging from the participants' perspective on their training in action research is that this was an opportunity to go through a refresher course on some aspects of their initial teacher training.

In a way, the training in action research encouraged self-introspection and provided them with guidance on how to cater for children with different abilities, as cited by Teacher 6 below.

> **Teacher 6**: *In my case, action research enlightened me* ***to know how to deal with children's problems*** [**problem resolution**] *catering for different abilities in the classroom; different backgrounds.*

With respect to this theme on problem identification and resolution, several sub-themes were also extracted from the study and these included:

- Conflict resolution
- Dealing with absenteeism of learners
- Evaluation and validation of solutions to problems
- Handling learner behaviour
- Handling challenges with the Competence Based Curriculum, and
- Dealing with problems beyond the classroom

These themes are presented and discussed in the sub-sections below.

5.5.1.1 Conflict resolution

It emerged from Head 4 in the third focus group discussion, that action research was very helpful in conflict resolution, citing that:

> **Head 4**: *As a teacher by profession and as a school administrator by promotion I find action research very instrumental especially in* ***maintaining relationships and resolving conflict among teachers*** [**Conflict Resolution**]. *I employ those data collection methods from action research such as interviews to collect information and I evaluate then I come up with solutions. I then call my colleagues together then we discuss the problem so that we generate some durable solution to the problem.*

In the above extract, Head 4 indicated that she found action research an important tool for conflict resolution. Action research becomes important in that one can use it as a procedure to systematically collect data on the problem, process it, evaluate it and use it to generate workable solutions to the problem. In this regard, action research is a tool that can be used to develop and propose solutions to problems in an inclusive manner, which means that teachers and other

stakeholders can collaborate and work together to search for an appropriate and sustainable solution.

5.5.1.2 Dealing with absenteeism

The second sub-theme on the role of action research towards problem identification and resolution related to the capacitation of teachers to decisively deal with the problem of absenteeism. Teacher 8 from the third focus group discussion explained that:

> **Teacher 8**: *Action research helps **solving the problem of absenteeism** of learners by going in to the community looking for the causes of why the pupil is always absent from school.*

Head 5 who was part on an in-depth interview further supported this:

> **Head 5**: *Action Research is also important even when you get into a classroom situation there are many **problems such as absenteeism** and you find out that **sometimes it is you who causes that** ... Sometime **lessons could be boring and unsuccessful to the learner** and this might cause absenteeism. I think classroom practitioners should adopt action research to find solutions to the challenges that arise in the classroom, especially on establishing causes of deviant behaviour and on how they can interact with the student effectively. In this regard, action research is very useful in day-to-day work for me.*

Both Teacher 8 and Head 5 mention the use of action research to deal with problems in the classroom, and more specifically, learner absenteeism. Learners are known to absent themselves from school and learning for a variety of reasons. From the foregoing analysis, the critical contribution of action research is its capacity to rely on research to establish the root causes of absenteeism [**Problem Identification**] and what measures can be put in place to stem it [**Problem Resolution**]. One important lesson from the use of action research to deal with this problem, according to the Head 5, is that action research makes one examine the practices in the classroom and what impact those practices have on learners.

5.5.1.3 Evaluation and validation of solutions

As quoted earlier, Teacher 3 specified that the training on action research helped him to be empowered as he managed to *manoeuvre many avenues* to address children's problems in the class. This was a typical example of how action research was being used to evaluate solutions and validate them. This sub-theme was further supported by Teachers 1, 6 and 7 who cited:

> **Teacher 6**: *I think action research helped me* ***to use different methods*** **[Evaluation of Solutions**]*, which can help solve other problems of the pupils in class* **[Validation of Solutions**].

This was supported by the seventh teacher who further added that:

> **Teacher 7**: *Another skill that we learnt from action research training is that of evaluating the methodologies that were employed and interrogate them* **[Evaluation of Solutions**] *as well as validating them for future use* **[Validation of Solutions**].

The first teacher added to this, stressing the role that action research plays among a group of educators trying to resolve a problem:

> **Teacher 1:** *Because we experience problems and after experiencing problems, we share the nature of problems. After sharing then we try to look for solutions probably as a team or group and then we discuss the possible alternatives* **[Evaluation of Solutions**] *until we come up with what we may consider as the best solution* **[Validation of Solutions**].

Overall, this sub-theme complements the axial theme that action research does in fact support problem identification and resolution. The three teachers all pointed to the fact that action research goes beyond using different methods to try and resolve challenges or problems. Using action research enhances the evaluation of not just what solution exists, but more specifically, what solution works best in that specific context. This is because action research allows interrogating any emerging possible solutions. Teacher 1 raised the possibility of looking for solutions to problems as a team or group and this would encompass diverse views that are jointly negotiated and agreed upon. In other words, action research does not just contribute to problem resolution by individual educators, rather, it also reinforces a group of teachers coming together and working together to understand and resolve similar challenges with which are they

faced.

5.5.1.4 Handling learner behaviour

Earlier, the role of action research towards dealing with absenteeism was noted, and this had some connotations of learner behavioural management. However, on a larger scale, it emerged from the findings that action research capacitated educators to handle learner behaviour. Teacher 18, who participated in an in-depth interview, explained:

> **Teacher 18**: *I usually deal with children. As a child comes to school, may be the child behaves in a certain way, which is, different ... then I try to find out, the reasons why the child behaves that way* **[Problem Identification]**. *Maybe for example if I can find out, that maybe, the child came to school, without having breakfast, then after that I find the solution. What was the problem, the background of that child…? I had a case and after finding out, I later discovered that the child was staying with a step-mother. The step- mother was abusing the child … the child will only have meals after school. But, in the morning he just wakes up and comes to school hungry … without eating anything. Then I had to find solution. I say, can I help that child? I had to go to the administration (school administration) and there is a special group at the school, which helps children … to pay for the feeding of that child. Since these days there are programmes where children are being fed at school and they pay for relish as maize is provided by government. So, that group helped to pay for that child's meals* [**Handling Learner Behaviour**].

Teacher 18 raised the issue of the need for carrying out investigations on children where there are challenges with their behaviour. The teacher raised the importance of not dismissing the behaviour of learners that is not the norm. From the provided perspective, a systematic investigation employing action research is likely to lead to revelations of the underlying issues and addressing those underlying issues would lead to better understanding of the learner's behavioural characteristics and their situation, thereby providing a relevant remedy to manage the learner's behaviour. In the case of Teacher 18, the root cause was identified and dealt with by providing the learner with supplementary feeding at school. This action helped to deal with the challenges that the learner was facing at home which were manifesting in the child's atypical behaviour in the classroom.

5.5.1.5 Handling challenges with the competence-based curriculum

In line with the first axial code, that is, problem identification and resolution, was also the role played by action research towards the handing of the challenges emerging from the use of the Competence Based Curriculum. While this is discussed at length in the section addressing the second research question, this emerged as one of the key sub-themes for the first research question. Teacher 14 and Inspector 4 managed to detail these benefits. According to Teacher 4, who was part of the fourth focus group discussion:

> **Teacher 14**: *So, to those teachers who are aware of Action Research, there are lots of* ***opportunities for them to deal with any challenges*** *they meet with the new syllabuses in an* ***investigative way, research*** *to understand their challenge and seek solutions.*

It emerged that action research empowered the educators to conduct research and investigate possible solutions for themselves rather than waiting to be told what to do. This was also reinforced in an in-depth interview with Inspector 7, who said:

> **Inspector 4**: *They cry, lack of textbooks, lack of this and lack of that. Now an* ***action researcher will get opportunities from that****. Produce books, produce teaching and learning materials.*

In other words, the inspector was suggesting that with action research, educators might be motivated to not wait for someone else to solve problems, but rather, that as action researchers become empowered by the knowledge to find a solution and thus bridge the gap. For example, in the dearth of textbooks, teachers themselves could be the solution by writing their own teaching and learning materials and in addition, to writing textbooks, thus promoting more teachers to become involved as writers. The inspector further stated that:

> **Inspector 4**: *Yes, most of our teachers were against the new curriculum. How then do you reach the world when you want to stay in the past? Everybody else is doing one, two, three, four, five but you fail to teach the children computers then what are we doing? Industry is moving fast. So, as far as to the policy itself, hats-off to the relevant department of the Ministry of Primary and Secondary Education who developed the Teacher Professional Standards TPS) supervision instrument ... The document is saying the teachers must be empowered to do Action Research. In this regard, it makes sense*

to ensure Action research is being emphasised the professional development programmes including (all short and long programmes such as degrees ….

Teacher 14 and Inspector 4 raised the issue of challenges in the implementation of the Competence Based Curriculum. The Ministry of Primary and Secondary Education (MoPSE) introduced a Competence Based Curriculum in 2016 and in 2017. The Competence Based Curriculum had a staggered implementation across the primary school grades and the secondary levels. A MoPSE (2019) formative evaluation report on the implementation of the Competence Based Curriculum established that teachers have been facing a number of challenges in the implementation. The challenges, however, are not insurmountable. It is in this context that Teacher 14 and Inspector 4 were encouraging the teachers to use action research in a collaborative way to overcome the challenges. Thus, use of action research has the potential for the teachers to eventually become creative in resolving the challenges they face in implementing the Competence Based Curriculum.

5.5.1.6 Dealing with problems beyond the classroom

From the findings, it also emerged that not only does the knowledge of action research apply within the classroom, it also applies with classroom scenarios. The following statements extracted from an in-depth interview with Teacher 1 indicate that action research applies outside the classroom.

> **Teacher 1***: And you know one other thing I have realised is if people practice Action Research whenever they experience some other problems elsewhere, they have the courage to face the problems and to think of alternatives. So, it starts from the classroom but then* ***it spreads to some other life sectors which is very, very important****. I like the point that Action Research gives teachers confidence to face problems and look for alternatives.*

According to the teacher, action research skills start by being used in the classroom in a professional capacity, but they do not end in the classroom as the techniques are being used in the community, and applied in day-to-day activities, as reinforced by Teacher 1. This was also supported by Inspector 4, who, in an in-depth interview, emphasised the value of the role of reflection in everyday life:

> **Inspector 4:** *When I meet our heads of schools, sometimes you find they have problems engaging with communities. What is the school-community relationship like, which is another key area in quality education. There must be positive relations between the school and the community. … you see action research goes hand in hand with reflection. The art of reflection is very critical even in everyday life. It teaches you how to handle issues and how to act.*

Teacher 16 further added that action research cannot only be applied in the context of the classroom, but as a tool or technique, has helped her in overcoming her economic challenges which are growing within the nation, and most of those within the teaching fraternity.

> **Teacher 16**: *To me, action research* ***does not end in the four corners of the classroom, but rather it goes further into the community****. I can give a good example of myself, because of the economic challenges that we are facing as teachers, salaries are not adequate, but* ***instead of complaining I used the knowledge I attained from action research to start a small business project to solve my cash problem.*** *I started a project on horticulture growing vegetables and tomatoes and this has helped me to get an extra income as I provide the market with vegetables and tomatoes. I am a head coach of the local football team that I have managed to take to the First Division from Third Division in the League and this also increased my sources of income. I achieved this because of action research that helps me to think of new ideas. Therefore, you can see that action research is also a personal tool and it needs to be rolled out to every teacher in the school to enhance their capacities.*

Teacher 1 raised the issue that once a teacher has been trained in the use of action research in the classroom, he has courage to use it outside the classroom being empowered and skilled to face problems outside the classroom in personal life. This is so because the teacher has gained confidence in investigating the problems, looking for alternatives in a systematic manner and resolving them. Inspector 4 raised the issue that action research goes hand-in-hand with reflection, which is an important skill that teaches one to handle issues.

5.5.2 Benefit 2: Professional Growth

In response to the question on how the research participants perceived the training in action research, the message that action research was a motivator for professional growth came out as the second axial theme. One implication for this emerging theme was that as they learnt about

action research and put it into practice in their work, action research training enhanced their professional growth and development. It can be argued at this point that action research is a catalyst for continuous professional development of the teacher. In other words, action research enriches professional growth of the teacher. A close look at the data collected showed that there were a number of benefits in this regard, as presented in Figure 5.7.

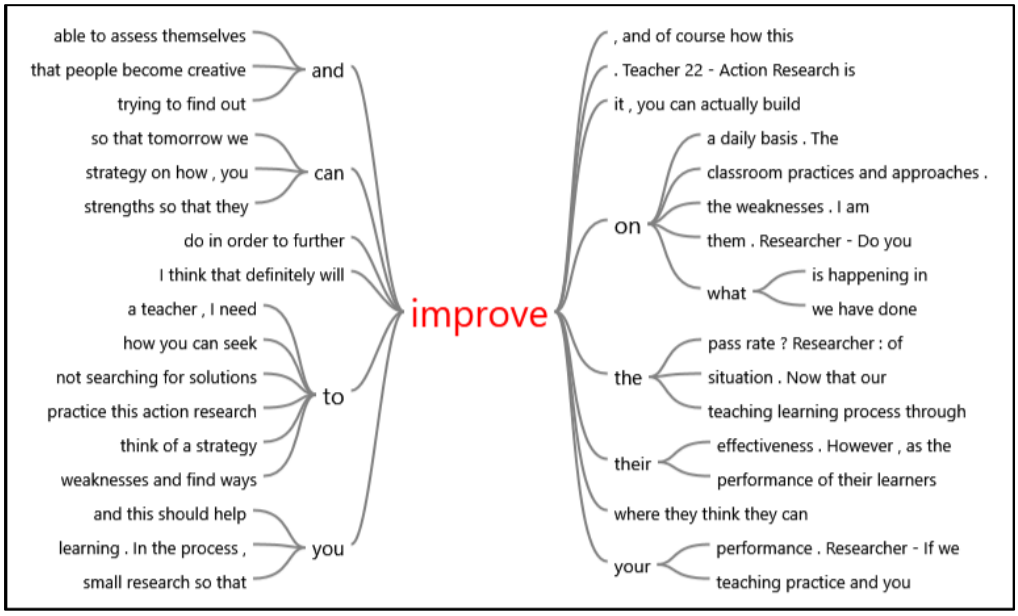

Figure 5.7: Word Tree - Improved Professional Growth

Source: NVivo 12

One of the key outcomes that was prominent was the improvement in the performance by the teachers, which came about as a result of the benefits of action research. The exhaustive list of the sub-themes that emerged from the thematic coding included:

- Improved performance
- Enhances promotion
- Enhances opportunities to innovate
- Improved emotional intelligence
- Leads to improved relations
- Leads to improved research skills
- Reinforces collaborative research and
- Leads to improved tolerance

5.5.2.1 Improved performance

The participants were coherent regarding the role played by action research towards improving both teacher and learner performance, as shown in Figure 5.8.

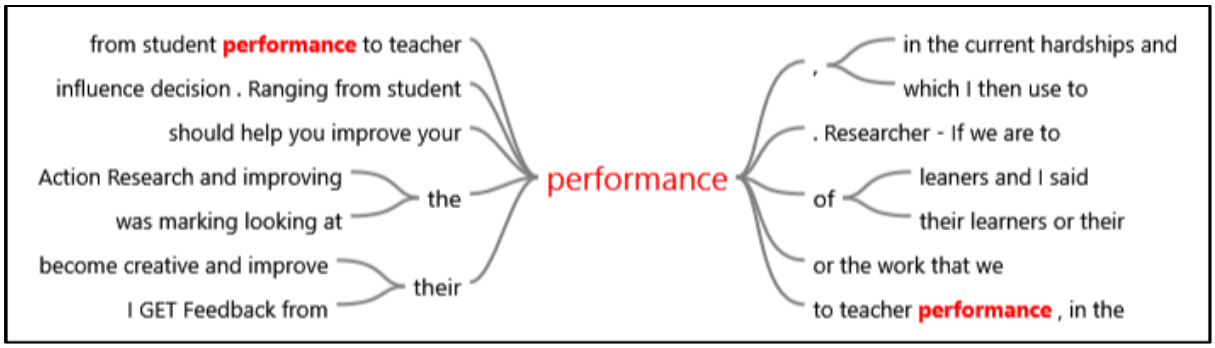

Figure 5.8: Word Tree - Improved Performance

Source: NVivo 12

The main input was raised by Teacher 9, who explained how action research has helped teachers towards assisting both slow learners and those that lag behind citing:

> **Teacher 9:** *Action research helps us to help learners who are lagging behind. I can simply say it was a good exposure to learning. It has helped a lot in my teaching as a classroom practitioner. You see, I have been used to classify children into groups according to their abilities and I will concentrate with those who understand what I am doing and not those who are behind. But through action research, I can now do reflective research by* ***always looking at those children who have not done well and find the reason they have done*** *... This is in line with the PLAP programme which is going on in my school … this programme is meant to bridge the gap between the slow learners and the fast learners. ...* ***So, using action research, I have been guided to reflect on how best I can assist those who are behind and those who are moving ahead****. I applaud this programme because it helped me to address my learners in a holistic manner.*

Teacher 9 raised the issue of the benefits of the research component in action research, which has contributed to strengthening a programme that the Ministry of Primary and Secondary Education (MoPSE) introduced in 2012. The programme is called Performance Lag Address Programme (PLAP) and is meant to encourage teachers to take action to support learners that are lagging behind others. The Performance Lag Address Programme (PLAP) is a catch-up

programme, which focuses on addressing learning gaps from Grades three to seven in primary schools by improving teacher's capacity to provide catch-up learning. PLAP as a programme that helps learners realise their last point of success and the teacher helps the child to catch up to their present grade. It is an individualised teaching and learning programme, which begins by determining the last point of success for each learner and systematically closing the gap.

The Ministry of Primary and Secondary Education launched the Performance Lag Address Programme (PLAP) in October 2012 in Manicaland Province after realising the under-achievement of students at both primary and secondary schools, which was caused by the socio-economic meltdown from 2006 to 2009. This came with the realisation that during these years, there was a decline in the educational gains in the country (Mpofu, 2018). The education sector experienced learning characterised by strikes, stay-aways and even abandonment of classes. Some schools recorded a zero percent pass rate at Grade 7 level (the primary school leaving examination) as a result of the exodus of the teaching personnel. Most learners operated below their grade level. For example, Makopa (2011), citing the research carried out in Manicaland in 2010, found that pupils in Grade five were operating at Grade two level.

Mpofu (2018) investigated teachers' attitudes towards the implementation of the Performance Lag Address Program (PLAP) in Kadoma East cluster of Mhondoro-Ngezi district in Zimbabwe. He examined teachers' attitudes in terms of their appreciation level of PLAP in helping learners who were lagging behind. The study found that primary school teachers teaching in Kadoma East cluster of Mhondoro-Ngezi district of Zimbabwe appreciated the importance of PLAP but thought it a strenuous teaching activity and demanding on their time to implement. Mpofu (2018) recommended PLAP staff development programmes aimed at ensuring that teachers appreciate the value of PLAP. Hence, Teacher 9 linked the application of action research for the teacher to clearly identify the performance lag and set the premise of interventions to close the performance lag. In another sense, Teacher 9 saw action research as both complementary and contributing to the implementation of PLAP but noted that it has to be driven by the teacher's own research and reflections.

The role played by action research in improving performance was also highlighted by Teacher 6, who mentioned that the knowledge acquired has helped with the use of different innovative teaching methods to deal with learners with different abilities:

> ***Teacher 6****: In my case, Action Research enlightened me to know how to deal with children's problems catering for* ***different abilities in the classroom****; different backgrounds and I think it* ***helped me to use different methods****, which can help solve other problems of the pupils in class. For me the bottom line is that* ***action research has given me new ideas, new approaches*** *that I can systematically search on my own.*

Teacher 17 further clarified how action research has facilitated the improvement of teaching efficiency, by using the skills learnt to ensure that learners are able to grasp a difficult concept and maintain interest:

> **Teacher 17***: It has also helped me in how I interact with other people in the community and am able to read if they are still understanding what I would be trying to put across to them through their expressions. For example, you will see that I have taken long trying to teach a concept and I quickly change approach after noticing that pupils are losing interest, not concentrating.*

Regarding this sub-theme, improved performance for professional growth, the research participants highlighted some key insights. Teacher 5 felt really empowered to check issues in the teaching and learning process, while Teacher 6 expressed that action research had given new ideas and approaches that can be systematically employed to deal with situations. Teacher 5 further felt that training in action research had helped in some ways as a 'refresher course' as the training led to re-reading of the current leading thinkers in education methodology to enhance the teacher's understanding and application of the principles learnt. Professional growth was depicted as well when Teacher 17 talked of being able to make lessons interesting.

5.5.2.2 Enhances promotion

The second sub-construct that was identified for the axial theme on improved professional growth related to the increased prospects of promotions. Head 2 and Inspector 4 both attributed their promotion to the action research training that they had received.

> **Head 2**: *At first it was very difficult to understand what Action Research was but later we understood what it was and we learnt a lot from that programme so it empowered me very much in my work. As a result of the knowledge and skills I gained during those days, I was promoted to be a deputy head in 2010* ***[Enhances Promotion]****. In 2014 again when it came to headship, I was also promoted* ***[Enhances Promotion]*** *and I think*

> ***Action Research was one of the components which assisted me to be promoted*** *as the deputy head and headmaster. This was because of what action research made me. I believe the way I performed in the interviews, articulated issues on school leadership, all but helped me get the promotions.*

Inspector 4 also attributed his promotion to the training on action research that he received while he was still holding a lower position and cited that:

> **Inspector 4**: *Because when we engaged in Action Research, I was not holding the post I am holding today* ***[Enhances Promotion]*** *and … as an individual I am on a daily basis using what I learnt in the Bikita Quality Education Project (QEP), which was on Action Research. As you are aware, I produced a report on my study, which was published. I was very empowered and I have the confidence now to talk about Action Research because I have something now which is physical, which I can show that this is what I produced. So, it didn't end there as I reflected … I was privileged to be one of first team that trained in Action research in that project. ….*

Both Inspector 4 and Head 2 acknowledged that action research had been a catalyst for their promotion to higher positions beyond what they held at the time of action research training. They reported that this training had built confidence and led to other things including promotion, writing and publishing. Head 2 in particular associates all his promotion from Teacher to Deputy Head and then to Head of a school to confidence he gained while training in action research and then applying it in his various position posts.

5.5.2.3 Promotes innovation

From the sub-theme on improved performance, aspects relating to the promotion of innovative teaching methods was mentioned, and this was further extracted as a sub-theme. Participants such as Teacher 25 noted that they apply action research to come up with alternate and innovative ways of teaching:

> **Teacher 25:** *There are a lot of opportunities, because in each period of instruction you will find out that I have 30 minutes of a lesson in each lesson interacting with the kids. You always find there is a certain challenge that emerges and when it emerges you will have to say before you point to anyone else, did I cause the problem? By the time, your action research becomes more spontaneous and learners are able to establish the*

spontaneity of it in the classroom and helps in motivating learners. ... I get feedback from the performance of the learners' performance, which I then use to reflect on how I can solve problems in my class. For example, in my class I was handling subtraction. ***I was using the equal addition methods of 'borrowing from the air' and giving, this made mathematics illogical so I then tried to use another method which is 'decomposition method' and this helped to clear some confusion in some learners [Promotes Innovation]****. This led me to say if some teachers could reflect on their methodologies their interaction with the learners, even pupil-to-pupil interaction, they will be able to solve some of the problems that arise in their class.*

Teacher 7 also mentioned that action research empowered him to come up with innovative teaching methods when the traditional methods failed to achieve optimal learning efficiency.

Teacher 7: *I think in areas where learners are not well versed in a certain area for example, multiplication, for example, let's say I have this Grade 6 class when I ask them a multiplication question and their response shows me that area was overlooked I then apply action research to solve the problem* **[Promotes Innovativeness]**.

Inspector 1, further added weight in this regard citing that:

Inspector 1: *Action research is a tool that* ***encourages teachers and supervisors to think outside the box*** **[Promotes Innovativeness].** *It is through reflection that people become creative and improve their performance of their learners or their own.*

Teachers 7 and 25, amongst other research participants, reported that action research training and practice offered opportunities for teachers to explore and come up with innovative ways of teaching where the traditional methods do not yield optimal performance. From their statements, it was clear they had opportunities to apply action research to understand and have a grasp of areas that would help improve the understanding by learners. In other words, action research is a strong tool to venture into uncharted waters. Teacher 25 talked about adapting methodology when losing the learners in a lesson through the use of methods not grounded in sound pedagogy.

5.5.2.4 Improved understanding of learners

The fourth sub-theme that emerged under the improved professional growth axial code was the role played by action research towards enhancing the teachers' understanding of learners. One such participant was Teacher 22 who said:

> **Teacher 22**: *Instead of barking at the learners because of poor results in the examinations, you find a way to calm them down* [**Improved Emotional Intelligence]**, *to reason with them to find a way forward for them to appreciate the circumstances.*

The foregoing is a typical case of improved understanding of learners, where the teacher uses the ability to be aware of other's feeling and sensitively and empathetically handles difficult situations, which helps in motivating learners to learn even if their performance is not as good as expected. In an in-depth interview, Head 1 further added that using the tools of action research has enabled him to take prompt action on multifarious problems but not to be reactive, rather to think through the problem.

> **Head 1**: *Since we are teachers,* ***we come in contact with a lot of people and a lot of problems*** *and action research helps us with ways in approaching these problems. For example, the way you talk to your teachers, parents during meetings, how you live with others in the community. Action research encouraged me not to make decisions without having reflecting the problem on yourself. It helps you not to give prompt responses or actions on a problem.*

Elfenbein (2007) explains that being aware of one's understanding of learners is vital in the resolution of any problem, and action research has the ability to impart similar skills. Deepak and Nisha (2015) further note that emotional intelligence improves the skill sets among the individuals who practice action research and facilitates self-awareness, self-management, social awareness among other skills. In this light, Goleman, Boyztzis and McKee (2002) further note that leaders ought to increase their emotional intelligence to become better equipped in handling and managing problems, and this knowledge can help towards improved and effective interaction with the learners, as also seen by Teacher 16 who now feels better equipped to understand child behaviour

> **Teacher 16**: *It helped a lot because through action research I am now enjoying to study the behaviour of a child especially at infant level, where I am teaching.*

The statements by Teacher 22, Head 1 and Teacher 16 lead to action research being beneficial to the teachers in that it develops improved understanding of learners. Here, improved emotional intelligence is understood to mean an enhanced understanding of the situation, of the circumstances one is in. In addition, it is understood to mean appreciating the challenges and moving ahead to seek solutions and make the most out of the circumstances that pose challenges. In Teacher 22, we see the teacher looking ahead and taking a calming approach, the same with Head 1, while for Teacher 16, action research empowers the teacher to seek more knowledge regarding child behaviour as a way to help deal with emerging challenges as regards the behaviour of learners.

5.5.2.5 Improved relations

It also emerged that action research facilitated the improvement of relations with other teachers as well as their relations with the learners and the community at large. Teacher 2 reinforced this sub-theme:

> **Teacher 2**: *The interaction with students really improves when you remove negative labels and you will have very sound relationships that are conducive to learning.*

The Head 9 further buttressed this point in an in-depth interview, saying:

> **Head 9**: *I find that embarking on action research helps to enhance harmony and good working relations in the work place as it enables you to understand each other better after carrying out action research on an identified problem or challenge … in collaboration with other staff members.*

Improved relations with colleagues and learners was part of what the research participants raised as a benefit from learning and practising action research. Teacher 2 talked of developing and maintaining sound relationships with learners/students particularly when the teacher is not influenced by labels for the learners, but works with each learner to improve his/her performance. Head 9 talked of engaging in action research as enhancing harmony and good working relationships. These are important for collaboration with other teachers in the school and to ensure an environment conducive to learning.

5.5.2.6 Improved research skills

The sixth benefit from action research that teachers in primary schools mentioned was the improvement in the research skills, as noted by Teacher 1 who said:

> **Teacher 1**: *I am excited about the training I went through. Of course, that was the time when I started to make some reflections on my own teaching, a thing which did not click in my mind before that and I had a wide range of experiences including the skills to develop some research instruments which was very critical and the ability as well to make some analysis on documents. Because of that, I am happy to inform you that quite a number of people who are engaged in short- or long-term studies, they come, we share experiences.*

The training in action research contributed to improved research skills for the research study participants. In the extract given above, Teacher 1 acknowledged that the training in action research he went through, and the practice he has had since, has made him a teacher researcher. This is consistent with the notion of the 'teacher as a researcher', a notion introduced in the work of Lawrence Stenhouse in Britain during the era of the Humanities Project (1970s) that ushered in a competence-based curriculum in the late 60s and early part of the 70s. Thus, action research training and practice developed teachers as researchers and further to this, the training and practice promoted their writing kills so they could publish their articles. Above all, as Inspector 4 noted, for the teacher to be an effective agent of change in the community, the teacher needs to be a researcher. Action research motivates teachers to be researchers. In line with improving research skills, was the aspect of collaborative research where teachers work in teams to investigate problems and collaboratively find the best possible solutions. This aspect was raised by Teacher 1, who went on to say that:

> **Teacher 1**: *Because we experience problems and after experiencing problems, we share the nature of problems. After sharing then* ***we try to look for solutions probably as a team or group and then we discuss the possible alternatives*** *until we come up with what we may consider as the best solution… personally I am normally* ***invited to a number of groups in order to share my experience in terms of reflecting on some issues and suggesting some possible solutions to that.***

The concept of collaborative research was further expounded by Head 1, saying:

> **Head 1:** *Action research helps us to interact with colleagues among ourselves to have the* ***chance to ask each other about the information, challenges encountered in teaching then come up with a solution based on evidence colleagues have*** *from their practice in the classrooms.*

Head 2 in an in-depth interview, added that for everything that he does, he reflects and consults other colleagues in order to come up with a solution:

> **Head 2:** *I also learnt that in Action Research it's* ***very important to work with other people in order to solve a problem*** *…* ***Yes, collaborative research*** *because, at times, … you need to work with others in the school to resolve some problems. …I feel that I am practising it because for everything I do, I reflect,* ***I consult other people especially some workmates whom I work with in order to solve some problems at the institution where I work*** *… I can give an example on discipline. When we encounter a disciplinary problem, it might be with a child learner, we work collaboratively with the Deputy Head, the Teacher in Charge and other teachers in order to get the cause of that problem. We work out strategies to address the problem, try them out, assess them, and check on what is happening to the child and eventually the problem. So, this is how I use Action Research, I am always trying by all means to teach my teachers and even some workmates at the school to use Action Research in order to solve some problems they meet.*

From the foregoing excerpts, the theme running through the statements is that action research has enforced and reinforced collaborative research. Teacher 1 raised the point that action research promoted teamwork and this is important for collaborative research. Head 1 and Head 2 noted that action research promoted interaction with other teachers, as well as consulting other workmates for durable solutions to the problems and challenges encountered in schools, which means that the staff take ownership of the solutions and are thus more likely to be accepted.

5.5.2.7 Improved tolerance

The last sub-theme extracted from the second axial code, is the role that action research plays in the improvement of the tolerance shown by the teachers. This was raised by Teacher 15 who explained that through action research training, she has been made aware of listening to other's

views, taking in other thoughts and opinions before drawing conclusions, and has thus become more tolerant in her dealings with people:

> **Teacher 15:** *Our training in action research did empower us in many ways. Starting with the way I interact with my colleagues, through action research training and practising**, I have learnt to listen to my colleagues because of action research.** Prior to this programme, **I was not tolerant to other peoples' views*** **[Improved Tolerance]** *… eehh … my opinions were always right, now I am very keen to find out what others think, have to say, have to contribute. I now like a lot to find out first before making conclusions or taking positions or views on an issue or event.*

Improvement in the tolerance of the learners' views was further mentioned by Teacher 17 as part of a focus group discussion, who recited an incident in which the teacher was at fault, but was open to the pupils' views because of the grooming received in action research training:

> **Teacher 17**: *Yes, it is not easy for one to able to criticize themselves. I remember what happened in one of my previous lessons when I gave my students the same test paper I had revised with them in the previous lesson. It was about Albania the city of Mother Theresa and they started to call me 'Albania' and one of the students said it openly that it was me who was the problem because I failed to listen to them as they were shouting 'Albania' as a way to remind me that we had covered it before.* ***This made me realise the importance of tolerating pupils' views because I am not always right as a teacher***.

Teacher 19 further introduced the aspect of patience with colleagues as part of the tolerance theme.

> **Teacher 19:** *Rather than neglecting those duties and complaining about them. So,* ***I am actually very patient with them especially the older generations they are not familiar with issues like ICT***. *They come into my office in numbers, complaining (laughter).*

The statements above raised a dimension of improved tolerance, listening to colleagues, listening to learners and being patient. These characteristics were linked to the training in action research as well as reflections on practising it. Teacher 15 opened up to improved tolerance of colleagues, their views and wanting to find out before making conclusions or taking positions on issues. Teacher 17 made reference to an occurrence in the classroom where if she had

listened to learners, an error where she made on administering a test she had done with the learners the previous day, would not have occurred. Teacher 19 explained that action research had made him *patient*, a characteristic critical for improved relations among colleagues in the same working space. Engaging in action research boosts teacher morale, an important characteristic in teaching and learning situations that are dynamic and often demotivating, especially in Zimbabwe where teachers are grappling to cope with the demands of a recently introduced curriculum. The Competence Based Curriculum was rolled out in 2017 and it is yet to run its full course across all the grades and levels. Thus, the Competence Based Curriculum is making teachers experience a learning curve.

5.5.3 Benefit 3: Promoting Reflective Thinking

The third axial theme that was extracted from the study was that action research implemented by the primary school teachers helped them in promoting reflective thinking, as illustrated by the word cloud in Figure 5.9 below.

Figure 5.9: Word Cloud - Promoting Reflective Thinking

Source: NVivo 12

From the foregoing illustration, the predominant key words were *reflection, research, think, look* and *criticise* all converged with the aspect of reflective thinking. It is in this light that this section explores the data where the research participants reported that action research is a strong vehicle to promote reflective thinking. The research study participants responded to the

question of how they used knowledge and skills in action research in their day-to-day work. All participants were emphatic that action research was a catalyst in promoting reflective thinking. Three major sub-themes emerged from this axial theme:

- Promotes self-reflection
- Promotes self-criticism
- Promotes self-introspection

5.5.3.1 Promotes self-reflection

The role of action research towards promoting the culture of reflectiveness was underscored by the participants. The prominence of this sub-theme was reiterated by all the participants who unanimously agreed on its value This is also evident from the more detailed word tree analysis on the data for the first research question, as shown in Figure 5.10 below.

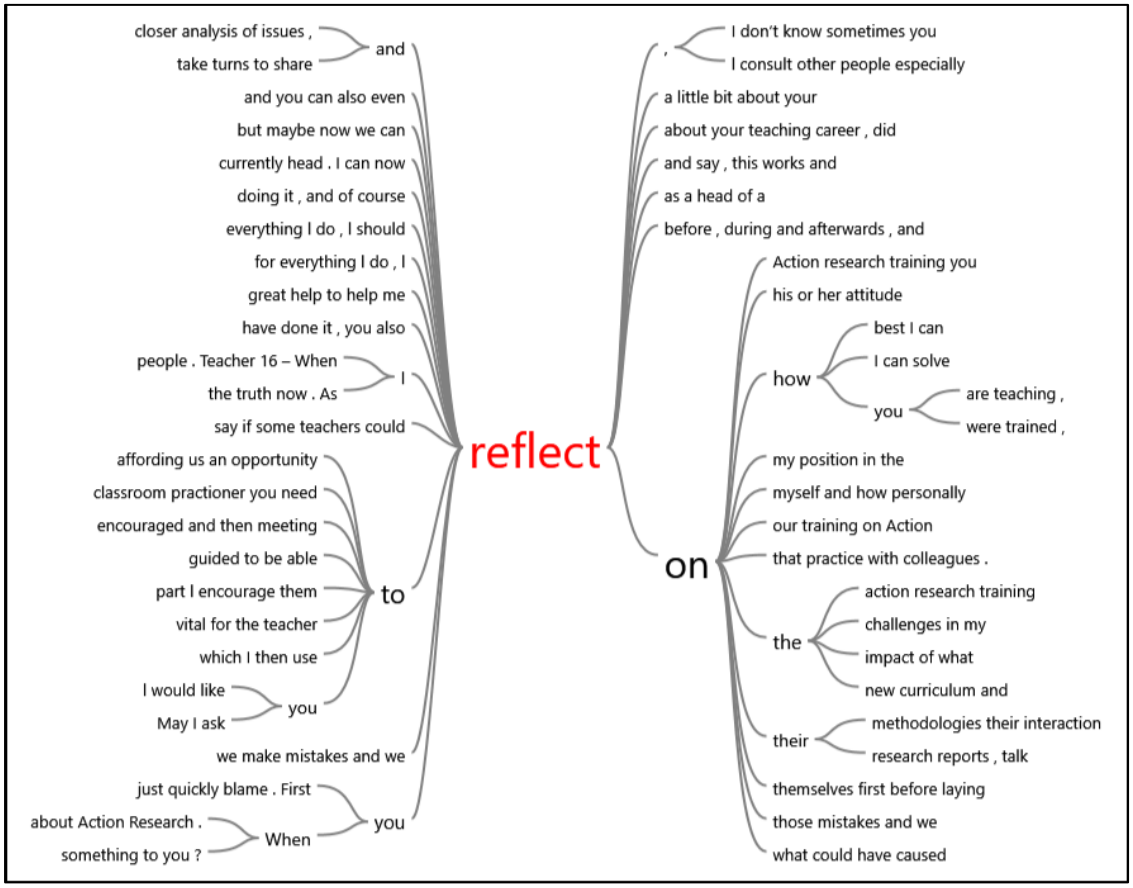

Figure 5.10: Word Tree - Promotes Reflectiveness

Source: NVivo 12

Inspector 1, who was part of the second FGD, provided a rich input and cited:

> ***Inspector 1****: The training that I underwent, action research, really changed my behaviour as a teacher and as a supervisor. It changed me in that* ***I ended up doing a lot of reflecting on myself, my work, how I relate to others in the work place*** **[Promotes Self-Reflection].** *I see myself doing quite some self-criticism and I encourage teachers to learn to criticise themselves when they have done anything wrong in teaching or executing their duties.* ***They should be able to assess themselves*** *and improve where they think they can do better to change the situation. Practicing action research* ***helps me as the supervisor to assess myself*** *that … this is the correct thing.*

Head 6, during the sixth focus group discussion, mentioned that through action research, he developed and appreciated the culture of reflection:

> **Head 6:** *Action Research has equipped me so much in the area of reflective thinking as a teacher, deputy head and currently head.* ***I can now reflect on my position in the problems*** *I encounter and how I can solve it for quality learning outcomes* **[Promotes Self-Reflection].**

Teacher 23 further reported that through action research, the accusing of others or apportioning blame for problems and challenges had been eliminated as the reflective thinking assisted the teacher in being able to identify the actual problem source, reflect on it and deal with it decisively.

> **Teacher 23:** *Action research reduces the blame game. When something happens, you do not just quickly blame.* ***First you reflect on what could have caused this and by so doing you get a better decision and take action suitable for the problem*** **[Promotes Self-Reflection].** *And also, as I said during problem solving, I mentioned, self-criticism, what part did I play? This should be the first question and if I didn't play any part, then how can I go about to solve the problem. I try to investigate why this happened and why it happened that way?*

Teacher 23 mentioned that through action thinking, decisions were not made impulsively and no one was passing blame. This was corroborated by Teacher 19 who was in the seventh focus group discussion who reiterated the same issue, citing that it is important to take time to reflect and take into consideration what can be done with a difficult situation:

> **Teacher 19**: *Eeh actually in my practice especially the reflection part,* ***personal reflection****, actually, helped me quite a lot. In most cases* ***I do not take abrupt action, usually I take a closer analysis of issues, and reflect on myself*** *and how personally I can influence the decision.* **[Promotes Self-Reflection]**.

In an in-depth interview, Head 2 supported the notion observed above on the need to take time to reflect on issues before making decisions. Rather, he opined that it was imperative to reflect before, during and after making a decision:

> **Head 2**: *One of the skills or knowledge I gained is reflection* **[Promotes Self-Reflection]***; I learnt that for everything I do,* ***I should reflect before, during and afterwards****, and this helps me to make some corrections if there are some corrections to be made.*

Head 9 further elaborated that through reflection, it was possible for the head to identify or to come up with novel and innovative ideas, appropriate for the context and situation, to solve a problem. In addition, he felt that in promoting the skill of self-reflection he had undergone professional growth.

> **Head 9:** *I feel empowered in that* ***I use the reflections to find or develop home-grown solutions to the identified problems or challenges****. The solutions I develop or come up with are unique to each situation or context. I really like that action research taught me to look into the 'self'* **[Promotes Self-Reflection]**, *what I do, how I do it and the impact this has on the learners and the teachers I lead.*

Overall, the research participants all converged on one key message. They all said action research promoted and enhanced reflective thinking. Inspector 1 raised the issue of action research having encouraged self-criticism. In other words, action research encouraged self-reflection, a critical tool for continuous learning. Inspector 1 noted that it was not easy to self-criticise, but thinking outside the box had many advantages especially on self-evaluation. Teacher 16 raised the issue that it was not easy to do self-criticism but over the years, one can learn this. However, this self-critique is something one can learn and improve on. Self-critique is related to self-evaluation. Teacher 21 mentioned yet another interesting feature about action research, seeing action research as a *game changer.* Head 2 said action research was helpful to make corrections as a result of reflection. Thus, action research goes hand-in-hand with

reflection. The action research cycle demands reflection and self-introspection in particular, at every step of the way (Hendricks, 2006).

The benefit of action research is promoting and strengthening reflective skills in teachers. The **document analysis for the 10 teachers in the research study** showed evidence of a growing reflection in their practices. This section of the chapter will present data from Teachers A1, A3, A7, A9 and A10 relating to the theme of promoting self-reflection.

Teacher A1 showed evidence of adapting own practice through reflection. My analysis revealed suggestions of actions taken to support learners who were struggling and the teacher engaging in systematic investigation on the self around the challenge particularly with the learners who were struggling. One example was captured in PLAP records where the Teacher A1 wrote in his Individual Record Book:

> **A1** ***(Male)*** **-** *... "I revisited my teaching methods following an investigation which led me to change my approaches to making complimentary comments/remarks as I found that some of those I used were demotivating to learners ..."* **(Learning from own practice)**

This was evidence of learning from own practice by Teacher A1 and a realisation that certain approaches used in commenting on student work did not have the desired positive effect.

I also looked closely at the Scheme-cum-plan, Test Record Book, Individual Record Book and Performance Lag Address Programme (PLAP) for research participant A3. There was evidence that the teacher was reflecting on self-performance through the performance of the learners. One record that was very clear related to a learner called 'EdVe' who consistently received low test scores across several subjects. Teacher A3 recorded carrying out a self-examination on methods she was using, the learner's home background and peers he plays with both at school and at home. In looking at the self, Teacher A3 recorded examining her language to encourage (or discourage) the learner. This became a learning point for improvement for the Teacher A3. At one point in the record, she wrote:

> **A3** ***(Female)*** *– I carried out a small classroom action research documenting a cycle of actions and reflections to inform my actions to remedy the challenge EdVe had. In the cycle of actions, I engaged the learner to understand more on his home background and peers. I recorded some observations I made in the process on the negative side (e.g. not*

much time given to homework while at home), in the home background and peers of the learner EdVe. I worked on turning these negatives into positives. Over a period of three weeks, I began to see EdVe Maths and English test scores going up. This makes me happy with my efforts so far. **(Self-reflection)**

The Individual Record Book shows reflection on how the test scores for 'EdVe' started to improve and this was linked to interventions to support and scaffold the learner as a result of the findings of teacher engagement with the learner.

The documents I looked at for Teacher A7 included the Scheme-cum-plan, Test Record, Individual Record Book and the record for remedial and extension work. The records were well maintained and up-to-date. In the Scheme-cum-plan, the teacher recorded her evaluations in detail. The evaluations showed the teacher reflecting on the teaching done, methods used and learning outcomes for the lessons. The Teacher A7 indicated where the results were good and where learning outcomes were not good and then possible reasons for each of the outcomes. Comments on the self, appraising self in the teaching were evident. Teacher A7, in one instance in her Scheme-cum-plan, she wrote:

> **A7** ***(Female)*** *– The actions I took to deal with the problem I identified on hand (helping Tino and Tanya catch up on the Mathematics challenge they had) were built from conversations I had with other teachers during a school staff development session. I used ideas shared in a school-based staff development session for own use in my classroom, in my Maths lessons and specifically dealing with Tino and Tanya.* **(Learning from school-based staff development sessions)**

This reflection indicated the value of school-based staff development sessions and the positive effect that it has on individual teachers, who in turn, are able to apply ideas to their own practice.

The documents analysed for Teacher A9 included the Scheme-cum-plan, Test Records, Individual Record Book and the remedial and extension record book. The Scheme-cum-plan book had a very telling record of the focus of teaching and learning. The teacher looked into self on methods used and the impact of these methods had on the teaching and learning process. The teacher questioned self on methods used, her place in those methods and motivating the learners. Both the high and low achievers were noted and students facing difficulties with specific aspects were followed up with additional support.

> **A9** ***(Female)*** *- I tried a different method in support to BBB and he started getting improved scores and above all grasping the concepts.*

The teacher gave closer attention to some of the struggling learners and this paid off as their scores, grasping of concepts and participation in the lessons improved for the better. The Individual Record Book reported on learner ABC who had dropped out of school. The teacher followed up with friends and siblings, eventually tracing the learner back home where the boy had started gold panning with step-parents. The teacher engaged the step-parents and succeeded in getting the boy back into class. **(Systematic follow-up)**

Three documents compiled by Teacher A10 were examined. These were the Scheme-cum-plan, Test Record Book and the Individual Record Book. In the Scheme-cum-plan, the evaluation of the teaching and the planning revealed a professional who is critical of own work and its impact on the learners. The evaluation reflects a teacher who was learning from own practice and interaction with other teachers especially during staff development sessions. One statement in the evaluation column in the scheme-cum-plan reinforces the value of school-based staff development sessions as well as informal collaboration with staff members.

> **A10** ***(Male)*** *- I picked up an approach to use in teaching reading in the staff development session facilitated by a colleague teacher DD …* **(Benefit of school-based staff development sessions)**

The Test Record Book for Teacher A10 showed the test scores for the learners and at a glance, some can identify learners making good progress and others that are struggling. From the Test Record Book, the teacher picked up one case of a girl learner whose performance on test scores was consistently low. The teacher planned and carried out an investigation in the form of action research to understand the situation. The Individual Record Book reported on the case of this investigation and recorded an in-depth understanding of the girl's home situation. The girl was found to be an orphan staying with aging grandparents. The record described a challenging home situation where the girl was not getting the support she needed with homework and other needs. At the time of the research, the teacher was engaging the Child Protection Committee to look into the case of the girl learner and talk to the grandparents. Thus, the Individual Record Book with its systematic follow-up, indicated a caring attitude strengthened by training in action research.

5.5.3.2 Action research promotes self-criticism

Over and above the promotion of self-reflection, it emerged from the study that for the broader axial theme on reflectiveness, action research had empowered the primary school teachers to embrace self-criticism, evident from the word tree below.

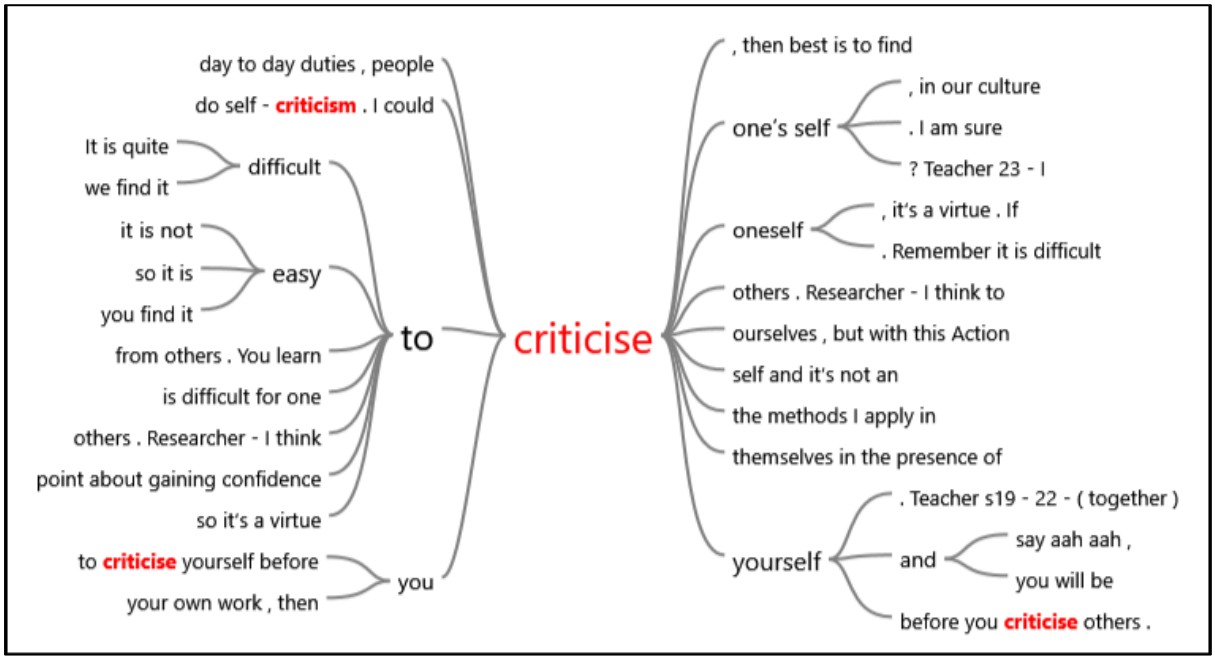

Figure 5.11: Word Tree - Promotes Self-Criticism

Source: NVivo 12

Self-criticism is evident from the foregoing illustration as observed by the contextual usage of the pronouns *one's self, oneself, ourselves, yourself* and *self* along with the verbs *criticise* or *critique*. Teacher 16 who was part of the fifth FGD, highlighted this as well, saying:

> **Teacher 16**: *When I reflect on the action research training and practising it over the years, I can say it helped me to be reflective because sometimes it is very difficult to criticise yourself in the classroom situation. But, look,* ***I have learnt to critique myself****, what I do, how I take the* ***situation*** **[Promotes Self-Criticism]**.

Teacher 16 has over the years, learnt to critique himself in the classroom, even though it was initially difficult. Developing this skill has been very helpful in the teaching and learning process as it ensures that the situations are analysed and that new ways are being sought to

improve. Teacher 23, who was part of the sixth FGD supported Teacher 16 on the issue that self-critique was not easy before action research training:

> **Teacher 23*:*** *I think it is not easy to criticise oneself. Remember it is difficult for one to criticise themselves in the presence of other people. But when you are away from other people, then it's easier to do that there is no blame game and then, thereafter, you are not afraid of being criticised in front of others.*

However, through action research training, the teacher was now able to self-critique:

> **Teacher 23:** ***The training made me to do self-criticism situation*** **[Promotes Self-Criticism]**. *I could criticise the methods I apply in my teaching. How I interact with the pupils and with colleagues and also find solutions to the problems that I encounter in my everyday teaching and learning practice and also in my classroom administration, I seek solutions to problems that I encounter, and also I do self-evaluation in each and every activity that I do in the teaching and learning process.*

The self-criticism, an outcome of the action research training, was also mentioned by Teacher 20, who stressed the role of self-critique over being criticised by others

> **Teacher 20:** *Yes, in our day-to-day duties, people criticise, then the best is to find the ways for being criticised by looking at inside yourself first. By so doing you will be able to meet criticisms from others. You learn to criticise yourself before you criticise others.*

The research participants, in particular Teachers 23 and 20, recognise that it is not easy for the teacher to critique oneself and yet this principle is key to action research implementation. However, over time they believe self-criticism can be learnt and this leads to self-improvement.

5.5.3.3 Promotes self-introspection

The third sub-theme was that action research promoted self-introspection. In an in-depth interview, Teacher 2 reinforced the role of self-introspection, citing reflective thinking as being the antecedent.

> **Teacher 2:** *It is empowering in the sense that you are encouraged to be reflective and* ***when you are reflective, there is self-introspection*** *and you may want to question yourself about how effective you are in whatever you will be doing in terms of serving*

your clientele. This is quite rich because before you label your client negatively you are forced to look into the self and you may see that you have gaps and those gaps will be filled by the self and no one else.

A similar sentiment was supported by Head 5:

> **Head 5**: *Yes, a teacher who stops to think about their work can draw from action research to deal with any challenge that may come their way. This is so as long as the teacher is someone who likes to investigate what is happening in their teaching, what is happening in their classroom or what is happening in their environment.*

Teacher 2 and Head 5 stressed the importance of self-introspection as a means of dealing with emerging challenges. According to them, self-introspection would lead to self-evaluation and searching of ways to improve and do even better, and they emphasised that teachers should stop to think of their work and how its impact on the learners.

5.6 RQ 2: How have primary school teachers applied action research knowledge to deal with the Competence Based Curriculum?

From the foregoing section, it emerged that action research was a vital tool to develop and that teachers who had been trained, managed to apply these skills positively in their practice which meant that learners benefitted immensely. Nevertheless, this section further investigated whether action research had played a significant role towards dealing with the Competence Based Curriculum, and if so, how. The participants were asked to respond to the question and all confirmed that action research had played a pivotal role in equipping them with the skills to deal with problems, which have emerged from the implementation of the Competence Based Curriculum. Regarding how action research had assisted in dealing with the Competence Based Curriculum, the summary of the outcome is illustrated in the hierarchical chart in Figure 5.12.

Figure 5.12: Hierarchical chart - Role of action research on Competence Based Curriculum

Source: NVivo 12

From the outcome above, it emerged that the major role that action research played was to promote solution-oriented thinking, and under this axial theme, there were two sub-themes: promotion of innovativeness as well as facilitating research. The second key role played by action research towards dealing with the Competence Based Curriculum was that it promoted reflective teaching, while the third role that emerged was that action research promoted talent management and the least being that action research made change manageable.

5.6.1 Promoted Solution-Oriented Thinking

The promotion of solution-oriented thinking as a result of the application of action research, was pivotal in dealing with problems that emerged from the implementation of the Competence Based Curriculum. The Ministry of Primary and Secondary Education (MoPSE) introduced a Competence Based Curriculum in 2016 and began with implementation in 2017, to be phased in over the years to 2022. The research participants concurred that the implementation of the Competence Based Curriculum offered teachers the opportunity to use action research to deal with the challenges that they meet in the teaching and learning process. Teacher 7, Head 7 and Inspector 4 were some of the key participants who offered opinions in this regard. They cited that action research had capacitated primary school teachers to deal with any form of challenges that would emerge, and that through home-grown solutions, these problems would be dealt with, far more easily for those who had a firm background of action research than those without.

> **Teacher 7***: I think action research is applicable especially when we come to the point of owning the problem because* ***when you make a problem yours it becomes your responsibility to solve that problem****.*

Head 7: *May I come in? It is quite difficult to criticise one's self, in our culture as Africans. Normally we find it difficult to criticise ourselves, but with this Action Research, it has helped us much to take charge of the problems which we create and the problems which might have been created by ourselves and others, so that* ***we take charge and we find solutions****, we move on for the ultimate goal for quality learning outcome.*

Inspector 4: *... Action Research has taught me to say, 'What is your role in what is happening? You don't pass a blame before you look at yourself where I don't have power to make any change,*

Inspector 4: *If the teacher had done Action Research, the teacher was going to say but what is my problem, what is my role, what is my challenge? Why is this child not performing as expected, what is the problem around this issue? It needs that type of reflective thinking to get into it.*

A clear aspect emerging from the data is that action research has engendered the role of taking responsibility for what is happening in the classroom, in the school and in the work place. Teacher 7, Head 7 and Inspector 4 all agree that the key issue is the teacher owning the problem in order to be able to take action. Owning the problem implies taking responsibility and realising that there is an obligation to do something and solve the problem. Koshy (2010) called this a key contribution of applying action research in the teacher's work. Head 7 capped the argument by stating that action research helped the teacher *to take charge* and *find solutions*.

5.6.2 Facilitated research on the Competence Based Curriculum

The training in action research facilitated conducting research on the Competence Based Curriculum. This is reinforced by statements from Teachers 4, 1, and 18, Head 9 and Inspector 4. Both Teachers 4 and 1 talked of the need for the teacher to be continually searching for new information in order for them be fully equipped to deal with the new curriculum and its changes in content and pedagogy. They felt that it was imperative to source new and innovative material and make it context-specific instead of relying solely on a textbook.

Teacher 4: ***I see Action Research as a useful tool, especially to understand and implement the new curriculum****. The* ***Teacher needs to be always researching, especially with new learning areas that have been introduced*** *... The new curriculum calls a teacher who can keep researching on what they are teaching.*

> **Teacher 1:** ... ***the new teacher we want today is a teacher who searches for information*** *and not just to take what has been put down by some people. We need a resourceful person that is what is critical. And, when you collect whatever information, you have to thoroughly analyse that information to make sure that it suits what you want so in analysing the information you are using document analysis skills which are very critical. And teachers need to be empowered that they don't have to rely on what they consider as textbooks. Textbooks are there always and everywhere but what is needed now is the ability to sift the kind of information one requires. And, that is very, very important and I have encouraged the teachers I supervise to make sure that they become resourceful persons, they become critical in terms of whatever they are going to read about.*

Teacher 18 observed that the teacher needs to be continually searching for and discovering new information. This is imperative with the introduction of a new curriculum, new subjects, new content and new pedagogy.

> **Teacher 18:** *In fact, all the subjects here are new.* ***And, so they have to discover every day and solve problems*** *and move forward.*

Head 9 mentioned the implementation of new syllabuses that requires the teacher to be constantly researching and discovering ways of interpreting the curriculum.

> **Head 9:** *Yah, the new curriculum that we are now implementing has many opportunities for teachers to use action research in order to cope with the challenges that have come with the curriculum change. I think this is the case because action research is a tool to help us as teachers to work out and provide solutions to the problems and challenges that we are meeting in implementing the new curriculum.* ***For example, when a teacher is faced with the problem of syllabus interpretation in teaching of the new learning areas, she has to research around the problem and find solutions that help to address the problem****. In the process, action research will help the teacher identify own strengths and weaknesses and find ways to improve on the weaknesses.*

Inspector 2 raised an intriguing point in that the Competence Based Curriculum requires the learners to also become involved in researching through project work, which is learner-centred

but guided by the teacher who has already been involved in research. Inspector 2 raised the issue of teachers requiring the skill to do research as even being more cardinal for them.

> **Inspector 2:** *The new curriculum encourages learners to be doing projects, where they investigate, look for solutions and create project profiles. This is encouraging as projects make students become researchers and they find out something so that they can talk about it during the lessons, which on itself is giving basic research to children.* ***For this to work well, the teachers will need that capacity even more if they are going to support their learners. In this scenario, if they are familiar with action research, the better for the teacher****s. They will already be in the mood to always be asking questions and finding out.*

Thus, Teachers 4, 18 and 1 and Head 9 all concurred that the implementation of the Competence Based Curriculum has many opportunities for teachers to carry out small investigations using action research. In this regard, they saw action research as a tool to navigate their way through the challenges they meet in implementing it. Inspector 2 raised an equally important issue of the Competence Based Curriculum encouraging learners to be always researching, carrying out investigations as part of projects they are expected to do in their learning. The research participants welcomed this approach as it will encourage the learners to always be on the lookout for opportunities to research, to find out, to try and explain phenomena.

5.6.3 Promoted Innovativeness

One other sub-theme emerging from the research data was that action research promoted innovativeness. This came out in the statements by Teachers 16, 21 and 18 where issues such as being open to change, reflecting on their practice and finding innovative ways to address challenges by thinking out of the box.

> **Teacher 16:** *The* ***updated curriculum requires us to be innovative*** *to solve the new challenges and this calls teachers to be researchers for them to find new ideas and test them if they are applicable or not. I think the key issue is we need teachers to be researching on what they are doing, how they are doing it, and of course reflect on the impact of what they are doing in their classrooms.*

> **Teacher 21:** *Yes, so many opportunities, we are grappling with the problem of accepting it. This is a new thing, the new curriculum, and now that we are faced with this problem.*

Is it going to work? What are the benefits of it to us? Then, the other problem is the problem on the resources, they (resources) are part of the problem. Sources like textbooks, grappling with problems of ICT. Now what is my position? What is the teacher's position in finding solutions to those problems, which are given to us in the current set-up? This is now an opportunity for us as teachers. What role can I play to make this exercise a success? Whether it is at a teaching level, at an administrative level or whatever level, what is my role? ***The problem now is how far can I go to find the solutions?***

Teacher 18: *Yaaah, these initial stages to the introduction of the new curriculum, a lot is there to be discovered. Because most of the teachers are not well versed with the new curriculum, even the subjects that are being introduced … They are discovering every day …* ***So the teacher has to discover, find out how ... The teacher … can use her phone in the absence of a laptop, to teach ICT so that the pupils can learn*** *... So the teacher should always … engage with Action Research …*

Teachers 16, 21 and 18 linked action research to promoting innovation. The demands of the Competence Based Curriculum are diverse and require teachers to be innovative as they research around the challenges with which they are faced in the implementation. The teachers noted the potential in action research to help them investigate and find innovative solutions to challenges they meet.

5.6.4 Promoted Reflective Teaching and Thinking

Yet another critical sub-theme emerging from the data was that research participants felt that action research promoted reflective teaching and thinking. This was in line with the arguments by Donald Schön, accredited with concepts such as reflective thinking of practitioners, reflection-on-action, reflection-in-action (Hendricks, 2006; Hopkins, 2002). Some of the statements made by Teachers 6 and 17 and Head 5 illustrated the way action research developed the skill of reflection in their teaching practice.

Teacher 6 talked of the importance of reflecting on how you are teaching, reflecting on your methods. Teacher 17 talked of action research appealing to their conscience and leading to asking a series of questions around their teaching, evaluating and critiquing to ensure that the new curriculum is correctly interpreted and implemented to ensure teaching and learning.

Teacher 6: *I can see from my own view that Action Research is of vital importance to this new curriculum because as a classroom practitioner you need to* ***reflect on how you are teaching, your methods****, which you have used to help the learner understand what you exactly want the learner to achieve. Therefore, Action Research gives me ample time to find out which method or methodology should I use so that the learners can grasp something.*

Teacher 17*:* *Yes, the opportunities are there because action research is appealing to one's conscience to resolve challenges we meet.* ***Action research enables one to ask several questions for example, what good have I done, what wrong have I done, what have I left out in my planning and lesson delivery?*** *Other questions you can ask yourself are how I can deal with challenges I meet in interpreting the new syllabuses? These questions and others help me the teacher to do self-evaluation, and look for ways to do better what I am doing in my planning and teaching. The new curriculum has brought new subjects and it is up to the teacher to accept the change and then engage the skills from action research to implement the curriculum.*

Head 5 introduced the concept of 'self-reflection' that Donald Schön (1983) saw as being at the centre of action research, particularly with attitude to change with the introduction of the new curriculum.

Head 5: *The introduction of the new syllabuses might meet some resistance from teachers who might think that it is not applicable and this might result in learners doing badly, and therefore,* ***it is vital for the teacher to reflect on his or her attitude on the new syllabus****. The teacher as the classroom practitioner can help to stimulate learners' interest depending on his or her attitude towards the learning areas.* ***Self-reflection could help deal with any negative attitude towards this curriculum*** *some teachers may have. Therefore, teachers are encouraged to conduct action research for them to establish ways they can use to stimulate interest in learners.*

While the statements by research participants above are all related to the Competence Based Curriculum and its implementation, they all point to the contribution of action research to promote reflective teaching and thinking in teachers. Teacher 6 notes the contribution of action research in investigating and using methodology that promotes the Competence Based Curriculum. Teacher 17 notes the many opportunities to apply action research in dealing with

the many challenges of implementing the Competence Based Curriculum. Head 5 raised the issue of teachers' self-refection in stimulating interest and enthusiasm of working with a new curriculum to ensure effective teaching and learning.

5.6.5 Promoted Talent Management

The research participants raised another important sub-theme that action research enabled the identification and promotion of talent in learners. Developing skills through action research has equipped teachers to identify and manage talent found in learners. Inspector 1 linked the Competence Based Curriculum with ability *to read*, or understand learners and through reflection, find ways on motivating them through content and learner-centred pedagogy to acquire the relevant knowledge, skills and values necessary for success in society.

> **Inspector 1:** *In fact,* ***the thrust of this new curriculum is on reading the learners and their skills*** *and if you want to give learners skills or relevant competencies, you have to change your approaches in terms of teaching. It is moving away from the traditional way of doing things. Therefore, in a way, since action research is so practical, I think it is going to have impact on our teachers in a bigger way so that when they use these reflective practices in their teaching processes, their methodologies become more of a learner-centred not really saying the teacher should be 'feeding' the learners. So,* ***action research on its own is practically oriented*** *and I think it will definitely help in this new curriculum for teachers to give our learners appropriate knowledge, values and skills.*

Inspector 3 raised a fundamental point that with action research, *no child should be left behind*. Talent and skills in the learners can be identified by the teacher, nurtured and developed for the benefit of the learner.

> **Inspector 3:** *I want to start by defining my own understanding of action research. It is a process of identifying a learning problem and think of a strategy to improve the situation.* ***Now that our teachers and learners are now exposed to the new curriculum, which is competence-based curriculum, it really means that no child should be left behind. What I am referring to is that all the learners have got a particular talent that should be identified by teachers. If these learners' talents are tapped and they will be developed and ensure that, all our learners' talents are developed to a level they can earn a living from them****. I think all our teachers should be trained in action research so that they can go through all processes of action research, which means that they*

should identify a problem or challenge, collect data, and from this data, they can devise further actions to remedy the situation. Another component of action research is that it is cyclic, which means they should continue trying their strategies until they win the expertise of every learner. If all our teachers who are teaching the learning areas of the new curriculum will be trained in action research, I am sure we will have learners whose talents are identified and developed to some level while they are still in school.

Both Inspectors 1 and 3 realised that the teachers can identify the talents of the learners and support them to develop these. For the teachers to play their role, they need to use learner-centred methodologies, they should monitor the learners closely, identify their talents and seek to nurture those talents.

The responses to the question posed to the research participants point to action research as an agent for change as shown in the Figure 5.13 below.

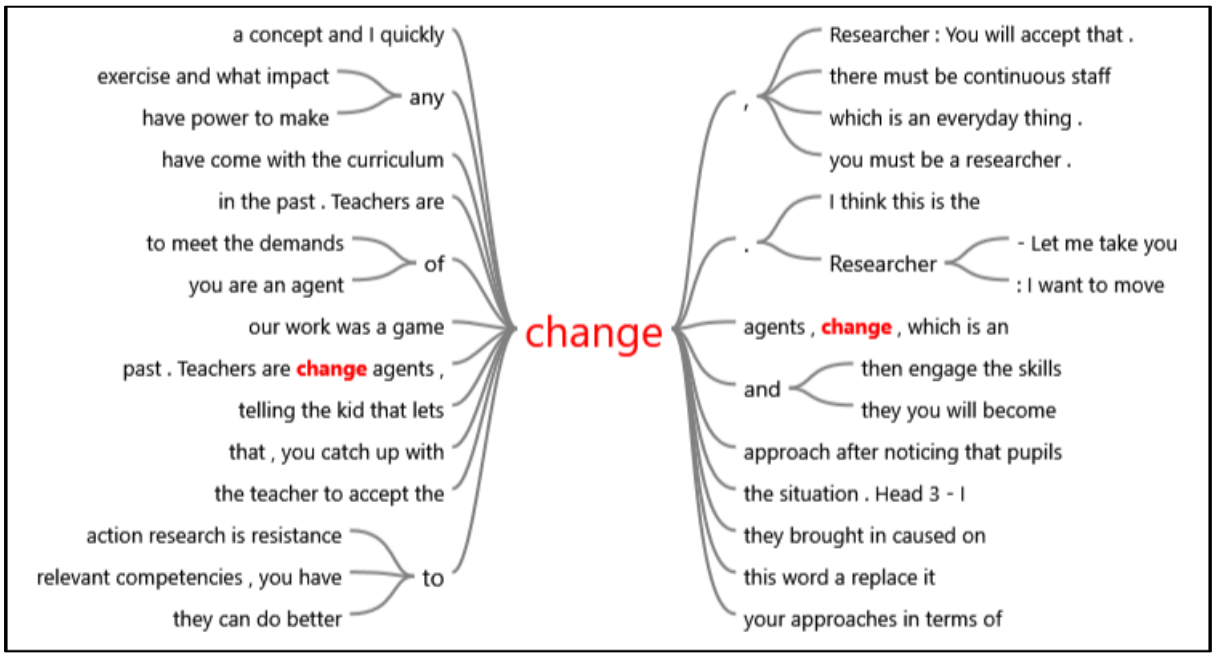

Figure 5.13: Word Tree - Action research as an agent of change

Source: NVivo 12

Figure 5.12 with the word 'change' in the middle demonstrate that through action research, the teacher is an agent of change. The teacher as researcher fulfils this agency role. Thus, it can be

argued that the skills developed through action research training are important for advocacy for change.

5.7 RQ 3: What challenges do primary school teachers face when applying action research, and supporting other teachers in learning and practising action research?

The research participants identified challenges and impediments to using action research. The challenges affected their use of action research to improve teaching and learning. In this regard, the challenges, if not attended to, have a bearing on the proposed framework for Continuous Professional Development (CPD) of teachers that is hinged on using the strategy of learning and applying action research. Figure 5.14 below shows the thematic mapping of the impediments raised in the interviews and FGDs.

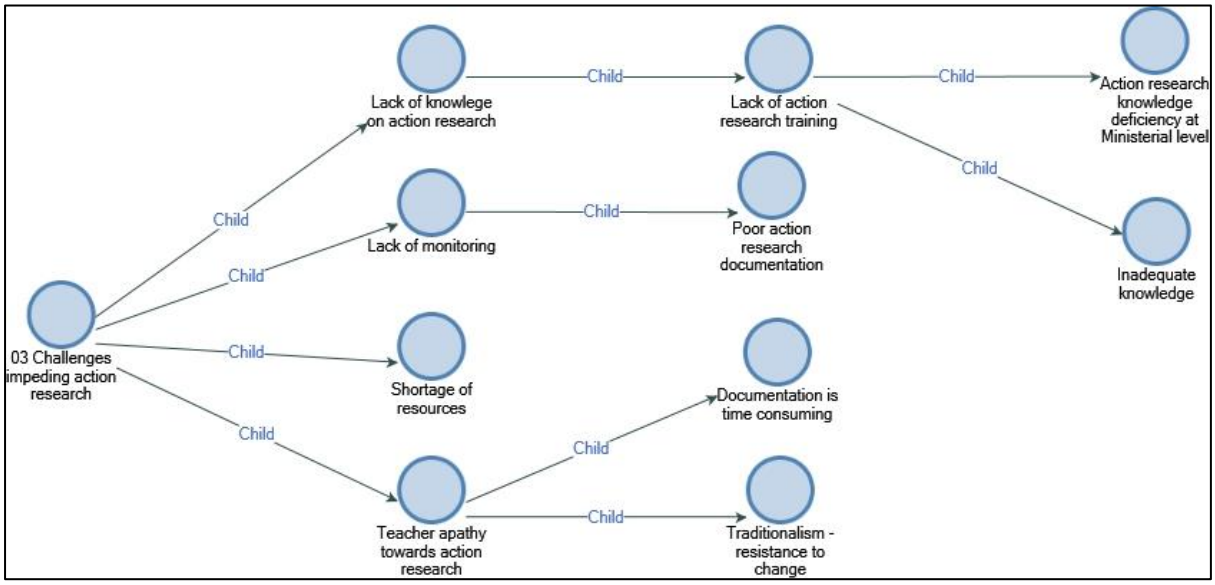

Figure 5.14: Thematic map - Mapping challenges impeding action research

Source: NVivo 12

The sub themes developed on the challenges of implementing action research were:

- Lack of training in action research for many teachers in the school system
- A deficiency of knowledge and practice in action research at high levels in the Ministry
- Inadequate knowledge of action research for many teachers in the schools
- Lack of adequate monitoring and support for teachers

- Poor action research documentation by teachers
- Non-availability of readily available resources on action research
- Teacher apathy towards action research
- Teachers considered documentation of action research experience as time consuming
- Resistance to change and sticking to traditionalism, and
- Challenge of time-tabling action research.

The following section of the chapter carries the substantiating statements of the sub-themes and the impediments.

5.7.1 Lack of Knowledge of Action Research

Figure 5.15 below indicates that not all teachers at the Bikita primary schools were trained in action research. At most, two or three teachers received the training during the first and second phases, resulting in quite a number of teachers without training in action research.

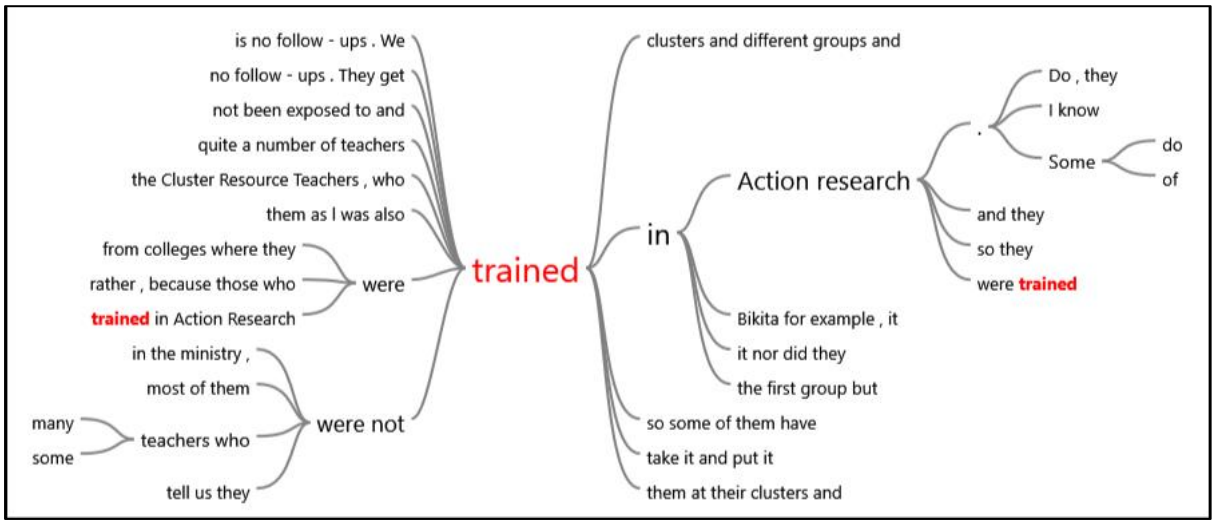

Figure 5.15: Word Tree - Lack of knowledge of action research

Source: NVivo 12

The research participants specified that many of the teachers in the schools lacked knowledge of action research. The statements below further substantiate this view as Inspector 1 and Teacher 9 noted that for a variety of reasons, not all teachers in the schools had undergone training in action research.

Inspector 1*: When we are supervising teachers at schools, the Teacher Professional Standards supervision instrument is the tool. When we ask the teachers whether they did action research or not, we find mixed reactions. ... The district has some teachers who were not trained in the first group but got the advantage of the Cluster Resource Teachers, who trained them at their clusters and at their schools.* ***Due to transfers and new appointments, the district has many teachers who were not trained in action research****. Some do struggle to catch up and they do not even know what action research is all about. On the Teacher Professional Standards (TPS) supervision instrument there is a section on classroom-based action research, which has a total of 5 marks on that, so it's a zero to every teacher who reports that they don't know about it.*

Teacher 9: ***One of the challenges is we have some teachers in our schools … who have not been exposed to, and trained in, Action research***.

Teacher 1 pointed out that there are some teachers who are not enthusiastic about action research, even though they had attended the training.

Teacher 1: *One of the challenges is* ***we have some teachers who are not for Action Research, they are not comfortable despite the fact that some of them went through some training but they find it not easy****.*

The statements elicited that there were teachers in the schools who were not familiar with action research. Inspector 1 and Teacher 9 made this point clear. In addition, Teacher 1 raised the issue that some teachers were not comfortable in applying action research to their work. Thus, lack of training in action research was a serious impediment to applying action research for the good of teaching and learning.

5.7.2 Action Research Deficiency at Higher Levels

Figure 5.16 shows that it is a serious issue when at higher levels there are officers who are not familiar with action research. The effect is that little encouragement was being offered from the supervision levels for the teachers. Yet, the Competence Based Curriculum introduced has a Teacher Professional Standards (TPS) supervision instrument that requires supervisors to check if teachers are engaged in action research to improve teaching and learning.

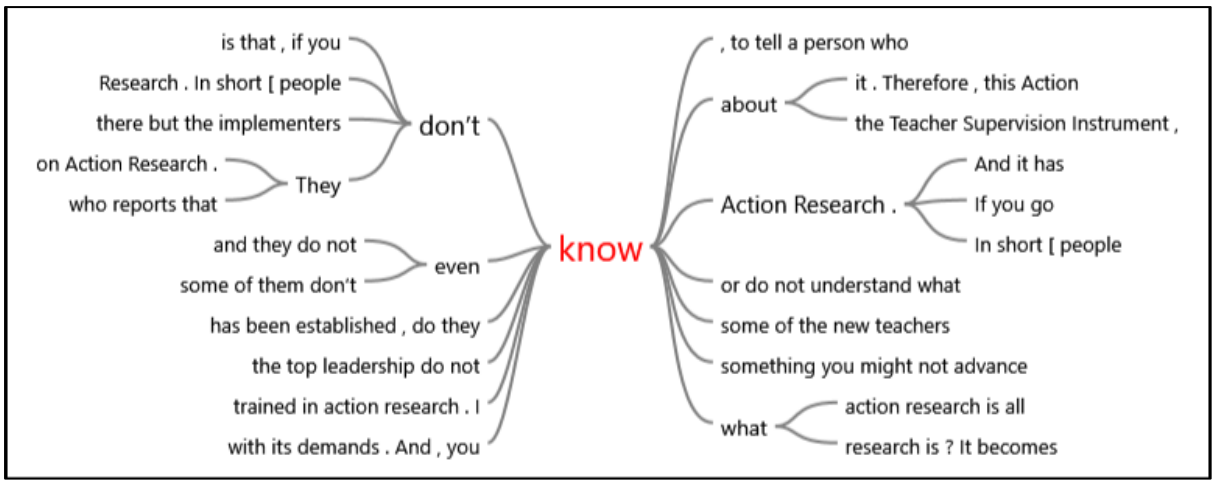

Figure 5.16: Word Tree - Action research deficiency at higher levels

Source: NVivo

Inspector 4 noted that training in action research was carried out in the Bikita District as an activity under the Bikita Quality Education Project, but not done countrywide. Thus, at top-level Ministry levels, training was not done, although there is a policy guideline on action research. This observation, in a way, spoke to the lack of appreciation of inclusion of action research in the Teacher Professional Standards supervision instrument, although at top-level, the Ministry has not been trained.

> **Inspector 4:** *So, a lot of what we learnt and are practicing today … but who has been trained in Action Research? Those trained in Action Research were trained in Bikita for example, it was a district, but when you look at the leadership,* ***the top leadership in the ministry, were not trained in Action Research and they might not understand what Action Research is****. So, in implementation, it boils down now, although there is a policy, policy guideline, taking into consideration, 'Teacher Professional Standards' in the New Curriculum, but if the top leadership do not know or do not understand what it is … it becomes a problem.*
>
> *The problem with policy implementation or policy formulation is that, if you don't know something you might not advance it as is wanted.*

For the good of any initiative, it is important that the top leadership in an organisation are knowledgeable and conversant with the proposed change. Thus, the top hierarchy in the Ministry needed to be conversant with action research. Inspector 4 raised the issue that the

Ministry of Primary and Secondary Education (MoPSE) and many in the top leadership were not conversant with action research, and therefore, not likely to be advocates for it.

5.7.3 Inadequate Knowledge of Action Research for Many Teachers in the Schools

Another critical sub-theme emerging from the data was that there was inadequate knowledge of action research for many of the teachers in the schools. Thus, despite the benefits identified earlier in the data from the research participants, all would come to naught if teachers have inadequate knowledge of action research and use it in their work. Teacher 9 thought that the competence, skills and knowledge on action research were still not adequate. Head 7 raised the issue of school administrators and school leaders not being that knowledgeable about the Teacher Professional Standards supervision instrument to accord the section on action research adequate attention. Below are their statements.

> **Teacher 9:** *The **competence, skills and knowledge** … on action research … **are still not adequate***

> **Head 7:** *Yes, the school administrators some of them don't even know about the Teacher Supervision Instrument, if they can attach some importance, to that section on action research the teacher is engaged in, then it can help. So, it can begin with the administrators, so that they go to their stations and staff develop their teachers.*

> **Head 2:** *in my school, there are quite a number of teachers, nearly half them out of 16 teachers ... they need to be assisted to use action research.*

Head 5 bemoaned the fact that some of the newly appointed teachers were not conversant with action research. However, Head 5 noted that some of the newly qualified teachers were trained in action research. This points to an uneven approach to research training in the pre-service teacher education institutions, where some institutions included action research and others did not include it in the research training.

> **Head 5:** *I look at this in two ways. In our district Bikita, we have had quite a number of teachers trained in action research. Some of the newly appointed teachers in the schools have come from colleges where they were trained in action research. I know some of the new teachers tell us they were not trained in it nor did they do their research projects using it.*

Head 9 drove home the point that there are gaps in the education and training with some newly qualified teachers as regards to familiarity with and knowledge of action research.

> **Head 9:** *I have come to understand that we have **gaps** in our teachers as many are not familiar nor knowledgeable in action research as a tool to help understand one's work.*

From the statements above, it was clear there were many teachers in the schools who lack adequate knowledge on action research. Heads 7, 2 and 9 and Teacher 9 highlighted this observation. However, Head 5 noted that some of the new teachers coming from teachers' colleges had learnt action research while other new teachers had not learnt it nor had they used it in their research projects. Thus, schools have a mixed bag with some teachers familiar and others not familiar with action research. This scenario has an effect on a whole school approach to taking up action research and indicates that individual teacher application of action research depends on their knowledge, skill and motivation.

5.7.4 Lack of Adequate Monitoring and Support for Teachers

Yet another critical sub-theme was the lack of adequate monitoring and support for teachers using action research. Teacher 23 reported that there had been no adequate follow-up for teachers who were trained in action research during the Bikita Quality Education Project.

> **Teacher 23:** *Yaah … some will ask why am I doing this? If I do this, I will get this … because there is no follow-up.* ***They get trained take it and put it on the shelf and gather dust because there is no follow-up****.*

> ***Teacher18:*** *monitoring and support must be at high government level, these refresher course. Now that there is the Ministry Teacher Professional Standards supervision instrument expecting the teacher to be engaged in this, action research.*

Teacher 23 raised a very important point. Some teachers may be trained in action research but will not use it because they see no external incentives for applying action research on their work in the classroom. Furthermore, there may be no follow-up at school level and from other levels like the District Education Office School Inspectors. Teacher 23 was emphatic about the need for monitoring and support at higher levels for teachers to move from *restricted professionalism* to *extended professionalism* in their work (Harber & Stephens, 2010). Teachers 23 and 18 in

the FGD noted the possible role to be played by the Teacher Professional Standards supervision instrument as it checks if the teacher is doing action research in their class.

5.7.5 Poor Action Research Documentation by Teachers

The research participants mentioned another challenge in using action research by teachers. This challenge emanated from poor action research documentation by teachers. This came out in both interviews with Teacher 1 and Head 2 and the FGD 7 contribution by Teacher 2.

> **Teacher 22:** *I feel it empowered us, because in our day-to-day lives, we are doing Action Research in the classroom. We do perform Action Research that on a wider perspective* ***we fail to write about the findings we get there … but our main problem is that we sometimes fail to write down the findings (failure to record)***.
>
> **Teacher 1:** *You will find that in most cases many people use Action Research but do not document it. Because we experience problems and after experiencing problems, we share the nature of problems. After sharing then we try to look for solutions probably as a team or group and then we discuss the possible alternatives until we come up with what we may consider as the best solution …* ***but as I said you may find that the origin of the issue may not have been recorded anywhere (no recording)***.
>
> **Head 2**: *yes … I do practise Action Research though I do not write it or put it in Black and White, most of the times.*

The statements above indicate an inherent weakness in terms of documenting. Teachers 22 and 1 and Head 2 all indicate there is action research is being conducted but the process and results are not fully documented. This was a challenge noted and would need to be rectified by encouraging practitioners to put on record the problem, action taken and progress made to the final results. Recording is a culture that needs to be encouraged.

5.7.6 Non-Availability of Simple and Readily Available Resources on Action Research

Participants raised another challenge impeding the use of action research by teachers. This challenge is the non-availability of simple and readily available resources on the subject. Statements by Teachers 7 and 19 noted the shortage of the reading materials on action research; it is imperative to have these resources at hand yet they were not readily available.

> **Teacher 7:** *The … problem is the* ***shortage of action research reference material***.

Teacher 19: *Yes, the material (on action research) is also needed.*

Teachers 7 and 19 are some of the research participants who raised the issue that training in action research can be done but there is need for simple and readily available materials that serve as resources for the teachers to fall back on as they practise action research in their schools. This was an important observation as the need for resources is essential to back up and support training.

5.7.7 Teacher Apathy towards Action Research and Documentation seen as Time Consuming

Another challenge of action research raised by the research participants was that some teachers displayed apathy towards applying action research and that documenting the process of doing action research was time consuming. The following statements made by Head 3, Teachers 8 and 7 illustrated the concern of the teachers.

Head 3: *There are lots of opportunities with the new curriculum for the teacher to be always researching and finding out. One challenge I see is that not all teachers are comfortable with action research or doing research in general.*

Teacher 8: *I think because action research requires us to keep records, some of our colleagues they feel it takes a lot of their time so they decide not to do it.*

Teacher 7: *No, I did not keep records, I just identified the problems then I proceeded to solve it.*

Head 3 and Teacher 8 made statements indicative of a general apathy in teachers and discomfort in doing research in general. This was then compounded, according to Teacher 7, by a reluctance to keep records and a feeling that action research was time consuming, as indicated by Teacher 8. It may be argued that these sentiments point to restricted professionalism raised by Harber and Stephens (2010) when conducting the Bikita Quality Education project.

5.7.8 Resistance to Change and Sticking to Traditionalism

Resistance to change and sticking to traditionalism was another challenge that research participants raised for attention. This challenge was noted in statements by Teacher 2.

Teacher 2: *I think if teachers were going to be introspective and reflective, they would be really motivated to catch up with the current demands because I think they have the knowledge but what they lack is the adjustment* ***they do not want to move away from routine (sticking to routine)***.

Teacher 2: *You will find that when we started on it (action research), it challenged the status quo and those in power were really threatened in the sense that they feared to be put in a zone of incompetency because they had built their niches and now action research comes in with its demands. And, you know, to tell a person who has been in research for years to say no we have this way of looking at professional development, that was quite a challenge. … Because you could find out that teachers were sort of mixing up issues, they said qualitative research and there were fond of graphs and pie charts. And I said, no, that's not it and they felt that I was pushing them into a zone of incompetence …. So, one major impediment to adopting action research is resistance to change.*

Teacher 2 raised an important point on resistance to change by the teachers, and those in higher levels of management, and the need to continue with familiar research approaches. It seems that the Bikita Quality Education Project brought in a change that challenged teachers. They felt exposed on what they did not know and were not used to. The change made them novices, hence they resisted. Resistance to change is real and can scuttle efforts to bring about effective change and improvement on teaching and learning in the classrooms using action research. In this regard, Hopkins (2002) argues for measures to minimise resistance to change for action research to take root.

5.7.9 Challenge of Time-Tabling Action Research Training

As research participants trained in action research during the school term time, Teachers 22 and 19 thought the timing for the training was not appropriate. The training during the school term time disturbed time for lessons and other school-based activities by taking teachers away from their duty stations.

Teacher 22: *Actually, during school term it can be difficult for all teachers to attend.*

Teacher 19: *That is why I was thinking of having some of the trainings, even during the school holidays.*

The research participants were all in-service teachers and reflected on the modalities for training teachers in action research. Their statements indicate that it was not ideal for them to attend training in action research during the school term as the training disrupted lessons and left some classes unattended. Nor was it proper for all teachers in the school to attend the training during school time and leave classes unattended. Teacher 19 proposed that training in action research be done during school holidays when no classes would be disrupted.

5.8 RQ 4: What strategies can be used to promote action research among primary school teachers?

Research participants were asked to identify strategies that could be used to develop and cultivate a culture of action research. These strategies were considered important in building a proposal for an Action Research Continuous Professional Development Framework (ARCDF), based on action research training. Figure 5.17 below provides a thematic map of the strategies raised by the research participants and their linkages.

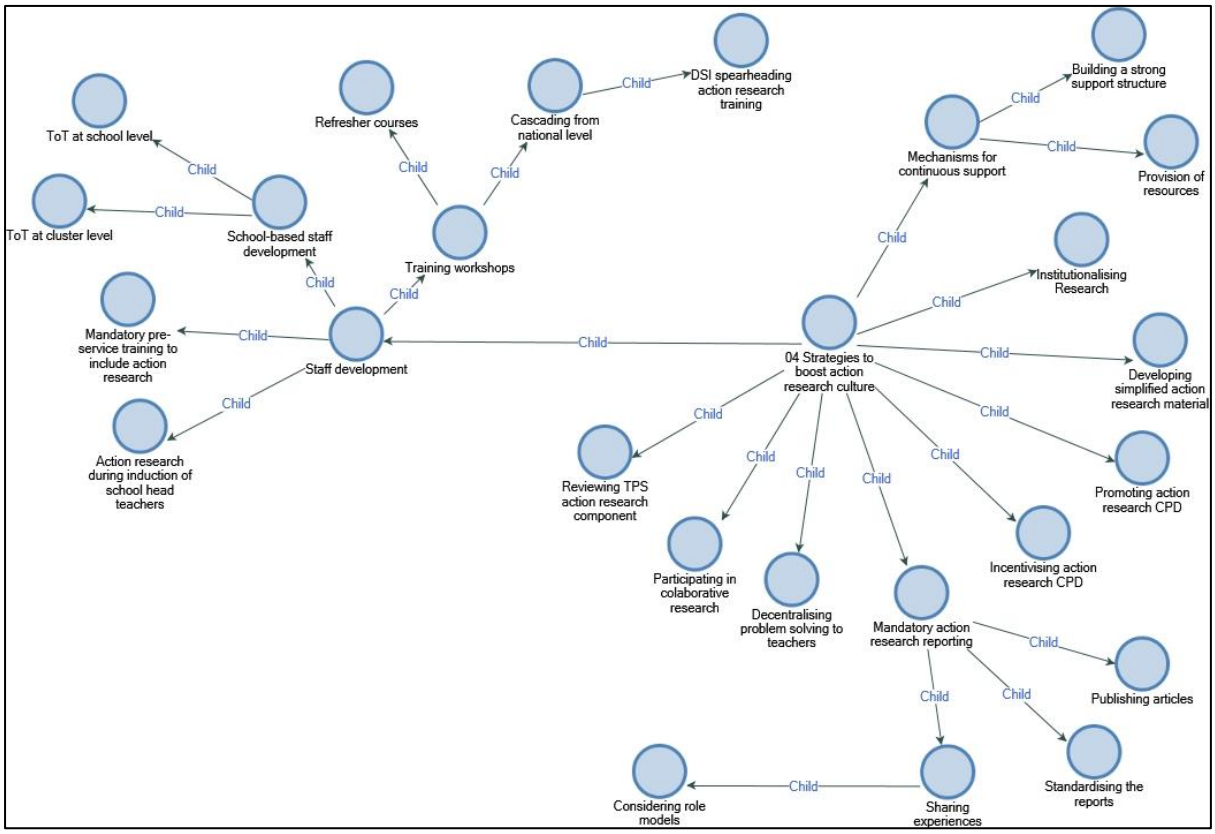

Figure 5.17: Thematic map - strategies to boost action research

Source: NVivo

The research participants identified a number of strategies and approaches that could be used to develop a culture of action research among teachers. The strategies, indicating the sub-themes, included:

- Decentralising problem-solving to teachers
- Promoting Continuous Professional Development (CPD) strategy that embraces action research
- Give incentives for participation in CPD
- Institutionalising research in teachers' practice and mandating teacher reporting under the TPS supervision instrument
- Encouraging teachers to publish articles and stories on their research
- Putting in place mechanisms for continuous support of teachers to grow professionally
- Build strong professional learning groups to practise collaborative research
- Building on the opportunities of promoting action research provided for in the Teacher Professional Standards (TPS) supervision instrument
- Including action research in the induction of school heads
- Using Trainer-of-Trainers (ToTs) at school cluster level to support teachers at school level
- Training in action research spearheaded by District School Inspectors, and
- Promoting refresher courses, including action research, as part of Continuous Professional Development

These strategies are presented below in some detail in Figure 5.18 with some of the statements carrying quotes from the research study participants. It was clear that **'staff development'** was the central phrase tying all the proposed strategies together for continuous professional learning.

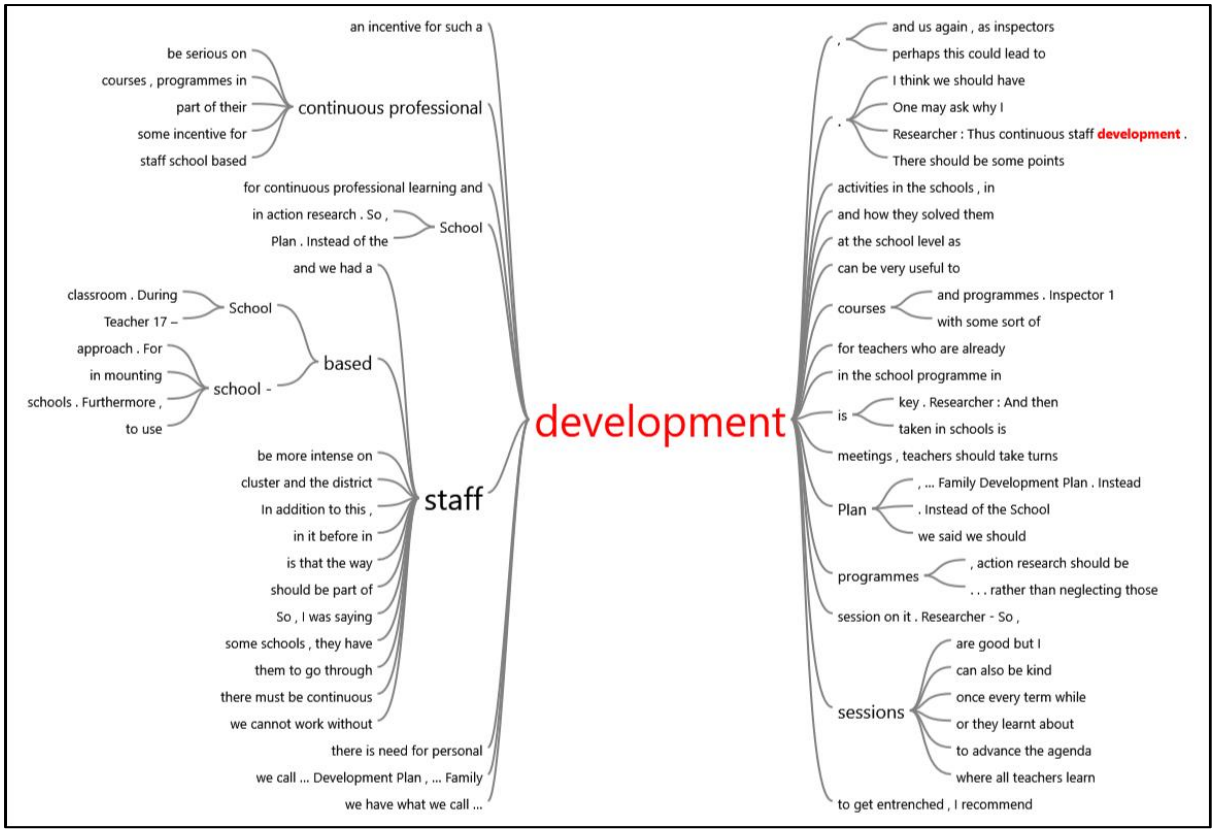

Figure 5.18: Word Tree - staff development as key strategy for continuous professional learning

Source: NVivo 12

The following section of the chapter presents the statements from the research participants and a discussion of the proposed strategies to develop a culture of action research in teachers that becomes rooted in their day-to-day practice.

5.8.1 Decentralise Problem-Solving to Teachers

Decentralising problem solving to teachers was one of the proposals made to ensure that teachers are motivated to continue to learn independently. Inspectors 2 and 3 emphasised the need for teachers to conduct action research to identify their weaknesses and improve their own practice.

> **Inspector 2:** *Teachers should solve the problems themselves. This is important for teachers to* ***engage in research that can inform self-didactical practices****.*

> **Inspector 3:** *I think for effective action research informing own practice, Teachers should concentrate on their weaknesses as compared to their strengths so that they can improve on them.*

Teacher 2's contribution drew from John Dewey's philosophy on the teacher's role to keep learning about her learners in their classroom.

> **Teacher 2:** *You know in philosophy we talk about John Dewey and we emphasize on the point that he had a laboratory school. And, I am always saying to my fellow teachers when you get into the classroom you are in a laboratory and embrace Dewey's ideas and anything about your improvement, improvement of the curriculum, it is in the classroom and you have no limitations. No one really comes to you and say hey what are you studying about and you can have your experiments with your learners.*

Inspectors 1 and 2 and Teacher 2 stated that teachers should realise that they are in the art for problem identification and solving in the classroom. Hence, they recommend that all problem solving should be decentralised to the classroom level. As Teacher 2 pointed out, the philosophy of John Dewey encourages teachers to identify problems and seek solutions in order to move forward.

5.8.2 Develop Simplified Action Research Material

Developing and availing simplified action research resources for the teachers was another important suggestion. The resources for teachers on action research would provide guidance for teachers to engage in action research and keep learning from own practice. Teacher 21 reflected on how action research was introduced to their group and suggested that the approach could have been improved upon. Teacher 2 was in the second group of teachers in Bikita that were introduced to, and encouraged to use action research in the period 2010 – 2013. The point on developing and availing simple resources for teachers on action research came out in FGD 6 (Teacher 21), Interviews 7 and 9 (Inspector 4 and Head 9, respectively).

> **Teacher 21:** *I was looking at it as, may be the way action research was introduced in the beginning, maybe made it difficult. Why can't we have it in a simpler way that it is understood by everyone? The fact that teachers keep asking more and more about it, to me it suggests, we need to be simple about it and develop small but easy to read*

guidelines ***(simple resources providing guidance to teachers for use as they work in their classrooms)***.

Inspector 4 was very clear and articulated the need for simple literature with guidelines on how to conduct action research under the broad theme of staff development.

> **Inspector 4:** *There must be literature, simple literature, simple, simple guide on it. Most of our teachers are keen on it. Because we have seen that most of our teachers don't know what Action Research is. There must be also people who are keen to produce their own Action Research studies. And these can be shared with the other teachers who have never done it. So, I was saying* ***staff development is key***.

Inspector 4 further raised an important point to bear in mind that research is not easy. This is a skill that needs to be learnt and practised for one to improve in it.

> **Inspector 4:** *Research itself, is very frightening to most of us, but Action Research is a very simple process, if well understood, and we need, that guide. Teachers are aware that it is not as rigorous as they think.*

Head 9 mentioned having simple literature to provide guidance to teachers on doing research, including action research as a tool to improve own practice. Head 9 saw a clear link between such action research supporting materials for the teacher and checking the Teacher Professional Standards supervision instrument that came into being with the introduction of the Competence Based Curriculum in 2016 and rolled out to the schools in 2017.

> **Head 9:** *For school-based staff development to get entrenched, I recommend that there be very simplified reading material on research, as well as action research as a tool.* ***These materials will help teachers navigate their way around classroom-based action research****, which the current Teacher Professional Standards supervision instrument highlights, promotes and encourages to be monitored.*

The research study participants noted a very important point that is critical to take forward in the training of action research and its practice by teachers. The challenge of lack of reading materials was noted in this section of this chapter that explored the challenges with training. Teacher 21, Inspector 4 and Head 9 all agreeing and converging on the need for developing simple reading materials on action research as a way to systematically investigate the teaching

and learning situation and which provide teachers with guidelines. This strategy speaks well to the support and reference materials that individual teachers would need while working on their own in their classrooms.

5.8.3 Promote a Continuous Professional Development (CPD) Strategy that embraces Action Research

Research participants mentioned promoting a continuous professional development strategy that embraces action research. Inspector 1 proposed that all teachers, including inspectors, be trained in action research as part of their continuous professional development.

> **Inspector:** *Further, all teachers need to be trained on action research as part of their continuous professional development, and us again, as inspectors to be trained on action research by experts (**Train all teachers and inspectors in action research**).*

Teacher 13 called for action research to be included in staff development at both school and cluster levels.

> **Teacher 13:** *In addition to this, staff development activities in the schools, in the school cluster and the district staff development programmes, action research should be included among other aspects that are brought in for continuous professional learning and development for teachers who are already in-service (**Include action research in all CPD activities**). There should be deliberate effort to have this in place. Yes, teacher training is now including action research but we have lots of teachers in the schools who were not trained in this. There can be efforts at school and district level to create awareness of this approach to get the teacher to continuously be researching their teaching and learning. It is in doing this that teachers can become reflective and question their methods, and so on.*

Head 2 and Inspector 4 raised two related issues which were that teachers needed to regularly engage in continuous professional development, However, continuous professional development needs to remain relevant in order to meet the demand of the ever-changing environment.

> ***Head 2:** Teachers need to be encouraged to take part regularly in continuous professional learning.*

Inspector 4: *In order to meet the demands of change, there must be continuous staff development.*

The research participants called for Continuous Professional Development (CPD) that embraces action research. Inspector 1 and Teacher 13 highlighted the importance of training in action research as part of their Continuous Professional Development (CPD). Inspector 1 added that even the inspectors who have trained during the period of the Bikita Quality Education Project (QEP), need further training as they are supporting the in-service training of more teachers. Teacher 13 acknowledged that new teachers graduating from teacher training colleges have action research included in their preservice teacher training, but there were still many teachers in service who needed the training. Inspector 4 confirmed that more training is necessary by arguing that it was important for teachers and inspectors to engage in continuous staff development.

5.8.4 Incentives for Participation in CPD

The provision of incentives was proposed for teachers to engage in Continuous Professional Development including training in action research. This call was loud and clear from Inspector 1, Head 7 and Teacher 25.

Inspector 1: *One thing I take as important is having some incentive for continuous professional development. There should be some points earned from taking courses, programmes in continuous professional development, perhaps this could lead to additional notches on one's pay or remuneration. This should make all teachers want to be serious on continuous professional development courses and programmes.*

Head 7: *There is need for personal development courses with some sort of* ***incentives*** *for those who take them. The best thing is after a few years, the people should be trained again in Action Research, refresher courses. Information changes over and over again. There should be an incentive for such a development. One may ask why I should be doing it.*

Teacher 25: *Then there is need to incentivize teachers for doing action research.*

Head 2 proposed that some sort of recognition is needed for those who become involved in Continuous Professional Development of. Head 2 further proposed promotion for those who

successfully engage in CPD but suggested that CPD be compulsory to ensure that teachers are kept abreast of new developments in the field of education.

> **Head 2:** *This CPD needs to be and perhaps some recognition be given to those who put effort to keep learning. Promotion is one motivation for them.*

The research study participants raised the issue of providing incentives to teachers who engage in Continuous Professional Development (CPD) programmes. Inspector 1 mentioned that successfully completing recognised and sanctioned CPD programmes would mean that teachers would be offered an additional notch in their remuneration which ensure that teachers take CPD seriously. Head 7 mentioned that without some sort of incentives, some teachers will query reasons for engaging in CPD. Head 2 raised the view that participation in CPD could be linked to some form of recognition.

5.8.5 Institutionalise Research in Teachers' Practices and make Mandatory Teacher Recording and Reporting which can be captured on the TPS Instrument

The research participants raised the issue of institutionalising research in teachers' practices. The Teacher Professional Standards supervision instrument was seen as a way to institutionalise research in teachers' practices. Inspector 4 emphasised that the value of action research is that the research is for self-improvement and not making recommendations to someone else to then consider and act upon, as in conventional research.

> ***Inspector 4:*** *Actually there is an anomaly, in the quantitative research where you give a recommendation to the ministry saying the Ministry of Education must do one, two and three as recommendations, you give your recommendations to that ministry, what you found, what you have discovered. So, it ends being very academic and it ends on a shelf somewhere or in a bookcase or in a cardboard box or something like that. Whereas in Action Research you are the key actor, you make recommendations to yourself. You take actions and do them.*

Inspector 2 and Teacher 13 linked the institutionalising of research to the records that teachers keep for learners. Recording of research could be elaborated on in the Individual Record Book and be the evidence needed for teachers to collaborate and act upon to improve teaching and learning.

Inspector 2: *There is a mechanism in place that can be further enhanced. Teachers have all kinds of records in the school; scheme-cum-plan, test records and the* ***individual record book****. … This Individual record book, could house more details on an action research follow-up and this could be shown to the supervisor as evidence for classroom-based action research. The record of action research carried out, documented could be the evidence needed on teachers' initiative in collaboration.*

Teacher 13: *I think on supervision in the schools, the supervisor, be it the School Head, TIC or even the School Inspectors from the District Education Office, they should check and ensure that teachers have records of their action research in their classrooms. These records should be like reports detailing what they investigated, what they did to remedy the problem, what they learnt from that exercise and what impact any change they brought in caused on the learners or their own professional practice.*

Teacher 22 picked on the PLAP Record, which is investigative, solution seeking, to propose an Action Research record that can be checked for supervision of the teachers. Head 5 encouraged the teachers to write detailed accounts, which are checked at the time of supervision.

Teacher 22: *I think we can have a PLAP record and more specifically, an Action Research Record. During training, everyone will know what Action Research is and then we can inject it into the PLAP record.*

Head 5: *Teachers can use their communication records such as registers, record books and so on and make a record, which is the evidence. Personally, I encourage my teachers in the school to generate a detailed account of why and how they conducted action research and what results came out of it and how they solved the problem. This evidence should be recorded and filed as well. The record is a good reminder to the Teacher himself or herself. I check this record when using the TPS instrument.*

Some of the research participants pointed out the need to ensure that reporting of procedures and actions followed in action research is mandatory and aligned with the TPS Supervision instrument. This makes sense as during the supervision of the teacher, the supervisor would check these records kept by the teacher on action research being conducted in the classroom. Should this be done, there is no better way to institutionalise action research. The Performance Lag Address Programme (PLAP) is about the self and improving action in the classroom for

the benefit of the learners. The range of records suggested by the research participants are all suited to carry evidence of the research that teachers conduct to address issues with which they are faced in the classrooms.

5.8.6 Encourage Teachers to Publish Articles and Accounts on their Research

Some research participants called for encouraging teachers to publish articles and accounts of research conducted. Publishing the articles and accounts will act as motivation to other teachers and in addition, may offer insight into how teachers overcome challenges faced in the classroom during the implementation of the new curriculum. Teacher 1 stated the publishing will leave a legacy among the teachers.

> **Teacher 1:** *From my observation, I think we need to start with small articles, which do not demand a lot of work. These small articles maybe published. These small articles are going to speak a lot about the practices and about people's experiences because what I have noticed is if you tell people to sit down and write a research report, they think it is so much demanding and complex. So, we need an approach which is going to make the work, which is assumed to be complex, very light and practical so that people can appreciate it.*

> **Teacher 1:** *Leaving a legacy is something very important so if a few members are identified and then they produce more articles …and these articles are published and distributed. Then, I want to believe, this is going to encourage people to continue with this kind of programme. At the same time, we may think of establishing some kind of an association so that we share with the members who might be interested in researching and publishing what they find and experience.*

Head 1 called for the supervisors at district and provincial levels to take the research findings seriously, especially articles related to the Competence Based Curriculum. Teacher 25 argued for platforms where teachers can share their research and engage other teachers. Teacher 20 called for modelling action research around some success stories, as this will also serve as motivation for others and provide a context-specific resource for insight into action research.

> **Head 1:** *What will encourage teachers most will be the supervisors at district and provincial levels taking seriously feedback from the foot soldiers, meaning the teachers,*

as they are the ones who have the problems and challenges. I am thinking of teachers and the new curriculum, ***as long as teachers present evidence from their small researches, the feedback they have on the new syllabuses should be taken seriously****.*

Teacher 25: *We … should have* ***structures where we can report to where these little researches that we are doing are taken up for the benefit of the teacher fraternity*** *so that in future we can have action research data base.*

Teacher 20: *We can* ***model action research training around some success stories****. We have such and such teachers who have taken it up and we have other luminaries who have taken it as their way of operation, so that it is taken by everyone. So, we need to model it around success stories. Even in our own profession, we have a teacher at a school who is operating, look at myself who has gone through Action Research, and is doing well. You go to a teacher like myself, and ask how are you doing it? You have produced 60%, 90% pass rate like … school. Such people can now cascade it to other teachers and in their own localities and into the cluster and then we go to the district level; bottom-up approach.*

The research study participants made suggestions to encourage teachers to write up reports or stories on their action research activities. The suggestions include teachers compiling accounts detailing classroom experiences. Publishing these reports and accounts would be yet another incentive for the teachers. The reports and account could be used for training other teachers on action research (Teacher 20). Through the publications, the teachers would be sharing evidence from their classrooms and possibly influence policy makers.

5.8.7 Promote Continuous School-Based Staff Development Sessions

Teacher 9 and Teacher 15 highlighted the preference for school-based staff development sessions to empower teachers with action research skills. This would be critical to provide support to teachers at school level. Teacher 15 further raised the issue of school-based staff development and interaction as best to equip teachers to deepen their understanding of the action research envisaged in the Teaching Professional Standards instrument

Teacher 9: *There is need for an* ***increased support on the teacher at school level*** *so that they are empowered on new areas brought by the new curriculum for example areas such as IT and so on.*

Teacher 15: *Reflecting on my experiences, teachers in schools are at different levels on understanding action research.* ***They need help to all deepen their understanding and the practice that will come from applying action research****. So, I am saying the* ***teachers need to be equipped with the skills of carrying out a research as envisaged in the Teaching Professional Standards Supervision instrument in use. This can be done well at school level****.*

Teacher 17 made an interesting observation about school-based staff development sessions. While quite a number of the research participants were for school-based staff development, the practice in schools was not at all uniform. It appears the practice is more of the initiative of the school head and the teachers in terms of the frequency. Teacher 17 called for the need of a policy circular guide from the Ministry of Primary and Secondary Education Head Office:

Teacher 17: *The idea is good to* ***use school-based staff development sessions to advance the agenda of the requirement for teachers to do action research, to do some research on their work****. The challenge I see though is that the way staff development is taken in schools in that it varies from school to school. In some schools, they have staff development sessions once every term while in other schools, it can be twice or thrice. This situation needs to be regularised maybe with a circular from Ministry Head Office.*

School heads called for school-based staff development. Heads 1, 2, 5, 9 and 7 all echoed similar sentiments in support of school-based staff development. Head 2 called for training in action research starting with pre-service teacher education, and then augmented through in-service training for teachers in the schools. Head 2 suggested that teachers conversant in action research, should be the facilitators in school-based staff development. Teacher 15 added that teachers should take turns to share their action research activities and reports. Head 7 also added that teachers from other schools could be invited to share as well.

Head 1: *At school level, it is clear* ***the Teacher Professional Standards teacher supervision instrument asks for evidence that the teacher is engaged in action research****. So,* ***school staff development sessions can also be kind of action research oriented so that teachers learn together, inform one another****, how to go about this.*

Head 2: *I think the first thing, let me start with the training at teachers' colleges I think Action Research must be taught so that when our teachers come to the field they must*

have been equipped already with the knowledge and skills. ***And, even when they come here because some might forget, so there must be some in-service training in form of workshops, seminars. I think the seminars and workshops are best at school level and cluster****. They need to be regular in-service training where teachers share their researches, findings and solutions they are developing. … My view is that at school level,* ***the head or some other teachers who are conversant with action research and are practising it, may be identified to help others****.*

Head 5: *Furthermore, school-based staff development can be very useful to get teachers help each other understand, practice and learn from one another in a collegial, friendly, non-threatening environment.*

Head 9: *Yeah, it is possible to make action research a culture for teachers. This could be achieved by making action research one of the tools by which teachers can be learning on their job continuously. More informed or knowledgeable school heads or other teachers can be pivotal in mounting school-based staff development sessions where all teachers learn about action research*

Teacher 15: ***During school-based staff development meetings, teachers should take turns to share and reflect on their research reports, talk about what they did, what they found, what they were trying to find out and improve, and of course how this research is informing their teaching****. I think, if we do this, we make doing research a culture for our teachers and develop the culture of recording our experiences in some systematic way.*

Head 7: *You can* ***take a teacher from a different school to share experiences, to present and discuss their experiences and share with others on action research****. That approach can be a bit more effective, as you listen to a voice from another school.*

Statements by the research participants were generally unanimous on school-based staff development sessions as a component of CPD. Teacher 9 raised the issue that the teacher is best empowered at school level. Teacher 15 and Head 1 mentioned the strengthening of the teacher at school level especially on the TPS supervision instrument. Head 5 considered school-based staff development, being conducted in a non-threatening environment, collegial as teachers who are more conversant with the issues under discussion help others (Hendricks, 2006). Teacher

15 suggested that teachers take turns to lead staff development sessions as this helps to build confidence. On another note, Head 7 suggested enriching the sessions with voices from other schools in the cluster. However, Teacher 17 raised an important challenge with the way school-based staff development is done; it is not uniform across the schools as there are no clear guidelines with the number of school-based staff development sessions per term, for example. School-based staff development is not currently regulated; thus, teacher have suggested that this issue be considered.

5.8.8 Build Strong Professional Learning Groups to Practise Collaborative Research

Yet another loud and clear proposal to make action research a culture in the schools, proposed by the research study participants, was the building of professional learning groups among teachers to scaffold collaborative research.

> **Head 3:** *I was also thinking on the scenario where teachers work as a group in collaborative research. As they investigate the case, say truancy, one of the teachers should be asked to record everything from the beginning of the investigation to the end when the group feels they have found a solution. Thus, action research should be collaborated there because these problems are documented and assign each other on how to solve these problems at school level as a group. This is happening in the school where I am the Head Teacher.*

> **Teacher 13:** *The facilitation can be among themselves, the teachers. Teachers learn collaboratively and do collaborative research learning among themselves. I think teachers might do action research based on those groups because sometimes they experience the same problems, for example the issue of absenteeism is a common problem from grade one to seven. I think teachers should consider working together in action research as this helps them to gather more knowledge regarding the problem that need solution.*

> **Head 1***: As colleagues, they help each other understand and practice action research to address their challenges. I see opportunities for the teacher to cite what problem he or she is facing in class, work with fellow teachers understanding the problem, investigating the challenge, trying out solutions which are subjected to evaluation and monitoring.*

> **Head 9:** *I think that teachers should be encouraged to work collaboratively in small teams to investigate what are considered as challenges … to understand, investigate and develop possible solutions. The challenges I see include truancy, theft and coming to school late. I strongly recommend this approach.*

The research study participants were unanimous on seeing the place of collaborative research. Collaborative research is usually undertaken through the collective efforts of many individuals, and it often results from researchers who work together from different departments or sections (Silverman, 2016). Collaboration in the workplace is when two or more people work together through idea sharing and thinking to accomplish a common goal. It is simply teamwork taken to a higher level. Head 1, 3 9 as well as Teacher 13 all agreed it was desirable for teachers to form collaborative groups and conduct research collaboratively, enriching each other with their experiences and solving recurrent problems such as truancy, absenteeism, theft and late arrival at school.

5.8.9 Include Action Research Training in all Training on Research in addition to Induction of School Head Teachers

The research study participants raised two related issues. One issue was the inclusion of action research in all training for teachers. The other issue was the inclusion of action research in the induction of school head teachers. This proposal makes sense as the Ministry of Primary and Secondary Education has included action research on the aspects to be monitored during supervision of teachers in the raft of changes and new developments that came with the introduction of the Competence Based Curriculum. Inspector 1 calls for action research being part of the training for the induction of school head teachers.

> **Inspector 1:** *School Head Teachers will need action research during the induction process.*

Inspector 3, Teachers 14 and 20 all pointed to the need to have action research in pre-service teacher education so that when newly appointed teachers are appointed to schools, they are already aware of and equipped with action research skills.

> **Inspector 3:** *This has to start from the teachers who are in teacher training colleges. The curriculum there at higher and tertiary education institutions should have a component on action research and in a way that could even help us as a country because*

where we have learners exposed to this practical research, we will not even have issues in solving our own problems and even challenges here and there.

Teacher 14: *First, at teacher training, on teaching research methods and approaches, action research should be included as something that all teachers in training should learn, know and be able to practice in the research methods course.*

Teacher 20: *For training, I think we should begin from the colleges where there are teachers in training who will be tomorrow's teachers in the schools. I understand Masvingo Teachers is doing it … training in action research. They are saying they are doing it. So, I think the training should start from colleges.*

Research participants advocated for a research methods courses to be included in all higher education programmes. Inspector 3 justifies the practical nature of action research in solving practical problems occurring in schools. Inspector 1 raised the issue of including action research in the induction course for newly appointed school heads. This was important as school heads occupy leadership positions at the schools. Inspector 3 went further to raise the idea that the higher education curriculum ought to include action research in the research methods course. However, Teacher 20 noted that the policy framework as regards learning and doing research was key for a sustainable solution.

5.8.10 District Schools Inspectors (DSIs) should spearhead Action Research Training

There was a clear call from the research study participants that the District School Inspectors should lead in building the culture of action research in schools. Inspector 3 said the School Inspectors at district level should be at the forefront but should be well acquainted with action research and be fully equipped to train teachers.

Inspector 3: *Therefore, this Action Research should* ***start with the DSI just to go through on what it is all about****, and the teachers in all districts should learn and practice this action research to improve on classroom practices and approaches.*

Head 9: *Above all,* ***we need the School Inspectors to be conversant with action research*** *as well.*

Head 7 indicated that the school head teachers should play their part in supporting the training and the staff development of teachers at cluster and district levels.

Head 7: *We can support that group (Inspectors) by carrying outreach (in-service) we can do it at cluster level and at district level.*

The call by the research participants to have supportive school inspectors could be linked to the Bikita Quality Education Project, where training in action research included the school inspectors and school heads so that they play their role in supporting teachers in the schools. Harber and Stephens (2010) had found this as one of the strengths of the Bikita Quality Education Project. The inspectors, the school heads and the teachers who trained together worked well together, supporting each other in applying action research in their work.

5.8.11 Use Trainer-of-Trainers (ToT) at School Cluster Level to support School-Based Training

The last sub theme emerging from the data was that research participants called for Trainer-of-Trainers (ToTs) at school cluster level to support school-based staff development. This came out clearly with Teacher 22 who talked of identifying and training a group of leaders to lead the training.

Teacher 22: *The first thing is to train an initial group, then they can cascade, but we will need leaders, the school leaders, the school heads and TICs to be trained and some other subject based teachers.*

Teacher 3 talked of using a cascading model for the training which would begin with national training, proceeding to provincial and district levels before going to school level. This approach was criticised by other research participants as they felt that the training would watered-down and less effective as it reached the lower levels.

Teacher 3: *I think we should use the cascading method it starts with ... the national level to provincial, district and then back to the schools*

In contrast, Head 5 presented a completely opposing view suggesting that the training should begin at school level with the teachers and then move up to cluster, district and provincial levels.

Head 5: *I think the starting point should be on the teachers to see if the teacher knows and understands what we mean by action research and how it is done. This means that there is a need for workshops from school level, cluster level*

and provincial levels for teachers to be educated on the benefit of Action research.

While there are opposing views in this sub-theme, the central theme that remains is the training of trainers to provide the technical support for teachers to learn and practise action research. Given the findings of Burns (2007) on training using the cascading model, the proposal by Teacher 22 made sense as this will have a trained group of trainers within the cluster of schools to provide technical support to teachers to learn and practise action research to improve own teaching and learning.

Figure 5.19 below presents a mapping of the proposed strategies emerging from the data presented in this chapter. At the centre of the mapping were suggestions, made by research participants, such as school-based staff development, having Trainer-of-Trainers at cluster level, District School Inspectors leading action research training and monitoring. Other suggestions at the centre included incentivising Continuous Professional Development, promoting action research on CPD, including action research in the research methods in pre-service training, encouraging participatory and collaborative research among teachers, and including action research in the induction course for school heads.

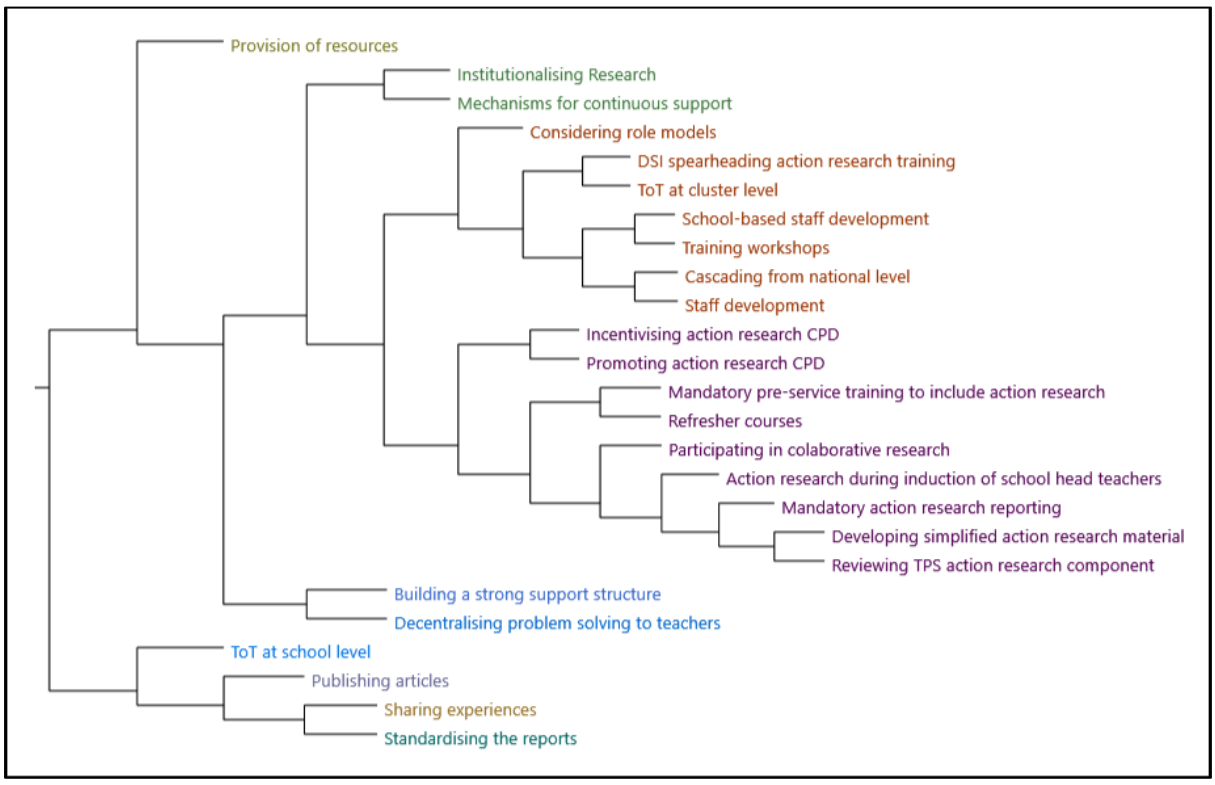

Figure 5.19: Mapping strategies to use action research for continuous professional development

Source: NVivo 12

5.9 CONCLUSION

In this chapter, research study participants with their characteristics were presented and described. The participants consisted of 25 teachers, nine school head teachers and four school inspectors resulting in 38 participants. Ten other teachers had their lessons observed and their classroom documents analysed.

The research data showed that action research training had **three main benefits** for the teachers in the research study. The **first benefit** was that the teachers were empowered in problem identification and resolution. They were empowered on conflict resolution, evaluating and validating solutions, helping learners who lag behind others in the class. In addition, they felt empowered both inside and outside the classroom on applying action research to different situations. The **second benefit** was that the teachers felt empowered on professional growth in their work. This meant they had improved emotional intelligence, performance in the classroom, relations with other teachers, learners and community. Action research reinforced collaborative research with other teachers. They improved on their own research skills. The **third benefit** was that action training promoted their reflective thinking in three ways. They improved on self-critique, self-criticism and their taking responsibility for their actions.

In addition to the benefits outlined above, action research was thought to be applicable to deal with the Competence Based Curriculum, the competency-based curriculum. In this regard, **four issues** stood out. Action research promoted solution-oriented thinking, reflective teaching and thinking, talent identification and management, as well as making change manageable.

Notwithstanding the benefits that action research had for the research participants, there were challenges on using action research. The most important of the challenges were lack of training in action research for many teachers in the school system, lack of adequate monitoring and support for teachers, non-availability of simple and readily available resources on action research, and resistance to change and sticking to traditionalism.

It was clear that, going forward, measures need to be taken to minimise the effects of these challenges. The ultimate end of this research study and thesis, a proposal for Action Research Continuous Professional Development Framework (ARCPDF) for primary school teachers is presented. Hence, identifying the possible impediments to a framework was critical to ensuring that the proposed ARCPDF would minimise the effects of the challenges.

The chapter ended with presenting and discussing strategies that research participants put forward to build a culture of action research in teachers. The strategies revolved around two key points. The first was strengthening the institutionalising initiatives for action research and school-based staff development.

The findings presented and discussed in this chapter concur with the findings of other studies on the benefits of training teachers on action research. Examples of these studies discussed in Chapters 2 and 3 were those by Harber and Stephens (2010), Brock-Utne *et al,* (2014) and Chisaka (2016). In addition, findings also resonate with the findings of other studies by Steukers and Weiss (2014) in Namibia and the study by Ono and Ferreira (2010) in Mpumalanga province in South Africa. Action research training has the capacity to transform the teaching approaches and build capacity of teachers to improve own teaching practices for the good of the learners. In addition, this study has shown that action research training has developed teacher competencies appropriate for a Competence Based Curriculum.

CHAPTER 6

DISCUSSION OF THE FINDINGS AND RECOMMENDATIONS FOR THE TEACHER CONTINUOUS PROFESSIONAL DEVELOPMENT FRAMEWORK

6.1 INTRODUCTION

This chapter presents the findings to the main research question through a discussion of the outcomes of the research to each of the four sub questions that guided the research study. Chapter 2 raised the concept of teachers as professionals, as learners, as researchers, as reflective practitioners, and teachers and continuous professional development practices. The theoretical frameworks described in Chapter 2, explored the teacher efficacy theory, the transformative learning theory, the social constructivist theory and the action research theory. In the discussion, pointers will be made to findings that are confirmed by literature surveyed in Chapter 2 on both the conceptual and theoretical frameworks, for each of the sub questions. In addition, this chapter indicates new findings, and therefore additions to the frontiers of what is known, are presented and discussed in the context of the main research question and sub questions. The findings discussed in this chapter provide a basis for a proposed Action Research Continuous Professional Development Framework (ARCPDF) which is presented in Chapter 7. The findings are presented and discussed following the structure of the four sub questions that were formulated from the main research question (sections 6.3.1, 6.3.2, 6.3.3 and 6.3.4).

Further to the focus outlined above, the chapter suggests other areas for research in relation to continuous professional development. This research study was a case study, confined to research participants of the Bikita Quality Education Project in Bikita District, Masvingo Province in south west Zimbabwe.

6.2 CONTEXT FOR THE FINDINGS

As a reminder, the context for the presentation and discussion of the findings of the research study was made in Chapter 1. The context is around the main research question, which is: *How can action research training be used as a professional development strategy to enhance effective classroom practices of primary school teachers?* To respond to this question, the

research study explored action research training used as a Continuous Professional Development strategy to engender reflective and effective primary school teachers over a period of eight years, 2006 – 2013 in the Bikita District, Masvingo Province in the south-eastern part of Zimbabwe. The main research question necessitated the formulation of four sub questions as follows:

1. How has action research training of primary school teachers empowered them?
2. How have primary school teachers applied action research knowledge to deal with the Competence Based Curriculum?
3. What challenges do primary school teachers face when applying action research, and supporting other teachers in learning and practising action research?
4. What strategies can be used to promote action research among primary school teachers?

The aim of the research study was to find out if there is evidence to develop a proposal of an Action Research Continuous Professional Development Framework (ARCPDF). The framework, proposed and presented in Chapter 7, contains a strategy to empower primary school teachers to become competent and reflective practitioners. Thus, the specific objectives formulated for the purpose of conducting this research study were:

- To explore how action research training of primary school teachers empowered them in their continuous professional teacher development and promotion of reflective practices;
- To establish how primary school teachers applied action research knowledge to deal with the Competence Based Curriculum introduced in 2016 and rolled out to all school grades thereafter;
- To explore challenges that primary school teachers face when applying action research, and supporting other teachers in learning and practising action research; and
- To use the literature review and findings from the research study to inform the development of an Action Research Continuous Professional Development

Framework (ARCPDF) routed in engaging in action research to improve on classroom practices and learning outcomes among primary school teachers.

This research study had two main expected outcomes. The first outcome was to learn from the processes through which the primary school teachers in Bikita District, Zimbabwe constructed new meaning to their practice of teaching, as a result of action research training in their Continuous Professional Development. This involved an exploration of the perspectives, changes and developments the teachers trained in action research ascribe to the training they received on their exposure to, and practice of action research. The second outcome was proposing an Action Research Continuous Professional Development Framework (ARCPDF) for primary school teachers. This framework is a contribution to promoting reflective teachers in their continuous professional development.

Chapters 2 and 3 presented a survey of literature related to the research study. In Chapter 2, the concepts of a teacher as a professional, teacher as a learner, teacher as researcher, teacher as a reflective practitioner and teach and continuous professional development, were explored. Related to this was a robust exploration of theoretical frameworks where the teacher self-efficacy theory, the transformative learning theory, the social constructivist theory and the action research theory were explored. What they mean for the practice of the teacher was examined and a standpoint reached that these theories had a relationship, each feeding into the other and all the four representing a continuum shift and development on teacher practice. Chapter 3 presented the varied understandings and practices of teacher continuous professional development practices. The chapter highlighted the Better Schools Programme for Zimbabwe (BSPZ) as a potentially effective strategy to support teacher continuous professional learning and development within structures that they run and manage. The limitations of the conceptualisation of teacher professional development in terms of Public Service Statutory Instrument (SI) of 2000, were highlighted. Emerging lessons to practices of developing and promulgating Teacher Continuous Professional Development strategies in South Africa and Malawi were highlighted as developments in a positive direction to motivate teachers and continuously build professionalism.

Chapter 4 presented the research methodology for the research study. The research was carried out using a qualitative research approach and adopted the interpretivist paradigm. The research was a case study. In this regard, the research study engaged participants in their ‘natural’

environment, in their schools and work places. The case study design allowed for an in-depth understanding of the research participants' views, perceptions and opinions as regards the use of action research in their continuous professional development. In addition, the research approach helped obtain rich and thick descriptions that assisted in unravelling and explicating ways in which teachers come to understand, account for and take action as they manage their day-to-day situation in their work environments (Bogdan & Biklen, 2007:60; Chisaka, 2006:8).

Four data gathering approaches were used and included interviews, focus group discussions, observation and document analysis to gather data. The data were analysed using the NVivo v12 software, looking for emerging themes and statements that substantiate them (Hoberg, 2001). Identifying themes and connections was useful to understand the motivation, beliefs, perspectives and actions of the research study participants from within their experiences. Chisaka (2006:5) calls this the emic interpretation.

Chapter 5 covered the presentation, analysis and presentation. In this chapter, the profile of the 48 research participants (38 for interviews and focus group discussions and 10 for observation and document analysis) was presented. The process of data management was outlined and it consisted of data collecting with the use of audio-taping, transcribing, cleaning and rechecking for accuracy on transcribing. The data was presented with the use of NVivo v12 software outputs of hierarchical charts, word trees, word clouds and thematic maps. These processes helped to draw out the broad themes and sub themes from the data for the findings which are summarised in Table 5.6. The findings summarised in that table are discussed in this chapter in responding to the main and sub research questions. In addition, as Richards and Farrell (2013:78) suggested, this chapter intends to discuss and relate the findings in light of the review of theoretical and empirical literature in Chapter 2.

6.3 DISCUSSION OF FINDINGS

The findings from the data were presented under the four questions used to engage the research participants.

6.3.1 RQ1: How has action research training of primary school teachers empowered them?

The research study participants dealt with this question at length during the interviews and focus group discussions. Three key themes came out as clear findings from the data. The

themes were action research **empowered the teachers in problem identification**; action research **empowerment led to professional growth**; and action research **promoted reflective thinking** in the teachers.

One of the key themes that emerged from the data presentation and analysis was that research participants felt e**mpowered in problem identification and resolution.** This was revealed when the research participants raised the following points about action research training, that it **helps teachers develop new knowledge directly related to their classrooms, reinforces the link between practice and student achievement,** and **gives practitioners new knowledge and understanding about how to improve educational practices or resolve significant problems in classrooms and schools** (*cf.* 5.8.1).

These findings confirm what literature review tells about action research. Engaging in action research offered the teachers insights into and knowledge about their learners in the classrooms (Stringer, 2008), with similar views being offered by Koshy (2010) as well as by Detert, Lois and Schreoder (2001). Mills (2011) and Johnson (2012) further point out that action research enables teachers to link theory from their teacher education training and their educational practice. In this regard, the data from the research study confirmed the view that action research empowers the teacher in both problem identification and seeking resolution to the identified problems. Teacher-led action research projects, as a professional development structure, contribute to the development of a supportive professional culture (Hensen, 1996). Further to this professional development culture, is the enhancement of career development, especially for younger and newly qualified teachers (Ado, 2013).

Another important finding from the data presented in Chapter 5 was that action research **empowered professional growth of the teacher**. In a closer look at the data, the research participants emphasised that action research **empowered professional growth** of the teacher. This point came out in the sub-themes extracted from the date. The sub-themes explicated that action research **expands teachers' pedagogical repertoire, puts teachers in charge of their craft, fosters an openness toward new ideas and learning new things, enables them to collect their own data to use in making decisions about their schools and classrooms** and **gives teachers ownership of effective practices (***cf.* 5.5.3.1).

The findings stated above, are reflected in literature on action research and teacher professional development. Teacher empowerment is very important for effective teaching and learning as

the more the teacher is empowered to make decisions and take actions that are informed by evidence, the stronger the ownership of practices (Detert *et al.*, 2001). Detert *et al.* (2001) found a close link between engaging in action research and effective teaching in a study in high schools. Engaging in action research was found to put teachers in charge of their craft, their work (Cain & Harris, 2013; Chisaka & Kurasha, 2012).

Further, to the linkages between the research study findings and reviewed literature, action research fosters an openness toward new ideas and learning new things (Hine, 2013). Practising action research enables teachers to collect their own data to use in making decisions about their schools and classrooms (Mills, 2011; Stringer, 2008). A worthy benefit of action research was that teachers developed an ownership of classroom practices (Johnson, 2012; Koshy, 2010), with research participants indicating their practices in the classroom were enhanced by their new learnings from engaging in action research (*cf.* 5.8.2). Harber and Stephens, (2010) found evidence of extended professionalism of teachers trained in action research while Chisaka and Kurasha (2012) found that action research improved and developed teachers' thinking capabilities and made them look inwards into themselves for solutions to problems. Thus, the teachers did not place blame elsewhere, but sought to improve their actions and practice in teaching (Chisaka & Kurasha, 2012).

The third finding emerging from the data was that action research p**romoted reflective thinking**. The main findings under this sub theme were that action research **promotes reflective teaching and thinking** and **promotes self-improvement and self-awareness** (*cf.* 5.5.3.1).

The research study participants viewed action research as promoting self-improvement and self-awareness which aligns with the views of Stringer (2008) and Johnson (2012). Self-improvement and self-awareness are virtues of a reflective teacher (Ado, 2013) and. engaging in action research gives practitioners self-confidence and love for own work and improves the practitioners' attitudes towards learners and their work (Chisaka & Kurasha, 2012). This is part of what constitutes reflective teaching and thinking for a practitioner (Koshy, 2010). Thus, there was some agreement between what the literature on action research is saying and what the research participants in this sturdy said.

Using interview questions, focus group discussions, observation and document analysis to gather data from the research participants have led to rich data. Overall, the findings with regard

the first research sub question have shown the applicability and relevance of these research methodological approaches in a qualitative case study design (Matthew, 2017). In addition, the findings related to this question provide evidence that engaging in action research empowers the teacher, as the practitioner. Furthermore, it can be argued in line with Liu and Zhang (2014) that engaging in action research, in particular classroom-based action research, empowers the teacher to be proactive in seeking solutions to challenges the teacher meets in the teaching and learning situation. It is in this engaging in action research and reflective teaching that plays a significant role in teacher professional development (Liu & Zhang, 2014).

6.3.2 RQ 2: How have primary school teachers applied action research knowledge to deal the Competence Based Curriculum?

The second research question examined how primary school teachers applied action research to deal with the Competence Based Curriculum in schools. As has been pointed out in this research study report, in 2017 the Ministry of Primary and Secondary Education (MoPSE) started rolling the Competence Based Curriculum (CBC) to schools. This new curriculum brought with it a curriculum that put teachers in a position to learn from their experiences in implementing the new Competency Based Curriculum. In Chapter 5 on data presentation, findings indicated that the research participants with regard the CBC, believed that their training and practice in action research **promotes solution-oriented thinking, made change manageable, promotes reflective teaching and learning,** and **promotes talent management** (*cf.* 5.6.5).

Research participants considered that action research promotes solution-oriented thinking with concur with the findings of Zeichner (2003), Chisaka and Kurasha (2012), Bolghari and Hajimaghsoodi (2017). Action research compelled the practitioner to look inward, to the self for solutions to challenges they faced. The implementation of CBC came with change to the curriculum for which the teachers were not prepared. Thus, action research empowered them to face the problems as they searched for way in which to adapt to the change. In this regard, action research promoted seeking solutions when faced with challenges as they grappled with managing the change realising that the changes were manageable and they could navigate their way through the changes. Very important too, was finding that action research promoted reflective teaching and learning, in addition to supporting the research participants' ability to identify talent in learners. The CBC encourages teachers to identify the talents of their learners and nurture those talents in line with developing competencies of the learners.

The findings discussed above confirmed some of the key points about action research in the reviewed literature. In particular, the findings were in line with Bandura (1977; 1978) who proposed the teacher efficacy theory. The research study participants developed confidence and with this confidence they were able to dealt with challenges and find solutions. In addition, as Mezirow (1991) suggests, the training-in-action research triggered teachers' critical reflection, discourse with other teachers and taking action, all in line with transformative learning theory.

The research study was carried out during the introduction of a new Competency Based Curriculum in Zimbabwe. The formative evaluation of the Competency Based Curriculum showed that implementing it was not a straightforward matter (MoPSE, 2018); it came with challenges that teachers needed to deal with and work around. Findings from the research study showed that teachers who engaged in action research were far more equipped to deal with issues that arose and find workable solutions. Hence, from a methodological perspective, the research study approaches helped to find out how teachers, who were trained in action research, were able to deal the challenges they faced. The findings reveal that the research participants had confidence to face the challenges. This finding illustrated how the research participants became 'solution seekers' and made the best of the situation to identify talents in learners and nurture those talents. In this regard, the findings confirm that engaging in action research not only builds self-efficacy but makes the teacher a creator of knowledge and repertoire of teaching practices.

6.3.3 RQ 3: What challenges do primary school teachers face when applying action research, and supporting other teachers in learning and applying action research?

The third research question sought to identify challenges that primary school teachers faced in applying action research, and supporting other teachers in learning and applying action research. The data identified some challenges which are presented below. These were **lack of training in action research** for many teachers in the primary school; **lack of adequate monitoring and support for teachers**; **non-availability of resources to learn action research** and **teacher apathy** towards action research; **poor action research documentation by teachers**. Other challenges included **a lack of knowledge and practice in action research at high levels in the ministry, resistance to change and sticking to traditionalism** and the **challenge of time-tabling action research training** (*cf.* 5.7.9).

The research study participants were introduced to action research training while they were in service in the schools, but because they had not undergone training during their initial teacher training prior to their deployment to schools, they raised this lack of training in action research as a challenge. Indicative of a relatively new area was the lack of relevant resources and reading materials available to teachers in service. This general lack of readily available reading materials on action research at the time compromised the teachers' ability in applying action research to their work.

While reflective practice has become a prime educational trend expected of education practitioners globally, this research study found that teachers were resistant to change. This resistance has been found too in other research studies (Hendricks, 2006; Kemmis *et al.*, 2014) with Zireva (2017) finding that some teacher educators actually stifled development of reflective practice by sticking to traditional approaches to research and not giving a chance to newer approaches or encouraging student teachers to engage in participatory action research.

The issue of monitoring was mentioned as a challenge indicating the research participants wanted not only to be to be monitored by supervisors and others as they were conducting action research on their work. In a way, the monitoring could provide an opportunity to engage with the supervisor and fellow teachers and discuss their experiences and findings. The issue of teacher apathy to action research was another challenge that was intriguing. As some research participants pointed out, some teachers did not see what was in it for them. Such teachers probably viewed doing action research as extra work, an extra load to what they considered an already heavy load.

There were two other challenges raised by the research participants, namely **lack of time** and **lack of generalizability** as the findings were often relevant to the investigated setting, making replicability a challenge. However, these challenges were not unique to the study as Colucci-Gray, Das, Gray and Spratt (2013), Hendricks (2009), Kemmis *et al.* (2014) and McNiff (2016) all mentioned that teachers report lack of time to carry out action research. The lack of generalisability of the findings was raised as each research setting was found to be unique in its own way (Henricks,2009). Further to this, McNiff (2016), Borko, Whitcomb, & Byrnes (2008) and Kemmis *et al.* (2014) all highlight the issue that action research findings were often relevant to the investigated setting and it was difficult to replicate in different situations.

6.3.4 RQ 4: What strategies can be used to promote action research among primary school teachers?

The fourth and final research question sought strategies to promote action research among primary school teachers. This question was fundamental in that this research study had an objective to recommend a continuous professional development strategy that embraces action research. Hence, it was critical to obtain insights of perspectives that would work as strategies in order to promote an action research continuous professional development framework for primary school teachers. The findings highlighted by the responses make a critical contribution to new insights and knowledge about teachers' continuous learning and using action research to improve practice. The insights were peculiar to this research study and a clear contribution to add to literature reviewed.

Seven strategies were proposed by the research participants. The **first strategy** was that the Ministry of Primary and Secondary Education and its supervision structures right down to schools, should **decentralise problem solving to teachers** on issues related to teaching and learning in their classrooms. The participants believed that this would strengthen teachers by giving them the responsibility to resolve any challenges they met. While it can be argued that teachers were bound to take responsibility to resolve challenges, this strategy would be critical in that it would place the primary responsibility for their teaching on their shoulders. Ministry supervision structures would come in to strengthen what the teachers would be already doing in their Communities of Practice.

The **second strategy** was to **promote CPD that embraces action research**. It is the researcher's view that the research participants recognised that the Ministry of Primary and Secondary Education engaged teachers in continuous professional development from time to time. In this regard, the research participants proposed a strategy that embraces action research. This could have been a reflection of the benefits they saw to their own continued professional learning following training and using action research in their work. This strategy is in line with advocacy in the writings of some Bandura (1978), Mezirow (1991) and Kemmis *et al*. (2014).

The **third strategy** was **incentivising action research Continuous Professional Development**. Probing the research study participants further on what they meant by incentivising CPD, it was clear they wanted recognition for the additional learning. This could even be in the form of recognition for participation and additional earnings such as an

additional notch. This form of incentivising is found in CPD frameworks of some countries in the Southern Africa region. The South Africa (Steyn, 2011) and Malawi (MoEST, 2018) CPD policy frameworks provide for such incentivising on applying for promotion. **The fourth strategy** raised by the research participants was **institutionalising research**. In recommending this strategy, the research participants suggested institutionalising research in the life and work of the primary school teachers. The mechanisms included making action research reporting mandatory for all teachers, publishing articles on action research experiences in journals and other publications for the benefit of all teachers, and sharing action research experiences during staff development sessions at schools and across schools (*cf.* 5.8.7).

The mechanisms mentioned with regard the fourth strategy, were interesting and revealed uncharted territory in the case of the context of the research study. Making action research reporting mandatory, spoke very well to the MoPSE Teacher Supervision Instrument. The instrument requires supervisors to ask the teacher what action research they were doing or have done. In essence, such a requirement would ensure that the teachers record what they do under action research and have a report they can share with other teachers and/or show their supervisor. Furthermore, the suggestion that teachers who conduct action research publish articles on their action research experiences in journals and other publications, has the possibility of building confidence in the teachers as creators of knowledge that is published in the public domain. Indeed, a novel suggestion was that teachers who conduct action research share their experiences during staff development sessions, not only in their schools but with teachers in other schools. This action has the potential impact of getting teachers to influence each other with shared evidence-based experience which would support others in dealing with challenges they face in their work.

The above-mentioned mechanisms would need to be supported with **simplified action research materials** such as reading resources, putting in place **mechanisms for continuous professional support**, building **a strong action research support structure** as well as having **action research as part of the induction of school head teachers**. The issue of reading resources that are readily available for teachers came out clearly in the findings, with research participants indicating the absence of reading materials on action research. Hence the research participants recommended action to develop and avail reading materials on action research and enable the teachers to access such materials. From the research participants, teachers would need support to learn and use action research in their work. This calls for a strong support

structure at school level, which could be support from the supervisors, the head teachers, School Inspectors as well as support from fellow teachers. Thus, a strong support structure is important and would do very well if anchored on head teachers who are inducted into action research.

The **fifth strategy** proposed by research participants was **promoting collaborative research** among teachers in a school and across different schools. Collaborative research is where two or more researchers pursue mutually interesting and beneficial research (Hendricks, 2009). Kemmis *et al.*, (2017) and Bolghari & Hajimaghsoodi (2017) describe collaborative research in the same way and further highlight the importance of collaboration of researchers on common issues for their benefit and improvement in performance. They point out that collaboration has increasingly become common for multiple institutions to work together on projects. This particular proposal works well in the school setting where teachers collaborate and work together to look for solutions for common challenges they face in their work.

The **sixth strategy** was to make **action research part of the mandatory training on research for teachers.** This proposal seemed to be based on the argument that new teachers after initial teacher education training, should come to schools already armed, knowledgeable in doing research, including action research. The leading institution in Zimbabwe on teacher education through the Scheme of Association with teacher education colleges has made the teaching of research, including action research, part of the mandatory courses for pre-service teacher training (University of Zimbabwe Department of Teacher Education, 2015). With an average of 17 years in the teaching field, research participants acknowledged that their training took place many years prior to the introduction of the 2015 guidelines on the teaching of research.

The **seventh strategy** was **making action research part of school-based staff development**. According to the research participants, this strategy ought to be backed by two mechanisms to strengthen and entrench school-based staff development. In school-based staff development, all teachers come together, learn together and one from the other with regard to resolving challenges they meet in their work, as well as supporting each other in their work. One of the mechanisms to ensure that school-based staff development becomes entrenched is to have Trainer-of-Trainers (ToTs) at cluster level to form a core group to support school-based staff development. The other mechanism is to equip and empower the District School Inspector (DSI) and School Inspectors (SIs) to spearhead action research training in refresher courses for

teachers for the teachers in their clusters and schools. Having this in place, would provide a strong base for a culture of school-based staff development sessions where external support was close and available at short notice.

With the exception of encouragement of collaborative action research, the strategies largely encouraged by research participants were unique, an addition to the frontiers of knowledge in the context of primary school teachers in Zimbabwe.

The findings from the responses to the fourth question demonstrated that the research participants were rich sources of data. They shared responses from their 'lived experiences'; they proposed strategies to make action research part of the teachers' continuous professional growth (Chisaka & Kurasha, 2012). Some of the strategies were in line with suggestions noted in the reviewed literature but others were novel to their circumstances and case study. From a methodological point of view, this was consistent with a case study design (Creswell, 2006).

6.4 OVERVIEW OF FINDINGS ON THE MAIN RESEARCH QUESTION

The findings from the first question were very much in line with the literature on self-efficacy (Bandura 1977; 1978 & 1997) and social transformative learning (Mezirow, 1991), teacher as a researcher (Stenhouse, 1975), and action research theory and practice (Kemmis *et al.*, 2014). Participants confirmed that action research was empowering, and ensured building of self-confidence. The participants felt empowered to identify problems and seek solutions. The empowerment contributed to their continuous professional growth. The research participants had a greater understanding of their educational practices. The findings with regard to the second research question on how the study participants applied action research in implementing the Competence Based Curriculum rolled out into schools in 2017, confirmed that action research promoted solution-oriented thinking. It enabled them to manage the change in the curriculum by offering them the opportunity to investigate and understand the changes and the challenges in the curriculum. Changes they met in the Competence Based Curriculum introduced in 2017 by the Ministry of Primary and Secondary Education (MoPSE) were viewed as manageable. In addition, the research participants considered their training in action research promoted reflective teaching and learning, assisting in identifying and promoting talents in learners so as to build their competencies.

Notwithstanding the benefits, the research participants indicated there were challenges, which included lack of training in action research when they were in initial teacher training; lack of monitoring, and technical support during the conducting of action research in their schools; and non-availability of resources on action research to guide them in their practice. While there were challenges, the research participants still found benefits of being empowered and developed in their profession through engagement in action research. As found by Chisaka and Kurasha (2012), action research promoted personal and professional growth and contributed to the practitioner's self-consciousness, beliefs and values (Hopkins, 2002; 2008).

The research participants provided a range of strategies useful to promote action research for continuous professional development on the job. Seven strategies were identified by research participants with some of the strategies being unique to the context of the research study while others suggesting promoting collaborative action research, facilitating teachers working together to address common problems and common challenges they meet in their day-to-day work (Bolghari & Hajimaghsoodi, 2017; Hendricks, 2009; Kemmis *et al.*, 2017).

6.5 RATIONALE FOR ACTION RESEARCH CONTINUOUS PROFESSIONAL DEVELOPMENT

There is world-wide research consensus on the significance of and justification for teachers' continuing professional development (Borko & Putman, 1995; Darling-Hammond, 1993; Desimone, Smith & Frisvold, 2007). In light of the findings discussed above, this section of the chapter presents reasons why CPD is important and why there is need for MoPSE to develop and implement a highly effective Continuous Professional Development framework built on action research.

Continuous Professional Development of teachers has been seen as one of the keys to improving the quality of schools (Desimone *et al.*, 2007). CPD has also been one of the critical mediators in the effectiveness of policy for teachers and teaching practice to always improve learner achievement (Hine, 2013). Furthermore, many reforms in education rely on teacher learning and improved instruction to increase student learning. Hence, in this vein, some researchers and scholars have seen education reform and teachers' professional development as two sides of the same coin (Hendricks, 2009). Thus, there can be no reforms in education and education quality improvement without related teachers' continuous professional development.

Effective professional development is meant to increase teachers' knowledge and skills required to improve their practice and ultimately increase learners' achievement (Kennedy, 2005). It is also meant to increase the levels of new knowledge and support new practice until they become embedded into the teachers' daily practices. That is, CPD improves teachers' knowledge and mastery of subject content, appropriate teaching methods, which greatly influence the quality of education through the quality of teachers, and teaching. Pedagogical knowledge, including knowledge of instructional strategies and learning processes, as well as subject content knowledge, need to be fused to create conceptual maps of how to teach a subject, anticipating students' understanding and potential misunderstanding.

According to Nishimura (2014), meaningful and sustainable professional development empowers teachers to engage and collaborate with their colleagues, to create communities of practice, and thereby break the isolation that teachers are prone to when they work in closed classrooms with their students. Because of continuing professional development, teachers are assisted to determine what and how to teach, what learners' work is acceptable, and what support to give to these learners. Further to this, avenues for professional dialogue with colleagues and discussions about practice are a valuable support system that helps not only to break isolation, but also to lower attrition and reduce the chances of burn out (Njenga, 2019).

CPD enables teachers to develop empathy for learners. It helps them to develop their values as professionals by rethinking the meaning of what they do and what counts as valuable (Njenga, 2019). Meaningful and effective professional development of teachers keeps the teachers up to date and to be adaptable in this fast-changing world. Rapid technology advancements in the contemporary world imply that teachers' stock of knowledge and pedagogical skills becomes obsolete in a short time (Nzarirwehi & Atuhumuze, 2019). Therefore, constant upgrading to keep abreast with modern trends and knowledge advancement is essential. Furthermore, continuing professional development helps teachers build a career and continuously verify their competencies and assure the public that they, as professionals, are up to date (Friedman & Phillips, 2004).

Investments in the quality of teachers, therefore, produce the highest increases in learning outcomes compared to other investments aimed at improving learning (Njenga, 2018). The competencies of teachers have been found to matter more than other factors such as school and class size and available physical facilities (Desimone, 2009).

Based on the rationale of Action Research Continuous Professional Development presented above, it can be concluded, subject to more localised research, that education quality and learner performance, have direct links to the quality of classroom teaching. The rationale for CPD can be summarised as follows:

- It increases teachers' knowledge and skills to improve their pedagogical practice and ultimately improve students' achievement;
- It is one of the keys to improving the quality of schools and schooling;
- Education reforms and teachers' professional development are seen by researchers as two sides of the same coin;
- It increases the levels of new knowledge and supports new practice until they become embedded in the teachers' daily practices;
- It promotes collaboration and creates learning communities among teachers, all of which help to mitigate teacher isolation and reduce attrition and burn out;
- It helps to develop teachers' professional values and ethical conduct; and
- It keeps teachers up to date and helps them to become adaptable in the fast-changing world.

From the above, it is clear that a national strategy and policy framework to guide CPD should be put in place. This is important for a comprehensive management and implementation structure to support structures; however, it needs to be well structured, well-coordinated, systematic and comprehensive CPD which is institutionalised (school-based, managed by head teachers, implemented by teachers and supported by teacher resource centres). Teachers need to be the main drivers in identifying their training needs and therefore, the Action Research Continuous Professional Development (ARCPD) strategy and framework should be teacher-centred.

6.6 SUGGESTIONS FOR FURTHER RESEARCH

The research in this research study focused on how action research training can be used as a professional development strategy to enhance effective classroom practices of primary school teachers in the context of Zimbabwe. This focus raised other related areas that need, investigation for a richer understanding of action research and its impact. One of the issues raised in the research study is that action research can positively influence learners'

achievement. This claim deserves focused research into this linkage or relationship between use of action research and learning results for a cohort of learners in the context of the research study.

Another aspect for further investigation is the claim of the linkage between school-based collaborative action research as part of teachers' staff development programmes and improved teaching and learning in school contexts. It would be strategic to establish what evidence there is in the context of the research to support this perspective.

The third area is the view that a whole-school approach creates learning in Communities of Practice (CoP) that are a good potential for promoting collaborative learning. This claim also needs exploration in the context of the research study to unravel any nuances critical for promoting use of action research in a framework for CPD.

6.7 CONCLUSION

This chapter synthesised the research findings in an attempt to answer the main research question, guided by the sub questions. The research findings showed that action research training had **three main benefits** for the teachers in the research study. The **first benefit** was that the teachers were empowered in problem identification and resolution. They were empowered on conflict resolution, evaluating and validating solutions, helping learners who lag behind others in the class. In addition, they felt empowered both inside and outside the classroom on applying action research to different situations. The **second benefit** was that the teachers felt empowered on professional growth in their work. This meant they had improved understanding of their practice, better understanding of learners' performance in the classroom, relations with other teachers, learners and community. Action research reinforced collaborative research with other teachers. They improved on their own research skills. The **third benefit** was that action training promoted their reflective thinking in three ways. They improved on self-critique, self-criticism and taking responsibility for their actions.

In addition to the benefits outlined above, action research was found applicable to deal with the Competence Based Curriculum, the competency-based curriculum. In this regard, **four issues** stood out. Action research promoted **solution-oriented thinking**, **reflective teaching and thinking**, **talent identification and management**, as well as **making change manageable**.

However, challenges were also identified and included. These included lack of training in action research for many teachers in the school system, a deficiency of knowledge and practice in action research at high levels in the ministry, a lack of adequate monitoring and support for teachers. Other challenges were poor action research documentation by teachers, non-availability of simple and readily available resources on action research, teacher apathy towards action research and teachers considered documentation of action research experience as time consuming, resistance to change and sticking to traditionalism, and the challenge of time-tabling action research training.

The challenges mentioned above were considered in the proposed Action Research Continuous Professional Development Framework (ARCPDF) for primary school teachers. In this regard, the strategies raised by the research study participants fed into the proposed framework, which is presented and discussed in the following chapter.

CHAPTER 7

A PROPOSED ACTION RESEARCH FRAMEWORK FOR CONTINUOUS PROFESSIONAL DEVELOPMENT FOR PRIMARY SCHOOL TEACHERS IN ZIMBABWE

7.1 INTRODUCTION

The final chapter of this research study presents a proposal for an Action Research Continuous Professional Development Framework (ARCPDF) for primary school teachers that can be used for their continuous professional development. This proposed framework is built on two foundations. One foundation is the findings of the research study presented in Chapter 5 and the other foundation is the theories presented and discussed in the literature review in Chapters 2 and 3 of this study.

In presenting the continuous professional development framework (Figure 7.1), this chapter advocates for the epistemological contribution of the characteristics and attributes of a framework that embraces action research. The characteristics are drawn from the views of the Bikita Quality Education project participants, who, in the study, linked their knowledge of reflection and reflective practices to the Bikita Quality Education Project. That project advocated the use of action research to develop and promote reflective practitioners. The research participants saw their training in, and practising of action research as promoting continuous professional development of primary school teachers having a major effect on their practice in the classroom.

The main aim of the proposed Action Research Continuous Professional Development Framework is to guide the continuous professional development programme by building on current theories such as transformative learning linked to Paulo Freire and critical reflective practice theory linked to Donald Schön. At the centre of the proposed Action Research Continuous Professional Development framework is reflective practice playing a significant role in equipping the teachers, head teachers and school inspectors with the knowledge and skill the teaching profession demands at all times.

The proposed Action Research Continuous Professional Development Framework attempts to address, as well as pre-empt the challenges identified in the research study on using action

research training to encourage continuous professional development of teachers. Thus, this final chapter builds on the theories underpinning the proposed framework for CPD. In addition, the chapter identifies the Ministry of Primary and Secondary Education as a critical stakeholder for the proposed Action Research Continuous Professional Development framework alongside the head teacher, the school inspector as well as any facilitator of continuous professional learning for the teacher. This is particularly important because of the opportunity presented by two tools of the competency-based curriculum.

The two tools for teachers are the Teacher Self-Assessment form and the Teacher Supervision form. The self-assessment form, which the teacher is encouraged to use, brings realisation to teachers of their own gaps where they need to upgrade and learn new techniques and skills. The Teacher Supervision form, used in supervising the teacher by either the head teacher or school inspector, checks if the teacher is using action research to improve themselves and their practice. The proposed framework is an attempt to respond to, and build on, the processes required by the two tools, both of which encourage the teacher to engage in.

7.2 THEORIES UNDERPINNING THE PROPOSED ARCPD FRAMEWORK

The researcher explored four theories that provide a theoretical framework that informs the study and the proposed framework. The four theories, are teacher efficacy (*cf.* 2.4.1), transformative learning (*cf.* 2.4.2), social constructivist theory (*cf.* 2.4.3) and the action research theory (*cf.* 2.4.4). These theories carry some philosophical assumptions, world-views on teaching and learning, and professional development of a teacher. However, it is the action research theory that has a strong bearing on the proposed framework. While the social efficacy, transformative learning and constructivist theories give the teacher some attributes, it is the action research theory that, as per the findings of the research study, made a major impact on the research participants. These theories underpin the proposed framework for continuous professional development as they have the potential of understanding the professional development of teachers and affecting the way teachers view themselves with regards to their teaching and consequently, the way they view their professional development. This then is the connection between the theories and the proposed framework for continuous professional development and they are briefly discussed in the subsequent sections.

7.2.1 Self-Efficacy Theory

According to Bandura (1997), teacher self-efficacy is important because it refers to the teachers' confidence in their ability to bring about success with all students, in the belief that when teachers believe, students can achieve. In this regard, self-efficacy refers to an individual's belief in his/her capacity to execute behaviours necessary to produce specific performance attainments (Bandura, 1997). La Cock (2014) referring to Bandura's theory, defines self-efficacy as an individual's belief in performing a variety of activities to attain his/her goal without challenges. The development of a positive perception of self-efficacy involved in psychological processes includes cognitive, motivational, affective and selection processes. Self-efficacy reflects confidence in the ability to exert control over one's own motivation, behaviour, and social environment. In this regard, self-efficacy is critical to the teachers' professional responsibility and commitment to understanding the effects of their teaching on students and to enhance student learning.

A successful teacher needs both high efficacy expectation and high outcome expectancy (Gavora, 2014). Bandura (1997) suggested four sources to enhance healthy feelings of teachers' self-efficacy. These are mastery of teaching experience, physiological and emotional states, social persuasion and vicarious experiences. Teachers continuously acquire and develop these attributes. Thus, individual's mastery of experience boosts self-esteem and motivation of the teacher (La Cock, 2014). The findings of this study depict that some elements that enhance teachers' self-efficacy need to be built into a continuous professional development framework. Therefore, the study suggests the inclusion of Bandura's self-efficacy theory in the proposed framework. As Bandura (1997) observes, a **highly motivated** teacher has **high self-esteem** which supports him/her in his/her work as well as professional development. The research findings showed that the teachers in the Bikita Quality Education Project developed confidence, had levels of high motivation and self-esteem. This is important and crucial for teachers who are continuously learning from their professional practice.

7.2.2 Transformative Learning Theory

Transformative pedagogy is a pedagogy combining the elements of constructivism and critical pedagogy (Mezirow, 2009). This pedagogy empowers learners to critically examine their beliefs, values, and knowledge with the goal of developing a reflective knowledge base and an appreciation of multiple perspectives. Transformative pedagogy inspires change and/or causes a shift in viewpoint.

As regards the transformative learning theory, there are three perspectives that contribute to understanding of how learning, including how professional development of teachers takes place. These are behaviourism, cognitivism and constructivism. These theories provide insights into how children learn and what teachers need to do to cause or contribute to learning. Over and above these theories of learning, professional development of teachers should be viewed in light of what is known about adult learning theory, which is usually referred to as andragogy (Korthagen, Kessels, Koster, Lagewerf & Wubbels, 2001). This study proposes using this theory in educating reflective teachers because transformative learning in adult education examines the expectations of adult learners, offering frames of reference for their thinking, feelings and actions (Illeris, 2009).

Transformative learning is initially challenging for practitioners who learn from their field experience and from the challenges encountered. In the process of transformative learning, practitioners become emotionally ready to change, and thus transform challenging frames of reference (mindsets, habits of mind, meaning, perspectives), sets of hypotheses and expectations to fuel them into developing more inclusive, selective, open, reflective frames of mind (Illeris, 2009). In short, *Transformative Learning Theory* forms the foundation for critical reflection and facilitates its contribution to professional development. Drawing from the findings of this research study, there is congruency with Mezirow (2009) who says transformative learning theory motivates teachers to learn from every challenging experience. Indeed, the findings of this research study concur with transformative learning theory in that research participants, after training in action research and using it in their day-to-day work, found **every challenging situation as an opportunity to learn**.

Boyd's (1991) *Transformative Education* and Freire's *Pedagogy of the Oppressed* published in 1970, are classics, and offer other perspectives of transformative learning. Unlike Mezirow's perspective, Boyd's transformative education is about exploring the role of unconscious psychology for individual's development, and Freire's transformation is the human theory of existence concerned with social transformation. However, all scholars agree on features of transformative learning of inquiry to include critical reflection, ideology, culture, perception and one's mentality, as means of professional development and problem solving. Mezirow (1991) identified useful methods and approaches to foster critical self-reflection in transformative learning and include critical incidents, recorded histories, personal journals, cooperative learning and action research (Illeris, 2009). The proposed Action Research

Continuous Professional Development Framework draws on these methods and approaches to develop reflective practitioners with reflective teaching. This theory contributes the attributes of **critical thinking, scaffolding/building meaning and reflective practices** that are critical in the proposed Action Research Continuous Professional Development Framework for continuous professional development of primary school teachers.

7.2.3 Constructivist Theory

The constructivist theory is built around the social construction of reality. Vygotsky is one of the key thinkers in this line of thought. This theory has as its basis a theory of knowledge in sociology and communication. In the theory, the development of understanding of the world is based on shared assumptions about reality. Vygotsky (1978) stressed the fundamental role of social interaction in the development of cognition. Vygotsky believed strongly that community plays a central role in the process of 'making meaning', thus, the theory suggests that humans construct knowledge and meaning from their experiences.

Jean Piaget and Jerome Bruner are education psychologists who contributed to the social constructionism school of thought. Both refer to scaffolding and drawing on Vygotsky's perspective, the scaffolding theory identifies the importance of providing students with enough support in the initial stages of learning new content. Hence, the idea that students should be active in the learning process motivates them to contribute to the process of constructing knowledge. This theory encourages the teacher to support learners in constructing their own meaning from their experiences. On reflection, the researcher finds that this perspective aligns with continuous professional development as teachers are encouraged to construct meaning from their experiences.

In addition, Sybil and Nahida (2012) link critical reflective practice with social constructive learning theory, drawn from Vygotsky. This means that adult learners construct new knowledge from their experience when their inquiry evolves into an experimental process, leading to creative and potentially inventive action and developing into critical thinking (Foucault 2002; Hsiung 2008, Illeris, 2009). Smith (2011) further explains that critical reflection is a thorough process which regards logical understanding of personal, interpersonal, and contextual aspects influencing what is practically performed or not performed in a particular context and community. Likewise, in social constructive theory, knowledge is defined as a socially constructed experience in a real context (Mascolo & Fischer, 2005). Thus,

critical thinking that leads to enquiry-based learning, socially constructed experience and **collaborative learning** in actual context are the basic elements that support the proposed Action Research Continuous Professional Development Framework of this study (Figure 7.1). These components are what scholars, Dewey (1933), Kolb (1984), Schön (1987), Wallace (1991) and Smith (2008) suggested in educating and developing reflective teachers.

7.2.4 Action Research

Action research refers to a wide variety of evaluative, investigative and analytical research methods designed to diagnose problems or weaknesses, whether organisational, academic, or instructional (Hopkins, 2008). In this regard, action research helps educators to develop practical solutions to challenges they meet or face in their practice. In other words, action research is initiated to solve an immediate problem or to engage in a reflective process of progressive problem solving. This can be done by individuals working with others in teams or as part of a 'community of practice' to improve the way they address issues and solve problems (Hendricks, 2006; Hopkins, 2008).

In action research, critical theory in education enables practitioners to view their actions closely and critically to bring about change in people's views and beliefs (McLaren, 2003; Pockett & Giles, 2008). One of the critical theorists, Giroux (1997) argues that principles of critical theory can be applied to teaching and learning in order to analyse and transform the educational context. With a similar view, McLaren (2003) argues that proponents of critical theory consider education as a critical spot for power dynamics to examine impacts of dominant ideologies on teaching and learning, including professional development. These theorists encourage teachers to construct democratic relationships between themselves and learners, their institutions and society, and classrooms and communities and make socially accountable arrangements.

Drawing from the Frankfurt School of critical theory, Fuchs (2015) argues that critique forms the ontology of critical theory. The epistemology of critical theory encourages educators to reflect on individuals' interconnectedness among schools, society and their culture. In general, it is a theory that is crucial to understanding human society and their communication in a changing world; thus, this is what reflective teachers need most. In this study, the teachers, in terms of their continuous professional development need to link what they learn in their short or long training programmes with their experience and the actual context in their schools and the communities (Korthagen *et al.,* 2001). Therefore, due to the fact that critical theory

integrates critical thinking, reflection and professional transformation in adult education, this theory is appropriate to being incorporated in the proposed Action Research Continuous Professional Development framework (Figure 7.1). Moreover, the central concept of critical thinking integrates the theories that underpin this study in educating reflective teachers in their continuous professional development.

Leach, Neutze and Zepke (2001) confirm that critical reflection is an attribute of professional development by following a carefully planned route of action to enable professionals to be critical towards their actions. Schön (1987) has highlighted the contribution of reflective practice for professional development as the basis of critical reflection. Schön (1983) makes it clear that the act of critical reflection promotes professional capabilities and insights to review one's own thinking, action and behaviour. With this understanding, this study gives **critical reflection** an important place in the proposed continuous professional development of primary school teachers.

Hendricks (2006) defines reflective teachers as action researchers striving for new findings with which to update and upgrade their practice. In this regard, reflective teachers want to improve their practice. Hopkins (2008) in asking why teachers conduct classroom research, explains that good teachers are not those who do what others have found out; but those who make professional judgements based on evidence obtained through their classroom research or structured enquiry. Therefore, in both pre-service teacher education programmes as well as in continuous professional development programmes, it makes sense to promote reflective teaching. In this regard, action research should be one of the activities in which reflective teachers become involved (Stringer, Christensen & Baldwin, 2010). Mezirow's transformative learning supports *action research* as a strategy giving teachers an opportunity to develop meta-cognitive learning and critical reasoning skills (Mezirow, 2009). From the findings in this study and the review of literature, action research is a powerful tool that can improve the quality of the teacher's practice. The action research can be conducted by the individual teacher or by collaborative action research by a group of teachers. Thus, it can be an individual tool, helping classroom teachers to either reconsider their teaching approaches or adapt in order to solve problems they encounter in their practice.

7.3 MOPSE AS A CRITICAL STAKEHOLDER OF CONTINUOUS PROFESSIONAL DEVELOPMENT

The Ministry of Primary and Secondary Education (MoPSE) is the most critical stakeholder in terms of continuous professional development because it formulates (in consultation with stakeholders) and guides the implementation of policy on teacher continuous professional development. In 2015, MoPSE published a set of documents that provide a structure and tools for continuous professional development of teachers. It is heartening that the tools incorporate the use of action research so that teachers continue investigating and learning from their practice in their classrooms. The researcher takes the view that these tools are fundamental for the proposed framework for continuous professional development.

In 2015, the Ministry of Primary and Secondary Education (MoPSE) published the following documents. These are the:

- Teacher Professional Standards (TPS) (MoPSE, 2015a)
- Handbook on Teacher Professional Standards (MoPSE, 2015b)
- Training Manual on Teacher Professional Standards (MoPSE, 2015c).

The three documents are related and were to be used in preparing teachers for the newly-introduced expectations by the Ministry of Primary and Secondary Education (MoPSE). The Teacher Professional Standards (TPS), published in 2015 (MoPSE, 2015a), provides every teacher with a benchmark against which they are assessed, and can assess themselves and their performance. The stipulated standards serve as the basis for the provision of appropriate support for the teachers' long-term career development. In short, the TPS provides a framework that gives direction and structure to guide the preparation, support, continuous professional development and evaluation of teachers (MoPSE, 2015a). The Handbook on Teacher Professional Standards, published in 2015 (MoPSE, 2015b), articulates the background and purpose of the Teacher Professional Standards (TPS). The TPS are useful to teachers in several ways as they provide benchmarks for self-assessment of teacher performance, as well as benchmarks for measurement of teacher performance in addition to offering opportunities for quality curriculum delivery through improved teaching and learning. Above all, the TPS provides a basis for teacher continuous professional development (MoPSE, 2015c).

At the same time, supervision instruments were introduced to teachers during the training on Teacher Professional Standards (TPS). The instruments included the:

- Report on a School Head
- Report on a Teacher
- Report on a Head of Department (secondary school)
- Report on a Teacher-in-Charge (primary school), and the
- Teacher Professional Standards Self-Assessment Tool

These documents look for and encourage reflective practices. Two of these instruments speak to the research study, the Teacher Professional Standards Self-Assessment Tool and the Report on the Teacher. Thus, these two documents provide a great potential for the aim of this research study, which is to propose an Action Research Training for Continuous Professional Development Framework (ARCPDF) for primary school teachers.

7.4 POTENTIAL IN THE NEW CONTINUOUS PROFESSIONAL DEVELOPMENT PLAN ON PRACTICE

In this section of the chapter, I present and discuss two tools that the Ministry of Primary and Secondary Education (MoPSE) introduced alongside the Competence Based Curriculum. The two tools are the Teacher Professional Standards Self-Assessment (Appendix N) and the Narrative Supervision Report on a Teacher (Appendix O).

7.4.1 Teacher Professional Standards Self-Assessment Tool

The TPS standards guide the teacher in carrying out self-assessment and to identify areas for growth and further professional development for the teacher and work in conjunction with the Teacher Professional Standards Self-Assessment Tool, attached as Appendix N,

On a close look at the Teacher Self-Assessment for Professional Development, it is clear that the tool guides the teacher to reflect on practice, assess own performance, and identify gaps and development needs. This information is then used to develop a professional development plan (PDP). According to the TPS Self-Assessment Tool, one way for the teacher to consider strengths and weaknesses is to respond to focused guiding questions related to effective professional practices, as stipulated in the Teacher Professional Standards. The TPS has three main domains, each with its own sub-domains and it is one these on which the questions are

based. While the tool is confidential and is not meant to be an external tool for evaluation, it provides an opportunity for the teacher to be honest in the assessment for self-improvement. The TPS guidelines encourage the teacher to do the self-assessment with a trusted friend or colleague to allow for additional discussion and reflection. Based on an analysis of the teacher's own responses, development needs and training gaps are identified and from these, a personal professional development plan is developed, as noted earlier.

In the context of this research study, this tool aligns with the proposed Action Research Framework Continuous Professional Development Framework (ARCPDF) by encouraging reflection, self-critique and planning actions for personal continuous professional development.

7.4.2 Report on the Teacher

The TPS instruments, consisting of four reports (*cf.* Section 7.3), one of which is a specific Narrative Supervision Report on the Teacher (*cf.* Appendix O). The report is composed of six sections, namely Personal details, Institutional details, Professional knowledge and Understanding, Professional Skills and Abilities, Professional Values and Personal Commitment and Conclusion and Recommendations (MoPSE, 2016). Section D of the Narrative Report on the Teacher has three inter-related sections on Teaching and learning, Classroom organisation and Teacher personal reflection and communication.

The third aspect of this section, 'Teacher personal reflection and communication', has three, inter-related components, namely: Self-evaluation, Classroom-based Action Research, and Evidence of communication. It is in this Section D of the Narrative report on a Teacher (*cf.* Appendix O) where it is explicit that in the supervision report, the supervisor, in this case the school head or school inspector, engages the teacher on classroom-based action research being done to enhance the teaching, understand the challenges faced and proffer solutions as opposed to waiting for someone to provide solutions. The tool calls for classroom-based action research, which this study has explored and proposes to be used to provide continuous professional development for the teacher. Hence, the use of this supervision tool is incorporated into the critical thinking and reflection of the proposed Action Research for Continuous Professional Development Framework. The proposed framework is presented below in Figure 7.1.

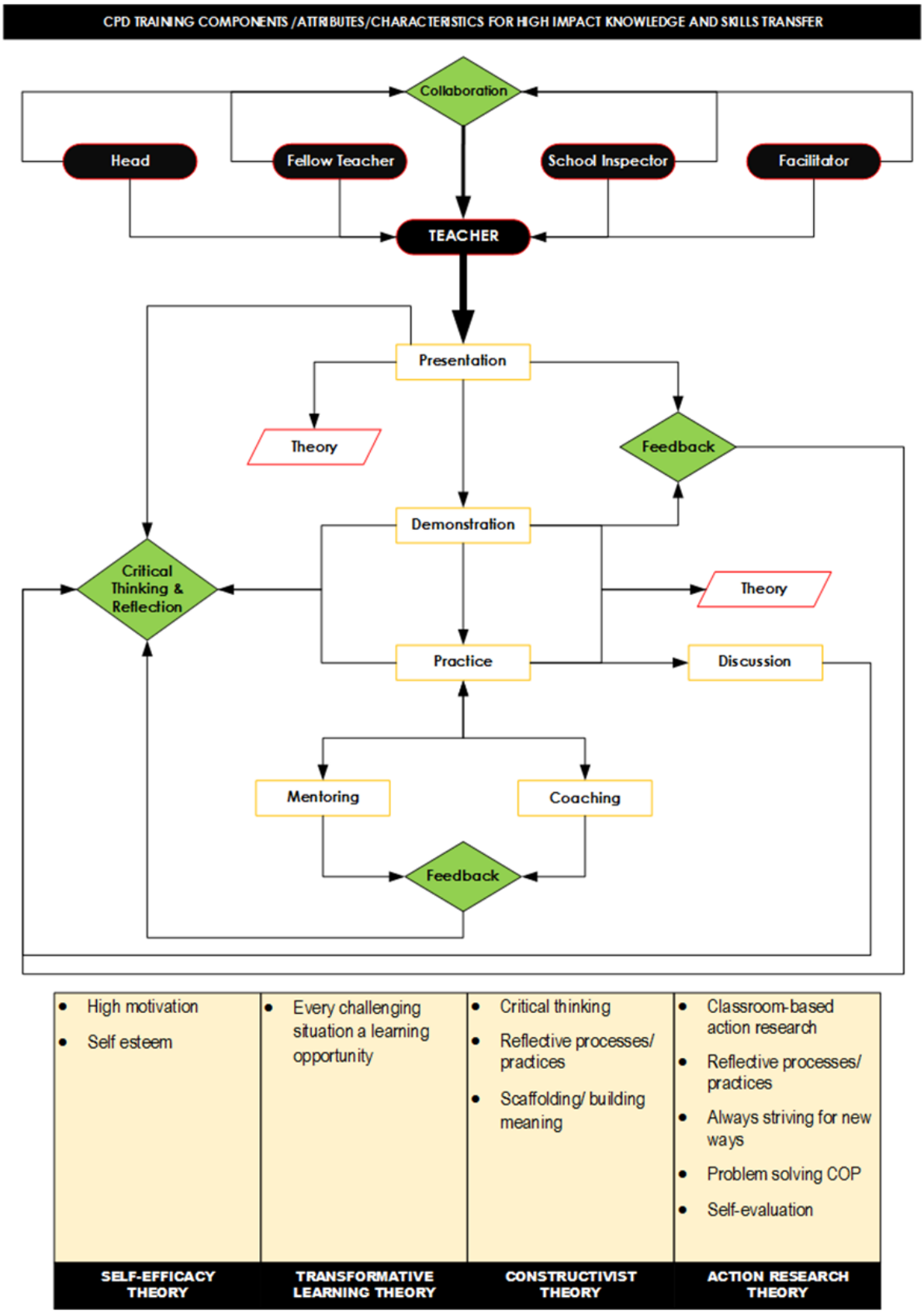

Figure 7.1: Proposed Action Research Continuous Professional Development Framework (ARCPDF) (Mukabeta, 2020)

The proposed Action Research Continuous Professional Development Framework, based on the findings of the research study, is a hybrid of the progressive trend of research and thought, building on the theories of self-efficacy, transformative learning, constructivist learning and action research. These theories each build on the foundation of the other and, in the view of the researcher, seem to flourish with critical thinking and reflective practices that are encouraged and brought about by continuously engaging in classroom-based action research. The findings of the research study, and evidence drawn from participants in the Bikita Quality Education Project, pointed to this view.

The proposed Action Research Continuous Professional Development framework (ARCPDF) also builds on the training attributes and combinations for high impact continuous professional development, as suggested by Rhodes and Houghton-Hill (2000). Rhodes and Houghton-Hill (2000) explain that the training attributes for high impact knowledge and skills transfer on the teacher professional development are theory, demonstration, practice, feedback, and coaching. From this research, the proposed framework for Action Research Training Continuous Professional Development (ARCPD) takes on board the attributes that Rhodes and Houghton-Hill (2000) proposed with continuous professional development being underpinned by the theories that support the development of reflective teaching and learning practices as part of teachers' professional development. In this regard, the researcher incorporates critical thinking and reflection, active learning, practice-oriented teaching and learning, experiential learning, modelling and co-operative learning as characteristics of professionals in the classroom. However, the success of the proposed framework needs the attention of the stakeholders, careful planning, inclusiveness, collaboration, clear policy guidelines and tools for a competent reflective primary school teacher. This proposed framework builds on the outcomes the tools, Self-Assessment Tool (Appendix N) and the Report on the Teacher (Appendix O) to encourage and promote reflective teaching.

7.6 FINAL WORD

In order to develop the knowledge and skills of reflection, practitioners need to be involved in activities, which give them the opportunity to reflect. Loughran (2005) claims that if teachers are to value reflective practice as a worthwhile attribute for their professional development, they must experience it as a logical consequence of learning to teach and as a tool to unpack and learn from the uncertainties of practical experience, rather than as a generalised and close-

ended process. Thus, learning to be reflective should be part of both pre-service teacher education and continuous professional development for teachers. From the findings of this research study, for in-service learning to be reflective, it should have attributes inclusive of **theory**, **demonstration**, **practice**, **coaching**, **mentoring**, **critical thinking**, **reflective practice,** as these are critical. The research participants linked their reflective practice to the action research being conducted in their classrooms, on their practice in collaboration with other teachers. This resonates with Dewey (1933) who stated that learning from experience occurs when practitioners are able to reflect on experience and Chitpin (2006) reminds us that learning from experience means a lot to the practitioner when there is continuous reflection, with constructive feedback from fellow teachers, supervisors and learning something new as a result.

Moon (2013) defines reflective practice as a set of skills that implies taking critical learning and performing stances and orientations into a problem-solving state of mind. Ghaye (2011) affirms that a reflective learning programme, including continuous professional learning, should incorporate four categories of learning: affective learning, cognitive learning, social learning and positive action learning. Skills in affective learning describe emotional reaction and the ability to experience. The revised Bloom's taxonomy (Anderson & Krathwohl, 2001) includes six cognitive dimension of learning skills: remembering, understanding, applying, analysing, evaluating and creating. Social learning skills are needed as well for reflective practitioners as they work with learners in real social contexts. Thus, collaboration becomes one of the important skills in reflective teaching and learning. Reflective practice needs positivity and open-mindedness among the practitioners. In a general sense, critical thinking skills are the most crucial aspects in training reflective professionals.

The researcher, has ventured on this journey, to propose an Action Research Continuous Professional Development Framework building on action research for continuous professional development of the primary school teacher. The proposed Action Research Continuous Professional Development Framework responds to the Teacher Supervision Instrument and Teacher Self-Assessment Tool. In addition, the proposed framework promotes reflection and reflective practitioner practices aligned with the objectives of the competency-based curriculum introduced by MoPSE. This curriculum places emphasis on reflective practitioners, who should be proactive in evaluating their performance and improving their practice. Lessons learnt from the literature and the participants of the study, gave the researcher the opportunity

to deepen his knowledge, skills of reflection and learn from the Bikita Quality Education Project experience to improve practice as a reflective practitioner. This thesis, investigating how action research training helps teachers develop reflective skills, has connected relevant points and led to the development of a conceptual framework on continuous professional development for primary school teachers. A reflective continuous professional development programme should incorporate theory, demonstration, practice, reflection, critical thinking because reflective practice cannot simply be taught; it should be practised-in-action (Schön, 1987). The proposed teacher Action Research Continuous Professional Development Framework (Figure 7.1) incorporates these attributes.

The basic concepts for continuous professional development of teachers are the concepts of *Reflection-before-action, Reflection-in-action* and *Reflection-on-action* (Moon, 2008). Reflection-for-action is thinking about future actions with the intention of improving or changing a practice. This type of reflection requires teachers to anticipate what will occur during a lesson, as well as reflect on their experiences in order to learn from that experience, before the next lesson occurs (Farrell, 2013). Reflection-in-action means to think about or reflect while you are carrying out the activity. This is typical when something is going wrong or you meet something out of the ordinary and you cannot help yourself thinking about it and taking action. However, practitioners rarely formalise this process (Moon, 2008; Farrell, 2013). For reflective practitioners, this is a seamless activity. In other words, reflection-in-action implies that the teacher gets engaged in on-the-spot critical thinking. This reflection and critical thinking helps to figure out what has been done, right or wrong. Then, it gives direction for further reflection, decision-making and action (McGregor, 2011; Schön, 1983). Reflection-on-action, however, means thinking about the practice undertaken during and after the event and turning that information into knowledge to inform practice, implying deliberate and planned action, thinking back on what has happened during the last teaching experience:

> Reflection-on-action is the retrospective contemplation of practice in order to uncover the knowledge used in a particular situation, by analysing and interpreting the information recalled. The reflective practitioner may speculate how the situation might have been handled differently and what other knowledge would have been helpful (Burns & Bulman, 2000:5).

It cannot be further emphasised that critical reflection is the corner stone of continuous professional development of practitioners, teachers included.

REFERENCES

Ado, K. 2013. Action research: professional development to help support and retain early career teachers. *Journal of Educational Action Research.* 212, 131-146.

Anderson, L.W., & Krathwohl, D.R. 2001. A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. New York: Longman.

Archer, A.L. & Hughes, C. 2011. *Explicit Instruction: Effective and efficient teaching.* New York. Guilford Press.

Bandura. A. 1977. Self-efficacy: Toward a unifying theory of behavioural change. *Psychology Review*. 84, 191-25.

Bandura, A. 1978. Reflections on self-efficacy. In S. Rachman ed. *Advances in behaviour research and therapy.* Vol. 1, pp. 237-269. Oxford. Pergamon.

Bandura, A. 1986. Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. 1997. Self-efficacy: The exercise of control. New York. Freeman.

Baxter, J. & Eyles, J. 1997. Evaluating qualitative research in social geography: Establishing "Rigor" in interview analysis. *Transaction of the British* Geographers 22 4: 505-525.

Bazeley, P. 2013. *Qualitative Data Analysis: Practical Strategies*. London: Sage.

Bazeley, P. & Jackson, K. 2013. *Qualitative Data Analysis with NVivo*. (2nd ed.). London. Sage

Bellamy, C. 2012. *Principles of methodology: Research design in social science*. London: Sage.

Berg, B. L. & Lune, H., 2012. *Qualitative Research Methods for the Social Sciences*. USA: Pearson.

Bernard, H.R. 2013. *Social research methods: Qualitative and quantitative approaches* (2nd ed.). Thousand Oaks, CA: Sage

Bernard, H.R., Wutich, A. & Ryan, G.W. 2017. Analyzing qualitative data: Systematic approaches. Thousand Oaks, CA: Sage.

Better Schools Programme in Zimbabwe (BSPZ). 1995. Training and Support for Teachers, Heads and Education Officers. Module A. Information and Awareness. Harare: Ministry of Education and Culture.

Better Schools Programme in Zimbabwe (BSPZ). 2000. Better schools programme, Zimbabqwe: a manual on resource centres Module C. Harare: Ministry of Education and Culture.

Beyer, L. 2002. The Politics of Standardization: teacher education in the USA. *Journal of Education for Teaching*. 28, 239-245.

Birman, B.F., Desimone, L., Porter A.C. & Garet, M.S. 2000. Designing professional development that works. *Educational Leadership,* 578: 28-33.

Bloomberg, L.D. &Volpe, M. 2012. *Completing your qualitative dissertation: A roadmap from beginning to end* (2nd ed.). Los Angeles: Sage.

Boeije, H. 2010. *Analysis in qualitative research.* Los Angeles, CA: Sage.

Bogdan, R.C. & Biklen, S.K. 1982. *Qualitative Research for Education: In Introduction to Theory and Method.* Boston, MA: Allyn and Bacon.

Bogdan, R.C. & Biklen, S.K. 2007. Qualitative *Research for Education: An introduction to Theory and Methods*. (5th ed.). Boston, MA: Allen and Bacon.

Bolghari, M. S. & Hajimaghsoodi, A. 2017. Action Research as a Bottom-up Approach to Foster Teacher Involvement in Language Curriculum Change. *In Journal of Language teaching and Research*. 82 pp 362-369. DOI:http://dx.doi.org/10.17507/jltr.0802.20

Boreham, N. 2004. A Theory of Collective Competence: challenging the neo-liberal individualisation of performance at work. *British Journal of Educational Studies*. 52, 5-17.

Borko, H., & Putnam, R. T. (1995). Expanding a teacher's knowledge base: A cognitive psychological perspective on professional development. In T. R. Guskey & M. Huberman (Eds.), *Professional development in education: New paradigms & practices* (pp. 35-66). NY: Teachers College Press.

Borko, H. & Whitcomb, J. & Byrnes, K. (2007). Genres of Empirical Research in Teacher Education. *Journal of Teacher Education.* 58(1). 10.1177/0022487106296220.

Boyd, R.D. 1991. *Personal transformation in small groups*. London. Routledge.

Boyle B., Lamprianou I., & Boyle T. 2005. A longitudinal study of teacher change: What makes professional development effective? Report of the second year of the study. *School Effectiveness and School Improvement,* 161, 1-27.

Brannen, J., 2017. *Mixing methods: Qualitative and quantitative research*. Abingdon: Routledge.

Brennen, B.S. 2017. *Qualitative research methods for media studies*. New York: Taylor and Francis.

Brock-Utne B, Banda D, Matafwali B & Dirwai C. 2014. *From Blaming to Reflecting. An evaluation of the Quality Education Project QEP in Zimbabwe and Zambia.* Save the Children Norway. Oslo.

Bryman, A. 2015. *Social research methods* (5th ed.). Oxford University Press.

Bryman, A. & Bell, E. 2015. *Business Research Methods.* University Press, Oxford, New York.

Burbank, M.D. & Kauchack, D. 2003. An Alternative Model for Professional Development: Investigations into effective collaboration. *Teaching and Teacher Education*. 19, 499-514.

Burns, M. 2007. *Assessing teachers' professional development needs: Data from four Indian states.* Bangalore, India: Education Development Centre.

Burns, M. 2011. *Distance education for teacher training: Modes, models and methods.* Retrieved from http://go.edc.org/07xd

Burns, M. 2012. *Technology, teaching and learning: Research, experience and global lessons learned*. Retrieved from http://tinyurl.com/ldfqsya or http://www.mehe.gov.lb/Uploads /file /TTLA.pdf

Burns, M. & Dimock, K.V. 2007. *Technology as a catalyst for school community: Beyond boxes and bandwidth*. Lanham, MD: Rowman & Littlefield Press.

Cain, T. & Harris, R. 2013 Teachers' action research in a culture of performativity. *Educational Action Research,* 21(3), 343-358. ISSN 17475074 doi:10.1080/09650792.2013.815039

Calderhead, J. & Gates, P. 2005. (eds.) *Conceptualising Reflection in Teacher Development*. London. Falmer Press.

Chan, J. C. Y. & Lam, S. 2010. Effects of different evaluative feedback on students' self-efficacy in learning. In Instructional Science. 381, 37-58.

Chiome, C. 2011. Preparing School Leaders for a Changing World: Lessons from Zimbabwe. Chapter 26 in Townsend, T and MacBeath, J. (eds.) *International Handbook of leadership for Learning*. London: Springer.

Chiromo, A.S. 2007. A History of Teacher Education in Zimbabwe, 1939-1999. Harare. University of Zimbabwe Publications.

Chisaka, B.C. 2006. *Practical and Theoretical Issues in Action Research*. A paper presented at the Save the Children Norway Quality Education Project Workshop, Bikita Public Service Training Centre, Masvingo Province, 7 March 2006.

Chisaka, B.C. 2007. Ability *Streaming: A Stumbling Block to Teaching and Learning.* University of Zimbabwe Publications. Harare.

Chisaka, B.C. 2008. *What is story telling in action research?* Quality Education Project Workshop, Masvingo Teachers' College, 27 – 28 November 2008.

Chisaka, B.C. 2016. Reflective Teachers: The Quality Education Project QEP. Experiences and the ACTION Research Story in four countries. Harare. Save the Children.

Chisaka, B.C. & Mavundutse, O. 2003. *Report on a baseline study to inform the Bikita Quality Education*. Harare. Save the Children Norway.

Chisaka,B. C. & Kurasha, P. 2012. The role of action research in the promotion of quality education: Reflecting on the Save the Children Norway Quality Education Project in Zimbabwe Bikita and Ethiopia Amhara Region. *In the Zimbabwe International Journal of Open and Distance Learning, International Research Conference – Special Edition. pp 5-9.*

Chitpin, S. (2006). The use of reflective journal keeping in a teacher education program: a Popperian Analysis. *Reflective Practice*, 7(1): 56-67.

Chivore, B.R.S. 1994. *The effectiveness of the primary school teacher in Zimbabwe*. Gweru. Mambo Press.

Coghlan, D. & Brannick, T. 2005. *Doing action research in your own organisation.* London: Sage.

Cohen, L. & Manion, L. 1996. *Research methods in education*. London. Routledge.

Cohen, L., Manion, L. & Morrison, K. 2011. *Research Methods in Education* (7th ed.). London Routledge.

Cohen, L., Manion, L. & Morrison, K. 2017. *Research Methods in Education* (8th ed.). London, Routledge.

Colucci-Gray, L., Das, S., Gray, D. & Spratt, J. 2013. Evidence-based practice and teacher action-research: a reflection on the nature and direction of 'change'. *British Educational Research Journal.* 3(1), 126-147.

Commonwealth of Learning Secretariat. 1993. Handbook for Country Working Groups. London.

Creswell, J.W. 2006. *Qualitative research and design: Choosing from five traditions.* Thousand Oaks, CA: Sage

Creswell, J.W. 2013. Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: Sage.

Creswell, J.W. & Poth, C.N. 2017. *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.

Crotty, M. 2014. *The Foundations of Social Research: Meaning and Perspectives in the Research Process*. Thousand Oaks, CA: Sage.

Darling-Hammond, L. 1993. Introduction. *Review of Research in Education.* 19(1), xi-xxiii. https://doi.org/10.3102/0091732X019001011

Davids, M. N. 2014. Is action research coming of age? The value of a historical action research project in professional teacher development in Yesterday & Today. No. 11. July 2014. *South African Society for History Teaching* SASHT. p. 2 – 20.

Davies, L., Harber, C. & Schweisfurth, M. 2005. *Democratic Professional Development.* Birmingham: CIER/CfBT.

Day, C. 1999. *Developing Teachers: the challenges of lifelong learning*. London: Falmer Press.

De Vos, A. S.; Strydom, H.; Fouche, C. B.; & Delport, C. S. I. 2003. *Research at grassroots: For social sciences and human service professions*. Pretoria: van Schaik.

Deepak, C. & Nisha, S. 2015. *Analytical Chemistry: A Qualitative and Quantitative Approach.* University Institute of Pharmacy. Kanpur.

Denzin, N.K. & Lincoln, Y.S. (eds.). 2000. *Handbook of Qualitative Research.* London. Sage.

Denzin, N.K. & Lincoln, Y.S., 2008. *Collecting and interpreting qualitative materials*. London: Sage.

Department of Education (DoE). 2006. The National Policy Framework for Teacher Education and Development in South Africa. Pretoria.

Department of Teacher Education. 2015. *Handbook for Quality Assurance in Associate Teachers' Colleges*. Harare. University of Zimbabwe.

Desimone, L.M. 2009 Improving Impact Studies of Teachers' Professional Development: Towards Better Conceptualizations and Measures. *Educational Researcher,* 382, 181-199. https://isidore.undayton.ed/.../EDT650/readings/Desimone_Laura_Mpdf downloaded on 3 March 2020.

Desimone, L., Smith, T. & Frisvold, D. (2010). Survey Measures of Classroom Instruction. Comparing Student and Teacher Reports. Educational Policy - EDUC POLICY. 24. 267-329. 10.1177/0895904808330173.

Desta, D., Chalchisa, D., Mulat, Y., Berihun, A. & Tesera, A. 2009. Enhancing active learning through self- and peer reflections: The case of selected schools in Ethiopia. *Journal of International Cooperation in Education,* 121,71 - 87

Detert, J.R., Seashore, L.K. & Schroeder, R.G. 2001. A culture framework for education: Defining quality values and their impact in U.S. high schools. *School Effectiveness and School Improvement.* 12(2(, 183-212. https://doi.org/10.107/sesi

Dewey, J. 1933. *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process*. Chicago, IL: Henry Regney.

Dudovskiy, J. 2015. Stratified Sampling. Retrieved from *Research Methodology.net* https://research-methodology.net/sampling-in-primary-data-collection/stratified-sampling/ accessed 2 June 2019.

Edwards-Groves, C. & Kemmis, S. 2016. Pedagogy, Education and Praxis: understanding new forms of intersubjectivity through action research and practice theory. *Educational Action Research*. 241, 76-96.

Eisner, E.W., 2017. *The enlightened eye: Qualitative inquiry and the enhancement of educational practice.* New York: Teachers College Press.

Elfenbein, H.A. 2007. '7 Emotion in Organizations', The Academy of Management Annals., 1(1), 315-386. DOI: 10.1080/078559812

Elliot, J. 1991. *Developing Teachers and teaching: Action Research for Educational Change.* Open University Press. Milton Keynes.

English, L.M. & Irving, C.J. 2012. Women and Transformative Learning. Chapter in Taylor, E. W & Craton, P. eds. *The Handbook of Transformative learning. Theory, Research and Practice.* San Francisco: John Wiley & Sons.

Farrell, T.S.C. 2013. Reflecting on ESL Teacher Beliefs and Classroom practices: A case study. https://doi.or/10.1177/00336882133488463

Fisher, C.D. *2010*. Happiness at Work. International Journal of Management Reviews, 12, 384-412. http://dx.doi.org/10.1111/j.1468-2370.2009.00270.x.

Fiske, E.B. & Ladd, H.F. 2004. *Elusive Equity: Education reform in Post-apartheid South Africa.* Washington: Brookings Institution Press.

Flick, U. 2018. An introduction to qualitative research. Thousand Oaks, CA: Sage.

Folley, L. 2012. *Constructing the respondent.* In J. F. GubriumJ. A. Holstein & A. B. Marvasti. eds. The SAGE handbook of interview research: The complexity of the craft pp. 305-316. Thousand Oaks, CA: Sage.

Fook, J. 2007. Reflective Practice and Critical Reflection. In J. Lishman Ed., *Handbook for Practice Learning in Social Work and Social Care, Second Edition: Knowledge and Theory.* pp. 363-75. Jessica Kingsley.

Foucault, M. 2002. *The Archaeology of Knowledge*. London: Routledge.

Freire, P. 2000. *Pedagogy of the oppressed*. (30th ed.). New York. The Continuum International Publishing Group.

Friedman, A. & Phillips, M. 2004. Continuing Professional Development: Developing a Vision. *Journal of Education and Work.* 173, 361-376. https://doi.org/10.1080/1363908042000267432

Fuchs, C. 2015. *Social Media: A Critical Introduction*. London: Sage.

Fullan, M. (1991). *The New Meaning of Educational Change*. Toronto: Teachers College Press.

Garet, M.S., Porter, A.C., Desimone, L., Beirman, B.F. & Yoon, K.S. 2001. What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal,* 38(4), 915-945.

Gavora, P. 2010. Slovak pre-service teacher self-efficacy: Theoretical and research considerations. *The New Educational Review.* 212, 17-30.

Gavora, P. 2014. Measuring self-efficacy of in-service teachers in Slovakia. *Orbis Scholae*, 52,

Ghaye, T. 2011. *Teaching and Learning through Reflective Practices: A practical guide for positive action*. London: Routledge.

Giroux, H. 1997. *Pedagogy and the politics of hope: Theory, culture and schooling*. Boulder: Westview Press.

Glaser, B.G. & Strauss. A.L. 2017. *Discovery of grounded theory: Strategies for qualitative research*. Abingdon: Routledge.

Glenn, A. B. 2009. Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 92: 27-40, https://doi.org/10.3316/QRJ0902027

Goddard, R.D., Hoy, W.K. & Hoy, A.W. 2000. Collective Teacher Efficacy: Its Meaning, Measure, and Impact on Student Achievement. *American Educational Research Journal.* 372, 479-507.

Golafashani, N. 2003. *'Understanding reliability and validity in Qualitative Research'* in The Qualitative Report. Vol. 8 Number 4. Pages 597 – 607. http://www.nova.edu/ssss/QR/QR8 Downloaded 24/12/2015

Goleman, D., Boyatzis, R. & McKee, A. 2002. *Primal Leadership: Realizing the Power of Emotional Intelligence.* Harvard Business School Press, Boston.

Graneheim, U. H. & Lundman, B. 2004. *Qualitative Content Analysis in Nursing Research: Concepts, Procedures and Measures to Achieve Trustworthiness* in Journal of Nursing Education Today, 24 2 105- 112.

Harber, C. 1997. *Education, Democracy and Political Development in Africa.* Brighton. Sussex Academic Press.

Harber, C & Stephens, D. 2010. *From Shouters to Supporters. Quality Education Project – Final Evaluation Report.* Save the Children Norway. Oslo.

Harding, K. 2009. Continuous Professional Development. *Modern English Teacher*. Vol. 18(3)

Hendricks, C. 2006. *Improving schools through action research. A Comprehensive Guide to Educators*. Boston. Pearson.

Hendricks, C. 2009. Using Action Research to Improve Educational Practices. *Journal of Curriculum and Instruction*. 3(1), 1-6.

Hensen, K.T. 1996. Teachers as researchers. In J. Sikula (ed.) *Handbook of research on teacher development.* (4th ed.). pp 53-66. New York: Macmillan.

Higgs, P. 1995. Metatheories in Philosophy of Education: An overview. In P. Higgs. ed.. Metatheories in Philosophy of Education. Johannesburg: Heinemann.

Higgs, P. & Smith, J. 2002. *Rethinking truth*. Cape Town: Juta.

Hine, G.S.C. 2013. The importance of action research in teacher education programs. *Issues in Educational Research Special issue*, 23(2), 151-163.

Hoban, G. F. 2002. Teacher Learning for Educational Change. Buckingham. Open University Press.

Hoberg, S.M. 2001. *Research methodology***.** Pretoria. UNISA.

Hopkins, D. 2002. *A teacher's guide to classroom research* (3rd ed.). Maidenhead: Open University Press.

Hopkins, D. 2008. *A teacher's guide to classroom research.* (4th ed.). Maidenhead: Open University Press

Howell, K.E. 2013. *An introduction to the philosophy of methodology.* London, Sage.

Hsiung, P. 2008. Teaching reflexivity in qualitative interviewing. *Teaching Sociology* 36:211_26. https://www.tandfonline.com/doi/full/10.1080/19415257.2019.1580849 accessed 28.02.2020

Huber, M.J., Fruth, J.D., Avia-John, A. & Lopez-Ramirez, E. 2016. Teacher Self-Efficacy and Student Outcomes: A Transactional Approach to Prevention. *Journal of Education and Human Development.* 51, 46-54.

Illeris, K. 2009. *Contemporary Theories of Learning*. London: Routledge.

Johannessen, E.M. 2001. *Final report of the Thematic Evaluation of Basic Education.* Save the Children Norway. Oslo.

Johnson, A.P. 2012. *A short guide to action research*. (4th ed.). New Jersey: Pearson.

Johnson, P & Cassell, C. 2001. Action research: Explaining the Diversity. *Human Relations*, 59(60), 783-814.

Kelly, P.P. & Williamson, M.G. 2002 Decentralisation of professional development: teachers' decisions and dilemmas. *Journal of In-Service Education*, 283, 409-426.

Kemmis, S. 2006. Participatory Action Research and the Public Sphere. *Educational Action Research*. 144, 459-476.

Kemmis, S. & McTaggart, R. 1988. *The action research planner*. (3rd ed.). Geelong. Deakin University Press.

Kemmis, S., McTaggart, R. & Nixon, R. 2014. The action research planner: doing critical participatory action research. Singapore. Springer.

Kennedy, A. 2005. Models of Continuing Professional Development: a framework for analysis. *Journal of In-service Education*. 312, 235-250.

King, F. 2019. Professional Learning: empowering teachers? *Professional Development in Education.* 45(2), 169-172.

Kirk, G., Beveridge, W. & Smith, I. 2003. *Policy and practice in education: the chartered teacher*. Edinburgh: Dunedin Academic Press.

Kolb, D.A. 1984. *Experiential learning: Experience the source of learning and development.* Vol 1. Englewood Cliffs, NJ., Prentice Hall. https://www.simplypsychology.org/learning-kolb.html accessed 1 May 2019.

Korthagen, F.A.J, Kessels, J., Koster, B., Lagerwerf, B. and Wubbels, T. 2001. *Linking Practice and Theory: The Pedagogy of Realistic Teacher Education.* London: Routledge.

Koshy, V. 2010, *Action Research for Improving Educational Practice*. A Step-by-step guide. (2nd ed.). London: Sage.

Kothari, C.R. 2016. *Research Methodology: Methods and Techniques.* New Delhi: New Age International Publishers.

Kowal, S. & O'Connell, D. C. 2014. *Transcription as a crucial step of data analysis.* In The SAGE Handbook of Qualitative Data Analysis. London. Sage.

Kumar, R. 2011. *Research Methodology A Step-by-Step Guide for Beginners*. (3rd ed.). New Delhi: Sage.

La Cock, Y. 2014. *Facilitating the self-efficacy of primary school teachers in Mpumalanga : a perspective from lifelong learning, University of South Africa*, Pretoria, http://hdl.handle.net/10500/13696

Lampard, R. & Pole, C. 2015. *Practical social investigation: Qualitative and quantitative methods in social research.* New York, NY: Routledge.

Leach, L., Neutze, G. & Zepke, N. 2001 Assessment and Empowerment: some critical questions. *Assessment & Evaluation in Higher Education*, 26:4 2001.

Lee, H.L. 2005. Developing a professional development programme model based on teacher needs. *The Professional Educator.* 171(2), 39-49

Leedy, P. D. & Ormrod, J. E. 2013. *Practical Research: Planning and Design.* (10th ed.). Pearson.

Leitch, R. & Day, C. 2000. Action research and reflective practice: Towards a holistic view. *Educational Action Research*, 81, 179–193. DOI:10.1080/09650790000200108.

Lewin, K.M. & Stuart, J.M. 2003. Insights into the Policy and Practice of Teacher Education in Low-Income Countries: The Multi-Site Teacher Education Research project. *British Educational Research Journal*. 29(5), 691-707.

Liu, L. & Zhang, Y. 2014. Enhancing Teachers Professional Development through Reflective Teaching. *Theory and Practice in Language Studies*. 411, 2396-2401.

Lofland, J., Snow, D., Anderson, L. & Lofland, L.H. 2004 *Analyzing Social Settings: A guide to qualitative observation and analysis* (4th ed.). Belmont, CA: Wadsworth.

Lorelli, S. N., Norris, J. M., White, D. E. & Moules, N. J. 2017. *Thematic Analysis: Striving to meet the Trustworthiness Criteria.* International Journal of Qualitative Methods. Vol. 16. pp. 1-13.

Loughran, J. 2005. *Developing Reflective Practice: Learning about teaching and learning through modelling.* London: Falmer.

Makopa, Z. 2011. The Provision of the basic classroom teaching and learning resources in Zimbabwe Primary schools and their relationship with grade 6 pupils` achievements in the SACMEQ 111 project HEP 2010 2011 advanced training programme in Educational Planning Research. Project report. Paris. International Institute of Educational Planning.

Marker, W. 1999. The Professional Development of teachers in T. G. K. Bryce and W. M. Humes (eds.) *Scottish Education.* Edinburgh. Edinburgh University Press.

Marshall, C. & Rossman, G.B., 2014. *Designing qualitative research*. London: Sage Publications.

Mascolo, M.F. & Fischer, K.W. (2005). Constructivist theories. Cambridge Encyclopedia of Child Development (pp. 49-63). Cambridge, England: Cambridge University Press.

Mason, J. 2017. *Qualitative researching*. (3rd ed.). Thousand Oaks, CA: Sage.

Matthew, P. 2017. Reflective Practices: A means to Teacher Development. In Asia Pacific Journal of Contemporary Education and Communication Technology. 31. 126-131.

McGregor, D. 2011. *Developing Reflective Practice: A Guide for Beginning* Teachers. UK: McGraw-Hill Education.

McKay, J. & Kember, D. 1997. Spoon feeding leads to regurgitation: A better diet can result in more digestible learning outcomes. *Higher Education Research and Development*, 161, 55-67.

McLaren, P. 2003. Critical pedagogy in the age of terror. In I. Gur-Ze'ev Ed.. *Critical theory and critical pedagogy today: toward a new critical language in education*. pp. 22-39. Haifa: University of Haifa.

McMillan, J.H. & Schumacher, S. 2010**.** Research In *Education: Evidence-Based Inquiry,* (7th ed.). Boston: Pearson.

McNiff, J. 1993. *Teaching as learning: an action research approach.* London. Routledge and Kegan Paul.

McNiff, J. 2016. *You and your action research project* (4th ed.). London: Routledge.

Merriam, S.B. 2009. *Qualitative Research: A Guide to Design and Implementation*. John Wiley & Sons.

Merriam, S.B. & Tisdell, E.J. 2015. *Qualitative research: A guide to design and implementation.* (4th ed.). San Francisco, CA: Jossey-Bass.

Mezirow, J. 1991. *Transformative Dimensions of Adult Learning.* San Francisco, CA: Jossey-Bass.

Mezirow, J. 2009. An overview on transformative learning. In K. Illeris Ed., *Contemporary theories of learning: Learning theorists in their own words*. London: Routledge.

Miles, M. B., Huberman, A. M., & Saldaña, J. 2014. *Qualitative data analysis: A methods sourcebook*. (3rd ed.). Thousand Oaks, CA: Sage.

Mills, G.E. 2011. *Action research: A guide for the teacher researcher*. (4th ed.). Boston: Pearson.

Ministry of Primary and Secondary Education (MoPSE). 2016. Annual Statistics Report. Harare. Government of Zimbabwe.

Ministry of Education, Science and Technology (MoEST) 2018. Continuing Professional Development Framework for teachers and Teacher Educators. Lilongwe. Government of Malawi.

Ministry of Education, Sports, Arts and Culture (MoESAC). 1994. Chief Education Officer Circular 1/94. Harare.

Ministry of Primary and Secondary Education (MoPSE). 2013. Annual Statistics Report. Harare, Government Printer

Ministry of Primary and Secondary Education (MoPSE). 2015a. Handbook on Teacher Professional Standards. Harare, Government Printer.

Ministry of Primary and Secondary Education (MoPSE). 2015b. Teacher Professional Standards TPS. Harare. Government Printer.

Ministry of Primary and Secondary Education (MoPSE). 2015c. Training Manual on Teacher Professional Standards. Harare. Government Printer.

Ministry of Primary and Secondary Education (MoPSE) 2017. Zimbabwe Schools Annual Census Report. Harare. Government Printer.

Ministry of Primary and Secondary Education (MoPSE). 2018. Report on the Curriculum Framework 2015 – 2022 Formative Evaluation. Harare, Government Printer.

Ministry of Primary and Secondary Education (MoPSE). 2019. An Initial Evaluation of the Implementation of the Competence Based Curriculum in Zimbabwe. Centre for Research, Innovation and Development CERID. Harare.

Ministry of Public Service. 2000. Statutory Instrument (SI 1). 2000. Harare. Government of Zimbabwe.

Moon, B. 2008. Rethinking the role of the University in teacher education: the teacher education in Sub-Saharan Africa TESSA experience. Presentation to the ACU conference of executive heads.

Moon, J.A. 2006. *Learning journals: A handbook for reflective practice and professional development*. London: Routledge.

Moon, J.A. 2013. *Reflection in Learning and Professional Development. Theory and Practice.* London. Routledge.

Mpofu, J. 2018. Teachers' attitudes towards the implementation of PLAP. A case study of Kadoma East Cluster of Mhondoro-Ngezi District. *International Journal of Education and Social Science Research*. 1(01), 41-59.

Mukabeta, M.T. 2020. Action research training as a professional development strategy in primary schools – a case study of Bikita District in Zimbabwe. PhD Thesis. UNISA.

Mundry, S. 2005. Changing perspectives in professional development. *Science Educator.* 14(1), 9-15.

Murimba, S. 2005. *Evaluating Students' Achievements.* The Southern and Eastern Africa Consortium for Monitoring Educational Quality SACMEQ: Mission, Approach and Projects in Prospects Vol. XXXY. No. 1. March 2005.

Myers, M. 2000. *Qualitative Research and the Generalizability Question: Standing Firm with Proteus.* The Qualitative Report. Vol 4. No ¾. http://www.nova.edu/ssss/QR4-3/myers.html

Nagel, T. 1992. Quality between tradition and modernity: Patterns of communication and cognition in Teacher Education in Zimbabwe. PhD Theses. Pedagogisk Forkskningsinstitutt. University of Oslo.

Nagel, T. 2008. Public education and intelligent design. *Philosophy and Public Affairs.* 36(2), 187-205.

Neuman, W.L. 1997. *Social research*. New York: Allyn and Bacon.

Nie, Y., Tan, G.H., Liau, A.K., Lau, S. & Chua, B.L. 2013. The roles of teacher efficacy in instructional innovation: its predictive relations to constructivist and didactic instruction. *Education, Research, Policy Practice.* 12, 67-77.

Nieto, S. 2003. Challenging Current Notions of High-Quality Teachers through Working a Teachers' Inquiry Group. *Journal of Teacher Education,* 545, 386-398.

Nishimura, T. 2014 Effective Professional Development for Teachers: A guide to Actualizing Inclusive Schooling. *International Journal of Whole Schooling,* 101, 19-42.

Njenga, M. 2019 *Continuing Professional Development for TVET Teachers in Kenya*. Conference Proceedings of the 8th Trefort Agoston Conference on Vocational and Higher Education Pedagogy, 21-22 November, 2018. Obuda University, Budapest,

Nzarirwehi, J. & Atuhumuze, F.C. 2019 In-Service Teacher Training and Professional Development of Primary School Teachers in Uganda. *IAF0R Journal of Education. 71* https://www.researchgate.net/publication/333548194 downloaded on 6/12/2019

O'Brien, R. 1998. An Overview of the Methodological Approach of Action Research. In R. Richardson ed. Theory and practice of Actions Research. Brazil. University of Praiba. web-ca/robrien/papers/arfinal.html accessed 29/11.2018

O'Neill, M.M., Booth, S.R. & Lamb, J. T. 2018. Using NVivo™ for Literature Reviews: The Eight Step Pedagogy (N7+1). *The Qualitative Report*. 23(13), 21-39. Retrieved from https://nsuworks.nova.edu/tqr/vol23/iss13/3

Ono, Y. & Ferreira, J. 2010. A case study of continuing professional development through lesson study in South Africa. *South African Journal of Education.* 30(1):59-74.

Patton, M.Q. 2015. *Qualitative evaluation and research methods* (4th ed.). Thousand Oaks, CA: Sage.

Perkins, D. 1999. The many Faces of Constructivism. *Educational Leadership*. 573, 6-11.

Piggot-Irvine, E. 1998. How 'deep' do you go in appraisal? *Good Teacher*, Term 4.

Pirtle, S.S & Tobia, E. 2014. Implementing Effective Professional Learning Communities *SEDL Insights.* 23, 1-8. www.sedl.org/insights/2-3/implementingeffective_ professional learningcommunities.pdf downloaded 21/01/2017

Pockett, R. & Giles, R. 2008. *Critical* Reflection*: Generating Theory from Practice: The Graduating Social Work Student Experience*. Sydney: Darlington Press.

Punch, K.F. 2005. *Introduction to Social Research: Quantitative and Qualitative approaches.* London: Sage.

QSR. 2018. *Getting started with NVivo 12.* Melbourne. QSR International.

Rhodes, C. & Beneicke, S. 2003. Professional development support for poorly performing teachers: Challenges and opportunities for school managers in addressing teacher learning needs. *Journal of In-service Education.* 29, 123-140. 10.1080/ 13674580300200245.

Rhodes, C. & Houghton-Hill, S. 2000. The Linkage of Continuing Professional Development and the Classroom Experience of Pupils: barriers perceived by senior managers in some secondary schools. *Journal of In-service Education.* 263, 423-435.

Romano, M. 2006. 'Bumpy moments' in teaching: Reflections from practicing teachers. *Teaching and Teacher Education.* 22, 973-985.

Ruddock, J. 1998. Changing the world of the classroom by understanding it: A review of some aspects of the work of Lawrence Stenhouse. *Journal of Curriculum and Supervision*. 41, 30-42.

Saunders, M., Lewis, P. & Thornhill, A. 2007. Research methods for Business Students. (4th ed.). Harlow: Pearson.

Save the Children International Zimbabwe. 2014. Annual Report. Harare. Save the Children International Zimbabwe.

Schön, D. 1983 *The reflective practitioner: How professionals think in action*. London. Temple Smith.

Schön, D. 1987. Educating the Reflective Practitioner: Toward A New Design for Teaching and Learning in the Professions. San Francisco: Jossey-Bass.

Schön, D.A. (1991). *The reflective practitioner: How professionals think in action*. Aldershot. Avebury.

Schweisfurth, M. 2002. Democracy and Teacher Education: negotiating practice in the Gambia. *Comparative Education.* 383,303-314.

Sharma, U., Loreman, T. & Forlin, C. 2012. Measuring teacher efficacy to implement inclusiveness practices. *Journal of Research in Special Educational Needs*. 121, 12-21.

Shumba, T & Zireva, D. Chapter 4 on 'Action Research: A Reflective Practice' in Mukabeta, M. T., Hamandishe, S. & Nzombe, C. (eds.) 2013. *Action Research: Some practical ideas for Educational Practice*. Harare. Save the Children.

Silver, C., & Lewins, A. 2014. *Using Software in Qualitative Research* (2nd ed.). Thousand Oaks, CA: Sage.

Silverman, D. 2015. *Interpreting qualitative data: Methods for analyzing talk, text and interaction.* (5th ed.) Thousand Oaks, CA: Sage.

Silverman, D. 2016. *Qualitative research* (4th ed.). Los Angeles, CA: Sage.

Smith, E. 2011. Teaching critical reflection. *Teaching in Higher Education*, 162: 211-223.

Smith, J. 2008. *Qualitative Psychology: A Practical Guide to Research Methods*. Thousand Oaks, CA: Sage

Stenhouse, L. 1975. *Introduction to curriculum research and development.* London: Heinemann.

Steukers, G. & Weiss, J. 2014. National Report of Action research initiative in 28 case-study schools in Namibia focused on the pre and lower primary grades. Windhoek. UNESCO.

Steyn, G.M. 2011. Continuing Professional Development in South African Schools: Staff Perceptions and the Role of Principals. *Journal of Social Sciences*, 28(1), 43-53.

Strauss, A. & Corbin, J. 1998. *Basics of qualitative research: Techniques and procedures for developing grounded theory.* London: Sage.

Stringer, E.T. 2008. *Action research in education.* (2nd ed.). New Jersey: Pearson.

Stringer, E.T., Christensen, L.M.F. & Baldwin, S.C. 2010. *Integrating teaching, learning, and action research: enhancing instruction in the K-12* classroom: London: Sage.

Susman, G.I. 1983. Action Research: A Sociotechnical Systems Perspective. Ed. G. Morgan. London: Sage. 95-113.

Sybil, T. & Nahida, C. 2012. Reflective Thinking: A Grounded Theory Approach. APH Publishing Corporation.

Tatto, M.T. 1997. Limits and constraints to effective teacher education. In: W Cummings & N McGinn (eds.) *International handbook of education and development: preparing schools, students and nations for the twenty-first century.* Oxford: Pergamon.

Thorne, S. 2016. *Interpretive description: Qualitative research for applied practice*. Abingdon Oxon: Routledge.

Townsend, T & MacBeath, J. (eds.) *International Handbook of leadership for Learning*. London: Springer.

Tschannen-Moran, M. Hoy, A.W. & Hoy, W.K. 1998. Teacher efficacy: Its meaning and measure. *Review of Educational Research*. 682, 202-248.

UNESCO. 1990. World Conference on Education for All. World Declaration on Education for All. Jomtien, Thailand. UNESCO. 2000. *Dakar Framework of Action on Education for All EFA. IIEP.* Paris.

UNESCO. (2000). *Dakar Framework of Action on Education for All (EFA).* IIEP. Paris: : UNESCO.

UNESCO. 2003. *Global Education Monitoring Report*. Paris: UNESCO.

UNESCO. 2004. *Education for All Global Monitoring Report: The Quality Imperative.* Paris: UNESCO.

UNESCO. 2015. World Education Forum. Final Report. Paris. UNESCO.

United States of America (USA) National Council for Accreditation of Teacher Education. (NCATE) 2010. Transforming Teacher Education through clinical practice: A national strategy to prepare effective teachers. Report of the Blue Ribbon Panel. Washington D.C: NCATE.

Van de Pol, J., Mercer, N. & Volman, M. 2018. Scaffolding Student Understanding in Small-Group Work: Students' Uptake of Teacher Support in Subsequent Small-Group Interaction. *Journal of the Learning Sciences.* 282, 206-239.

Van Niekerk, L. J. 1995. Chapter 11 on Hermeneutics in Educational Theory and Practice in Higgs, P (ed.) *Metatheories in Educational Theory and Practice.* Johannesburg: Heinemann.

Villegas-Reimers, E. 2003. *Teacher professional Development: An International Review of Literature.* Paris. UNESCO.

Vygotsky, L. 1978. *Mind in Society*. Cambridge, MA: Harvard University Press

Wallace, M. 1991. *Training Foreign Language Teachers. A Reflective Approach.* Cambridge: Cambridge University Press.

Wei, R.C., Darling-Hammond, L. & Adamson, F. 2010. *Professional development in the United States: Trends and challenges*. Dallas, TX: Learning Forward.

Weiner, G. 2002. Professional Development, Teacher Education, Action research and Social Justice: a recent initiative in North Sweden. Paper presented at the Annual Conference, In-service and Professional Development Association, Birmingham. 1-3 November, 2002.

Wenger, E. 1998. *Communities of Practice: Learning, Meaning an Identity*. Cambridge University Press.

Wood, P. & Butt, G. 2014. Exploring the use of complexity theory and action research as frameworks for curriculum change. *Journal of Curriculum Studies*. 405, 676 – 696.

Yin, R.K. 2018. *Case Study Research: Design and Methods*. Los Angeles, CA: Sage.

Zee, M. & Koomen, H. M. Y. 2016. Teacher self-efficacy and its effects on classroom processes, student academic adjustment and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research.* 2010, 1-35.

Zehetmeir, S., Andreitz, I., Arlacher, W. & Rauch, F. 2015. Researching the impact of teacher professional development programmes based on action research, constructivism, and systems theory. *Education Action Research*. 232, 162-177.

Zeichner, K.M. 2003. Teacher Research as Professional Development for P-12 Educators in the USA. *Educational Action Research* 11(20), 301-325.

Zireva, D. 2017. Cul-de-sac from diehard traditions: The demise of action research in teacher education. *Educational Research and Reviews*. 1215, 725-731.

Zvobgo, R. J. 1986. *Transforming Education: The Zimbabwean Experience.* Harare. College Press.

APPENDICES

APPENDIX A: Letter requesting permission to conduct research

The Permanent Secretary

Ministry of Primary and Secondary Education

14th Floor Ambassador House

P O Box CY 121

Causeway

Harare

Zimbabwe

29 March 2019

Request for permission to conduct research in Bikita District, Masvingo Province

Title of the title of research: Action research training as a professional development strategy in primary schools – a case study of Zimbabwe

Dear Mrs. T Thabela,

I, Moses Tapfumaneyi Mukabeta am doing research under supervision of Prof M. M. van Wyk, a Professor in the Department of Curriculum and Instruction, College of Education, towards a PhD in Education at the University of South Africa, request for permission to conduct research in Bikita District, Masvingo Province in south-east Zimbabwe.

The aim of the study is to develop a framework for Continuous Professional Development for Teachers. The study will entail engaging school inspectors, a group of school heads and Cluster Resource Teachers in Bikita District, Masvingo Province who took part in an action research training project between 2005 and 2010. The research will be conducted through interviews, focus group discussions, observations and document analysis. The action research training project took place in a tripartite project bringing together the Department of Teacher, University of Zimbabwe, Save the Children Norway Zimbabwe programme and the Ministry of primary and Secondary Education. The benefits of this study are that the participants in the research they have an opportunity to reflect on their experiences in the

project and how they have continued to use what they learnt to contribute to their continuous professional development.

The responses of the participants will be treated with the utmost of confidentiality in keeping with research ethics.

There will be no reimbursement or any incentives for participation in the research.

Yours sincerely

_____

Moses Tapfumaneyi Mukabeta

Student with UNISA

APPENDIX B: Letter from MoPSE granting permission

All communications should be addressed to "The Secretary for Primary & Secondary Education
Telephone: 794895
Telegraphic address : "EDUCATION"

ZIMBABWE

REF: C/426/3/MASV
Ministry of Primary and Secondary Education
P.O Box CY 121
Causeway
HARARE

17 May 2019

Mukabeta Moses T.
500 Houghton Park Rd
Houghton Park
Waterfalls, Harare

Re: **PERMISSION TO VISIT MASVINGO PROVINCE FOR RESEARCH: BIKITA DISTRICT: SCHOOL INSPECTORS, SCHOOL HEADS AND TEACHERS.**

Reference is made to your application to collect data for research purposes from Ministry personnel in Masvingo Province on the research title:

"ACTION RESEARCH TRAINING AS A PROFESSIONAL DEVELOPMENT STRATEGY FOR PRIMARY SCHOOL TEACHERS: A CASE STUDY OF ZIMBABWE."

Permission is hereby granted. However, you are required to liaise with the Provincial Education Director Masvingo Province who is responsible for the institutions and personnel whom you want to involve in your research. You should ensure that your research work does not disrupt the normal operations of the institutions.

You are also required to provide a copy of your final report to the Secretary for Primary and Secondary Education by December 2019.

PERMANENT SECRETARY
MINISTRY OF PRIMARY AND SECONDARY EDUCATION
17 MAY 2019
CY 121, CAUSEWAY
HARARE, ZIMBABWE

T. Thabela (Mrs)
SECRETARY FOR PRIMARY AND SECONDARY EDUCATION
Cc: Masvingo Province

APPENDIX C: Ethical clearance from CEDU UNISA

UNISA

university of south africa

UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2019/06/12

Ref: 2019/06/12/51509342/28/MC

Dear Mr. Mukabeta

Name: Mr. MT Mukabeta

Student: 51509342

Decision: Ethics Approval from

2019/06/12 to 2024/06/12

Researcher(s): Name: Mr. MT Mukabeta

E-mail address: mtmukabeta@gmail.com

Telephone: +263 77 255 5889

Supervisor(s): Name: Prof MM van Wyk

E-mail address: vwykmm@unisa.ac.za

Telephone: +27 12 429 4775

Title of research:

Action research training as a professional development strategy in primary schools — a case study of Bikita District in Zimbabwe

Qualification: PhD in Curriculum and Instructional Studies

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2019/06/12 to 2024/06/12.

The low risk application was reviewed by the Ethics Review Committee on 2019/06/12 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.

University of South Africa

Preller Street Muckleneuk Ridge, City of Tshwane

PO Box 392 UNSA 0003
South Africa Telephone +27 1 2 429 3
1 1 +27 1 2 429 41 50 www.unisa.ac.za

2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.

3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.

4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.

5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.

6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.

7. No field work activities may continue after the expiry date 2024/06/12. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number 2019/06/12/51509342/ 28/ MC should be clearly indicated on al/ forms of communication with the intended research participants, as well as with the

Committee.

Kind regards,

Prof AT Motlhabane

CHAIRPERSON: CEDU RERC motlhat@unisa.ac.za

Approved - decision template — updated 16 Feb 2017

Prof PM Sebate
ACTING EXECUTIVE DEAN
Sebatpm@unisa.ac.za

University of South Africa Preller Street Muckleneuk Ridge, City of Tshwane

PO Box 392 UNSA 0003 South Africa Telephone- +27 429 31 1 Facsimile +27 1 2 429 41 50 www.unisa.ac.za

APPENDIX D: Participant information sheet

Date: 1 July 2019

Title: Action research training as a professional development strategy for primary school teachers – a case study of Bikita District in Zimbabwe

DEAR PROSPECTIVE PARTICIPANT,

My name is Moses Tapfumaneyi Mukabeta and I am doing research under the supervision of Prof M. M. van Wyk, a Professor in the Department of Curriculum and Instruction towards a PhD in Education at the University of South Africa. I am inviting you to participate in a study entitled 'Action research training as a professional development strategy for primary school teachers – a case study of Zimbabwe'.

WHAT IS THE PURPOSE OF THE STUDY?

This study is expected to collect important information that could lead to the development of a proposal for a framework for Continuous Professional Development of teachers for Zimbabwe.

WHY AM I BEING INVITED TO PARTICIPATE?

You are invited because of your training, practice and experience in the Bikita Quality Education Project (QEP) that used action research training for teachers to develop reflection skills and use them in their day-to-day work as education practitioners and improve their professional practice and outcomes of their learners.

I obtained your contact details from the Bikita Ministry of Primary and Secondary Education District Education Office. There are approximately twelve (12) participants in this research. Some are School Inspectors, School heads and Cluster Resource Teachers (CRTs).

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves audio taping, focus group discussions, semi-structured interviews and document analysis. The questions are on your experiences during the Bikita Quality Education Project (QEP) training in action research and use of this training thereafter in your career and professional development activities. It is expected that the focus group discussions and semi-structured interviews will be about one (1) hour long each. Lessons observations will be no more than 30 minutes.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. While your participation will be anonymous, you are free to withdraw at any time and without giving a reason.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The potential benefit for the participant is the contribution to the development of a proposed framework for continuous professional development that builds on action research as a critical element.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

There are no risks in participating in the research as the responses of the participants will be treated with the utmost of confidentiality in keeping with research ethics.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

Your name will not be recorded anywhere and no one will be able to connect you to the answers you give. Your answers will be given a pseudonym and you will be referred to in this way in the data, any publications, or other research report, journal articles and/or conference proceedings.

While every effort will be made by the researcher to ensure that you will not be connected to the information that you share during the focus group, I cannot guarantee that other participants in the focus group will treat information confidentially. I shall, however, encourage all participants to do so. For this reason I advise you not to disclose personally sensitive information in the focus group.

HOW WILL THE RESEARCHER PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard with me for future research or academic purposes. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Hard copies will be shredded permanently and soft copies will be deleted from the hard drive of my computer.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

There is no payment or reward offered, financial or otherwise for participating in this study. Travel costs incurred by the participant to the focus group discussion will be reimbursed.

HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the Research Ethics Review Committee of the College of Education, UNISA. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Moses Tapfumaneyi Mukabeta on +263 772 555 889 or email mtmukabeta@gmail.com

Should you have concerns about the way in which the research has been conducted, you may contact Prof M. M. van Wyk vwykmm@unisa.ac.za and +27 83 544 5217

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

Moses Tapfumaneyi Mukabeta

APPENDIX E: Consent to participate in this study (return slip)

I, _____,

confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time.

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the interview / focus group discussion.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print)

_____

_____ _____

Participant Signature Date

Researcher's Name & Surname: Moses Tapfumaneyi Mukabeta

_____ _____

Researcher's signature Date

APPENDIX F: Focus group questions for primary school teachers

1. How has action research training of primary school teachers empowered them?
2. How have primary school teachers applied action research knowledge to deal with the competence-based curriculum?
3. What challenges do primary school teachers face when applying action research and supporting other teachers in learning and practising action research?
4. What strategies can be used to promote action research among primary school teachers?

APPENDIX G: Focus Group questions with school head teachers

1. How has action research training of primary school heads and teachers empowered them?
2. How have primary school teachers applied action research knowledge to deal with the competence-based curriculum?
3. What challenges do primary school heads and teachers face when applying action research and supporting other teachers in learning and practising action research?
4. What strategies can be used to promote action research among primary school teachers?

APPENDIX H: Focus group questions for school inspectors

1. How has action research training of primary school teachers and inspectors empowered them?
2. How have primary school teachers and inspectors applied action research knowledge to deal with the competence-based curriculum?
3. What challenges do primary school teachers and inspectors face when applying action research and supporting other teachers in learning and practising action research?
4. What strategies can be used to promote action research among primary school teachers?

APPENDIX I: Interview questions for primary school teachers

1. How has action research training of primary school teachers empowered them?
2. How have primary school teachers applied action research knowledge to deal with the competence-based curriculum?
3. What challenges do primary school teachers face when applying action research and supporting other teachers in learning and practising action research?
4. What strategies can be used to promote action research among primary school teachers?

APPENDIX J: Interview questions for school head teachers

1 How has action research training of primary school teachers and head teachers empowered them?

2 How have primary school teachers and head teachers applied action research knowledge to deal with the competence-based curriculum?

3 What challenges do primary school teachers and head teachers face when applying action research and supporting other teachers in learning and practising action research?

4 What strategies can be used to promote action research among primary school teachers?

APPENDIX K: Interview questions for school inspectors

1. How has action research training of primary school teachers and inspectors empowered them?
2. How have primary school teachers and inspectors applied action research knowledge to deal with the competence-based curriculum?
3. What challenges do primary school teachers and inspectors face when applying action research and supporting other teachers in learning and practising action research?
4. What strategies can be used to promote action research among primary school teachers?

APPENDIX M: Guide to document analysis

Date: Pseudonym for research participant: Name of School: Subject: Time: Lesson duration:	
Document	**Findings**
Scheme Book and Lesson Plans - Evaluations (sentiments/issues coming out; evidence of reflective reviews and follow up actions	
Action research report(s) by participants - Evidence of capturing the reflective skills	

APPENDIX N: Teacher Professional Standards (TPS) self-assessment tool

MINISTRY OF PRIMARY AND SECONDARY EDUCATION

TEACHER PROFESSIONAL STANDARDS (TPS)

SELF-ASSESSMENT TOOL FOR PROFESSIONAL DEVELOPMENT

Introduction

The Ministry of Primary and Secondary Education has developed a set of teacher professional standards (TPS) that provide every teacher with a benchmark against which they are assessed, assess themselves and their performance. The stipulated standards serve as the basis for the provision of appropriate support for the teacher's long term career development. In short, TPS provides a framework that gives direction and structure to guide the preparation, support, development and evaluation of teachers. Most importantly, the standards guide the teacher in carrying out self - assessment and to identify areas for growth and further professional development.

Teacher Self-Assessment for Professional Development

As a professional teacher you need to reflect on your practice, assess your own performance, identify your development needs and gaps and develop a professional development plan (PDP) for yourself. One way to consider your strengths and weaknesses as a teacher is to respond to focused guiding questions related to effective professional practices as stipulated in the Teacher Professional Standards. The TPS has three main domains, each with its own sub-domains that, as a teacher, you should be familiar with. Questions in the tool below are based on the domains and sub-domains. The tool is confidential and is not meant to be an external tool for evaluation. It provides an opportunity for you to be personal and honest in your assessment for self - improvement. You may wish to do the assessment with a trusted friend or colleague to allow for additional discussion and reflection. Based on an analysis of your own responses, you can then identify your development needs and training gaps.

From the identified needs and gaps, you can then develop your own professional development plan as noted earlier.

Self-Assessment Tool for Professional Development Planning

With reference to TPS, complete the assessment tool below using the three-point scale provided - A being highest and C being lowest. Be honest with yourself.

Domain	**Sub-domain**	**Question**	**A**	**B**	**C**
A: Academic professional Knowledge and Understanding	Academic requirements	• Have I achieved the minimum academic qualifications for the age/level in the field that I am teaching?			
	Professional requirements	• Have I achieved the agreed minimum professional qualifications to meet the requirement in the field that I am teaching			
	Curriculum	• Do I have full understanding of the syllabus that I am expected to teach?			
		• Do I understand fully the impact of culture and cultural identity on the curriculum?			
		• Am I competent in the use of appropriate language and can I confidently teach my subject areas?			
		• Do I have sufficient knowledge and understanding to fulfil my responsibilities for cross-cutting curricular themes?			
		• Do I have the knowledge and understanding to enable me to plan coherent and cumulative teaching/learning programmes and demonstrate what I teach?			
		• Am I able to include industrial and Agricultural, cultural and heritage knowledge and experiences in the planning and teaching of technical/vocational education subjects?			
		• Am I able to competently apply my subject and pedagogical knowledge appropriate to the age/level which I am teaching?			

		• Do I have research skills relating to teaching and learning and a critical appreciation of the contribution of research, including classroom based action research to education in general?			
B. Professional skills and abilities	Teaching and learning	• Am I able to plan coherent and stimulating teaching lessons which match my learners' needs and abilities and build on my learners' prior knowledge?			
		• Am I able to draw upon content knowledge and pedagogical knowledge when scheming, planning, teaching and evaluating?			
		• Am I able to communicate clearly, making skilful use of a variety of media and interact productively with learners individually and collectively?			
		• Am I able to use a range of teaching strategies and resources which I can evaluate and justify in terms of curriculum requirements and of the needs and abilities of my learners?			
		• Do I understand how to teach for entrepreneurship?			
		• Am I able to plan out of class activities to consolidate and extend understanding that the learners have acquired?			
		• Do I know when to differentiate in my planning and practice appropriate approaches which are matched in the diverse range of learners?			
		• Am I able to set goals which challenge learners of all backgrounds and abilities?			
	Classroom organisation and management	• Are you able to organise and manage classes and resources to achieve safe, orderly and purposeful activity?			
		• Am I able to manage learner behaviour and classroom incidents fairly, sensitively and consistently, making use of rewards and punishment, and seek and use advice of colleagues where necessary?			
		• Do I have awareness and skills for meaningful record keeping including socio economic data of learners?			
	Learner assessment	• Do I understand and apply or practice principles of formative and summative assessment, recording, providing feedback and reporting quarterly on the performance of learners?			

		• Do I use relevant data to monitor progress, set targets and plan subsequent lessons? Do I account for learners' attainment, progress and outcomes and address the needs of individual learners?			
	Profession reflection and communication	• Am I able to reflect and act to improve my personal professional practice which contributes to my own professional development?			
		• Do I work collaboratively with other staff in planning and implementing curricular, cross curricular activities and whole school programmes? Do I share expertise and new ideas with colleagues? Do I observe other teachers teaching their classes? Do I develop action and other research activities based on real classroom issues?			
		• Am I able to communicate effectively with parents, guardians/caregivers, colleagues, support staff and associations with regards to learners' achievements and wellbeing?			
C. Professional values and personal commitment	Professional values and personal commitment	• Do I live by and with the spirit of *Unhu/Ubuntu*, including the spirit of service?			
		• Do I show personal demeanour, reliability, promptness, loyalty to school and respect the school system and colleagues?			
		• Do I show in my day to day practice a commitment to social justice, gender responsiveness, inclusion and caring for protecting learners?			
		• Do I take responsibility for my own professional learning and development?			
		• Am I well versed with the current changes that affect the community, the country and the planet such as climate change, sustainable development, use of new technologies and Disaster Risk Management?			
		• Do I value and respect local culture and linguistic norms and actively participate in the community in which I work?			
		• Do I have knowledge and understanding of the ethical, professional and legal responsibilities and am I a role model of my profession?			
		• Do I participate in professional and community networks and fora to broaden knowledge and enhance best practice?			

Key

A: **Exceeded - 3** **B: Achieved - 2** **C: Not achieved – 1**

Analysis

1. Get a total of the scores in each domain to establish where your strengths and weaknesses lie.
2. From your analysis of scores, which domain is your strongest and which one is your weakest and why?
3. What steps are you going to take in order to strengthen the domain where you are weakest?

Conclusion

On the basis of the results of your self-assessment, you can then proceed to develop your own professional development plan (PDP) that is time-framed and costed. The tool below will assist you in developing your plan.

PERSONAL PROFESSIONAL DEVELOPMENT PLANNING (PPDP) TOOL

Personal Professional development Planning is a process of creating an action plan based on awareness, values, reflection, goal setting and planning for personal development.

Personal Professional Development Plan can help me to:

- Increase my awareness:
    - who I am
    - what I want
- Identity my existing skills and experiences
- Identify my skills gaps.
- Create a plan to acquire the skills I need for my academic studies or my chosen carrier path.
- Think about and plan for my own personal, academic and carrier development.

***NB** The purpose of creating a Personal Professional Development Plan is to document a process of self-analysis, personal reflection and honest appraisal of your strengths.

Consider the following when coming up with a Personal Professional Development Plan

i) What do I want to be?
ii) What are my strengths?
iii) What are my weaknesses?
iv) What are the common feedbacks (positive or negative) that I receive from others?

v) What other performance Indicators can I notice?

Below is a Personal Professional Development Plan (PPDP) template:

Name: ---------- EC No: ----------

Designation: ----------

Focus area(s)	**Performance gap(s)**	**Objective(s)**	**Activities to achieve objective(s)**	**Period – Start & end date**	**Resources**	**Review dates**	**Summative Evaluation**

APPENDIX O: Narrative supervision report on a teacher

MINISTRY OF PRIMARY AND SECONDARY EDUCATION

NARRATIVE SUPERVISION REPORT ON A TEACHER **TOTAL** ☐

Distribution

Head Office	1 copy
Provincial Office	1 copy
District Office	1 copy
School	1 copy
Teacher	1 copy

Section A: Personal Details

Surname: …… First Name: ……. Title ……..

E.C. No.: ……. Phone Number: ……

E-mail address……..

Male ☐ Female ☐

Date of Joining Service: ……..

Length of teaching service: ……..

Type of Appointment: …….…….

.

Current Grade: …….…….

Date of appointment to Grade: …….…..……..

Date of Last Assessment: …….…….

Date of visit: …….…...…….

Purpose of visit: ……...…….

Subject(s) observed: …… Grade/Form observed: …..…….

Topic taught: ……..

Section B: Institutional Details

(a) Name of School: ……EMIS No: ……

(b) Postal Address: ……E-mail address: ……

(c) School Registration No.: …….

(d) Dept/Stn Code: ……

(e) Province: ……..……District: ….……..

(f) Type of School: | | | | | | | |

(g) Boarding or Day: ……

(h) Responsible Authority: ……Code Number: ……

Section C: Professional Knowledge and Understanding (10 points)

(a) Academic Qualifications: ……When & Where obtained: ……..….

(b) Professional Qualifications: ……..When & where obtained: ……..

(c) Subject specialisation: ……

(d) Self-advancement: ……..
……(1)

(e) Curriculum: Syllabus interpretation, scheming and lesson planning: ……
…… (5)

(f) Record keeping: ……..
…….(4)

Section D: Professional Skills and Abilities (70 points)

(a) Teaching and Learning (30 points)

- Class(es)
- Teaching load: enrolment and subject (s) taught, periods per week

- Lesson presentation (logical lesson presentation; use of variety of teaching strategies and resources)
  (15)
- Written work/ learner activity (frequency, quality, quantity ,marking and corrections)
  (15)

(b) Classroom organisation and management (20 points)

- Class motivation and control
  (10)
- Evidence of continuous formative assessment
  (10)

(c) Teacher personal reflection and communication (20 points)

- Self-evaluation
  (5)
- Classroom based Action Research
  (5)
- Evidence of effective communication
  (10)

Section E: Professional Values and Personal Commitment (20 points)

- Professional Development: (3)

  .....
- Participation in professional, school and community networks: (3)

  .....
- Deportment, attire, attitude to work and advice: (3)

  .....
- Involvement in sporting and cultural activities: (3)

  .....
- Willingness to go an extra mile: (3)

  .....
- In-class remediation:
  …….. (3)

- Learner care and protection:
  ……. (2)

Section F: Conclusion and Recommendation

- Strengths noted:

  .....
- Areas for improvement:

  .....
- Challenges:

  .....
- Recommendations:

  .....

  Name of Reporting Officer:……

  Designation: ……..

  Province: ……..

  District: ……

  Signature: ……

  Date: ……

APPENDIX P: Proof of editing

This letter serves to confirm that editing and proofreading was done for:

Moses Tapfumaneyi Mukabeta

Action research training as a professional development strategy in primary schools

A case study of Bikita District in Zimbabwe

Curriculum Studies

at the

University of South Africa

Supervisor: Professor Micheal M. van Wyk

Cilla Dowse
14 July 2020

Cilla Dowse
PhD in Assessment and Quality Assurance Education and Training University of Pretoria 2014
Programme on Editing Principles and Practices: University of Pretoria 2009
Basic Editing and Proofreading: McGillivray Linnegar Associates 2008

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APPENDIX Q: Turnitin report

Action Research Training as a Professional Development Strategy in Primary Schools A case study of Bikita District in Zimbabwe

ORIGINALITY REPORT

29%	23%	7%	16%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS