THE CONTEXT AND PRACTICE OF SCHOOL-BASED MENTORING OF PRE-SERVICE TEACHERS IN ZIMBABWE

By

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Thesis submitted in fulfillment of the requirements for the degree

Philosophiae Doctor (PhD) in Education

In the

SCHOOL OF EDUCATION STUDIES

FACULTY OF EDUCATION

At the

UNIVERSITY OF THE FREE STATE
BLOEMFOMTEIN
November 2018

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DECLARATION

I declare that the thesis, **THE CONTEXT AND PRACTICE OF SCHOOL-BASED MENTORING OF PRE-SERVICE TEACHERS IN ZIMBABWE,** hereby handed in for the qualification of Doctor of Philosophy at the University of the Free State is my own independent work and that I have not previously submitted the same work for a qualification at/in any other university.

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BBMuyengwa

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November 2018

DEDICATION

This thesis is dedicated to my parents, Mr Barnabas Muyengwa (Senior) and my late mother, Mrs Maggie (nee Zvomuya) Muyengwa, who taught me to believe that with hard work anything is possible. Moreover, I dedicate the completion of my doctoral study to all my family members and friends who understood my situation and gave me time to complete this study uninterrupted.

ACKNOWLEDGEMENTS

I am grateful for the support and guidance I got from the following people at the University of the Free State during the course of this study:

- To my supervisors, Professor Loyiso Jita and Dr. Thuthukile Jita, for their patience and guidance throughout the research process.
- To the SANRAL team of reviewers who helped to shape this study at various stages. Those who read this study and gave their comments include Dr. Tsakeni, Dr. Makaye, Dr. Gudyanga, and Dr. Makamure,
- To the RIMS team and Ms. Irene Molete-Mohapi for the administrative support.
- To the Office of the SANRAL Chair, School of Mathematics Natural Sciences and Technology Education for the financial support for this study.
- To my colleagues especially "the Harare Cohort Group" who helped me to fine-tune this study as I reflected on their questions and concerns.

In addition, I would want to acknowledge the support I got from the Zimbabwe Ministry of Primary and Secondary Education Research Unit, Provincial and District office staff, and participating schools, teachers and pre-service teachers.

Last but not least I would like to thank my editor-in-chief Mrs Betty Mutambanengwe for her professional contribution and my workmates who gave me time to leave the office to go and gather data for this study.

LIST OF ABBREVIATIONS AND ACRONYMS

BED	Bachelor of Education
HOD	Head of Department
MED	Master of Education
MKO	More knowledgeable other
PGDE	Postgraduate Diploma in Education
PLC	Professional learning community
TP	Teaching Practice
ZPD	Zone of proximal development

SUMMARY OF THE STUDY

Changes in teacher education that are experienced worldwide have continued to influence teacher preparation in developing countries such as Zimbabwe. These changes have seen teacher education literally shifting to include schools in recent years and this has placed new demands on teachers in schools. However, there has not been a corresponding capacitation of school personnel for their new roles. In addition to teaching, teachers have been expected to play a critical role in teacher education as mentor teachers. This study, besides analysing the differences in mentoring contexts in secondary schools, sought to determine if and how different mentoring contexts shape mentoring practices. In an attempt to provide a deeper understanding of how school-based mentoring of pre-service teachers is practiced in various school contexts of Zimbabwe and with what consequences for the classroom practices of the pre-service teachers, the current study used a qualitative multi-case study to investigate mentoring contexts and practices in selected secondary schools in one district in Zimbabwe. The unit of analysis was the mentoring pair in conveniently selected secondary schools. The mentoring pairs were purposively sampled and comprised of pre-service teachers who were on Teaching Practice (TP) in their final semester and their mentors from a population of Postgraduate Diploma in Education (PGDE) students of the university that was studied.

The data analysis process for interviews, observations of mentoring sessions and documents resulted in the emergence of the main themes and selected sub-themes from the categories. The Vygotskian socio-cultural theory with its main tenets of mental development based on social interaction, the use of the more knowledgeable other (MKO), and the zone of proximal development (ZPD) was used as a lens to interpret findings of the present study. The main themes were contexts, mentoring practices, pre-service teachers' classroom practices and improvements in mentoring of pre-service teachers.

The findings of this study suggest that the contexts in which mentoring took place were different and as expected, there were different challenges which formed the basis for improving the practice of mentoring pre-service teachers in secondary schools. In addition, the current study established that teachers, despite not having formal training in mentoring; they have been able to contribute to teacher development using their limited expertise in

teacher education and at times limited resources. Though teachers were not specifically trained as mentors, the way they have accepted their assumed new role of teacher educator in the schools can be commended as they have made significant contributions to teacher development for no extra pay. Furthermore, teachers were informally in-serviced during the mentoring process, especially on contemporary teaching methodologies. However, the study recommends the establishment of communities of practice as part of the schools-university partnership to capacitate the mentoring pairs. Consequently, the study proposes an evolving model for improving school-based mentoring of pre-service teachers that could lead to improved teaching and learning in secondary schools as they offer opportunities for learning to teach.

Keywords: pre-service teachers; teacher educators; mentoring contexts; mentoring practices; teacher development.

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CHAPTER 1

ORIENTATION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION

Recent developments in teacher education have seen schools assuming more and more responsibilities in the preparation of teachers. In the United Kingdom many of the initial teacher education programmes have been basically school-based since 1992 (Douglas, 2012), with the Post Graduate Certificate of Education (PGCE) students spending 24 weeks of the 36 weeks of their programme in secondary schools. In Ghana, in the new teacher training programme implemented since 2004, known as "the In-In-Out programme" has pre-service teachers doing teaching practice in schools in the "Out" segment of the programme in the final year of the three-year duration of the Ramnarian course (Bukari and Kuyini, 2015: 46). (2015) reports that Post Graduate Certificate in Education (PGCE) Physical Sciences students at a South African university spend 10 hours per week at a teaching school in their one year of training. In Zimbabwe, the introduction of the so-called "2-5-2 teacher education programme" has seen students doing teaching practice under the supervision of a qualified teacher for five of the nine terms of the three year programme (Majoni and Nyaruwata, 2015: 3698). The increase in the duration in schools for pre-service teachers has elevated the role of school-based mentoring since it now has a bigger role in shaping future teachers' classroom practice. School-based mentoring is a critical element of teacher preparation which is used extensively in teacher education (Douglas, 2012). School-based mentoring also has the support of the Vygotskian socio-cultural perspective which regards pre-service education as a human activity which is learned with the assistance of others (Heeralal, 2014). School teachers thus, need specialist skills in order to effectively mentor pre-service teachers.

Mentoring offers a source for professional learning for school-based mentor teachers and their mentees (Draves, 2013). Research has articulated the importance of school-based mentorship in teacher development for those learning to teach (Chien, 2015). In mentoring, the classroom teacher has to assume an additional role of guiding and advising the pre-service teachers who are

learning to teach while they are on teaching practice. The classroom teacher becomes the pre-service student's mentor. When the classroom practitioner combines the two roles of teacher and mentor it comes with its challenges (Jaspers *et al*., 2014: 106).The mentor is expected to have specific skills to guide and support the pre-service teacher. The teacher may be able to teach the content herself/himself but may find it challenging to support and advise a pre-service teacher in learning how to teach (Jaspers *et al*., 2014: 106). The mentoring of pre-service teachers takes place in different schools, under different contexts. The mentoring contexts are distinguished by a number of factors. These could be organisational, instructional and professional orientations with regards to the teaching and mentoring process (Orland-Barack and Hasin, 2010). The differences in mentoring are inherent with the existence of different schools. There is, thus, a need to have a deeper understanding of the context in which the mentoring takes place under these different settings and its possible influences on pre-service teachers' classroom practices.

School-based teacher educators or what we also refer to as classroom teachers, mentor the pre-service teachers during teaching practice. The mentor teachers are supposed to induct the pre-service teachers and help them as they progress from student to teacher (Denis, 2015). The mentor teachers are there to guide, advise, and support the pre-service teachers as they give them opportunities to learn how to teach (Buhagiar and Tonna, 2015). Mentoring is more demanding than teaching as it involves both teaching and other tasks (Draves, 2013; Yuan, 2016). That is, if teaching is a complex activity, then mentoring is even more complex as it involves teaching plus other duties. Not only does the mentor have to teach his/her class, but s/he also needs to have knowledge about supporting teaching in order to guide the pre-service teacher (Marimo, 2014). This places special demands on the teacher who is to act as a mentor and there could be need for professional education on aspects of mentoring. Colleges of education and universities have tried, in various ways, to provide some guidance to mentor teachers through workshops and/or seminars to ensure some consistency in the mentoring that is offered to pre-service teachers (Hudson *et al*, 2013). However, it would appear that not all pre-service teachers are getting the same opportunities to learn how to teach in the schools as some mentor teachers are not specifically trained for this important role of mentoring (Chien, 2015). Hence, this study sought to also understand the different mentoring practices of classroom teachers and the ways they might shape each pre-service teacher's own classroom practice.

Critics of the traditional teacher preparation programmes have continued to debate the major shift of teacher education programmes from universities to schools. These critics continue to debate the depth and quality of teacher education programmes which are mainly school-based (Zeichner, 2010). Zeichner (2010: 89) sees "… a disconnection between the school-based mentoring and the university-based coursework in education programmes" that empowers classroom practitioners and is of the view that there is need for bridging the gap between schools and universities. The other view is that for teacher education to remain relevant, it needs not reside in universities only as it is in danger of being excluded from the realities and practicalities of what happens in schools (Taylor *et al.*, 2014). The involvement of teachers as mentors without adequately preparing them for the mentoring tasks might, however, be problematic (Buhagiar and Tonna, 2015). Good teachers identified by school heads as mentors may not necessarily be effective teacher educators (Feiman-Nemser, 2001). Mentoring a pre-service teacher to teach requires much more than teaching skills. In mentoring, the teacher assumes dual roles of being a teacher of his or her class, and being a teacher of the pre-service teacher (Jaspers *et al*., 2014). This would mean that the teacher requires specialist skills in providing the appropriate opportunities for those learning how to teach (Aspfors and Fransson, 2015). The pre-service teacher is an adult and is different from school learners. Teaching an adult is different from teaching a minor, for example, the teaching approaches are bound to differ. In fact, the mentor is expected to assume a number of roles when working with teachers to be and these include being a parent figure, acting as support system, colleague and scaffolder (Abel *et al*., 1995). For the teacher to assume these roles, Aspfors and Fransson (2015) are of the view that the teacher needs to have received some form of training in mentoring. It could be interesting to find out how teachers who have no formal training in mentoring guide their pre-service teachers as they learn how to teach. This study, thus, also seeks to explore the teachers' mentoring activities and their possible influence on pre-service teachers' performance in the classroom.

Mentor teachers are also expected to play a critical role in enacting curriculum (Orland- Barak and Hasin, 2010). The mentor is in charge of a class and the pre-service teacher he or she is mentoring. Teachers are the curriculum implementers at school level. With the coming of the updated curriculum in Zimbabwe as from 2017, classroom practitioners are expected to also mentor pre-service teachers on the implementation of the updated curriculum. The Zimbabwe Curriculum Framework 2015-2022 (Zimbabwe Ministry of Primary and Secondary Education,

2016) has new learning areas at all stages in the school system, including at secondary level. In a case where the curriculum is centralised, such as in Zimbabwe, the differences in mentoring contexts become more visible at the implementation stage. It is at the implementation stage, in schools, where the mentor plays a critical role (Aspfors and Fransson, 2015). The good mentors are expected to adapt and adopt their worldview of what is to be taught in the updated curriculum in their diverse contexts (Orland-Barak and Hasin, 2010). Such changes in the curriculum call for mentors whose teaching and mentoring perspectives are compatible with the notion of reform-driven teaching that is consistent with societal needs (Wang and Odell, 2007). Mentor teachers are often expected to help and support pre-service teachers develop professionally in various spheres which include subject matter, students, methodology, curriculum, pedagogical content knowledge and class management (Chien, 2015). This may be a tall order for many classroom teachers and there could be need for teachers to be adequately trained to carry out the mentoring duties of pre-service teachers.

1.2 BACKGROUND TO THE STUDY

There are many reasons to embrace school-based mentoring in teacher preparation. One of the reasons is that school-based mentoring is grounded in the prominent theories of professional learning that support learning of trainees who work under the guidance of experienced practitioners or mentors (Trif, 2015). According to Hobson (2002), one of these theories is the Vygotskian perspective which regards school-based mentoring as a human activity anchored in social participation that is learned collaboratively with the help of more capable peers. The other reason is that those who are learning to teach would expect those who have gone through similar experiences as pre-service teachers and are now teachers, to have a positive influence on their professional identity construction and development (Hobson, 2002). In addition, the current model of teacher preparation creates a more enabling environment for the pre-service teacher to marry theory and practice during teaching practice (Musingafi and Mafumbate, 2014).

In Zimbabwe, teacher education has gone through a number of changes since independence in 1980. In the early years of Zimbabwe's independence, teacher education programmes were meant to address teacher shortage and pre-service teachers were in charge of a class during teaching practice (Ngara and Ngwarai, 2012). From 1982, pre-service teachers were on teaching practice for a total of three terms during the three year period of the programme and were

supervised by school heads and college lecturers (Shumbayawonda, 2011). Since 1995, "the 2-5-2 model of teacher preparation which means that students are in college in the first two terms, and on teaching practice for five terms before they come to college in the final two terms", was adopted (Majoni and Nyaruwata, 2015: 3698). Pre-service teachers practise under the guidance of trained teachers as their mentors (Musingafi and Mafumbate, 2014). The mentor teachers are expected to support the pre-service teacher during the teaching practice period. Clearly Zimbabwe, like many other countries, seems to have embraced the notion of school-based mentoring in teacher preparation (Shumbayawonda, 2011).

Although school-based mentorship has been embraced in Zimbabwe, local researchers have pointed out some of the challenges in the current teacher preparation model (Majoni and Nyaruwata, 2015; Musingafi and Mafumbate, 2014; Ngara and Ngwarai, 2012). Some of these challenges include ill-defined duties and expectations for those involved in mentoring, uncoordinated school and college teaching programmes, inadequate training of mentors and mentees who are not sufficiently prepared for the mentoring process (Musingafi and Mafumbate, 2014). It has been argued that mentor teachers could do a more effective job of mentoring pre-service teachers if they were prepared for the task (Majoni and Nyaruwata, 2015; Shumbayawonda, 2011; Samkange, 2015). It would be interesting to find out how the practising mentor teachers go about the task of mentoring pre-service teachers; especially given that many are not formally trained specifically to be teacher educators. This presents a real problem that needs to be studied.

Findings from a local research study reported that there was variance in the way mentoring was perceived by mentors and pre-service teachers (Ngara and Ngwarai, 2012). A mentor was to be regarded as being a guide and helper in the technical aspects of teaching (Shumbayawonda, 2011). However, different conceptions of the mentor could lead to tensions and conflict during the mentoring process and as a result, compromise the quality of mentoring (Ngara and Ngwarai, 2012). Another study by Majoni and Nyaruwata (2015) investigated challenges in attaining effective mentoring during teaching practice and recommended the training of mentors to develop their mentoring habits. A more related local study was a research on pre-service and in-service secondary science teachers' perceptions using the five-factor model for mentoring practices in a quantitative study (Mudavanhu and Zezekwa, 2009). In a Mudavanhu and

Zezekwa's (2009) study, significant differences were found between the pre-service and in-service teachers' views of mentoring practices with the pre-service teachers having more positive perceptions than the in-service teachers. While there is a growing body of literature on school-based mentoring of pre-service teachers, few studies have focused on the context and practice of school-based mentoring of pre-service teachers in Zimbabwe. This study sought to fill this gap by exploring how mentoring contexts and practices shape pre-service teachers' classroom practices.

The programme considered in this study, the Post Graduate Diploma in Education (PGDE), has its teaching practice component in the final semester of study. The PGDE programme has duration of one and half years. The students are attached to secondary school mentors. At university, the students would have been prepared for this teaching practice through the foundations of education courses and curriculum subject methodology courses. The students also study professional courses that include educational technology, contemporary educational issues, guidance and counselling courses. To guide the students and their mentors, the university's Department of Teacher Development produces tutorial letters for students going on teaching practice giving examples of templates of schemes of work, lesson plans, and teaching records. The tutorial letters also spell out the expectations of the department in the mentoring, supervision and final assessment of students on teaching practice. The university spells out the expectations for mentoring students on teaching practice. In addition, unlike in the past, the Ministry of Primary and Secondary Education now provides guidance to supervisors and mentors in the first chapter of the Handbook on Teacher Professional Standards (TPS) (Zimbabwe Ministry of Primary and Secondary Education, 2015). The handbook highlights the purpose of TPS to mentors and supervisors as the basis for providing benchmarks for the measurement of teacher performance. Such official documentation could be considered as showing how the Ministry values the mentoring of pre-service teachers during teaching practice. In this study, mentor and pre-service teachers were interviewed, mentoring sessions were observed and official documents were analysed to have a deeper understanding of the context and practice of school-based mentoring of pre-service teachers.

Being a teacher educator for the past two decades, I have developed interest in school-based mentoring and how different mentoring contexts and practices in schools can be explained. This

study specifically explored the various contexts and practices of school-based mentoring of pre-service teachers in Zimbabwe.

1.3 STATEMENT OF THE PROBLEM

This study seeks to create a deeper understanding of how school-based teachers or classroom teachers who are not trained as teacher educators (Garza and Harter, 2016), but are expected to play the role, cope with the task. Classroom teachers play the role of teacher educators on the basis of some of the assumptions school-based mentoring makes on the mentor teachers as educators. One of the assumptions is that an effective teacher will make a good mentor (Garza and Harter, 2016). Being an effective teacher may be a necessary condition for being a good mentor but may not be sufficient for one to be an exemplary mentor (Wang, 2001). The second assumption is that experienced teachers will effectively use their teaching experience in mentoring (Garza and Harter, 2016). Besides being experienced, the teacher mentor is supposed to be more knowledgeable to be able to support the pre-service teacher in practising teaching (Siyepu, 2013). The mentor teacher is expected to be a 'more knowledgeable other' (MKO) in order to assist the pre-service teacher to acquire new skills in the profession (Shooshtari and Mir, 2014). As a mentor, he or she is expected to assist the pre-service teachers in marrying theory and practice as they learn how to teach (Denis, 2015). Viewed through a socio-cultural perspective lens, the mentor is accountable for taking the pre-service teacher to the next upper level in the zone of proximal development (ZPD) (Bekiryazici, 2015). The mentor has relevant experience because he or she has experienced what the pre-service teacher is experiencing during teaching practice, so is in a position to share his or her experiences with the pre-service teacher (Buhagiar and Tonna, 2015). The pre-service teachers have learned the relevant theories from university but need to be supported as they attempt to combine the theoretical and practical knowledge in a real classroom situation (Draves, 2015). This is the aspect in which the mentor is expected to play a major role as he or she is familiar with school tradition, culture, values, goals and myths (Ramnarian, 2015). The mentor is expected to guide, advise and support the pre-service teacher during teaching practice (Ngara and Ngwarai, 2012). However, this could be a problem because the school-based mentors may not have been adequately trained in mentoring (Majoni and Nyaruwata, 2015). Without uniform and formal training, the mentors' guidance to pre-service teachers could differ as other contextual factors may influence how teaching and

mentoring are implemented in schools and classrooms (Wang, 2001). The contextual factors could be institutional related and this could present diverse ways of mentoring and opportunities to learn for both the mentor and pre-service teacher (Wang and Odell, 2007).

Besides the contextual factors, the other determining factor in the mentoring process could be the mentor teachers' conception of mentoring (Ramnarian, 2015). Mentors could have different perspectives of mentoring which include the humanistic, the situated apprentice and the critical constructivist views (Wang and Odell, 2007). The way teaching is structured, organised and implemented could be reflective of the teacher's philosophy and beliefs on teaching and learning (Msila, 2015). The mentoring practices are a result of the interrogation of teaching, interactions and reflections on practice (Orlando-Barack and Hasin, 2010). The mentor, as the MKO, is expected to advise and guide the pre-service teacher as he or she acquires new skills in the profession (Bekiryazici, 2015). Student teaching takes place in different contexts as the practitioners could be operating at different levels within the zone of proximal development (ZPD) (Shooshtari and Mir, 2014).

Some studies have explored opportunities to learn to teach provided by different contexts (Wang, 2001). Others have investigated mentors and pre-service teachers' perceptions of mentoring practices (Mudavanhu and Zezekwa, 2009; Waring, 2013). Locally, a study by Mudavanhu and Zezekwa (2009: 65) investigated "pre-service and in-service secondary science teachers' perceptions of mentoring practices". However, in all these studies mentoring practices were not specifically observed during the mentoring process. In addition, I have not been able to locate a study on context and practice of school-based mentoring of pre-service teachers in Zimbabwe. This present study fills this gap by examining the context and practice of school-based mentoring of pre-service teachers. This study seeks to explain how mentoring contexts and practices shape pre-service teachers' classroom practices in a context where the school teachers, who are not trained teacher educators, are expected to play the role of mentors.

1.4 THE MAIN RESEARCH QUESTION

How is school-based mentoring of pre-service teachers practiced in various school contexts of Zimbabwe, and with what consequences for the classroom practices of the pre-service teachers?

1.4.1 Sub-questions

The following sub-questions helped to answer the main research question:

a) What are the differences in mentoring contexts in secondary schools?
b) How do different contexts shape and give rise to particular mentoring practices?
c) In what ways do mentoring contexts and practices shape pre-service teachers' classroom practices?

1.5 AIM OF THE RESEARCH

The aim of this research is to deepen understanding of the practice of school-based mentoring of pre-service teachers in various school contexts in Zimbabwe and its consequences for the pre-service teachers' classroom practices.

1.5.1 Objectives of the Study

The objectives of the research are to:

a) Analyse the differences in mentoring contexts in secondary schools;
b) Determine if and how different mentoring contexts shape mentoring practices;
c) Use evidence from the study to explain how mentoring contexts and practices shape pre-service teachers' classroom practices.

1.6 PURPOSE OF THE STUDY

The study sought to help to explain how mentoring contexts and practices shape pre-service teachers' classroom practices. As schools have assumed an important function as teacher education sites (Zeichner, 2010), there is need to examine the collaboration between schools and universities in teacher education considering the duration the pre-service teachers spend in schools as they learn how to teach. The traditional disconnect between schools and universities seem to continue to be a challenge for this teacher education model (Zeichner, 2010). This disconnect has to be revisited if pre-service teachers are to benefit from the mentoring process under the guidance of school-based teacher mentors. However, the diversity in the school contexts is likely to present pre-service teachers with different opportunities for learning to teach. There could be differences in the way learning and teaching are organised at a school (Wang, 2001). The resources, both material and human, are also bound to differ and could have different influences on mentoring practices. Thus information from the examination of mentoring

practices could assist policy makers and teacher educators as they develop mentoring education programmes to capacitate mentor and pre-service teachers.

The study hopes to document and analyse details on how school-based mentorship takes place, in an effort to enhance the opportunities to learn how to teach effectively in secondary schools in particular (Wang, 2001). Effective mentorship which involves school-based personnel and university staff is still in its infancy in Zimbabwe (Majoni and Nyaruwata, 2015) and there is need to have a deeper grasp of school-based mentoring of pre-service teachers in order to improve the professional growth of pre-service teachers and mentors (Yuan, 2016). The mentoring pair is expected to learn from each other during the mentoring process (Ambrosetti, 2014). The mentor has the craft knowledge from his or her years of experience as a classroom practitioner, whereas the pre-service teachers are expected to bring theory and latest teaching approaches from their method courses at university (Denis, 2015). The mentoring experiences would make pre-service teachers appreciate the practicalities of teaching initially under the close guidance and supervision of a mentor who will gradually let the pre-service teachers assume more responsibilities as the teaching practice progresses (Yuan, 2016). By interrogating the pre-service teacher's and the mentor's classroom practices, this study will determine the extent to which teaching and mentoring practices influence pre-service teachers' classroom practice, bearing in mind the different contexts in which this takes place in the varied secondary schools.

The research also seeks to enhance the professional growth of pre-service teachers and mentors. Mentoring could provide opportunities for life-long learning for both the mentoring pair (Jaspers *et al*., 2014). The knowledge gained from mentoring could become useful in the professional life of practitioners. The mentor could use this knowledge to mentor other pre-service teachers in future. The pre-service teachers could use knowledge from mentoring as they build a repertoire of knowledge for teaching and learning (Buhagiar and Tonna, 2015). This study may also influence policy on school-based mentorship and its role in teacher education programmes (Shumbayawonda, 2011).

1.7 SIGNIFICANCE OF THE STUDY

This study adds to the existing literature on mentoring, by providing a deeper understanding of the mentoring practices of teachers given that schools provide different mentoring contexts and cultures. In the case of Zimbabwe, the contexts of mentoring that exist are characterised by different secondary schools, including boarding, rural, urban, single-session day and double-session day schools. These schools are likely to have different environmental conditions for mentoring. Therefore, this study pays attention to how different contexts influence mentoring practices and their consequences for pre-service teachers' classroom practices.

My study is also important to the mentors and pre-service teachers in the study as they have the opportunity to develop deeper understanding of school-based mentoring. They can use the research study to reflect on their classroom practices. In addition, the participating mentor teachers are able to appreciate the important role they play in teacher preparation. They have assumed roles of teacher educators and are involved in human capital development for the country. The existing teacher education programmes have redefined the roles of schools, reducing the fixed customary boundaries between schools and university, with university knowledge no longer excluding that of schools (Taylor *et al*., 2014). This study highlights the third space in teacher education that signified the non-hierarchical nature among academic, classroom practitioner and community knowledge (Zeichner, 2010). Therefore, this study may influence policy makers to recognise the new role of schools in the professional growth of educators.

The study provides details on how school-based mentorship takes place in different secondary schools and suggests solutions for challenges faced. The study also enables researchers to have a deeper understanding of the mentoring contexts and practices of pre-service teachers. Pre-service teachers and mentors who have access to the findings of the research are likely to realise their contribution to the professional growth of classroom practitioners. Lastly, the study may influence policy makers to recognise the important role of schools and mentor teachers in teacher education.

1.8 THEORETICAL FRAMEWORK

This study uses Vygotsky's Socio-cultural Theory as a lens through which to view school-based mentoring during teaching practice. The theory, which provides one of the foundations of

constructivism, argues that socialisation affects the learning process in an individual. The three pillars that anchor the theory are social interaction, the more knowledgeable other (MKO), and the zone of proximal development (ZPD) (Miksza and Berg, 2013). The key tenet of the theory is that pre-service teachers' cognitive development, which includes language and reasoning processes, develop through social interactions with others with whom they share their culture and practices. The ability to learn from the social interactions defines intelligence in the Vygotskian perspective.

Learning to teach is based on interacting with other people and, for this to happen, there should be a more knowledgeable other (MKO) who assists the pre-service teacher to acquire new knowledge (Shooshtari and Mir, 2014). The mentor teacher, as the MKO, has the expertise and relevant experience to support and guide the pre-service teacher as they interact during mentoring.

The other important concept in the socio-cultural theory is the zone of proximal development (ZPD) (Shooshtari and Mir, 2014). The ZPD refers to the difference between the potential level of development and current level of growth of the pre-service teacher (Dunphy and Dunphy, 2003). The current level of growth refers to what the pre-service teacher is able to do without the assistance of others, whereas the potential level refers to what the pre-service teacher is capable of doing with the assistance of other people (Miksza and Berg, 2013). The other people in this case could be the MKO. Learning occurs in the ZPD and the MKO assists the pre-service teacher to reach a higher level in the ZPD (Shooshtari and Mir, 2014). The MKO uses expertise and experience to help the pre-service teacher understand more complex higher level knowledge.

For learning to take place in the ZPD, the MKO should provide support. This support is gradually withdrawn as the pre-service teacher begins to master the material being taught. The process of providing support until such a time that it could be withdrawn gradually as the pre-service teacher gains confidence is referred to as scaffolding (Miksza and Berg, 2013). This is a critical stage in the learning process as the MKO has to fully understand the progress in the learning development to correctly gauge when to start to gradually reduce the support given to the learning and at the same time build the pre-service teacher's confidence to be able to perform the learning task even in the situation in which the MKO's help is slowly being withdrawn. The ability to eventually perform the learning task signifies that learning has taken place in the ZPD.

The Vygotskian perspective is considered to be the appropriate lens to be used to view school-based mentoring during teaching practice. School-based mentoring is some form of learning about teaching for both the mentor teacher and pre-service teacher (Hudson *et al.,* 2013). Socialisation is considered to possibly affect the learning process which takes place in the ZPD under the guidance of the MKO.

1.9 RESEARCH METHODOLOGY AND RESEARCH DESIGN

The study adopted the qualitative research approach with the multiple case studies as the research design. The research approach was chosen because it allowed me to carry out the study in its natural settings (Creswell, 2014). The research sites were five secondary schools. The multiple case designs were utilised in this research to examine the mentoring contexts and practices in the five different schools in which pre-service teachers were attached to mentors. The schools were different in terms of type, size, organisation and location. The case study design was chosen as it enabled the research to focus on the critical participants and situation in the mentoring process (Leedy and Ormod, 2013). The design also permitted me to be close to the mentors and the pre-service teachers and hear their voices on the mentoring process while observing mentoring sessions in the schools (Clark and Ivankova, 2016).

Information was generated from school visits during which mentors and pre-service teachers were observed and interviewed to gain insight into the mentoring contexts and practices. The mentoring practices were observed during mentoring sessions. The interviews were semi-structured in order to guide the dialogue to remain focused on mentoring contexts and practices (Leedy and Ormod, 2013). I observed some of the mentoring activities mentioned in interviews. School and policy documents were also analysed to understand the differences in mentoring contexts in the research sites. The document analysis also enabled me to cross-check findings from interviews and observations as part of the triangulation process to ensure credibility in the study (Clark and Ivankova, 2016).

The participants were pre-service teachers and their respective mentors, and this involved five such pairs of mentor-pre-service teacher. The purposive sampling technique was used to select from a population of Post Graduate Diploma in Education (PGDE) students at one university in Zimbabwe who were on Teaching Practice in their final semester and their mentors. These students were selected as they were considered information-rich cases and my interactions with

them enabled me to have a deeper understanding of the mentoring contexts and practices in the five secondary schools (Leedy and Ormod, 2013). The selected secondary schools were one rural day single-session, one rural day double-session, one boarding, one urban day single-session, and one urban day double-session. A single-session secondary school operates from 7.30 in the morning till late afternoon whilst a double-session operates as two schools in one using the same classrooms on an alternating basis on the same school day.

Interviews, observations and documentary analysis were used as a methodological triangulation strategy to enhance trustworthiness in this qualitative study (Clark and Ivankova, 2016). Use of interviews, observations and documentary analysis was after careful consideration to ensure credibility (Clark and Ivankova, 2016). Interviews were audio-taped and transcribed verbatim. The generated information was content analysed and the observations and participants' responses were coded and classified into categories of different themes. I did member checking by reporting back preliminary findings to the mentors and pre-service teachers, asking for their critical interpretation on the findings and integrating these critiques into the study's findings (Creswell, 2014).

I considered ethical issues of informed consent, voluntary participation and confidentiality to protect the participants and the schools (Leedy and Ormod, 2013). I also applied to the Ministry of Primary and Secondary Education for permission to conduct the research in the participating secondary schools. The participants were given consent forms with information about the study to decide whether or not they agree to take part in the study. Participants were also assured of the confidentiality and anonymity to be observed in the study. More details on the methodology are provided in Chapter 3.

1.10 DELIMITATIONS OF THE STUDY

The participants for this research study were Post Graduate Diploma in Education (PGDE) students, who were on teaching practice, and their mentors. The teaching practice was done in their final semester of their three semester programme. The pre-service teachers' mentors were also included in this study as their perceptions on the mentoring contexts and mentoring practices in secondary schools were also examined. It was important to include view points from the mentoring pair as these were the main participants in this study who could provide information on context and practice of school-based mentoring of pre-service teachers. The study was

confined to secondary schools in one district in Zimbabwe. Primary schools were not included in the study. However, the findings from this study may be transferable to other pre-service programmes with similar conditions. These other pre-service programmes could include the following:

a) Similar teacher education programmes with a similar curriculum,
b) Other higher education institutions' programmes in the country with school-based mentoring during teaching practice, and
c) Other countries' teacher education programmes which include school-based mentoring during teaching practice.

1.11 LIMITATIONS OF THE STUDY

There were some limitations in carrying out this study. Findings of this study may not be applicable to other teacher education programmes that are not similar. This explains why I made a deliberate attempt to give thick descriptions of the participants, research methods and the context in which the mentoring of pre-service teachers took place in the different schools to allow for contextual learning and comparison. The context included the environment, conditions and how pre-service teachers were mentored as they were given opportunities to learn how to teach. Eventually, it would be up to the reader to make a decision on whether the results are transferable to other similar contexts. However, the findings may be significant as they are likely to shed light on the mentoring contexts and practices in some secondary schools.

Other limitations could be related to the research methodological aspects of this study. Some of the information was gathered through face-to-face interviews and the presence of the researcher could have affected the trustworthiness of the data (Clark and Ivankova, 2016). In an effort to improve on this challenge, I had to guarantee the participants confidentiality of the information they gave in this study (Leedy and Ormod, 2013). It was also important to establish a rapport before the interviews and observations to gain the participants' confidence and trust in the whole research process. During observations, my presence could have also influenced the participants' behaviour as they could adjust their normal behaviour. However, even the assurance by the researcher for the participants to act naturally may not guarantee that the participants would act naturally. This could explain why I used other methods of gathering information like interviews and documentary analysis as some form of triangulation in order to cross check the findings from

the different methods. The use of retrospective interviews to gather data could also produce biased results as participants' analysis of what they went through might be affected by later experiences (Jaspers *et al*., 2014). The participants were relying on their capacity and ability to recall their past experiences. In an effort to cater for this shortcoming, I encouraged participants to make reference to some of their school teaching documents and actual examples in order to cross check their responses and give accurate information.

1.12 DEFINITIONS OF KEY TERMS

The following terms are defined to have a common understanding of the terms as they are used in this study.

Student teacher refers to a person who is training to be a teacher in an institution of higher learning, such as a teachers' college or university. In the mentoring process, the student teacher is the mentee (Majoni and Nyaruwata, 2015). Student teacher, mentee, and pre-service teacher are used interchangeably in this study.

Pre-service teachers refer to student teachers who are enrolled in their initial teacher education programme. They could be studying for a diploma or degree in education. First degree holders could study for a Post Graduate Diploma in Education (PGDE) or its equivalent to enable them to be qualified teachers in Zimbabwe (Zimbabwe Ministry of Primary and Secondary Education Handbook on Teacher Professional Standards, 2015).

Mentoring is a school-based activity in which a more experienced teacher provides professional assistance to pre-service teachers aimed at empowering them so that they become more effective in their practice (Mudzielwana and Maphosa, 2014).

Mentor teacher refers to a qualified educator who acts as an advisor, guide, facilitator and counsellor to the pre-service teacher during teaching practice (Musingafi and Mafumbate, 2014). The mentor teacher is responsible for the professional development of the pre-service teacher during teaching practice (Yuan, 2016).

School-based mentoring is a nurturing process in which pre-service teachers are assisted in their professional growth by the guidance, support and advice they get from their mentors, other teachers and school leadership as they learn to be teachers in schools (Hobson, 2002).

Mentoring contexts refers to the situation, environment and circumstances in which a more experienced person advises and guides pre-service teachers as they learn how to teach in schools. The mentoring contexts are determined by the way teaching and learning is organised and structured in the schools which have different cultures and other determining factors like school leadership, resources, calibre of students, and at times location of the school (Wang, 2001). The mentoring contexts, in short, refers to environmental conditions, situations and circumstances that exist in schools as pre-service teachers are inducted into the teaching profession by experienced classroom practitioners. Environmental conditions include time, physical and socio-cultural factors that shape mentoring.

Mentoring practices refers to the teacher's classroom behaviours and actions as he or she guides, supports and advises the pre-service teacher during teaching practice. These practices are socially constructed as they are likely to be reflective of the school's beliefs, values, traditions and goals (Ramnarian, 2015). The mentoring practices are meant to enhance the professional growth of pre-service teachers and the mentor as they interact and reflect during the planning, teaching and evaluation of their lessons. In short, what the mentor does in the process of teaching his or her class and the pre-service teacher which enriches the teaching capabilities of the pre-service teacher has indicators of mentoring practices.

Classroom practice refers to teaching and learning activities which take place in the classroom as part of the instructional processes facilitated by the teacher as learners interact with content, their own learning experiences and the teacher's class management techniques (Li and Oliverira, 2015). The teacher is expected to manage these class interactions in such a way that learning is contextualised and caters for the diverse learning needs of all learners by ensuring that the instructional practices, among others, focus on individualisation, teamwork and reliable assessment. However, classroom practice, as a process that involves a number of stakeholders and their interactions, could be affected by some factors which are situated either within or outside the classroom. One of the factors could be the mentoring process.

More knowledgeable other (MKO) refers to anyone who has a superior understanding and competencies of what has to be learned or done (Bekiryazici, 2015). In teaching, the mentor could be considered as the MKO as he or she advises and guides the pre-service teacher in carrying out teaching duties.

Student teaching is also referred to as teaching practice, field experience or practicum. This is the period when the pre-service teacher is in schools learning how to teach under the guidance of a qualified teacher (Majoni and Nyaruwata, 2015).

Socio-cultural theory explains that human learning is a product of human activities that take place during social interaction which is shaped by the cultural context (Trif, 2015).

1.13 ORGANISATION OF THE THESIS

The thesis is organised into five chapters:

Chapter one focused on the introduction which comprised of background to the study, statement of the problem, research questions, aim of the research, objectives of the study, purpose of the study, significance of the study, research design and research methodology, delimitations of the study, limitations of the study, definitions of key terms and organisation of the thesis.

Chapter two explored and reviewed related literature on the lens used to view school-based mentoring during teaching practice, mentoring contexts and practices. The theoretical framework for the study is the socio-cultural theory and its themes guided this research.

Chapter three focused on the research methodology that was used in the study. At first the researcher conceptualised the qualitative research methodology employed in this thesis. The researcher went on to identify and describe the use of the multiple case studies design in this study. The selection procedures and research instruments used to generate data in the study were discussed in this chapter. The practical conduct of the study as well as the ethical considerations was also explained in this chapter.

Chapter four is based on the data presentation, analysis and interpretation of the research findings from the study. Interviews, observations and documentary analysis were the main instruments used to generate research data as guided by the research questions and objectives of the study. The analysis and interpretation of the themes that emerged from the three case stories from the study formed the core of this chapter.

Chapter five concludes the study by discussing and summarising the findings of the research, drawing conclusions to answer the research questions and making recommendations to the

relevant authorities. The chapter also recommended other areas of further research identified during the course of the study.

The next chapter presents the review of related literature on mentoring contexts and practices.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

This chapter is a review of related literature to the present study. Basically, the review was done in two parts. The first part discusses and adopts Vygotsky's socio-cultural theory as the lens used to examine mentoring practices in different school contexts and their influences on pre-service teachers' classroom practice. This provides a clear indication of the theoretical structure and main themes influencing this research study. The literature review was intended to answer the following research sub-questions:

a) What are the differences in mentoring contexts in secondary schools?
b) How do different contexts shape and give rise to particular mentoring practices?
c) In what ways do mentoring contexts and practices shape pre-service teachers' classroom practices?

The sub-questions were formulated as the part of the unpacking process of the main research question for this study: How is school-based mentoring of pre-service teachers practiced in various school contexts of Zimbabwe and with what consequences for the classroom practices of the pre-service teachers?

The second part looks at the main concepts in the above research questions. The review described the relationship between the concepts that were critical in shaping and conducting this study titled: "The context and practice of school-based mentoring of pre-service teachers in Zimbabwe". Among some of the concepts that were reviewed are the following:

i. The context of mentoring pre-service teachers
ii. The practice of mentoring pre-service teachers
iii. Pre-service teaching in schools
iv. Schools as teacher education sites for mentoring practice
v. Pre-service teachers' classroom practices

Different research studies were used to explain the concepts and the relationships among them. There was a deliberate attempt to relate mentoring concepts to themes in the theory framing this

study. The key concepts of Vygotsky's socio-cultural theory framed my review of related research studies and my personal views could be considered as my style of interrogating some of the issues which helped me to answer my research questions. My next focus is on the theoretical framework.

2.2 USING VYGOTSKY'S SOCIO-CULTURAL THEORY AS A LENS TO VIEW SCHOOL-BASED MENTORING OF PRE-SERVICE TEACHERS

This study is underpinned by Vygotsky's socio-cultural theory which advances that socialisation affects the learning process in an individual. To understand how this theoretical framework helps to guide and interpret the knowledge presented in this study, it may be necessary to discuss the key concepts and implications of the theory in teacher education.

2.2.1 Overview of the socio-cultural theory

Vygotsky's researches on how children solve problems that seemed to be beyond their level of development led to the development of the socio-cultural theory. Basically, the theory explains that human learning is a product of human activities that take place during social interaction and is influenced by the cultural context (Trif, 2015). The cultural context is shaped by the people's values, beliefs and practices which influence the child's psychological development. The main idea of the theory is that mental development, which includes language and reasoning processes, develop through social interactions with others with whom they share their culture. Those who influence the child's thinking process make use of their prior experiences and knowledge (Hudson, 2002). Mental development is a result of the process of social interaction which begins at birth and is ongoing until death. The social interaction influences do not have a cut-off point in life. During one's lifetime, a person can be assisted to learn new things. Social interaction leads to cognitive development. The theory is based on three main themes concerning "social interaction, the more knowledgeable other (MKO), and the zone of proximal development (ZPD)" (Shooshtari and Mir, 2014: 1772).

The socio-cultural perspective provides the theoretical lens through which school-based mentoring was viewed. The pre-service teachers who are learning to teach go to different schools with different contexts and cultures for their teaching practice. The mentor is an experienced classroom practitioner who has experienced what the pre-service teacher is experiencing (Shumbayawonda, 2011). The pre-service teacher needs to be supported and guided during the

mentoring process. The mentoring which goes on in schools is based on interactions. From interacting with mentor teachers, teachers at the school and students, the pre-service teacher learns to understand how the teaching and learning process is organised and implemented. The pre-service teacher has to be assisted by the more experienced teacher to acquire teaching skills by observing the mentor teacher's lessons and engaging in discussions before, during and after the lessons to have a deeper understanding of the teaching which goes on in schools. Learning how to teach can be understood in the context of the socio-cultural perspectives as discussed in this chapter.

The three themes of the socio-cultural perspective provide the theoretical framework that guided this study. Although Vygotsky's theory focused on children's cognitive development, I think it can be related to school-based mentoring as the principles of learning and cognitive development are the same. I believe a child's learning can be related to a pre-service teacher who is learning to teach under the guidance of a qualified teacher. I now turn my focus on each of these themes of the theory and how they can be used in school-based mentoring.

2.2.2 Social interaction in cognitive development

Vygotsky was of the idea that social interaction has a critical role in the process of mental development. His theory of cognitive development is influenced by social interaction, language and cultural context (Shooshtari and Mir, 2014). The main argument is that social learning precedes mental development. Learning or cognitive development is a result of the connections among people and how they use tools developed in their culture as they interact. Language which includes speech and writing are some of the tools used to develop higher thinking skills (Morcom, 2015). At the beginning, children make use of language as a way of communicating their needs. When children have internalised the use and meanings of the social interaction tools, they use these to have a better understanding of their environment as they develop their mental capacity. According to Vygotsky, a child's mental development appears on two planes. The first level or plane symbolises the social interaction between people and then the second plane is the psychological growth which takes place within the child (Bekiryazici, 2015). The children's experiences enable them to initially depend on others for guidance before they gradually understand the context in which they can apply the knowledge. The social interactions can determine the pace of the cognitive development which goes on until death. Therefore,

mentoring of pre-service teachers can be likened to situations in which the social interactions that take place in the classroom influence the professional growth of the pre-service teacher. This study examined the pre-service teacher-mentor interactions during the mentoring sessions to have a deeper understanding of how social interactions affect contexts and practices of school-based mentoring of pre-service teachers.

Vygotsky's perspective on cognitive development was different from that of Piaget. Piaget was of the view that a child's mental development had four main periods which could be related to age and had an endpoint (Trif, 2015). The four main periods of mental growth, according to Piaget, were sensorimotor, preoperational, concrete operations and formal operations. However, Vygotsky disputed this and argued that cognitive development is too complex to be categorised by stages (Bekiryazici, 2015). He saw cognitive development as a life-long process. Likewise, professional development of pre-service teachers and mentors during mentoring could be viewed as a life-long process. The current study sought to determine ways in which mentors and pre-service teachers continued to learn during mentoring and throughout their teaching careers.

Interrogating teacher practices and engaging in discourse with the mentor teacher and learners form part of the interaction which takes place during mentoring. This interaction could facilitate the learning of teaching skills for the pre-service teacher. The context in which discussions are held could provide useful teaching practices as the pre-service teacher is mentored to teach. The mentoring happens in a particular school context in which schools have their own cultures, traditions, beliefs, norms and goals (Wang, 2001). The quality of the mentoring could depend on the type and kind of interactions which take place during the pre-service teacher's teaching experiences at the school. According to the Vygotskian perspective, the pre-service teacher who is the mentee and the mentor teacher are expected to learn from the mentoring experiences as they adopt the life-long learning approach to teaching. This could suggest the need for some form of standardisation of the mentoring which goes on in schools, possibly through some education programmes to capacitate mentors. However, the schools and mentors, because of their diverse nature, are likely to provide varied opportunities for pre-service teachers to learn how to teach. Therefore, this study set to find out the opportunities of professional growth provided by the social interactions involving the mentoring pairs in schools during the mentoring process.

2.2.3 The more knowledgeable other (MKO)

The other key concept in the theory is the more knowledgeable other (MKO) and this refers to anyone who has a superior level of understanding and ability of what has to be done (Bekiryazici, 2015). In a teaching and learning situation, the teacher is expected to have a higher level of understanding of the concepts, tasks and learning assignments for him or her to be able to facilitate learning of the learners including the pre-service teacher (Siyepu, 2013). In addition, in teaching, the MKO could be a classmate or some electronic teaching tools like computers, cell phones and calculators. Learners will depend on these for support during the instructional process. In a learning situation, there could be several MKOs in situations in which learners work in groups as some more capable members of the group could assist classmates. However, the interaction between the learner and the MKO could be limited if it is an electronic device. The MKO could also lack expertise in certain areas in practice although the general assumption is that a teacher can effectively facilitate learning. Therefore, this study needed to investigate the mentors' expertise in mentoring since they were not trained teacher educators and yet they had been tasked with the task of school-based teacher educators.

In mentoring, the MKO could be the mentor who would provide support and guidance during the mentoring process. The mentor would provide emotional and technical support to the pre-service teacher. The mentor would also assist with the practical and pedagogical aspects of teaching during teaching practice. The mentor could also assume various roles during the mentoring process with the aim of assisting the pre-service teacher to be a teacher. The MKO could provide more professional support if he or she is properly trained for the task. If someone has to be viewed as the MKO, it could be mandatory to have the required skills in order to guide the novice effectively. This study found it necessary to examine the mentoring practices of teachers who were mentoring pre-service teachers without being formally prepared for the task. As a result, the current study intended to find out if the mentor teacher had the expertise of a teacher educator to facilitate the transition of a pre-service teacher to a teacher.

2.2.4 Zone of proximal development (ZPD)

In the socio-cultural perspective, for meaningful learning to occur, the pre-service teacher should be in the zone of proximal development (ZPD) (Shooshtari and Mir, 2014). The ZPD shows the area which represents the difference between what a pre-service teacher can do on his or her own and those things he or she cannot do even with the assistance of the MKO (Siyepu, 2013). The

ZPD shows the area in which we have things the pre-service teacher can do with the assistance of the MKO. The MKO is expected to take the pre-service teacher from a lower level to a higher level within the ZPD. The MKO has to provide opportunities to support the pre-service teachers to develop their teaching competencies during the learning process (Shooshtari and Mir, 2014), so that there is a change in their levels within the ZPD.

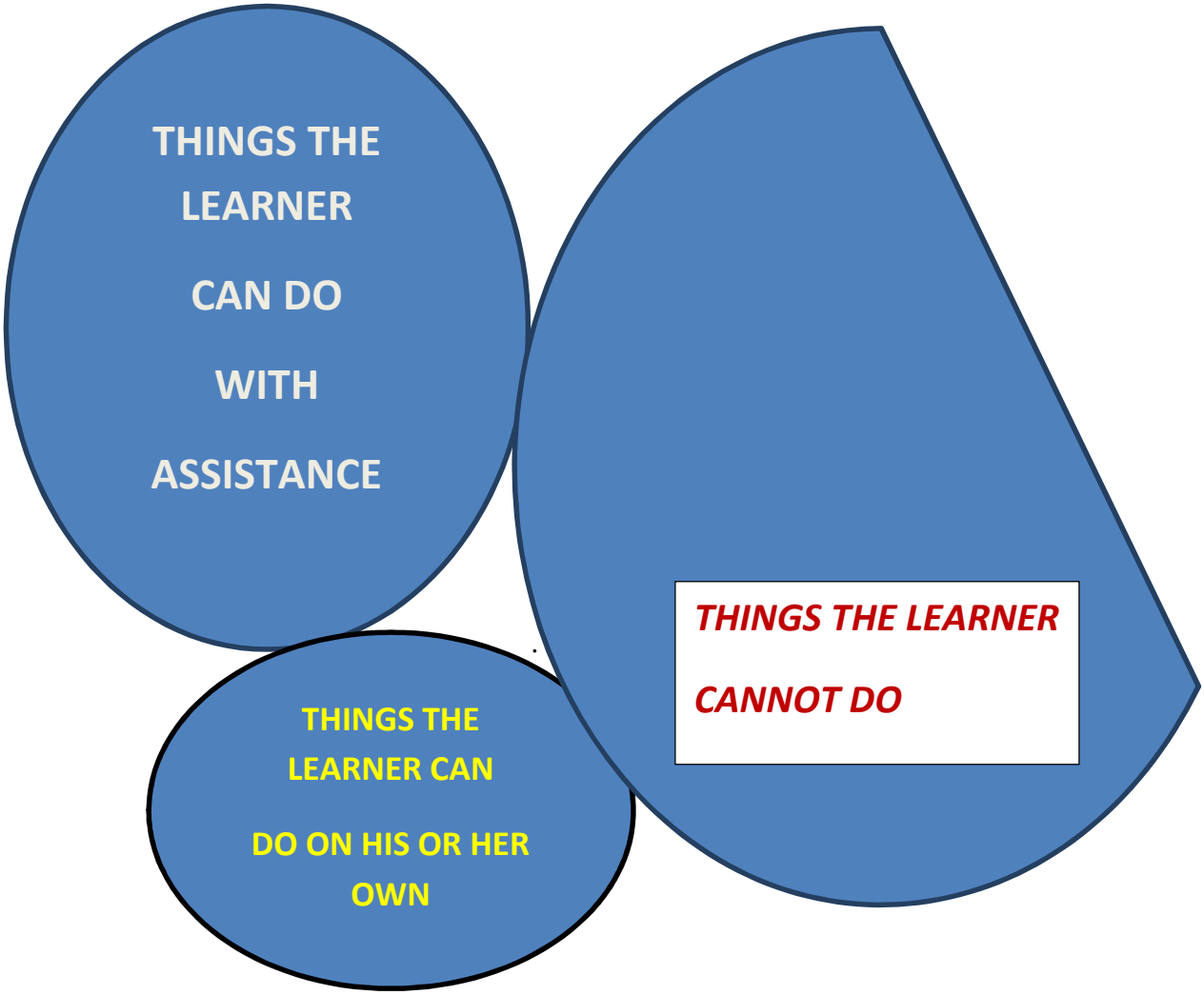


Figure 2.1 Zone of Proximal Development (ZPD) (Adapted from Bekiryazici, 2015: 914)

With the assistance of the MKO, the one who is learning to teach is expected to operate within the ZPD to show that learning is taking place. Any teaching which is outside the ZPD is not meaningful and well thought out. If the teaching is meaningful, it should not be on what the pre-service teacher can already do on his or her own. Meaningful teaching results in learning in which there will be change in knowledge acquisition. The other extreme would be teaching pre-

service teachers things they cannot do. In this scenario, the pre-service teacher would not have been prepared for the material being taught and yet teaching is supposed to be a process of facilitating learning. As a result, no learning would take place as there would be no relevant grounding on which the new material would be based. Learning which takes place in the ZPD could be best represented by the Stephen Krashen's Input Hypothesis which is also referred to as the 'i+1' theory (Bekiryazici, 2015). In the 'i+1' theory, 'i' represents the pre-service teacher's present competence and 'i+1' shows the content that has gone slightly beyond the pre-service teacher's current level. It shows that additional information has been added, no matter how small to signify the increase in knowledge. The small amount of new knowledge signified by '+1' would take the pre-service teacher to a new and higher level in the ZPD. So, the 'plus one' takes the pre-service teacher to a new level in the ZPD from whatever level he or she had been operating in the ZPD. The current study needed to establish the '+1' added to pre-service teachers' repertoire of teaching knowledge during mentoring though the mentors were not specifically trained as teacher educators. However, the added '+1' resulted in different levels for pre-service teachers and this could be on the basis of the varied mentoring contexts. Nonetheless, any additional amount signifies a new level in the ZPD. Therefore, the current study needed to explain why the new levels after the '+1' were different for pre-service teachers.

The concept of ZPD is applicable in mentoring in that the pre-service teacher goes to schools with some knowledge and skills. This could be represented by the 'i' in the Krashen's theory. The mentor could take the pre-service teacher to the next level in the ZPD by supporting and advising him or her in various aspects of teaching. The mentor's advice and guidance could be representing the '+1'. For example, the pre-service teacher has no experience in marrying the theory they learned at college with practice. The mentor could assist and guide in this aspect. The pre-service teacher is likely to enhance his or her professional development during teaching practice. The task of the mentor during teaching practice could be to provide opportunities to increase the pre-service teacher's knowledge base in teaching. The mentor could do this through a technique called scaffolding (Shooshtari and Mir, 2014). Scaffolding is regarded as the gradual withdrawal of MKO support in the mentoring process as the pre-service teacher gains confidence in the teaching process (Bekiryazici, 2015).

In teaching and mentoring, the MKOs could need relevant specialist skills for one to be an effective MKO. The contexts in which the teaching takes place could also be different. Consequently, not the same scaffolding techniques could be used. Therefore, different techniques of the scaffolding could be used for each situation. In practice, some of the forms of support to be provided through scaffolding include questioning, modelling, explanations, handouts, assignments, reflection and feedback. The diverse nature of the context and learners could force the MKO to consider various forms of scaffolding to cater for the different needs of learners and this could be a real challenge. In the current study, the task was to determine the levels to which the mentor teacher took the pre-service teacher and the forms scaffolding provided in the ZPD despite the differences in the mentoring contexts.

2.2.5 Stages of the zone of the proximal development (ZPD) and implications in mentoring

The learning which takes place in the zone of the proximal development (ZPD) can be divided into four stages (Dunphy and Dunphy, 2003). The division of this learning zone is logical in the sense that those who want to analyse learning can be guided to gauge at which level a pre-service teacher would be operating. The division of the ZPD is in terms of what the pre-service teacher will be able to do. In the first stage, the pre-service teacher is being assisted by the MKO (Dunphy and Dunphy, 2003). In the early stages the pre-service teacher needs more help for him or her to be able to conceptualise the learning task. The MKO's support is withdrawn gradually as the pre-service teacher becomes more familiar with the learning tasks. In this scenario, the pre-service teacher gets more responsibilities as the learning progresses. This is typical of a mentoring situation in which the mentor's teaching load and assistance to the pre-service teacher could be said to be on a declining plane as the pre-service teacher gets used to an increasing number of the teaching responsibilities. However, this is a critical stage of the ZPD as it is likely to give a pre-service teacher a firm foundation for his or her professional career and the mentor's gradual withdrawal has to be based on concrete evidence of the pre-service teacher's capability. Furthermore, some authorities have termed this stage, the handover phase in the ZPD (Dunphy and Dunphy, 2003). During this stage, the MKO assesses the pre-service teacher's capability to take over some of the teaching duties without compromising the usual learning of the class.

At stage two, the performance of the learning task has not yet been perfected but is still being developed (Siyepu, 2013). The continuous engagement in the learning task provides some form

of assistance in mastering what is being learned. However, there is no perfect proficiency yet, as some form of assistance is still needed. Some of the learning tasks can be remembered by engaging in loud thinking sessions as a way of reminding one-self of critical stages in the learning task. In teaching, this could be a stage in which the pre-service teacher could need to make reference to the lesson notes, the lesson plan or even the sitting plan in the teaching process. At this stage, the pre-service teacher could teach a lesson even in the absence of the mentor teacher, provided he or she has all his or her supporting materials. However, the presence of the mentor remains critical as he or she could be the point of reference whenever the pre-service needs assistance.

At stage three, the learning is developed and could be said to be automatised as it cannot be forgotten. At this stage, the pre-service teacher does not need the assistance of the MKO to accomplish the learning tasks. The pre-service teacher develops some form of independence as the learning tasks are now internalised. Any form of assistance by the MKO is considered disruptive and slowing down the learning process (Dunphy and Dunphy, 2003). In teaching and mentoring, the pre-service teacher could now be aware of all the class routines and the possible areas which need special attention, like assigning extra work to the bright students as part of extension work.

At the fourth stage, which is the last stage, the pre-service teacher can attempt to understand the demands of each learning task. The learning task can be related to what was learned before and the appropriate learning techniques would be applied (Siyepu, 2013). In teaching and mentoring, the demands of the learning tasks determine how the pre-service teacher can apply knowledge from previous and similar situations. Nonetheless, the contextualised nature of the teaching and learning situations is likely to determine how one progresses through these learning stages in the ZPD. Therefore, the current study made use of observations of mentoring sessions to establish the stages at which pre-service teachers operated during mentoring.

Fani and Ghaemi (2011) argue for a refinement of the stages in the ZPD to accommodate teacher education students. They are of the view that the first two stages could be re-conceptualised to focus on reflection. This reflection would be both self- and teacher-centred as a way of examining the pre-service teachers' prior learning experiences that candidates have from high school. As I see it, collapsing stages could widen the learning area in the ZPD and it would be

difficult to identify the level at which a pre-service teacher would be operating. I could prefer coming up with more stages for the first two stages of the ZPD so that appropriate assistance could be given by mentors. For example, the first stage could focus on self-centred reflection and the second stage on teacher-centred reflection. An additional stage to be created could focus on the reflections of both the pre-service teacher and the mentor teacher.

On the third stage, Fani and Ghaemi (2011) have suggested less reliance on the instructor's assessment of the pre-service teacher's execution of the teaching episodes. The new stage could put emphasis on self-documentation of the reflections done as part of interrogating the strengths and challenges noted during teaching. The relevant ZPD area would focus on the pre-service teacher's capability to reflect on critical teaching areas. I am of the view that there could be need for the pre-service teacher and mentor to collaborate as they reflect on their deliberations as this would enable them to appreciate the thinking processes which would have gone into their compilations. In addition, this promotes social interaction, a key tenet of the Vygotskian perspective. Lastly, Fani and Ghaemi (2011) also suggest that enrolment into a master's degree programme, as a way of enhancing the professional growth of the pre-service teacher, could be considered. This could be a valuable addition which could be strengthened by encouraging the pre-service teachers to study master's degree courses which are directly related to field experiences. This could also enable them to examine the connection between theory and practice. One of the tasks of the current study was to determine the stages at which pre-service teachers were operating in the ZPD during school-based mentoring and how mentors enhanced or impeded the professional growth of their mentees.

This discussion has shown how the key concepts of Vygotsky's socio-cultural perspective helped to guide my research on the contexts and practices of school-based mentoring of pre-service teachers. The next sections focus on aspects of mentoring as they shape the pre-service teacher's classroom practices.

2.3 CONCEPT OF MENTORING

2.3.1 Conceptualisation of mentoring

Different concepts have been used to explain mentoring in teacher education. Some of the terms that have been equated or used to define mentoring include coaching, modelling, co-teaching and supervision (Aspfors and Fransson, 2015). The terms used to define mentoring differ because the

contexts in which mentoring takes place are different. In some cases, it is more of supervision than co-teaching or coaching. In education, the term mentoring is normally used in the context of pre-service teacher preparation and when referring to initial teacher training, trainee teachers and their mentor teachers (Aspfors and Fransson, 2015). In such cases, Aspfors and Fransson (2015: 76) regarded mentoring as

> *an activity, a process and a long-term relationship between an experienced teacher and a less experienced newly qualified teacher (NQT) that is primarily designed to support the NQT's learning, professional development and well-being and to facilitate their induction into the culture of teaching and the local context.*

In the case of pre-service teacher education, the experienced teacher is the mentor, who assists and guides the less experienced pre-service teacher, who is still in transition from student to teacher. In this study, the experienced teacher is the qualified teacher who mentors a pre-service teacher enrolled in the PGDE programme. The experienced teacher could be considered to be the more knowledgeable other (MKO) in the Vygotskian perspective. The mentoring is normally done over a period of time which could be a term, a year or more. The mentor is experienced and has gone through what the pre-service teacher is experiencing for the first time (Shumbayawonda, 2011). In this regard, the mentor is qualified to support the pre-service teacher as she or he understands the culture and context in which the teaching is taking place. In other words, the mentor seems to be well placed to support the pre-service teacher's professional growth as the pre-service teacher acquires new skills and survival techniques in teaching. However, what could be problematic is, if the mentor is not trained for this role of mentoring the pre-service teacher. It could be interesting to find out how the mentor supports and guides the pre-service teacher in learning how to teach as he or she intends to take the mentee to the next level in the zone of proximal development (ZPD).

Mentors could be prepared for the mentoring process. Aspfors and Fransson (2015: 76) suggest that mentor education could include the following:

a) recognised courses or education programmes comprising universities, teacher education institutions and researchers as facilitators;
b) coaching seminars to enhance the professional development of mentors; and

c) school-based action research projects involving school personnel, university staff and stakeholders.

This type of education could capacitate teachers to fully understand their role and transform them from experienced teacher to the post of mentor. This transformation process would involve the professional development of mentors to enable them to master the mentoring practice. As mentors, they would acquire elements of communication, learning and identity formation during the mentoring process. Having gone through a teacher education programme, mentors are likely to successfully complete the mentoring programme as there are similarities in the professional development stages of teachers and mentors (Majoni and Nyaruwata, 2015). There are basically two ways in which professional development of mentors could take place. Firstly, this could be through informal learning and interactions with pre-service teachers. Secondly, mentors could attend formal courses or programmes or organised opportunities for professional growth done through seminars or workshops. However, what are not clear are the content and the implementation matrices of such programmes. In any case, the mentoring conceptions and practices are likely to be influenced by instructional contexts. Wang (2001) explored a study of mentoring practices in the United States of America, England and China to come up with a similar finding. This study investigated mentoring contexts and practices in secondary schools to have a deeper understanding of school-based mentoring of pre-service teachers.

Informally, mentors can learn from their own teaching practices by engaging in critical reflections (Aspfors and Fransson, 2015). This could be considered informal learning as this reflection is neither systematic nor programmed to follow a particular schedule. Another avenue of informal learning for a mentor is during interactions with the pre-service teacher. The mentor could be exposed to current trends, knowledge and latest perspectives and cross-cutting issues in teacher education. As the mentor acquires additional high order teaching skills, she or he is likely to make use of these in both teaching and mentoring (Aspfors and Fransson, 2015). It could be difficult to separate the mentor's informal learning and her or his professional development. The acquired body of knowledge from the informal learning episodes enhances the professional development of the mentor. The context in which the knowledge is acquired may not have much effect when it comes to how it is applied. It could be possible to have a good mentor who has acquired the mentoring knowledge informally. However, a challenge could be faced when one

wants this mentor to explain and justify his or her considered best practices in mentoring. There could be need to understand how a teacher, who is not formally trained as a teacher educator, mentor a pre-service teacher in a secondary school.

The other case of professional development of mentors is through some form of training. This form of mentor preparation enhances understanding and competence in mentoring. In a study involving twenty-three trained mentors and twenty-three untrained mentors, Everston and Smithey (2010) also showed that trained mentors exhibited more interactive skills and were more likely to use their experiences to guide pre-service teachers. The trained mentors were exposed to a four-day training workshop and follow-up meetings during the school year. In four of the cases, the mentors and their mentees did not teach in the same grade and subject area. This could have affected the findings of the study. There was voluntary participation in the study and pre-service teachers were matched to mentors according to subject specialisation and grade level (Everston and Smithey, 2010). However, more details on how the teaching and mentoring were organised could have shed more light on the findings in the study. The aspect of compatibility of the matched pairs was not explored in this study and this could have affected the findings as well. In this study, I examined mentoring contexts and mentoring practices and considered how the mentoring pair related in an attempt to have a deeper understanding of school-based mentoring of pre-service teachers.

2.3.2 Dimensions of mentoring

Mentoring can be regarded as having dimensions which shape the ways in which the mentor supports the pre-service teacher during mentoring. According to Ramnarain (2015), the three dimensions of mentoring are relational, developmental and contextual in nature. Let me focus on each of these three dimensions. The first dimension refers mainly to the interpersonal relations between the mentor teacher and his or her mentee (Aspfors and Fransson, 2015). In this study, the pre-service teacher, as the mentee, is new to the practicing school and to the teaching profession. The mentor teacher is assumed to be well experienced and has gone through what the mentee is experiencing for the first time. The teacher had similar experiences as a trainee teacher. Therefore, the mentor is in a position to support the trainee teacher. The mentor can emotionally support the pre-service teacher and the fact that the pre-service teacher has been paired with someone who has previous relevant experience and is readily available;

consequently, the mentor is bound to become a critical friend. Familiarity with the personal character of each other makes it possible for the relationship to become stronger as they get to know each other. In some cases, they face the same challenges as teachers of the same learners. The partnership gets stronger as the mentoring progresses and as they collaborate in solving problems during teaching. The pre-service teacher could also be introduced to the mentor's colleagues and he or she would feel free to consult them even in the absence of the mentor. Slowly they begin to establish a small community of practitioners. They could share experiences and solve instructional problems as a community of practitioners (Ramnarian, 2015). In this case, the pre-service teacher could be considered to have more MKOs and the interactions they have in their community of practice would assist the pre-service teacher to move to a higher level in the ZPD. The current study needed to establish the support the pre-service teacher got from colleagues in the school as they assisted the nominated mentor teacher in mentoring.

The developmental dimension of mentoring is centred on mentoring functions which promote the individual and professional growth of both the mentor and the pre-service teacher. There could be individual growth because each of the members is expected to learn something from the mentoring partnership. The mentor has a lot of craft knowledge of teaching and has taught the same level and content before. The pre-service teacher would want to use the mentor's knowledge as he or she learns to teach with the assistance of the mentor. The mentor is the 'more knowledgeable other' (MKO) who has to guide the pre-service teacher to a new level in the ZPD according to the Vygotsky' socio-constructivist perspective of learning (Ramnarian, 2015). Otherwise, on his or her own, the pre-service teacher would not have been able to teach. On the other hand, as the mentor observes the pre-service teacher's lessons, besides collecting data for their post lesson discussion and analysis, he or she also learns from the pre-service teacher's presentation. When they engage in reflective discussions, some of the pre-service teacher's views could enable the mentor to teach similar lessons more effectively in future. The fact that the pre-service teacher is coming from college could mean that they could have been exposed to the latest approaches in teaching. However, it could be argued that the pre-service teacher is the one who is more likely to benefit from the partnership as he or she has more to learn as they put the theory they learned at college into practice. On the other hand, the mentor also gains valuable information that he or she can use to mentor other pre-service teachers in future. As a result, it may not be easy to say who has gained more in the mentoring process. Nonetheless, both the

mentor and pre-service teacher are expected to operate in their respective ZPD as they learn in their respective roles. In this study, it would be useful to establish the benefits for each member of the mentoring pair.

The contextual dimension of mentoring is shaped by the cultural, organisational and operational aspects of the school (Ramnarian, 2015). Every school has its own traditions, beliefs, values, norms, myths, and goals. These are likely to influence what takes place at a school including the teaching and mentoring activities. The mentor is in a position to induct the new pre-service teacher into the school culture. The mentor knows how the school operates and can easily advise and support the pre-service teacher on how to learn to teach in their particular environment. The mentor is familiar with the school culture and its goals as an educational institution. These contextual considerations could determine how the mentoring is going to be conducted. However, within these mentoring dimensions, there are other factors which can shape the mentoring which takes place. Some of these factors could include the mentor and pre-service teacher's beliefs, education philosophies, and previous experiences in learning and teaching. As this study examined the mentoring contexts and practices, it was necessary to discuss the mentoring dimensions before interrogating the mentoring contexts and practices in detail. It would appear the contextual dimension of mentoring was framed by the social interaction theme in the socio-cultural theory. Wang and Odell (2007) used alternative terms for mentoring dimensions as explained below.

2.3.3 Mentoring perspectives of Wang and Odell

Wang and Odell (2007: 474) used the terms "mentoring perspectives" when they discussed the nature of "mentor-novice relationships". The perspectives are shaped by one's conception of learning and mainly focus on what a mentoring relationship should attain regardless of the complexity of the mentoring relationship. The three perspectives I will discuss are the "humanistic, situated apprentice and critical constructivist" (Wang and Odell, 2007: 475). The assumption in the humanistic perspective is that learning challenges can be traced to one's inability to solve problems in the context of the physical and social environment. The pre-service teacher has to be assisted to develop self-belief in learning through guidance and advice (Son and Kim, 2012). The mentor-pre-service teacher relationship aims to facilitate the pre-service teacher's transition into teaching. The mentor has to give emotional support to the pre-service

teacher which will help in building self-confidence. The mentor teacher assumes the role of counsellor and encourages the pre-service teacher to solve problems of practice. The mentor is viewed as a critical friend of the pre-service teacher as he or she is always there for his or her mentee. The mentor is also open-minded and gives the pre-service teacher opportunities to try new ideas in the teaching and learning process. This gives the pre-service teacher chances to implement any reform-minded teaching they were taught at college though the school might not have adopted a similar approach. Such opportunities are likely to reduce chances of conflict as the mentor allows the pre-service teacher to try out new practices. However, the main weakness of the perspective seems to be that the mentor is largely concerned with motivating and encouraging the pre-service teacher to practise teaching at the expense of the content and how it is taught. The decision on the content and methodology rests with pre-service teacher. This perspective could be problematic if the aim is to promote reform-minded teaching. If mentoring is viewed through the ZPD lens, the pre-service teacher expects to be taken to the next level not only in the organisational and managerial aspects of teaching, but in all critical aspects which include content and other deep structures of teaching. In this study, mentoring sessions were observed to examine how mentors guided and assisted pre-service teachers.

The situated apprentice view of mentoring makes the assumption that all knowledge is interpreted and used in a given context (Wang and Odell, 2007). Learning is about getting familiar with the new situation by slowly engaging in the activities of the community. The participation increases in intensity as the learning progresses. The pre-service teacher learns to teach by understanding how the teaching is done in their school. The mentor assists the pre-service teacher with technical support and understanding of the school culture and practice. Slowly, the mentor inducts the pre-service teacher into the school practice giving the pre-service teacher more responsibilities as he or she gains more confidence. The mentor uses his or her experience and practical knowledge to demonstrate how the teaching at the school is conducted. The modelled practice could prepare the pre-service teacher for reform-minded teaching if it is in sync with the envisaged goals of reform-minded practice. In the event that the modelled practice is incompatible with reform-minded teaching, the pre-service teacher could be disadvantaged and this could be a source of tension in the mentoring relationship which could impact on teaching practice. This practice seems not to encourage transformation of existing school practices as new members of the community of practice are expected to fit into existing practices so to speak. The

effects of context and culture facilitated through tools, such as language and speech on teaching and learning in this situated apprentice perspective of mentoring could be traced to the socio-cultural theory tenets. Consequently, the same could be assumed for mentoring since it is some form of learning. In mentoring, pre-service teachers are learning how to teach. However, this perspective of mentoring seems not to promote a 'two-way' of teaching as mentor teachers are expected to model best practices for the pre-service teachers. In this study, it became necessary to seek to understand the effects of context and culture in which mentoring was carried out. Nonetheless, this could be problematic as the mentors are not trained teacher educators though they may be good teachers.

The critical constructivist perspective is of the view that learners need to actively participate as they critique current knowledge and practices (Wang and Odell, 2007). This perspective acknowledges that teaching is conducted in different contexts which may be the same or different with reform-minded teaching. Learning how to teach is a complex process which requires interrogating one's own teaching and this can be done in collaboration with the mentor. Conflict is part of learning and can help to transform one's practice (Wang and Odell, 2007). In the process of critiquing practice, conflict is unavoidable because the mentor and pre-service teacher could be having different views. However, this conflict could be used to have a better understanding of the different views of the mentor and pre-service teacher. Since the mentor and pre-service teacher are working collaboratively, they could come up with an acceptable shared view as they resolve their conflicting views. In practice, the mentor's view could be more dominant because of the hierarchical nature in the mentoring pair, more so, if the mentor happens to be a line manager of the pre-service teacher. The mentor, being the MKO, is expected to have deeper knowledge of the subject content to be in a position to guide the pre-service teacher as the two reflect on practice. The pre-service teacher is expected to have expanded knowledge from his or her interactions with mentor. However, the assumption is that the mentor and pre-service teacher will have the same views on reform-minded teaching and research-based learning to teach in an ideal situation. The ideal situation is likely not to yield conflict. In practice, a number of combinations could arise in pairing mentors and pre-service teachers on the basis of their beliefs in reform-minded teaching and research-based learning to teach. The current study needed to understand how the mentoring pairs critiqued their own practice during mentoring. In addition, this study investigated mentoring practices to establish the dominant

mentoring dimensions or perspectives in the classes which were observed using the socio-cultural theory lens to determine their influence on pre-service teachers' classroom practice.

2.3.4 Mentoring as a reform-based teaching tool

Reform-based teaching has set standards which were tried and tested by professional organisations. It is research-based teaching and promotes learner-centred teaching and critical thinking in learners. Because it is well researched, it is culturally relevant (Wang and Odell, 2007). In reform-minded teaching, there is a deliberate attempt to meet the diverse needs of learners. Various forms of assessment are used by teachers to provide opportunities to learners to demonstrate their understanding of content. Teaching is organised around expanding the knowledge base of learners taking into account their previous knowledge, interests and learning achievements. The learner-centred nature and research-based type of the reform-minded teaching could be considered to be consistent with the Vygotskian perspective that recognises social interaction in professional growth.

For mentoring to function as way of reforming the curriculum, it must embrace an accepted framework of good teaching, in the context of grasping teacher learning, anchored on a professional philosophy that encourages cooperation and inquiry (Feiman-Nemser, 1996). Since the introduction of mentoring in the 1980s, policy makers and researchers have a strong belief that it could be used to reform instruction and teacher education. Successful mentorship programmes thrive on a productive collaboration of schools and universities through social dialogue. In this study, there was need to investigate the collaborations between university and schools in the mentoring of pre-service teachers.

The collaboration needs to conceptualise and formalise reform-based teaching as mentor teachers are expected to guide pre-service teachers in their learning of how to learn to teach. For mentors to support reform-based teaching which is normally outlined in official documents with the rationale and operational guidelines, they have to share the same or similar beliefs with the pre-service teachers. Mentor teachers could also revisit their philosophy of education so that they are compatible with the reform-based teaching being advocated in the new framework (Bradbury, 2010). This could explain why mentors could be considered as change agents when it comes to implementing reforms. However, the problem could arise if the mentors are not capacitated to

appreciate the focus and rationale of the reform as stated in the official documents. This could be a real challenge to be investigated.

The reform-based teaching has a number of implications for mentoring. Mentors are supposed to be experienced and experts in their subject areas. The expectation is that mentors would competently guide and advise the pre-service teacher in the reform-based teaching framework. However, reform-based teaching could pose challenges for the mentor. The mentor's dilemma could be on the basis of three reasons. Firstly, the reform-based curriculum could bring in new aspects in the instructional process which are unfamiliar to the mentor. Secondly, research in education and curriculum is ongoing and will require experts to mentor pre-service teachers whenever reforms are introduced. So, each time a reform is introduced for implementation, the mentor teacher is incapacitated. Thirdly, the pre-service teacher is coming from the university which would be involved in research and teaching of the reforms in their methods courses. The pre-service teachers might end up having more information than the mentors. Each of these dilemmas has practical implications for the mentor if he or she has to remain relevant and competent. There could be need to find out how mentor teachers are kept updated on changes taking place in teaching and teacher education.

Each of the above dilemmas could be discussed by considering different conceptions of mentoring and their implications for practice. First, the mentor, as a professional teacher, was not prepared or trained for one type of reform. Using the early notion of mentoring which highlighted the main functions of a mentor as an emotional supporter and friend, the mentor was likely to be incapacitated as the reform will be unfamiliar and new (Bradbury, 2010). In Zimbabwe, an updated curriculum with new learning areas was introduced in 2017 (Zimbabwe Ministry of Primary and Secondary Education, 2016). The practising mentor teachers were teaching it for the first time. This, somehow, shows the limitation of this conception of mentoring. Second, each reform brings with it some form of unfamiliarity and the mentor is unable to model teaching in this new situation. The mentor teachers would be relying on their repertoire of practical knowledge which enables them to serve as role models and their mentees will be expected to replicate their mentors' practice in similar classroom settings. The mentors could assist with accessing of relevant resources as they would be acquainted with the culture and operations of a particular school. With a newly introduced reform, the apprentice model of

mentoring has possible limitations. Third, this scenario gave rise to a more recent conception of mentoring which is based on collaborations between the mentor teacher and the pre-service teacher. In this set up, the mentor and pre-service teacher collaborate to solve problems of practice (Bradbury, 2010). The pre-service teacher could share some of the latest information from his or her college with the mentor. The mentor has some craft knowledge about what they want to co-teach and this is his or her major contribution in the teaching partnership. The focus is on co-learning as they share their experiences and ideas as the demarcations between expert and novice become less pronounced. However, this conception of mentoring also has limitations, especially when it comes to subject specific mentoring which aims to teach the pre-service teacher to learn to teach in reform-minded ways. Therefore, it became necessary to examine the mentor-pre-service teacher pairing in the current study and understand how they related during mentoring.

These limitations seem to justify the inclusion of Feiman-Nemser's frame of educative mentoring (Bradbury, 2010). Educative mentoring goes beyond emotional and psychological support and encompasses providing situations in which pre-service teachers and the more experienced mentor teacher work together as they co-teach and co-evaluate lessons in an effort to improve teaching and learning (Reese, 2016). In this type of mentoring, the inquiry into one's experience is used to construct a reflective approach to learning, working collaboratively to implement research-based teaching with the main thrust of considering learner-centred needs. There are basically two kinds of educative mentoring, namely, "inside the action" and "outside the action" (Reese, 2016: 40). The first kind refers to activities during the teaching which could include coaching, intervention during teaching, probing, illustrating and demonstrating. During teaching the mentor and pre-service teacher need to view the process as a joint initiative. If the mentor feels there is something to be corrected, this can be done tactfully during the lesson without belittling the pre-service teacher's approach. A mentor can come up with a demonstration to illustrate something during a lesson. The learners will instantly benefit from the mentor's contribution rather than waiting for the lesson to end then correct the pre-service teacher. Some of these demonstrations could have been overlooked during the co-planning stage of the lesson. This also shows the complexity of teaching. The teacher can plan the central learning tasks but some of the responses during the lesson could call for supplementary learning

activities. In this study, mentoring sessions were observed to deeply understand the “inside the action” and “outside the action” mentoring (Reese, 2016).

The second kind of mentoring is centred on mentor-pre-service teacher interactions before and after the teaching which could include co-planning sessions, briefing and debriefing sessions, video-taped analysis of teaching and shared journal compilations. Before and after the teaching of the lesson are critical stages in the lesson delivery process. These stages shape future lessons as gathered information could be used. Before-lesson discussions focus on what will be taught and how the teaching is going to be organised. The central learning tasks are also identified during this period. The teaching strategies to be employed are also considered. The after-lesson discussions could be reflective and evaluative. This represents some form of playback or review of the lesson as the mentor and pre-service teacher reflect and evaluate so that future lessons could be improved on the basis of the lesson that was taught. In co-evaluating, there is likely to be genuine sharing of ideas and experiences as there is joint ownership from the planning stage of the lesson. This further justified the observing of mentoring sessions in the current study.

Educative mentoring differs from the traditional forms of mentoring in that besides aiming on strategic goals of professional growth, it also aims to address the immediate needs of pre-service teachers. The pre-service teacher needs to be helped to deliver a successful lesson. This help comes as they plan, teach and evaluate the lesson together. However, as the mentor and pre-service teacher go through these processes, the pre-service teacher also acquires professional skills for his or her growth. A closer look at this mentoring model seems to suggest that it is a combination and a refinement of the earlier conceptions of mentoring. For the mentor to be supporting, advising, guiding and assisting with the deep structures of teaching there could be need for experience, expertise and subject specialisation. This type of mentoring includes all the mentoring aspects in the other conceptions of mentoring, but it also brings in additional demands on the part of the mentor. The mentor is expected to have subject expertise. It is assumed that mentors will support pre-service teachers’ practical knowledge development in the critical domains of content, students, methodology, curriculum, pedagogical content knowledge, school and classroom settings, and class management (Chien, 2015). The subject matter which has aspects of pedagogical knowledge and pedagogical content knowledge forms the core of the learning content (Reese, 2016). The mentor is not only expected to assist with the managerial

and technical aspects of teaching, but the pedagogical aspects as well. Being the 'more knowledgeable other' in the mentoring process, the mentor is expected to give professional support to the pre-service teacher during teaching (Siyepu, 2013). However, the mentor is also expected to be operating in his or her own ZPD as new knowledge is acquired in their reflective interactions and detailed analysis of teaching. The criteria used to select and appoint mentor needed to be examined in this study to assess the applicability of educative mentoring in secondary schools.

Collaborations in planning, co-teaching and co-evaluation bring the mentor and pre-service teacher closer in the teaching process. Co-planning, co-teaching, and co-evaluations offer openings for the mentor and pre-service teacher to learn from each other. These activities also provide a context for "scaffolded" learning (Kerin and Murphy, 2015). Each of the partners will make use of their shared expertise and experiences to enhance their own teaching capabilities. Collaborations in teaching also reside in the ZPD in the sense that a partner is assisted to achieve certain teaching competencies with the help of another. Otherwise, on their own they could have not attained such levels. However, co-planning, co-teaching and co-evaluating do not necessarily mean that the partners share equally these teaching activities. Some factors could determine how these are shared. For example, the sharing could be on the basis of some known personal characteristics, such as experience and expertise. It could also be logical to start with the mentor taking more tasks within each activity and the more challenging ones in the initial stages as a scaffolding strategy to give the pre-service teacher confidence to tackle more demanding tasks in future. In this study, efforts were made to observe key mentoring activities to witness the collaborations and scaffolding strategies used in mentoring of pre-service teachers.

2.4 THE CONTEXT OF MENTORING PRE-SERVICE TEACHERS

The context in which teaching and mentoring takes place could have a great influence on the mentoring practices (Wang, 2001). The context has to do with how the teaching and mentoring are structured and organised. In some instances, the mentor and the pre-service teacher could be teaching the same subjects in the same class. The pre-service teacher could be attached to one mentor. Alternatively, the mentor could be mentoring more than one pre-service teacher. If the mentor and pre-service teacher are teaching in different classes and in some cases different subjects, this could have implications for mentoring practices in terms of frequency of meetings

and interactions patterns (Wang, 2001). This could imply that the teaching can take place in different contexts. There are different layers of contexts starting from the national level coming down to the classroom level (Aspfors and Fransson, 2015). In some cases, the context of the teaching differs at national level because the curriculum will be decentralised as revealed in the Wang (2001) study carried out in the United States of America (USA), United Kingdom (UK) and China. However, in the case in which the curriculum was centralised, like in Zimbabwe, the different contextual levels became more visible at the implementation stage. This could be at school and class levels. There was need to have a deeper understanding of the context of mentoring at school level as the curriculum was centralised in this study.

Schools are different as they have different cultures and this could be due to a number of factors. Among some of the differences, it could be leadership, the calibre of the learners or the location of the school. Such factors could have an influence on how teaching is organised at a given school. The teaching practices at the school will also be related to the mentoring practices as the mentors are teachers and the pre-service teachers come to learn to teach in the mentor's class in most cases. Within these classes, there are also bound to be differences. At this particular level, the context could be the differences in the classes and how they are organised for learning. The mentors could be having different beliefs, goals and purposes about teaching and mentoring (Wang, 2001). In practice, it could appear that the context in which teaching takes place may be different and this presents a different mentoring context. The context could be in relation to how, when and where the mentoring takes place. However, even the consideration of the mentoring contexts at the minute levels like classroom level, could be worthy examining. This study examined mentoring contexts in different classes to gain a deeper understanding of the mentoring practices using the socio-cultural theory lens.

In a study in which Wang (2001) explores the association between contexts of mentoring and mentoring practice involving twenty-three mentor teachers from the USA, UK and China, mentor-mentee interaction patterns were analysed. The interaction patterns in the different countries' settings presented different mentoring contexts. Among some of the interaction features which were analysed were percentage rates of interactions in offices, interactions in classrooms, single topic interactions, multiple topic interactions and interactions in other places of the school. Duration of interactions, number of interactions per week and the typical number

of interactions per pair were also analysed to determine the opportunities which were provided to mentees to learn to teach in the various contexts. Though the analysis about the mentor-mentee interaction patterns in each setting leads to findings on interaction patterns in the study, it is inconclusive on the content in these interactions. All the same, the study has a strong methodological approach and also includes notable areas recommended for further research. The Wang study was able to inform this current study in a number of ways. For example, the need to use the discussions to understand the learning opportunities that pre-service teachers had in the context of classroom settings. This qualitative study attempted to have a deeper understanding of the mentoring contexts in secondary schools by examining the content and patterns of mentor-mentee interactions.

Another related study was carried out by Mukeredzi *et al.* (2014) at the University of KwaZulu-Natal (UKZ), exploring school-based mentoring experiences of part-time Postgraduate Certificate in Education (PGCE) students. The findings revealed that the students received different mentoring experiences during their field experiences in schools. The differences could be attributed to the different contexts in which they were teaching as their mentors had different levels of expertise in the subjects they were teaching. It was found out that mentors with strong content knowledge provided a more enriching mentoring context for the PGCE students. In Zimbabwe, Marimo (2014) found out that those pre-service teachers that were supervised by mentors with academic degrees but with no teaching qualification were provided with a mentoring context that lacked confidence in articulating critical professional issues during teaching practice. Therefore, the current study found it necessary to study the contexts in which mentoring of pre-service teachers took place in secondary schools.

The mentoring context could be related to the organisational context. Among other factors, the selection of a mentoring model could be based on the organisational context and the pre-service teacher's needs. The organisational context could relate to how the teaching is organised and structured. For example, the learners could be having some specialist room for certain subjects. This would mean the learners moving to the specialist rooms at specified times. This could imply that the movements have to be organised in such a way that the learners are orderly and do not disturb learning in other classes. The pre-service teacher has to be supported in organising the learners for learning and in the actual delivery of the lesson. This arrangement places certain

demands on the mentor and pre-service teacher. This is an example of a representation of a particular context in which the teaching is taking place. The presented mentoring context could be more suited to a particular model of mentoring. The mentoring context could influence the selection of a mentoring model to be used. According to Abiddin and Hassan (2012), among some of the mentoring models are the following:

- The Counselling Model for Effective Helping
- The Competence-Based Model and the Mentor as Trainer
- The Furlong and Maynard Model of Mentoring
- The Reflective Practitioner Model
- The True and Pseudo Model

The above models call for specific skills in the mentoring process and they make specific demands with regards to the involvement, expertise, teaching experiences and availability of the mentor and pre-service teacher. For example, in the Competence-Based Model, the mentor assumes the role of a meticulous trainer and monitors the pre-service teacher by providing regular feedback on the attainment of specified pre-defined teaching skills mainly from coaching (Ngara and Ngwarai, 2012). This could have implications in terms of the availability of the mentor teacher during the pre-service teacher's lessons. If the mentor has to use a checklist to ascertain the attainment of teaching skills, he or she has to be present throughout the lesson. There will be various skills to be checked at different stages of the lesson and this requires the presence of the mentor. Even if the pre-service teacher has had a brilliant start to the lesson, the mentor cannot leave the classroom before the end of the lesson as there are other skills to be checked at other stages of the lesson including the conclusion. This checklist becomes useful when the mentor and pre-service teacher hold the post lesson discussion. In addition, the mentor, as the MKO, becomes aware of the areas in which the pre-service teacher needs assistance in order to improve his or her teaching. On the basis of these noted areas, the MKO would be able to assist the pre-service teacher in future lessons to move to a higher level in the ZPD. However, besides restricting the movements of the mentor, the model does not also allow the trainee teacher to teach in the absence of the mentor which could give him or her feeling of being in charge of a class. This could also have implications on the pre-service teacher's development of a teacher identity. Furthermore, the presence of the mentor could influence how learners behave

during the lesson. This could imply that, in practice, one could use more than one model or combination of them to have better results. Each mentoring model is likely to have its own limitations. The assumption is that the mentor would be aware of a number of models which would suit each setting. This could have implications for the mentor's level of training in mentoring and the mentoring contexts that will be provided to the pre-service teacher. The theoretical framework guiding this study also makes the assumption that the mentor takes his or her mentee to the next level in the ZPD. In the absence of formal training in mentoring (Shumbayawonda, 2011), in the current study, it could be interesting to observe the mentoring models which mentors used in the different contexts as they supported and guided their pre-service teachers to reach the 'i+1' level according to the Krashen's Input Hypothesis theory.

2.5 THE PRACTICE OF MENTORING PRE-SERVICE TEACHERS

The mentor teacher's practices are likely to be reflective of the school's beliefs, values, traditions, myths and goals (Ramnarian, 2015). Mentoring practices could be observed from the mentor's class teaching. As an experienced member of staff, the mentor is expected to be more informed on how the school is organised and structured (Waring, 2013). The teaching does not happen in a vacuum but in a socially constructed context. The way teaching is conducted can influence how mentoring is carried out with the aim of attaining the goals of teaching and mentoring. Mentoring practices are developed and designed to enhance professional and personal growth of the mentor teacher and the pre-service teacher (Orlando-Barak and Hasin, 2010). In the context of the Vygotskian framework for this study, the mentor as the 'more knowledgeable other' (MKO) advises and guides the pre-service teacher on the traditions, rules, values, norms, and goals of the school during the mentoring process (Shooshtari and Mir, 2014). However, this mentoring practice becomes problematic if the school is not one of the excelling ones and, as a school, they want to maintain the status quo while the pre-service teacher advocates for change. This could become a source of conflict and tension in the mentor-pre-service teacher relationship. For example, the pre-service teachers could be restricted by the school philosophy in their endeavour to implement inquiry-based learning if the school's emphasis is on passing examinations (Wang and Odell, 2007). This could have an impact on the mentoring practices at the school.

Whatever the mentor does should be in support of the pre-service teacher. Mentoring has an effect on the pre-service teacher's instructional practices and was found to be higher in classes in which pre-service teachers were under the guidance of a mentor (Mathur *et al*., 2012). In a study, carried out at Columbia University in the USA, describing two mentor practices that produce mentee reflection without explicit solicitations, Waring (2013) came up with two main categories of these, namely, assessment and advice. The assessment could be either positive or negative. Positive assessment is likely to motivate the pre-service teacher and on reflection, the challenge is to come up with a similar or better presentation in future. On the other hand, negative assessment could force the pre-service teacher to reconsider the presentation in order to improve up to the expected standard. On advice, just like with assessment, this presented an opportunity for the mentoring pair to share their views on the mentor's advice. From their discussion, alternative courses of action were suggested to improve on the presentation. The pre-service teacher will think deeply on what will have happened and how to handle future situations. In some cases, there could be no need to change if the pre-service teacher can justify and convince the mentor on the way the presentation was dealt with. Findings of this study also offer the value of sharing ideas in a mentor-pre-service teacher relationship. In another study in South Africa, Msila (2015) explored the mentoring experiences of five mentors who mentored five principals. The findings revealed that the culture and school pride influenced mentoring practices that were informed by the different contexts in the various schools. Though the study participants were mentors and principals, the study was relevant to this current study as it involved schools and school personnel. The current study involved mentor and pre-service teachers who were involved in mentoring in secondary schools. In Zimbabwe, Ngara and Ngwarai (2012) conducted a survey in Masvingo urban to determine mentoring practices for student teachers who were on teaching practice. The study established that mentoring practices were anchored on the conception of a mentor as a guide and helper in technical teaching matters. However, this could be considered a narrow view of mentoring in the context of mentoring pre-service teachers in a secondary school. The current study needed to deeply understand the mentoring practices and how these could be related to mentoring contexts in secondary schools.

If the mentors adopt a life-long perspective to mentoring, the pre-service teachers could influence the school teaching practice and mentoring practice as mentors learn from them. This could see the pre-service teachers influence the school culture, prepare mentors for innovations

and encourage mentors to continuously develop themselves. However, the hierarchical structure in the mentoring relationship seems to give the mentor more power in decision-making and the pre-service teacher's initiatives were likely to be overridden.

In a Hobson (2002:10) study in which Post Graduate Certificate in Education (PGCE) pre-service teachers were comparing the effectiveness of two mentors, the pre-service teachers found the first mentor to be more effective. Some of the reasons why the first mentor was considered more effective included the following:

i. The mentoring practices could have been adjusted to suit the mentees' new level of development.
ii. Pre-service teachers could have been used to the first mentor's practices and found it difficult to adjust to different mentoring practices.

In my view, two main issues emerged from these two reasons. Firstly, mentoring practices can be adjusted to suit a particular level of the pre-service teacher's level of development. In some mentoring models, pre-service teachers are given more support and guidance during the initial stages of mentoring, and this becomes gradually less during the mentoring period. Secondly, mentoring practices can differ. Mentors have different experiences and philosophies of teaching and learning. These influence what they do during the mentoring cycle (Msila, 2015).

There is no universal agreement on what constitutes exemplary mentoring practices in different settings as found in a study carried out in Israel by Orlando-Barak and Hasin (2010). The beneficiaries of mentoring, such as school heads, pre-service teachers, university supervisors and fellow teachers are in a position to describe mentoring practices that are exemplary (Orlando-Barak and Hasin, 2010). Mentoring practices could be of a developmental nature and nurturing in outlook. Good mentors are those with exemplary mentoring practices. Besides being flexible and sensitive to the pre-service teacher's needs, they also have rich pedagogical content knowledge. In addition, they could be considered as a model of a life-long learner. However, exemplary mentoring practices could depend on a particular context. The contexts are bound to differ because of the factors that make up the culture, beliefs, norms, values, practices, and myths of any given system. The diversity in the contexts may demand different mentoring practices. For example, a mentor in a well-resourced school may not focus on improvisation of teaching

materials since they can purchase the required items. Another example could be mentoring in a traditional teaching model and in a reform-based teaching set up could require different mentoring practices.

There are resemblances among good mentoring, good teaching and teacher leadership (Orlando-Barak and Hasin, 2010). There are similar elements that are likely to make a good teacher a good mentor. A good teacher could be considered as one who has rich pedagogical content knowledge in teaching, referring to the ability to simplify content to the level of the learner and show its applicability in solving real-life problems. This could be equated to the ability to marry theoretical and practical knowledge in mentoring. Teaching and learning theories are to be applied in a real classroom in order to facilitate pre-service teachers' learning. A closer look at what the mentor does shows that it is much more than what the teacher is expected to do. Not only does the mentor see to it that learners are learning, but he or she has to make sure that they are learning the correct material in the correct manner. This could explain why an exemplary teacher will not necessarily be an exemplary mentor (Orlando-Barak and Hasin, 2010; Ambrosetti, 2014). In another study, in Nigeria, Ogonor and Badmus (2006) focused on the kind of support given by partnership schools to pre-service teachers. The study participants were final year Bachelor of Education students on teaching practice in secondary schools in Nigeria. The findings showed that partnership schools did not perform the role of mentors to pre-service teachers as they felt that it was the sole duty of teacher education institutions. The study revealed that the training institution had not made sufficient efforts to involve the school teachers in the mentoring of pre-service teachers during teaching practice. This finding showed that the partnership schools did not provide a supportive school mentoring context in the preparation of secondary school teachers. As expected, the study recommended the involvement of partnership schools so that pre-service teachers can be provided with opportunities for professional growth on the basis of provision of effective mentoring practices. In Zimbabwe, Majoni and Nyaruwata (2015) showed that there are challenges in achieving effective mentoring of pre-service teachers during teaching practice. Among some of the challenges cited in the study were lack of effective communication between teacher education institutions and schools, selection of mentors, and competencies of mentors and unpreparedness of the pre-service teachers for the teaching practice in schools. As a result, these challenges affected the mentoring practices; in addition, the mentoring practices were indicators of the cited challenges. Consequently, this study sought to

determine how mentoring contexts that existed in the studied secondary schools shaped mentoring practices and their consequences on pre-service teachers' classroom practices.

Mentoring makes more demands on the part of the practitioner than teaching. In practising mentoring, there are indicators of good teaching practices. In addition, the mentor is expected to establish and maintain good interpersonal relationships. This could be equated to the exemplary teacher's ability to form positive interpersonal relationships and an educative classroom environment (Kerin and Murphy, 2015). Effective mentoring can take place when there is order and pre-service teacher interactions are well managed to allow for sharing of ideas among pre-service teachers and the mentor teacher (Ambrosetti, 2014; Poleacovschi *et al*., 2017). The mentor teacher has to create conditions for effective learning to take place and provide prospects for their mentees to grow in the profession (Wang, 2001). In short, the mentor ensures that learners are learning and the pre-service teacher is also learning to teach. The demands are more on the part of the mentor as he or she oversees all learning including the pre-service teacher's learning (Buhagiar and Tonna, 2015). The mentor has to exhibit more than the exemplary teacher's teaching skills and abilities. The current study needed to establish what the mentor did as he or she provided opportunities for the pre-service teacher to learn to teach.

The congruence in exemplary teachers and mentors could be in terms of organisational ability. Both the pre-service teacher and mentor, have to exhibit high skills in management of time, planning, and setting of learning tasks (Orland- Barak and Hasin, 2010). There could be need for some sense of order and organisation in both teaching and mentoring. At the planning stage, the teacher and mentor have to start thinking of how the central learning tasks will be sequenced and organised for effective learning to take place. In teaching, for example, this is why there is need for detailed lesson plans, specifying what will be done and how at each phase of the lesson. In mentoring, the initial skills to be acquired by the pre-service teacher could be documented so that a checklist of baseline teaching skills can be developed at each phase of the field practice. Nonetheless, the mentor facilitates the learning of adults and the teacher teaches non-adults. This has implications for approaches to be used. The approaches are different and this could be one of the reasons why mentors have to be trained. The mentoring is likely to be unsuccessful if the adult pre-service teacher is treated like a form three student. So, the mentoring practices of a trained mentor and an untrained mentor could be different. This is an area warranting further

research. Although Wang (2001) did a study on mentoring practice and opportunities for learning to teach in different settings, he observed that the relationship between mentoring practice and contexts of teaching and mentoring needed further exploration. In another study, Orlando-Barak and Hasin (2010) also observed that despite expert mentors sharing the same characteristics, it is likely that one who is regarded as an expert in one context may not necessarily be viewed by others as an expert in another context. A Zimbabwean researcher, Samkange (2015), examined the role of mentors during teaching practice in primary schools. One of the major findings to emerge from the study was that the relationship between the mentor and the pre-service teacher provided a critical context in which mentoring took place. Although these findings were making reference to mentoring in different settings, this could be investigated for different contexts in schools as an area for further research. These studies motivated me to carry out this current study to fill the gap on understanding the various mentoring contexts and practices in different secondary schools in Zimbabwe.

The link between an exemplary mentor and a leader could be explained in terms of common leadership roles performed by both. First and foremost, a mentor is a formal leader in a school set-up. What could be the difference between the school head and the mentor is the level at which they perform their leadership roles and their span of control. The head leads the whole school including the mentor. The mentor is the leader of the pre-service teacher and the learners. As leaders, both are expected to motivate their subordinates, empower them and promote autonomy among other things (Poleacovschi *et al*., 2017). In addition, the exemplary mentor is expected to provide a transformative view of leadership as the pre-service teacher has to be equipped with life-long learning skills. The mentor is also expected to be a life-long learner as he or she interacts with different cohorts of pre-service teachers who bring in new ideas from their colleges and universities (Buhagiar and Tonna, 2015). However, the school head, being a transformational leader, has to provide the resources and opportunities for the mentor to professionally grow. In the long-run, this will benefit the school and the school leadership will get the credit. There seems to be opportunities for shared leadership in schools and the mentoring practice is expected to exhibit leadership skills. Observation of mentoring sessions in this study presumed to lead to deeper understanding of the opportunities for shared leadership as a mentoring practice of pre-service teachers in secondary schools.

Mentoring practices can easily and directly influence the pre-service teacher's classroom practice during co-teaching. Co-teaching offers many opportunities for the pre-service teacher and mentor to share experiences. Co-teaching is when two or more teachers teach together, share responsibility for achieving the set goals as they teach and at the same time learn from each other (Kerin and Murphy, 2015). The teachers collaborate on all aspects of the lesson as they plan, teach, and evaluate the lessons together. Since the mentor and pre-service teacher will be working together, co-teaching provides opportunities for the pre-service teacher to learn from the mentoring practices. The professional development of the pre-service teacher will be in at least four aspects: subject or content knowledge, pedagogical knowledge, curricular knowledge, and pedagogical content knowledge (Kerin and Murphy, 2015). The mentor teacher will be assisting and guiding the pre-service teacher on these aspects during the co-teaching.

Mentoring practices can support those in school leadership. Mentor teachers are formal leaders in the school set-up and can be involved in decision-making in the school set-up making use of their experience during the mentoring process. What the mentors gather from their lesson observations and interactions with pre-service teachers could be used in drawing up school staff development programmes to guide pre-service teachers as they study teaching. The staff development programmes end up supporting those in school leadership as there could be improvement in teaching and learning, and ultimately, the realisation of organisational goals (Msila, 2015). However, those in school leadership also need to support the mentors in their work. Besides recognising mentors' contribution to school improvement, the school could arrange for capacity development programmes for mentor teachers. The pre-service teachers' colleges and universities could be approached to enhance the mentoring skills of the teachers. The universities also benefit from the improved mentoring practices through their students and teacher education programmes. The current study intended to establish the amount of support given in the mentoring of pre-service teachers.

In a Garza and Harter's (2016) study in Texas in the USA that investigated Mathematics and Science pre-service teachers' views of their mentoring practices in their first year in a Teaching Residency Programme for Critical Shortage Areas, participants reported negative and positive mentoring experiences. As expected, negative mentoring practices may not help in the professional growth of the pre-service teacher. Negative practices could affect the pre-service

teacher's development of a teacher identity. The pre-service teacher's confidence and interest in teaching may be negatively affected. The negative mentoring practices also have the potential to influence the other pre-service teachers' views of the mentor and crucially the mentoring relationship. The pre-service teacher's professional development and personal growth is likely to be impeded by such practices. The findings of the study helped to provide a genuine account of how mentoring practices can negatively impact on the learning opportunities that are provided to those learning to teach in a mentor's classroom. However, these findings are based on the pre-service teachers' perceptions and may be considered to be one sided. The mentors' views could also be considered to give a more balanced view on the mentoring practices. As a result, this study sought both the mentors' and pre-service teachers' views on mentoring experiences and practices.

In another study in Ghana, Bukari and Kuyini (2015) investigated pre-service teachers' experiences about the mentors and mentoring process in primary schools. The study involved 18 pre-service teachers and 8 mentor teachers. Semi-structured interviews were used to gather data from all the participants. The findings of the study revealed that the mentoring practices could be improved through empowering of mentor teachers through training. The recommendation from the study was that for major stakeholders to contribute meaningfully in teacher development there was need for a better partnership arrangement between schools and the teacher education institutions. In Zimbabwe, Mudavanhu and Zezekwa (2009) came up with similar findings when they investigated pre-service and in-service secondary science teachers' perceptions of mentoring practices. In addition, they concluded that there was need to match mentoring strategies with the participants' mentoring expectations. It could be inferred that there was a gap between mentoring practices and the pre-service and in-service teachers' expectations. As a result, using the mentioned studies, this study intended to observe mentoring sessions and interview participants to get their views on mentoring. This was done in order to compare and contrast mentoring practices and participants' expectations on mentoring of pre-service teachers in secondary schools.

Reflective practice enables mentors to consider alternative teaching approaches in the mentoring process. When mentors reflect on lessons taught, this informs their mentoring practices. These lessons could have been taught by the mentor or by the pre-service teacher or by both. Reflection

could be in-action and/or on-action (Denis, 2015). Reflection in-action happens during the lesson whereas reflection on-action takes place after the lesson. Both forms of reflection are important and complement each other in shaping mentoring practices. However, guided reflection by the mentor during the post lesson observation discussions is likely to be more probing and thoughtful as the mentor has more time to think about the processes (Denis, 2015). This form of reflection could also be supported through the use of video and audio tapes. The tapes could be used during the post lesson discussions between the mentor and the pre-service teacher. In Lesotho, Chere-Masopha (2018) examined how teachers adopted and integrated digital technologies in their classroom practices. However, the study revealed that the teachers lacked the skills and digital knowledge to integrate digital technologies in their classroom practices. Nonetheless, pre-service teachers, though they had been exposed to digital technologies in their methodology courses, they expected the mentor to take them to next higher level in zone of proximal development (ZPD) regarding the use of digital technologies in teaching. The current study intended to observe the integration of information and communication technology (ICT) tools in teaching and mentoring as a way of understanding the mentoring practices in secondary schools.

Furthermore, on the role of reflective practice on mentoring practices, Stegman (2007) in Denis (2015: 4) argues that reflective discussions between mentoring pair in music were likely to be effective when:

a) reflection happened consistently;
b) the pre-service teacher was allowed to determine what was to be discussed;
c) the questions focused on meeting the needs of the pre-service teacher;
d) the mentor teacher guided further investigations; and
e) the mentor teacher encouraged reflections to generate strategic solutions for future problems.

From the above, one can infer that reflection shapes mentoring practices. Regular reflection will imply more interaction between the mentor and pre-service teacher and results of these discussions will be implemented in future lessons. When the pre-service teacher initiates the course of the discussion, his or her concerns will take centre stage and are likely to be addressed. The mentor probes in order to have a deep understanding of the pre-service teacher's actions and thinking processes. The guided investigation could be meant to assist the pre-service teacher to

progress to the next level in the ZPD and use this as base for future teacher learning. In addition, it has been observed that reflection time assists to create interpersonal relationships and reduces tension and conflict between the mentor and the pre-service teacher. Nevertheless, reflection in general, and teacher reflection in particular, are influenced by beliefs. The reflections will be guided by the teacher's philosophies and experiences in teaching and learning (Msila, 2015). This could explain why the mentor should be an experienced teacher and an expert in the area, to be able to successfully advise and guide the pre-service teacher. Though the pre-service teacher is less experienced, he or she could also contribute significantly in the discussion from what they learned in their theory courses. As a result, each of the members of the mentor-pre-service teacher pairing is expected to contribute in the discussion and their contributions are likely to add value to the inquiry. Draves (2013: 58) explains that "reflective practices can be a powerful tool for professional growth and development in pre-service music teacher preparation." This could also be true for other subjects. This study was of the view that there was need to fully unpack the notion of reflective practices so that it was understood and related to the context and philosophy in which mentoring practices took place. In this study, the reflective discussions which took place between the mentor and the pre-service teacher were examined to have a deeper understanding of the mentoring practices.

2.6 PRE-SERVICE TEACHING IN SCHOOLS

Teaching in schools is a key element in teacher preparation and pre-service teachers regard it as one of the most valuable parts of their teacher education (Denis, 2015; Draves, 2013). Pre-service teaching involves field experiences in schools. This is also referred to as teaching practice or student teaching because pre-service teachers will be putting into practice the theory they were taught in their campus-based courses. It provides the time and opportunity to learn about teaching (Denis, 2015). For the pre-service teacher, teaching practice provides a practical graduation from student to teacher. The professional life of the pre-service teacher as a teacher is also shaped during teaching practice (Izadinia, 2016).

University supervisors and cooperating teachers monitor and assist the pre-service teacher to acquire the necessary teaching skills during teaching practice (Draves, 2013). The university supervisors visit the schools on a few occasions to supervise and assess the pre-service teacher. It is the cooperating teacher who, in most cases, assumes the role of mentor for the pre-service

teacher. However, mentoring is a specialised role in teaching and cooperating teachers may be prepared for this mentoring role (Everston and Smithey, 2010). The mentor is anticipated to assume a critical role in shaping the pre-service teacher's professional growth by advising and guiding him or her in the preparation of lessons, lesson delivery, classroom management, monitoring and assessing of learners (Denis, 2015). Besides providing the environment in which teaching takes place, the mentor also supports the pre-service teacher emotionally. Williams and Soares (2002) in Denis (2015) identified the following five mentor roles as critical to successful student teaching in an educational setting:

a) providing unhindered discourse between teachers;
b) opening the trainee teacher to the viewpoints of others in his or her teaching;
c) modelling best practice;
d) guiding the pre-service teacher through the use of productive feedback; and
e) offering support to the pre-service teacher.

For one to carry out these roles effectively, some form of mentoring education could be necessary. In the absence of such education, it would be interesting to find out how mentors who had not been formally prepared for such critical roles were performing in their mentoring roles. It was one of the areas of focus for this study. The mentor as the more knowledgeable other (MKO) in the context of the theoretical framework of this study was expected to guide and support the pre-service teacher in learning how to teach. However, it has to be noted that the mentoring of pre-service teachers during teaching practice has to be fully supported by schools and university (Denis, 2015). The professional growth of the pre-service teachers could be a collaborative initiative between schools and universities (Zeichner, 2010). The universities could capacitate mentor teachers so that they effectively mentor their mentees during teaching practice.

In a qualitative study on the transition from pre-service teacher to mentor teacher conducted in the Arizona in the USA, Draves (2013) observed that pre-service teaching could be improved by defining and communicating anticipated skills to all stakeholders. In addition, this could be followed-up by revising the curriculum to promote those standards that offer opportunities for deeper preparation and learning experience in student teaching. However, I am of the view that his second suggestion could be costly. What might be needed is to revisit the mentoring programmes in schools so that the perennial problem of the disconnection between schools and

universities in pre-service teaching and mentoring is addressed (Zeichner, 2010). Draves' (2013) study was based on review of research literature only and could be inconclusive. This study has gone further by making use of pre-service teachers' and mentors' perceptions to find out what could be improved in mentoring during teaching practice.

The other suggestions from Draves' study which could merit consideration include having field experiences within every course in a teacher education programme. In some cases, micro-teaching and school lesson observations have been used to incorporate some practical aspects in the teaching of courses. However, pre-service teaching in every course could benefit the pre-service teachers as they develop and nurture their teacher identities. Such an arrangement could also see more involvement by faculty in the supervision and monitoring of pre-service teaching. This could also compel schools and universities to reduce the gaps between school and campus-based teacher education (Zeichner, 2010). It could appear, suggestions to improve pre-service teaching are taking more responsibilities to schools without suggesting how schools and their personnel are to be capacitated to implement such significant changes. Teaching practice does not only have to prepare pre-service teachers to function in the institutions in which they teach, but as professionals they should be able to do so in others as well (Draves, 2013). The school-based personnel could be empowered to effectively deal with more responsibilities in offering more opportunities to pre-service teachers to learn to teach.

Pre-service teaching could also be improved if expectations are clearly spelt out before the teaching practice (Denis, 2015). There could be need to have effective communication channels between schools and university to have a common understanding of what is to be done during the student teaching experience. One way of ensuring a common understanding of expectations is by having a well-organised preparation programme for mentor teachers for their roles during the teaching practice experience. Having regular meetings between university supervisors and school mentors has been suggested as a possible solution for developing a strategy to meet the expectations of schools and university for a successful teaching practice experience (Ambrosetti, 2014). However, Williams *et al.* (2002) in Denis (2015) argue that schools operate in isolation and it becomes difficult to engage them in some of the organisational issues. The problem could be that schools fail to realise the benefits of collaboration in teacher education programmes. Schools need to realise that they benefit more from collaboration with universities in terms of

capacitation of teachers and this will have an effect on teaching and learning. This study sought to investigate the influence of mentoring contexts and mentoring practices on pre-service teachers' classroom practices.

There could be benefits for the pre-service teacher from classroom practice. In a study in Taiwan investigating pre-service English teachers' views of field experience and professional learning from exemplary teachers' mentoring, Chien (2015) highlights some of the lessons pre-service teachers learned from teaching practice. These include classroom management, designing of teaching materials, learner participation and interaction, and content delivery. The teaching practice experience also enabled pre-service teachers to align their understanding of classroom setting, lesson content, instructional methodology, and their learners. This result supports the findings of an Australian study by Hudson (2007) showing that mentor teachers' field practice experiences enhance the practicalities of teaching of mentees. As pointed out in the Chien's study, pre-service teaching practice was regarded by the majority of the thirty-five participants as the most beneficial during field experience as pointed out in the studies previously discussed. However, the study further highlighted one of the major limitations as not pairing the pre-service teachers and expert teachers on the basis of teaching specialties or similar personalities (Chien, 2015). Pairing of mentor and pre-service teacher could have an impact on teaching practice as it provides a contextual factor in the mentoring process. However, it is difficult to match partners with the same personality in a mentoring relationship. One of the reasons is that the mentor and mentee operate at different levels and the structure of the relationship makes it difficult to reveal all the personal characteristics of each of the partners. The current study examined how pre-service teachers were paired with their mentors.

From the study mentioned above by Chien (2015), there were six other categories that arose as significant in the pre-service teachers' experiences of the field. These include finding expert teachers, establishment of mentoring relationships, attitudes toward the mentoring experience, lessons learned from observation, self-assessment and lessons learned from discussing with expert teachers. Pre-service teachers were able to find expert teachers using one of these four teaching methods: instructor, colleagues, family members, and former teachers (Chien, 2015). However, what may not be consistent are the criteria used to select the expert teacher. Pre-service teachers were able to establish their relationships with the expert teacher using face-to-

face interactions, emails, or phone calls. Use of emails and phone calls could lack the personal touch and charm which is crucial in establishing a mentoring relationship. On the whole, the 35 participants held positive attitudes towards the mentoring experiences and hoped to be like their expert teachers in years to come. The qualities which the participants saw in their expert teachers are over and above of those of good teachers. These qualities could be products of relevant teaching experience and different forms of capacitation in mentoring aspects. By observing expert teachers' demonstration lessons, the pre-service teachers reported that they enhanced their pedagogical content, pedagogical content knowledge and classroom management knowledge (Ambrosetti, 2014). However, the best practices in actual teaching may not always come from demonstration lessons as these are specifically designed for the benefit of the pre-service teacher. It could be more revealing if the usual lessons are observed and if possible without the expert teacher's knowledge.

Lastly, lessons learned from discussing with expert teachers highlighted the importance of feedback in the mentoring process. Feedback is one of the factors in the Hudson's five-factor model for mentoring in teaching and is considered useful as it shapes the mentee's effective teaching (Hudson, 2007). Similar findings emerged from a qualitative case conducted in a rural based university in South Africa (Mudzielwana and Maphosa, 2014). The Mudzielwana and Maphosa (2014) study had Bachelor of Education students who were on teaching practice as participants. The study sought to assess the usefulness of school-based mentors in the professional growth of pre-service teachers on teaching practice. The other major finding to emerge from the study was that mentors contributed immensely in the professional development of pre-service teachers during teaching practice. However, in Zimbabwe, a Marimo (2014) mixed methods study showed that school-based mentors were not helpful in developing teaching skills of pre-service teachers during teaching practice. The participants were drawn from universities, secondary teachers' colleges and secondary schools. One possible explanation for the differences in the findings could be attributed to the levels of mentor training in the countries. Unlike in South Africa, most mentor teachers in Zimbabwe had not been formally trained in mentorship as mentorship was introduced with the coming of 2-5-2 model of teacher preparation in 1995 (Majoni and Nyaruwata, 2015). In this study, it became necessary to evaluate the mentoring support given to pre-service teaching in secondary schools.

The support given by mentors during pre-service teaching is critical. Edwards and Collison (1996) cited in Hobson (2002: 6) suggest the following ways in which mentor teachers could support pre-service teaching:

- listening to pre-service teachers
- modelling teaching and general classroom management
- analysing and discussing own practice
- observing pre-service teachers
- negotiating with pre-service teachers
- assisting with sourcing of teaching materials
- providing constructive criticism

The above descriptions, in a way, show how pre-service teaching is rooted in social participation in the context of Vygotsky's perspectives of learning. Pre-service teaching could be supported by a more knowledgeable person to be more beneficial and the above findings show that learning to teach does not need to be done in isolation but with the assistance of others (Hobson, 2002). Using the socio-cultural theory lens, the current study examined the role of mentors during pre-service teaching.

2.7 THE SCHOOL AS A TEACHER EDUCATION SITE FOR MENTORING PRACTICE

Mentoring takes place in schools. Pre-service teachers learn how to teach under the guidance of a mentor teacher in a school. The latest shift in teacher education gave more responsibilities in the preparation of teachers to schools. Schools seemed to have assumed a more significant role as teacher education sites. The perennial problem of the disconnection between university and practicing schools in teacher education remains topical (Zeichner, 2010). Schools are in a position to provide opportunities for pre-service teachers to put theory into practice as they were tutored at university in their methods courses (Ngara and Ngwarai, 2012). However, the school-based educator would not be aware of some of the university requirements to adequately prepare pre-service teachers as expected by their university. The university would also not be aware of some of the school requirements when they prepare pre-service teachers for teaching practice. The university supervisors are in schools on the few occasions they visit pre-service teachers on teaching practice. When they are in schools, the university supervisors rarely see mentor teachers

teaching (Shumbayawonda, 2011). There could be need to find strategies to bridge the gap between schools and universities. This study set out to understand the kind of collaborations between practicing schools and teacher education institutions in the mentoring of pre-service teachers.

Collaborations between schools and universities could be used to narrow the gap between schools and the university. However, it has been acknowledged that the solution to the problem of disconnection between schools and the university is not simply taking the university staff to teach their courses in the schools (Zeichner, 2010). Alternatively, it does not mean taking the school personnel to teach their courses in the university. The school educators could be involved in university courses that prepare pre-service teachers for teaching practice. For example, when pre-service teachers go for micro-teaching in schools, teachers could be more involved. The teachers could be involved in the supervision of micro-teaching. In addition, it could be more beneficial if the school and university educators jointly supervise the pre-service teachers. Furthermore, before the supervision, school educators could be involved when pre-service teachers are being prepared for micro-teaching. For example, in the presence of school educators, the pre-service teachers and university educators could discuss the scheme and lesson plan formats and then how to develop detailed teaching documents. The formats will have to be compatible with school formats and the school teachers could assist in the lectures for scheming, lesson planning, record keeping, media preparation and assessment. What has to be appreciated with this approach is that there would be joint ownership and shared responsibility when pre-service teachers finally go on teaching practice. However, what could be problematic is the timing of such lectures as the school personnel are full-time teachers at their schools and their main responsibility is the teaching of their learners. The current study would want to establish the extent to which mentors and pre-service teachers are supported by schools and the university.

The involvement of school and university personnel in some courses in teacher education has been described as the creation of ‘third space’ (Zeichner, 2010: 92). In practical terms, it is more than the combining of school and university-based teacher educators’ efforts. It also means the marrying of classroom expertise and theoretical knowledge to enhance the learning of those learning to teach (Zeichner, 2010). Such an approach would represent a major shift in the way teachers are prepared in Zimbabwe at the moment. This would represent a deliberate attempt to

equate practitioner and academic knowledge as a way of narrowing the gap between schools and universities (Zeichner, 2010). The rationale for the concept of the 'third space' could also be viewed as a genuine attempt to marry theoretical and practical knowledge in order to address one of the major criticisms of teacher education (Douglas, 2012). Simply put, academic knowledge represents the theory and practitioner knowledge is a representation of practice. However, this approach could need a lot of pre-planning and research involving both the school and the university educators. These joint collaborative research initiatives could also represent some form of creation of third spaces in teacher education (Buhagiar and Tonna, 2015). Such researches could clarify the knowledge contribution of schools and universities in teacher preparation and the logistics of involving school and university educators in lectures which prepare those going for teaching practice (Zeichner, 2010).

Schools and universities could also organise virtual mentoring programmes as they collaborate in the preparation of teachers. Reese (2016) conducted a study in New York that showed that the increase in technology makes it possible to utilise video technology in virtual conferencing as pre-service teachers interact with experienced teachers during teaching practice. This could come at a cost but there are some benefits of virtual mentoring. One of the benefits, according to Reese (2016), is that it provides more time for reflection and discussions both before and after the lesson. The discussions could be scheduled to be done when both the mentor and pre-service teacher have time to engage in meaningful discussions without the distractions of other teaching tasks. The other benefit is that by observing the mentor teaching and the mentor observing the pre-service teacher teaching, there are opportunities for professional growth for both the mentor and the pre-service teachers. In addition, the mentor and pre-service teachers are in a position to make comparisons and examine their teaching practices and growth over time. Mentors could learn alternative teaching approaches from detailed analysis of observed lessons of pre-service teachers. The same could be said for the pre-service teachers.

On the other hand, there are also challenges in using virtual mentoring. One of the challenges is related to the limitations of technology (Reese, 2016). For example, a camera can only capture a restricted view of the teaching and learning process. However, some critics have suggested having more cameras with some being teacher-focused and the others focused on learners to improve on what would be captured. What is clear, though, is that cameras may not capture all

that the human eye is able to capture. The other challenge is that of lack of real-time interaction between the mentor and pre-service teachers during the virtual observations of lessons (Reese, 2016). Virtual mentoring does not provide opportunities for 'inside-the-action' mentoring during teaching (Reese, 2016: 45). This refers to mentoring done during the teaching of the lesson. This could be critical in a lesson as the 'stepping in' of the mentor during the teaching could provide a defining moment in the course of the lesson. For example, the mentor cannot intervene in the event that there is a classroom or class management issue which needs his or her attention. This means that some aspect of co-teaching during mentoring cannot be easily implemented when using technology. Feedback cannot be provided during the lesson and this could frustrate mentors as they would not be able to provide 'inside-the-action' mentoring. Technology is also unable to capture the intensity of live discussions and exchanges during the lesson. The interpersonal energy flow among the teacher and the students could be a decisive indicator of student learning during lessons. The energy flow filtered through the computer or television screen may weaken the actual energy flow in the lesson (Reese, 2016). In another study in Lesotho, Chere-Masopha (2018) found out that teachers lagged behind in the use of ICT tools in classrooms because they had limited access to ICT tools and this affected their confidence in its use.

The mentioned challenges of virtual mentoring were some of the findings from Reese's (2016) study which explored music teachers' views on the advantages and disadvantages of virtual mentoring. The qualitative study included six teachers who were each assigned two or three pre-service teachers to mentor. Mentors taught 30-minute lessons which were captured via Skype. Mentors discussed via Skype their lessons with the pre-service teachers within a week. Later in the semester the pre-service teachers taught 30-minute lessons after a 30-minute discussion as part of the lesson preparation. This was done for three weeks, then, at the end of the final interaction, mentors were asked to share their mentoring experiences. The findings of the study are quite informative and there could be need to devise strategies to minimise the highlighted challenges of virtual mentoring. Institutions with the capacity to introduce virtual mentoring could carry out further research to fine-tune the model to meet their expectations. However, at the moment the cost factor could be an impediment for some institutions in the prevailing economic environment not only in Zimbabwe but in other developing countries as well. Because

of limitations in resources, this study can only highlight this area for further research to explore its applicability in our local educational institutions.

My next focus is on professional learning communities (PLCs) in schools. Schools are situated in communities and there have been calls to broaden the site for pre-service teacher education (Zeichner, 2010). The idea is to extend teacher education sites from schools and universities to include more communities in which the schools reside. Expertise that resides in the broader community could be of use in preparing pre-service teachers. Within the area in which schools are situated, professional learning communities could be established for use in supporting mentoring in teacher education. Hudson, Hudson, Gray and Bloxham (2013) view a professional learning community as a forum that is used by a group of connected and engaged professionals to explore, fine-tune and promote practices that strengthen the organisation. In a school situation, this could be a grouping of mentors that would want to establish and interrogate mentoring processes and practices with the aim of improving student learning. Improved student learning could result in an improved image of the school. Teaching practices could be refined in the process of seeking improved student learning. Mentors are responsible for teaching pre-service teachers to learn to teach, and mentors could play a pivotal role in these professional groupings. The professional learning communities could be organised to focus on improving mentoring in schools (Hudson *et al*., 2013). Networks and linkages could be established within the professional learning communities. The networks could be on the basis of subject expertise and teachers could share ideas on best practices in the teaching of their subject areas. Teachers could exchange ideas to foster effective mentoring practices. Membership of such a professional learning community could be extended to include pre-service teachers (Buhagiar and Tonna, 2015). The pre-service teachers could benefit from interacting with their mentors in other professional settings which are not the classroom. This could give pre-service teachers opportunities to discuss professional matters with their mentors outside the classroom and also see how they relate with other colleagues. For example, a mentor could be naturally an introvert and the pre-service teachers would begin to appreciate how the mentor relates to them in a classroom situation. Mentors could also benefit from the presence of the pre-service teachers in that when they are discussing mentoring practices related to the pre-service teachers, they could hear the real voices of the mentoring process. The decisions from such forums are likely to be successfully implemented by classroom practitioners as there would be ownership and are

quickly accepted because they are decisions conceived from the grassroots. However, it could appear the hierarchical nature of the mentoring relationship seems to favour the mentor's decisions in the final decision-making process even in mentoring. This is because the mentor's decisions could be communicating the unofficial school decisions as the mentor is part of the school leadership and could be privileged to know some of the school decisions which are not yet official policy.

The environments that prevail in the professional learning community could shape successful mentoring practices. The leadership in the professional learning community could enhance the operational effectiveness of the grouping. The designated formal leaders in the school could take a back seat and support others to lead the forum. This gives opportunities for others to assume leadership roles and this puts into practice the notion of zone of proximal development leadership (Hudson *et al*., 2013). Distributed leadership is an indicator of the existence of multiple levels of leadership within an organisation. Besides empowering the incumbents, this is also likely to provide different leadership styles. Shared leadership roles could emerge from the professional learning community and these could be utilised in other forums for the benefit of the school. Mentors could also gain an appreciation of some of the mentoring practices which they experience from participating in some of the activities of the professional learning community. For example, peer mentoring could be one of the practices to be encouraged from the way the professional learning community operates. Those involved in peer mentoring would begin to appreciate the value of collaborating and the related strategies of peer mentoring, such as, co-planning, co-teaching and co-evaluating. The operations of professional learning communities could also help to demystify the notion of isolation often associated with teachers' classroom practice (Hudson *et al*., 2013). However, a professional learning community, as an organisation, could face challenges emanating from the context and cultures in which these are established. The diverse nature of the membership in the group could be problematic as the mentors have different backgrounds. Besides the challenges which could be contextual, some of the challenges could be purely logistical. For example, the scope of the community could be difficult to delineate in a school. At present, some of the big secondary schools in Zimbabwe have over one hundred teachers who operate in two separate sessions. The challenge could be the organisation of accommodation for such forums considering that all rooms would be fully occupied throughout the day and normal classes have to go on as the teachers meet. In different scenarios,

some secondary schools operate at the premises of primary schools. In practice, it is a combined secondary and primary school. The teachers and pre-service teachers at such schools teach different levels and have different teaching mandates, presenting the challenge of coming up with groupings with similar teaching interests. This study investigated the opportunities for professional growth presented to participants through professional learning communities, if any, in secondary schools.

One of the interesting studies on the professional learning communities in mentoring was conducted by Hudson, Hudson, Gray and Bloxham (2013) in Australia. The focus of their study was on the research question: "What are experienced mentors' understandings about professional learning communities and mentoring" (p. 1300). Their qualitative study made use of 27 experienced mentors who were involved in discussions which were audio recorded. The mentors also responded to questionnaires with open-ended questions. All the mentors had the experience of having mentored at least two pre-service teachers. Some of the main findings from the study showed that the professional learning communities promoted and supported teacher development by providing opportunities for collaborative problem solving activities. The study also showed that professional learning communities can be used for professional renewal as members share new knowledge with colleagues. In addition, the study showed that networking among classroom practitioners enhanced teachers' professional knowledge, communication skills and commitment to organisational culture (Hudson *et al*., 2013). This current study interrogated mentoring practices by exploring the different structures and groups which are in place in secondary schools to support teaching and mentoring. Nonetheless, my study's inclusion of mentors and pre-service teachers as participants presented a slightly different methodological approach from the Hudson *et al.* (2013) study with the aim of having a deeper understanding of mentoring of pre-service teachers.

2.8 PRE-SERVICE TEACHERS' CLASSROOM PRACTICES

Learning to teach is normally done with the assistance of a more experienced person. The learning involves social participation and the experienced person provides advice and guidance to the one who is learning to teach as classroom practices take shape. The more experienced person, who is the mentor, guides the pre-service teacher by making use of what the pre-service teacher already knows to take him or her to the next higher level in the zone of proximal

development (ZPD). School-based mentoring has its theoretical base in the Vygotskian socio-cultural perspectives (Heeralal, 2014). In terms of the Vygotskian perspective, the mentoring activities take place in the ZPD. The more experienced mentor is expected to assist in the integration of the teacher to be into the school classroom practices and the teaching profession (Garza and Harter, 2016). The pre-service teachers expect to be guided on various areas as they graduate from being students to teachers. The mentoring needs initially focus on survival skills and then high order teaching skills as the mentoring progresses. The survival skills shape the classroom practices of pre-service teachers as they try out various teaching strategies. However, in the early stages the pre-service teacher tries to model the way the mentor teacher teaches so as not to confuse the learners and at the same time follow the mentor's way of teaching. Consequently, the pre-service teacher expects to be mentored on how to survive the early days of teaching that come with a lot of anxiety as teaching becomes a new experience with some unfamiliar classroom practices.

In a quantitative study involving thirty-nine final year Bachelor of Education pre-service students at a South African university, Heeralal (2014: 512) identified the mentoring needs of the pre-service teachers. The order of their demands, starting with highest, were stated as assessment, lesson preparation, administrative matters, lesson presentation, classroom management, discipline, professional development, time management, extra and co-curricular activities, dealing with diversity, dealing with change, relationships, and adapting to a school environment (Heeralal, 2014). A closer look at the mentoring needs seems to suggest that if the list is read in reverse order and the mentoring needs are met in that order, the pre-service teacher is likely to slowly fit into the school culture and finally in the profession. The mentoring needs give rise to the classroom practices of pre-service teachers. For example, adapting to a school environment is very critical in the early stages of one's teaching practice. Otherwise, the pre-service teacher will find it very difficult to operate without adapting to the school's environment. Every school has its culture and beliefs which have to be understood by new members if they are to be meaningfully integrated into the school's activities and practices. The same could be said about relationships and this includes the mentor-pre-service teacher relationship. The social participation which takes place in a school in general, and in mentoring in particular, calls for deep understanding of the various relationships in the school. The mentor is expected to have experienced what the pre-service teacher is experiencing for the first time. It is assumed the

mentor is well positioned to guide and advise the pre-service teacher on the productive relationships in the school and in the instructional process. The mentor has the advantage of understanding the context in which all these relationships work in the school and those that could be problematic, especially for a new person. In addition, as part of the school leadership, the mentor has a better appreciation of the challenges the school might be facing in sourcing for resources to support certain teaching practices that affect classroom practices.

Each of the stated mentoring needs could be justified and they crucially show the importance of the mentor in the mentoring process which involves social interactions, and learning with the assistance of a more knowledgeable person in order to acquire new skills. This fits well in the chosen theoretical framework for this study which has social interaction as one of the pillars in the Vygotskian perspective. When school-based mentoring is viewed using the socio-cultural development theory lens, it appears there is need to explore how mentors can successfully carry out the MKO role as they positively influence classroom practices of pre-service teachers.

In a mixed-method study referred to in Section 2.5, Garza and Harter (2016) examined the perceptions of first year Mathematics and Science pre-service teachers of mentoring experiences, participants gave their views on the mentoring process. The participants valued the solid mentoring relationships which they had experienced in their programme. The relationships they had established were important considering the setting of the schools and the way the teaching and mentoring were organised. They were teaching in the same classroom for a whole year. A solid relationship facilitated learning of the pre-service teacher and the fact that the mentor was always present meant that they could share ideas and classroom experiences more often. If the relationship had failed to click, there was likely to be tension throughout the year. This could have negatively affected their interactions and how they related to each other. Most of the mentoring tasks were centred on communication and with a tense environment, discussions were bound to be limited and the pre-service teacher was likely to find it difficult to ask for guidance and advice. However, some of the participants reported impediments in the mentoring process and these constrained the growth of classroom practices. The pre-service teachers felt short-changed in the growth of their classroom practices because they expected the mentor to assist them in these key areas. Some of the reported barriers included a few classroom lesson observations by the mentor, not receiving constructive feedback, not being afforded time to

discuss teaching, and few opportunities availed to co-plan lessons (Garza and Harter, 2016). For example, if a few lessons were observed and there was no constructive feedback, the pre-service teacher's professional development was likely to be limited. The mentor is expected to use lesson observations to assist the pre-service teacher by discussing areas to be improved on in the lesson delivery. The various aspects of the lesson, which could be the focus of the discussions include, the introduction, lesson development, questioning techniques, use of instructional media, concept development, use of group work and lesson conclusion. In the absence of lesson observation and discussions, it becomes difficult to improve the next lessons. However, the study does not explain why these pre-service teachers were not assisted by the mentor in these critical classroom practices though it explains how this was likely to negatively affect their proficiency and professional development. The study also gives the perceptions of the pre-service teachers only without getting the views of the mentors. Methodologically, it was going to be more enlightening to get views from both sides to have a more balanced view. The inclusion of mentors' perceptions on the classroom practices of the same pre-service teachers could have provided more conclusive findings. The fact that the study used a mixed methods approach and was carried out when the pre-service teachers were on a one-year long field experience could have given the researchers room to consider the use of other data collection methods to complement the online survey questionnaire. This study took note of these methodological limitations by using more data collection methods and examined mentoring needs of the pre-service teachers using a qualitative study that was able to give thick descriptions of pre-service teachers' and mentor teachers' perceptions in contextual settings.

The Garza and Harter's (2016: 415) study also observes that "few participants reported negative mentoring experiences, but several described their mentor as being judgmental, critical, insincere, and misleading." These findings do not show emotional support which is expected from a mentor teacher in the mentoring process (Son and Kim, 2012). In a way, the pre-service teacher's professional identity formation is likely to be negatively affected. A relationship between the mentor teacher and the pre-service teacher can shape the development of teacher identity in the pre-service teacher (Izadinia, 2015). The way teachers make sense of themselves and images projected to others, define teacher identity (Yuan, 2016). As pre-service teachers, their teacher identities are shaped mainly from their interactions with mentor teachers (Yuan, 2016). The pre-service teacher looks up to the experienced mentor as they engage each other in

the complex and ever-changing process of learning to teach. The mentor is expected to provide support and give critical feedback as the pre-service teacher develops his or her teacher identity. Negative mentoring experiences in which the mentor is reported to be "judgmental, critical, insincere, and misleading" are not likely to promote a positive teacher identity in the pre-service teacher (Izadinia, 2015: 2). In the socio-cultural perspective, the assumption is that learning occurs in a social process in which the pre-service teacher gains new levels of knowledge and skills in teaching through exchanging experiences and ideas with the mentor and other teachers. In other words, the mentors referred to in this study did not support the pre-service teacher's learning to teach and this was likely to affect their teacher identity as they grew in the profession. They were likely to lack confidence as the mentor did not approve what they were doing in the teaching and learning process. This is why it could be important for mentors to give supportive and encouraging comments to build the pre-service teachers' confidence. When the pre-service teacher has confidence, he or she will be encouraged to ask for more help and guidance when conducting future lessons. So, besides promoting the pre-service teacher's teaching capability, mentoring is also expected to wield a transformative influence on the pre-service teacher's classroom practices and identity development. With the mentor's careful guidance which includes academic and emotional support, reciprocal trust, and interactive dialogue, pre-service teacher's professional identity can be developed (Yuan, 2106).

The formation of a teacher identity is critical in the process of becoming a teacher, especially under the guidance of a mentor (Yuan, 2016). Having a sense of identity helps the pre-service teacher in his or her formative stages of teaching. At the stage of transforming to be a teacher, a pre-service teacher is still building and reinforcing beliefs and values of what teaching is about. The mentor's input becomes critical as it is likely to influence the identity to be conceptualised. According to Yuan (2016), there are various identities that emerge for those who are learning to teach as they interact with mentor teachers during their teaching practice. The identities basically relate to the notion of 'self-concept' which sums up one's self-knowledge and how he or she views himself or herself. Basically, three domains of the "self" have been conceptualised, namely, "the actual self", the "ought self" and the "ideal self" (Yuan, 2016: 189). The "actual self" refers to the attributes the person actually believes to have. The attributes the person is supposed to have as a result of some assigned responsibilities belong to the "ought self". Lastly, the "ideal self" refers to those attributes the person ideally should have. The development and

interpretation of one's self-concept is made up of imagination and reflection to visualise one's "hoped-for-self". The different selves could be realised if one thinks deeply about the stage at which they are in their classroom practice. Through their various engagements in teaching, the pre-service teacher determines the level at which they are and think of ways of going to the next level. If one understands the complexity of teaching, then it becomes easier to think of ways and means of overcoming the constraints so that one achieves his or her targeted "self". However, being a pre-service teacher could bring extra constraints as he or she fine-tunes classroom practices. The fact that the pre-service teacher is working under the mentor teacher has its own limitations in terms of what can be taught and how it can be taught. School and national policies could be interpreted in terms of the mentor's perspective of teaching and learning. This could be problematic in cases where the mentor and the pre-service teachers' worldviews on classroom practices are not. In such cases, this could cause tension and conflict in the mentoring pair's relationship as the classroom practices of the pre-service teacher are not viewed using the same lens by the mentor teacher. This is likely to impede the professional growth of the mentoring pair. However, it could be difficult to establish the sources of all tensions in mentoring relationships as other variables could come into play as pre-service teachers determine their classroom practices on the basis of their experiences and perceived expectations. This, in a way, presented different mentoring contexts which needed to be explained.

My next and last section of this chapter sums up the main issues discussed in this chapter.

2.9 CHAPTER SUMMARY

This chapter has presented Vygotsky's socio-cultural theory as the theoretical framework guiding this study. The theory emphasises that social interaction precedes cognitive development. Vygotsky's researches could be related to how pre-service teachers were able to solve problems that seemed to be beyond their level of professional development. Professional development could be viewed as a life-long process which cannot be categorised as in Piaget's four stages of mental development. The main tenets of the theory are social interaction in mental development, the more knowledgeable other (MKO), and the zone of proximal development (ZPD). Social interaction informs the professional growth of the mentoring pair. At the first plane, it is between people and at the second level, it is professional growth which takes place within the pre-service teacher. The mentor teacher, as the more experienced classroom

practitioner, acts as the more knowledge other (MKO) in mentoring. The MKO is the person or electronic device having better ability levels and is responsible for facilitating learning to teach for pre-service teachers. Learning takes place in the zone of proximal development (ZPD) as the mentor takes the pre-service teacher to a higher level in the ZPD.

Three themes of the socio-cultural theory frame school-based mentoring of pre-service teachers during teaching practice. Teaching practice is considered a critical component of teacher education programmes as it offers opportunities for professional growth during mentoring. During school-based mentoring, the mentor teacher is the MKO who guides and supports the pre-service teacher to acquire new knowledge in the process of becoming a teacher. Acquisition of new knowledge takes the pre-service teacher to a higher level in the ZDP. The learning in the ZPD is shaped by the different contexts which exist in schools. Teaching and mentoring in schools is influenced by the school culture, beliefs, values and norms. The mentoring practices which emerge from the teaching and learning process could be considered to be contextual as they were shaped by institutional factors and other interacting variables. Mentoring can also be viewed differently through known perspectives that enhance the professional growth of both the mentor teachers and their pre-service teachers. The professional growth could be promoted through the establishment of professional learning communities which could be considered as a strategy of bridging the disconnection between schools and universities. Schools, as teacher education sites, could consider embracing research-based teaching and the use of technology in teacher preparation.

Reviewed research studies helped me to consider alternative conceptual boundaries and methodological approaches for this study. These studies enabled me to refine and re-focus the thrust of my research study as I examined the various contexts and practices of school-based mentoring of pre-service teachers in secondary schools in Zimbabwe.

My next chapter presents the research methodology for this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The focus of this chapter is to present a detailed explanation of the research methodology and methods that were used in this study to address the main question and its sub-questions. The chapter discusses the appropriateness of the chosen methods in gathering the information needed to address the questions posed by the research problem. The discussion mainly focuses on the qualitative research methodology and the rationale for its selection for this study, the research questions, the research design, the participants, ethical issues, the data generation methods, the analysis and interpretation of data as well as the aspects of trustworthiness and credibility of the research.

3.2 RESEARCH QUESTIONS

The primary research question that was addressed in this study is: How is school-based mentoring of pre-service teachers practiced in various school contexts of Zimbabwe and with what consequences for the classroom practices of the pre-service teachers?

The primary research question was unpacked using the following sub-questions:

a) What are the differences in mentoring contexts in secondary schools?
b) How do different contexts shape and give rise to particular mentoring practices?
c) In what ways do mentoring contexts and practices shape pre-service teachers' classroom practices?

3.3 PURPOSE OF STUDY

The aim of this study is to deepen understanding of the practice of school-based mentoring of pre-service teachers in various school contexts in Zimbabwe and its consequences for the pre-service teachers' classroom practices. The study is titled "The context and practice of school-based mentoring of pre-service teachers in Zimbabwe." The objectives of the study are to:

a) Analyse the differences in mentoring contexts in secondary schools;
b) Determine if and how different mentoring contexts shape mentoring practices;

c) Use evidence from the study to explain how mentoring contexts and practices shape pre-service teachers' classroom practices.

3.4 THE CONTEXT OF THE STUDY

The study was carried out in one university and five secondary school sites in Zimbabwe. Data were gathered in schools from July 2017 to November 2017. The university offers a one and half year Post Graduate Diploma in Education (PGDE) programme for pre-service students with first degrees with school curriculum subjects content. There are sixty-four school curriculum subjects recognised for teaching purposes in Zimbabwean secondary schools (Education Secretary Circular P1 of 2013). The PGDE programme is for training secondary school teachers as it awards the first degree holders a professional teaching qualification. The PGDE curriculum includes teaching methodology of two school curriculum subjects, courses in theory of education namely Psychology, Sociology and Philosophy as well as Professional Studies. Professional Studies courses include Computer Applications in Education, Entrepreneurship in Education, Emerging Trends in Secondary Education, Educational Management, Introduction to Media and Technology and Guidance and Counselling in Education. Teaching Practice (TP) is done in the third and final semester of the programme under the guidance and supervision of a qualified teacher who was regarded as the pre-service teacher's mentor.

To prepare the students and their mentors for Teaching Practice, the university's Department of Teacher Development has produced tutorial letters for students going on teaching practice giving examples of templates of schemes of work, lesson plans, and teaching records. The tutorial letters also spell out the expectations of the department in the mentoring, supervision and final assessment of students on TP. The university spells out the expectations for mentoring students on TP. In addition, unlike in the past, the Ministry of Primary and Secondary Education (MPSE) offers guidance to supervisors and mentors in the first chapter of the Handbook on Teacher Professional Standards (TPS) (Zimbabwe Ministry of Primary and Secondary Education, 2015). The handbook highlights the purpose of TPS to mentors and supervisors as the basis for providing benchmarks for the measurement of teacher performance. The school-based mentors are selected by the school head and normally a pre-service teacher is attached to one mentor teacher in the same subject department though they may be teaching different classes. While on TP, the pre-service teachers work under school-based mentors and university lecturers visit

practising pre-service teachers in schools to assess and grade them. The mentors are not involved in the final assessment of pre-service teachers although the last two school grades from the school administration are considered in the final computation of the TP mark. The school-based assessors include the head, deputy head, senior master/woman and head of department. The graduates of the programme qualify to teach their two curriculum subjects in secondary schools (Education Secretary Circular P1 of 2013).

3.5 RESEARCH APPROACH

This study is situated in the interpretive paradigm as the views of the participants were sought in order to have a deep understanding of the mentoring practices in the different contexts which exist in schools and how these shape pre-service teachers' classroom practices. The research study adopted the qualitative research approach. This research approach was chosen because it allowed me, to carry out the study in its natural settings (Creswell, 2014). In this case, the context in which school-based mentoring was done was different in the secondary schools in which it took place and there is a need to have a better understanding of how the pre-service teachers were guided and advised as they learned how to teach. The qualitative research approach was considered to be the most appropriate because of its characteristics and the philosophy underpinning its utilisation of epistemological and methodological ideas (Chilisa and Preece, 2005). Thus, it is important that I discuss these key issues surrounding the choice of the qualitative research approach to provide in-depth information on contexts and practices of school-based mentoring of pre-service teachers.

According to Clark and Ivankova (2016: 198), "the qualitative research approach belongs to the interpretive paradigm". As a researcher with an interpretive orientation, I believe that reality is socially constructed and is mind dependent, meaning there are unique realities constructed by different people from their experiences (Yin, 2011). This means, what is known is through how people think and through socially created meanings which shape the interpretive researcher. Reality cannot be generalised as it is related to a given situation in terms of setting, space, period and individual. As a result, interpretivists are of the view that knowledge is subjective since it is socially constructed according to one's thinking (Chilisa and Preece, 2005). The human experience shapes what is considered as truth according to the people's culture, history and context in which this happens. Research is value bound and value laden as the chosen paradigm

informs the data gathering and analysis methods, and the interpretation of the findings (Chilisa and Preece, 2005).

As mentioned in this section, there are a number of features of qualitative research which led to the choice of the approach for this study. Bogdan and Biklen (1992: 29) have identified the following as some of the features of qualitative research:

- carried out in natural settings;
- researcher as the main instrument;
- descriptive;
- more concerned with processes rather than results;
- data are analysed inductively; and
- participants' perspectives are essential.

These features of qualitative research were acknowledged in carrying out this study. As the researcher, I spent no less than ten weeks, between July 2017 and November 2017, in the schools which were the research sites for this study as part of carrying out this study in a natural setting. It was important to visit these schools and observe the mentoring practices in the different schools as they presented different contexts for the mentoring activities. These school visits also enabled me to have a deeper understanding of the context of the history of the settings of the schools. I was also the main instrument in the research process as I observed mentoring activities, interviewed mentor teachers and pre-service teachers, and analysed documents.

This qualitative research became descriptive because the data gathered were in the form of narrations and include interview transcripts, field notes and documents. Furthermore, the interview and observation instruments required descriptive information from participants. The written word is considered to be critical in the qualitative research approach, both in recording and publicising the findings as there is deliberate attempt to bring out the richness in the gathered and analysed data (Creswell, 2012). In addition, qualitative researchers mainly focus on the process rather than the end results because they would want to follow the natural development of what is being studied (Yin, 2011). In this study, I wanted to have a deeper understanding of the contexts in which mentoring was being carried out in secondary schools and the existing practices and how these shape pre-service teachers' classroom practices. Besides the

environment in which mentoring was taking place, I also wanted to have a deeper understanding of how mentoring was being carried out. So, it was important to interview both mentors and pre-service teachers and then follow up these interviews with observations of mentoring sessions and document analysis.

The qualitative researcher's theory emerges from the bottom as he or she puts together the different pieces of collected evidence that are interrelated (Chilisa and Preece, 2005). In this study, I needed to identify different mentoring contexts, the mentoring practices in these contexts and their influence on pre-service teachers' classroom practices. The interconnectedness of the contexts, practices and classroom practice was explored in an iterative manner using interviews, observations and document analysis.

I was concerned with making sure that I capture the participants' "lived experiences and wanted to hear the participants' voices" (Leedy and Ormod, 2013: 139). Both the mentor and pre-service teachers were interviewed in order to gather their views on the mentoring which was taking place in schools and their suggestions on ways of improving the mentoring of pre-service teachers were also considered in this study. The observations also helped me to understand the meaning the participants were attaching to mentoring activities and practices. Qualitative research is primarily about what the participants' interpretation of situations or events that they experience as insiders. In this research, the mentoring contexts and practices were described from the participants' own experiences of these at their respective schools.

3.6 RESEARCH DESIGN

This section explains the meaning of research design, case study and why the multiple case studies design was used in this study to deepen understanding of the contexts and practices of school-based mentoring of pre-service teachers.

3.6.1 Meaning of research design

The research design, as a concept, can be understood as an approach or technique to provide answers to the research problem and the related sub-problems in a study. In a way, it can be regarded as an implementation strategy for the research (Punch, 2004). Punch (2004: 149) suggests the implementation strategy matrix for a section of an investigation, "comprises of four key notions: the approach, the conceptual context, the participants, and the instruments to be used for gathering and analysing information". A well-crafted research design determines the

realisation of any research. However, other factors, such as expertise and resources could affect the implementation stage in the actual study. Lewis (2008) notes that a worthy qualitative research design has a clear goal, in which research questions and the data gathering approaches can be interrogated to generate information that is trustworthy and credible. Thus, a research design fulfils two key roles: firstly, it comes up with practical arrangements to facilitate the carrying out of a study and secondly, it stresses the significance of credible procedures in the whole research process (Kumar, 2005). Nonetheless, it is imperative to emphasise that in qualitative research, an intertwined phase which does not come at the end in the lifecycle of a study, represents the research design: it is an ongoing process during which decisions on approaches and participants will be continuously updated (Lewis, 2008). It is essential to understand the concept of a single case study before explaining the multiple case studies that were used in this study.

3.6.2 Case study

Yin (2014) gives a two-fold definition of a case study. The first definition denotes the confines of a case study in which it is referred to as an intensive study of an existing phenomenon in its natural settings from the participants' perspectives, especially in cases in which the demarcation between the issue of concern in the research and context may be blurred. The second makes reference to the characteristics of a case study. The case study investigation is said to cope with the practically unique circumstance in which there will be a number of determinants of concern than data sources, and one has to rely on numerous information gathering techniques, making use of triangulation to direct data gathering and analysis. In short, the two-fold definition can explain how the case study deals with the aspect of a plan for data collection and analysis making use of several methods to fully understand a given phenomenon in its natural setting. It can also be noted that a case study can accommodate different epistemological views including the relativist perspective which recognises multiple realities having several meanings with the findings that are researcher dependent (Yin, 2014).

Chilisa and Preece (2005) posit that a case study comprises of a comprehensive study of single phenomena or units of analysis with the purpose of making an all-inclusive description of those particular phenomena. The unit of analysis or phenomenon may be a person or people, for example, a study of school-based mentoring. Here the unit of analysis and the people being

studied are school-based mentors and their mentees. In a teacher education study, like this one, an event can be a specific programme in specific sites, such as, the school-based mentoring programme in schools as research sites. Information was collected and conclusions were drawn on this unit of analysis which was the mentoring pair in this study. An essential characteristic of a case study is that it makes use of several data collection techniques to study a single phenomenon. In this study, data were gathered using observations, semi-structured interviews and document analysis.

Literature reveals different types of qualitative case studies which include the observational case studies (Bogdan and Biklen, 1992). In the observational case studies, the dominant data gathering method is participant observation and the emphasis of the study is on some organisational aspects or some normal activities of the group. Features of the organisation that become the central focus of the study include specific roles of members in the organisation, certain practices of the organisation and events in the grouping. In this study, the organisation was the school and the place of focus was the classroom in which mentoring took place. The concerned groups of people were the mentor and pre-service teacher who were both the key participants in the mentoring activity which took place during teaching practice in the schools. The mentoring sessions were observed so as to have a better grasp of the context and practice of school-based mentoring of pre-service teachers as the mentor teacher, who was the more knowledgeable other (MKO) in the Vygotskian perspective, guided the process.

Gall *et al*. (2003) are of the view that case study research is the in-depth study of a phenomenon in its natural setting and from the viewpoints of the participants involved in the study. In this study, the school-based mentoring was studied in the research sites in which it was taking place. There was a deliberate attempt to gather views of mentor and pre-service teachers in order to get detailed information on the mentoring contexts and practices since one of the objectives of this study was to explain how mentoring contexts and practices shape pre-service teachers' classroom practices. The case study seemed highly appropriate for this research since each school presented a different context for mentoring of pre-service teachers and the mentors' and mentees' views were used to describe the mentoring contexts and practices.

Creswell (2012) explains some ways by which case studies may be differentiated. In some instances, case studies may be categorised according to the magnitude of the defined case which

may involve an individual, a number of people, a group, a whole programme or an event. In this study, the case study involved five pairs of mentor and pre-service teacher and school-based mentoring as the phenomenon under study. Case studies may also be categorised on the basis of the intent of the case analysis or its unique characteristics. The intrinsic case is selected because of its uniqueness. On the basis of intent, there is the single instrumental case study, the multiple or collective case study and the intrinsic case study (Creswell, 2012). The single instrumental case study is centred on a specific aspect as it illuminates the issue. Case studies could also include a collective case study, called multiple cases in which there are descriptions and comparisons among cases to provide a deep understanding of an issue.

3.6.3 Multiple case studies

After careful consideration, the research design I thought suitable for this study was the multiple case studies. The research design suits a situation in which the same study contains more than one single case (Yin, 2014). Yin (2014: 56) says "…one study may contain two or more single cases". When this happens, the study uses a multiple case studies design. In this study five single cases, representing the five research sites, were used. The research sites were the five different secondary schools which were used in this study. Multiple case studies were preferred to a single case study in order to achieve more robust results and one of its aims was to come up with a generalised explanation model for each of the cases in the study, despite the cases being varied in contexts and practices of mentoring pre-service teachers (Vohra, 2014). The results from multiple cases are often regarded as more compelling than evidence from a single-case design, and on the whole, the study is considered as being more convincing. In addition, the logical benefits of having more than one case may be substantial in a research study in that the results from the cases can be compared and contrasted. The multiple case designs were utilised in this research to examine the mentoring contexts and practices in the five different secondary schools in which pre-service teachers were attached to qualified teachers who acted as mentors. The schools were different in terms of type, organisation, size and location. The selected secondary schools were one rural day single-session, one rural day double-session, one boarding, one urban day single-session, and one urban day double-session. A single-session secondary school operates from morning till late afternoon whilst a double-session one operates as two schools in one using the same classrooms on an alternating basis on the same school day. The teaching programmes were organised differently at each of these schools providing different mentoring

contexts. The different organisation of teaching programmes at these schools offered different opportunities for mentoring pre-service teachers as they provided varying durations for mentor and pre-service teacher interactions. These variations were likely to influence mentoring practices and pre-service teachers' classroom practices.

This study studied five cases as it sought to provide a deep understanding of the contexts and practices of school-based mentoring of pre-service teachers. The five cases were in different schools which were in different locations and operated teaching and mentoring programmes differently. Thus, this study was designed to describe and compare the mentoring contexts and practices in the five different secondary schools. These descriptions and comparisons were on the basis of document analysis, mentoring session observations and semi-structured interviews with mentor and pre-service teachers. This study chose the multiple case as it enabled the researcher to focus on the critical participants and situation in the school-based mentoring process in the selected five research sites to have a cross case analysis (Leedy and Ormrod, 2013). The design also permitted me to be close to the mentors and the pre-service teachers and hear their voices on the mentoring process while observing mentoring sessions in the schools and interviewing mentor and pre-service teachers (Clark and Ivankova, 2016).

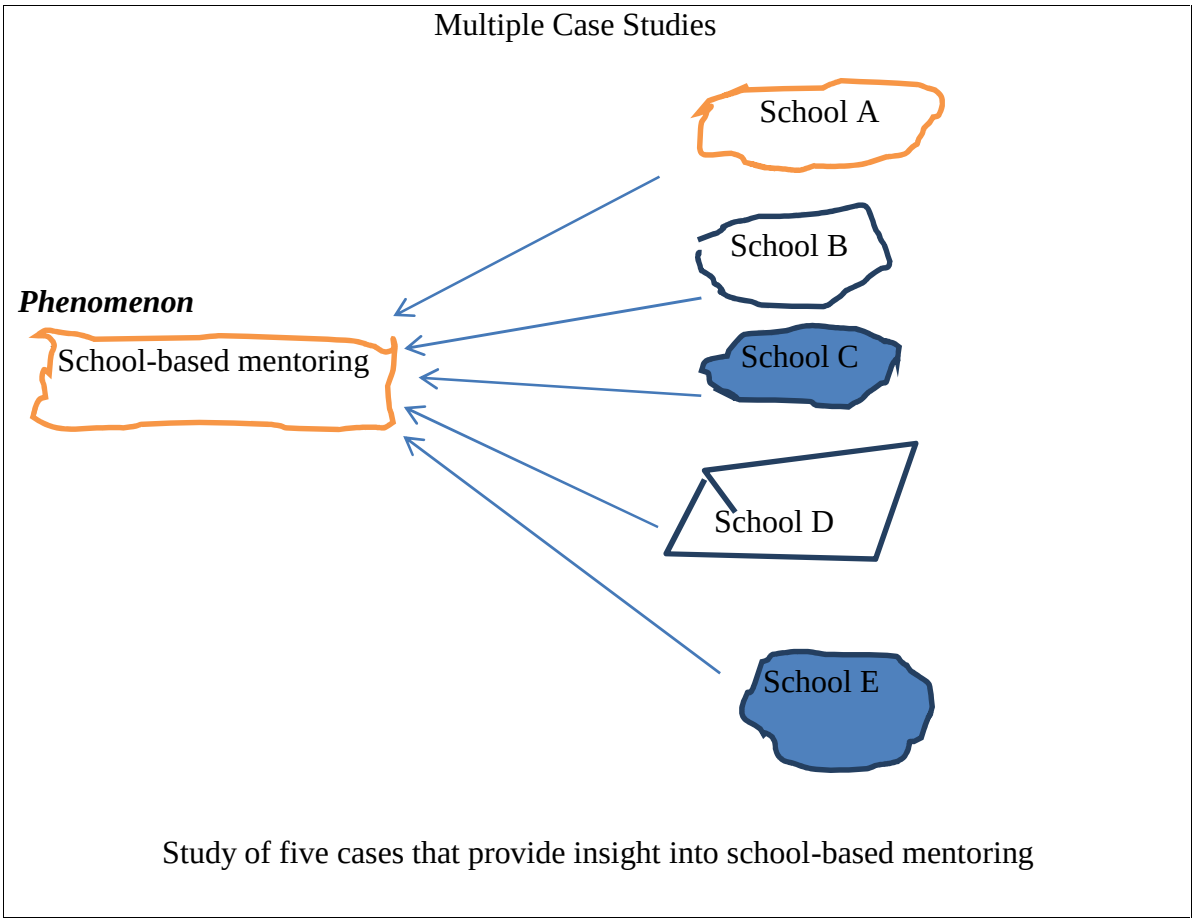


Figure 3.1: Multiple Case Studies *(Source: Adapted from Creswell, 2012: 466)*

3.7 RESEARCH SITES

The study was carried out in one district in Mashonaland East Province of Zimbabwe. Research sites were secondary schools. Five secondary schools which were in different settings and presented with different contexts were selected for this study. The difference in type, organisation, size and location of schools presented different contexts in which the mentoring of pre-service teachers took place. Context also included where, when and how the mentoring was carried out in these schools. School A was a rural day single-session school with single stream classes from forms one to four. School lessons started from 7.30 in the morning to 4.30 in the afternoon on each school day. School B was a rural day double-session school and classes alternated to use the same classrooms during school days. The school had two streams of classes for forms one to four and also had lower and upper six classes. Forms three to six came to school at 7.30 in the morning and finished at 3.30 in the afternoon and forms one and two started school

at 10.00 in the morning and finished at 5.30 later in the day. Students who started school at 7.30 in the morning were said to be in the 'morning session' while those who started at 10.00 in the morning were said to be in the 'afternoon session'. School C was a boarding school with forms one to six and classes started at 7.30 in the morning and ended at 4.30 in the afternoon on each school day and students also had supervised one and half hour evening studies during school days. School D was an urban day single session school and operated like School A. Their differences were that one was rural and the other was urban. School E was in an urban area and operated like the rural-based School B.

These schools presented different instructional contexts mainly because of how the teaching and learning was organised. The contexts in which mentor teachers work could have a bearing on their teaching beliefs and how they mentor pre-service teachers (Wang, 2001) and this can be related to two of the first sub-questions of this research study which analyse the differences in mentoring contexts and their influence on mentoring practices. Being a qualitative case study, the participants were actively involved in the analysis of the different contexts and description of the mentoring practices from their own perspectives (Creswell, 2012). As a result, different methods were used to gather data and these included interviewing both mentor and pre-service teacher, observing mentoring sessions and document analysis. During the school visits, I interviewed pre-service and mentor teachers, observed mentoring sessions and analysed documents. The school visits were aimed at gaining insights into the different mentoring contexts existing in different schools and how these shaped mentoring practices. It was important to observe and interview mentor and pre-service teachers in their natural settings (Kothari, 2011). The school visits also offered opportunities for a deeper understanding of the natural history of the five cases in this study, especially from interactions with participants more so when it is viewed from the Vygotskian perspective which framed this study. However, the assumption is that there is uniformity in mentoring during teaching practice in spite of the fact that mentoring practices may vary according to situations.

3.8 POSITION OF RESEARCHER

As a researcher, I was a key instrument in this qualitative research as I personally gathered information through analysing documents, observing behaviours and interviewing participants (Creswell, 2014). Though I used some instruments for gathering the information, I am the one

who, in practice, collected the information and my personal influences became a determining factor in the qualitative research process. It was important for me to clearly identify my biases, experiences and personal background that may have influenced my interpretations during this study. I was familiar with the programme and participants being studied as a tutor in the PGDE programme though I had not tutored this cohort of students. Throughout the research process, I deliberately maintained a professional and objective approach by observing all the ethical principles in qualitative research and kept reminding myself of the need to remain neutral as I gathered information and analysed it. I had to keep on reminding the participants and myself that I was not assessing them but was carrying out a research to improve the PGDE programme. I visited all the schools and gathered the research information on my own as I did not want the participants to view me as part of the university supervision and assessment teams. I also made use of multiple strategies for validation to show the accuracy of the information (Yin, 2014). In this study, I included a pilot case study as some form of trial run of the actual study and the use of document analysis, interviews and observations was methodological triangulation as a way of depicting the participants' perceptions of school-based mentoring in a more accurate manner (Creswell, 2014). In addition, I had to rely on my twenty years of supervision experience as a teacher educator to make judgements on what to consider as valid information concerning contexts and practices of school-based mentoring of pre-service teachers. However, I was also aware that my experiences had their own biases and as a result, I ended up consulting widely to seek independent views on some aspects, such as methods of data gathering and analysis during the research process. I hope the professional stance I adopted throughout the research process reduced the influences of my personal biases in this study as I was conscious of my own experiences and beliefs throughout the research process, especially in the area of school-based mentoring.

3.9 PARTICIPANTS

The participants were pre-service teachers and their respective mentors, and this involved five such pairs of mentor-pre-service teachers. The pre-service teachers were registered in the Post Graduate Diploma in Education (PGDE) of one university in Zimbabwe. The pre-service teachers were in their final semester of the one and half year teacher education programme. The pre-service teachers were teaching at selected secondary schools under the guidance of a qualified teacher as the mentor. The mentoring pairs were profiled in the next chapter.

The pre-service teachers were teaching at different schools. The differences in the schools were in terms of how they were organised for teaching and learning purposes, type, location and size by enrolment. However, these are not the only factors which shape the contexts provided by the different schools as there are others like school culture which is influenced by these factors which, in turn, shape mentoring of pre-service teachers. The context also refers to the environment, circumstances and conditions in which mentoring took place and how it was conducted. The assumption is that the context in which mentoring takes place has an influence on pre-service teachers' teaching. As a result, one of the sub-questions to be answered in this study is: "In what ways do mentoring contexts and practices shape pre-service teachers' classroom practices?"

3.10 PARTICIPANT SELECTION

I used the purposive sampling technique to select pre-service teachers who were on Teaching Practice (TP) in their final semester and their mentors from a population of PGDE students of the university that was studied. These pre-service teachers were selected as they were information-rich cases and my interactions with them enabled me, as a researcher, to have a deeper understanding of the mentoring contexts and practices in the five secondary schools in which they were doing their TP (Leedy and Ormod, 2013). The purposively selected five pre-service teachers were practising in conveniently selected schools with different contexts and they were experiencing the mentoring practices as they were attached to qualified teachers who were their mentors. The selected pre-service teachers, mentors and schools were information-rich participants in this multi-case study as they had unique characteristics which needed to be explored. Despite being on the same teacher education programme the pre-service teachers were different. Although all the five teachers were qualified, they had different personalities and teaching experiences. The schools were also different and operated differently.

This study used a small sample of five pre-service teachers and their respective mentors as there are no strict rules about sample size in the qualitative research approach in practice and specifically in multiple case studies (Kothari, 2011). For this study, the purposive selection technique was considered appropriate as I sought those participants who would help me to have a more comprehensive understanding of the context and practice of school-based mentoring of pre-service teachers. As a result, five pre-service teachers and their respective mentors were

interviewed, observed during mentoring sessions to clarify mentoring practices, and their school documents were scrutinised to better understand the mentoring contexts and practices. Purposive selection was used in order to understand participants' lived experiences in-depth. In order to get rich information, I intentionally selected cases where the most appropriate and abundant information could be obtained (Patton, 2002). Hence, the selection of the pre-service teachers and schools mentioned above was intentionally done. However, the real identities of the schools and participants are being concealed for ethical reasons. The pre-service teachers were on TP and their mentors who were qualified teachers were guiding and advising them as they learned how to teach as viewed through the Vygotskian perspective which frames this study. In my view, the selected schools, pre-service and mentor teachers had relevant information and indicated that they were willing to share through participating in this study. The selected five pre-service teachers were being mentored by fellow teachers at their schools and were considered as good pre-service teachers by their school-based supervisors. The aim of using purposive selection in this study was to have mentor and pre-service teachers who were knowledgeable with the phenomenon of school-based mentoring of pre-service teachers (Cohen *et al.*, 2011).

In this study, selection was done at two levels. The first level involved the convenient selection of schools and the second level involved the purposive selection of the participants who were the pre-service teachers and their mentors (Patton, 2002). The choice of the schools was done on the basis that the schools were easily accessible as they were in my home area and provided different school settings in the Zimbabwean context. The different secondary school categories were rural day school, urban day, boarding, rural day double-session, and urban day double-session. However, the studied school categories are not exhaustive as other categories were not considered in this study. On the other hand, the selection of pre-service teachers was done in such a way that only final semester PGDE students attached to a qualified teacher were selected for this study. A pre-service teacher was chosen from each of the five selected schools in the sample. In three of the cases there was only one pre-service teacher at the school. In the other two cases, the pre-service teacher with the most senior classes was selected to be in the sample. The assumption was that experiences from the different contexts and practices during the school-based mentoring were lived by the pre-service teachers and those with senior classes interacted with more experienced learners and teachers. The respective mentor teachers, as school-based educators, also had relevant experiences to share in this qualitative multiple case studies.

3.11 ETHICAL ISSUES

Before starting the data generation for this study, as the researcher, I had to request for an Ethical Clearance Certificate from the University of the Free State. The university clearance was approved after which then I applied for permission to carry out this research study to the relevant authorities in Zimbabwe. Since my study involved schools as research sites, teachers and pre-service teachers who were practising in school, I had to seek permission from the Ministry of Primary and Secondary Education (MPSE), the Provincial and District Education Offices and the school heads whose schools were involved in the study. The applications enabled these authorities to examine the research for ethical soundness as this involved teachers and pre-service teachers as participants. The approval letters enabled me to conduct my study in the selected schools. Once the permission was granted, I had to obtain the permission of school heads, teachers and pre-service teachers. I had to seek the informed consent of mentor teachers and pre-service teachers who were involved in this study and this was granted. It was important to go through these procedures as the study was qualitative in nature and would require me to have an in-depth study of school-based mentoring of pre-service teachers in their natural settings (Yin, 2011). I was also able to establish rapport with the participants during the processing of permission to conduct the study as the importance and ethical principles of the study were explained to officials and participants. A programme of research activities was approved by the concerned schools, teachers and pre-service teachers as they were satisfied that this would not be disrupting their normal school activities (Creswell, 2012).

Researches, like this one, had to consider ethical principles to be observed. Research ethics provide guidelines for researchers to act and behave in morally acceptable ways (Punch, 2004). The two major issues which dominate recent guidelines and ethics in research with human participants mainly focus on voluntary participation and the security of participants from both psychological and physical harm (Bogdan and Biklen, 1992). In this study, I had to inform the participants about the purpose of this research.

Research ethics demanded that the pre-service and mentor teachers were fully appraised about the goals of this study as well as their role in the research process. It would have been immoral to gather data without the approval of the pre-service and mentor teachers and their permission to participate. The pre-service and mentor teachers needed to know that they were research

participants and the nature of the research (Silverman, 2006). As participants, they also had the right to withdraw from the research at any time for any reason even without disclosing what would have led to their withdrawal. In this study, the pre-service and mentor teachers, as participants, were personally informed about what the study intended to achieve and extent of their involvement. Participants' consent was granted in writing and all the identified participants managed to last the whole duration of this research study. Consent from heads of educational institutions was obtained prior to contacting their teachers and pre-service teachers in relation to the study.

The confidentiality of information supplied by the research participants through interviews, mentoring session observations and documents was guaranteed in this study. As a researcher, I had an obligation not to disclose the information I got during the research to others in such a way that they would be identified. I had to ensure that the participants' identities remained anonymous and their contributions to the collected information were kept confidential to protect their identities (Patton, 2009). In this study, pseudonyms were used for schools and participants to protect their identities. In addition, the study guaranteed confidentiality by making use of anonymous codes when interviews were transcribed. When a tape recorder was used in interviews and observation of mentoring sessions, it was with the permission of the participants on the understanding that the recorded information was only to be used for research purposes. This had implications on information storage and dissemination as all the collected information was kept in protected gadgets of which I was the only person with access.

Participants were protected from physical, psychological and emotional harm by adhering to the ethical considerations of informed consent, confidentiality, and protection of identity during the research (Leedy and Ormod, 2013). Kumar (2005: 212) says that "…harm in research could include disclosure of information which causes anxiety, conflict, discomfort, harassment, invasion of privacy, or degrading behaviour to or among participants". In this study, school-based mentorship thrived on healthy relationships between the mentor and the pre-service teacher and it was important not to antagonise these participants during the research. There was a deliberate attempt not to give interviewee responses from other interviewees as this could have caused tension in the mentoring relationship. The interviews were also conducted on an individual basis for this same reason. I found it appropriate to interview the mentor and pre-

service teacher separately so that they would not be affected in any way by the responses of their partner in the mentoring relationship as there was no disclosure of what the other partner had said about the mentoring contexts and practices. Mentoring practices could be viewed differently by the pre-service and mentor teacher and all their views were independently accepted in this study.

3.12 DATA GENERATION

Information was generated from school visits during which mentors and pre-service teachers were observed and interviewed to gain insight into the mentoring contexts and practices. The school visits started when permission was granted to research in schools by the Education Secretary and the Provincial Education Director. Information collected from the schools provided a naturalistic setting for the participants, namely, the mentor and pre-service teachers (Patton, 2002). I started by interviewing the mentors and their pre-service teachers separately. In addition, I interviewed them individually to get their independent views on the mentoring process. The interviews were semi-structured in order to guide the dialogue to remain focused on mentoring contexts and practices (Leedy and Ormod, 2013). I targeted some of the key mentoring activities mentioned in interviews in my observations. The mentoring activities were observed during five mentoring sessions for each mentoring pair. School and policy documents were also analysed to understand the differences in mentoring contexts in the research sites. The document analysis enabled me to cross-check findings from interviews and observations as part of the triangulation process to ensure credibility in the study (Clark and Ivankova, 2016). Before carrying out the actual study it was necessary to embark on a small scale study in the form of a pilot case to pre-test all the research instruments and data generation techniques in order to have a more robust study. I now examine each of the data generation tools in the following sections.

3.12.1 Pilot case study

I carried out a pilot case study which I considered as a mini-version of a full-scale detailed examination of mentoring of pre-service teachers in schools using views of mentor and pre-service teachers as they actively experienced the school-based mentoring (Yin, 2014). This is a study that I carried out before the actual study and I used the same methods of gathering data as part of the trial run of the intended study. The study helped me to fine tune data gathering plans with regards to both the type of the data coding and analysis procedures that were used. The pilot case study had a critical formative role in the actual study as it helped in the development of

research instruments and questions. The effectiveness of research tools and protocols were developed during the pilot case study. Methodological aspects relating to the provision of relevant information about field questions and other logistics were improved during trial runs in the pilot case study (Leedy and Ormod, 2013). This also assisted in the conceptualisation of the research design as the grey areas on mentoring contexts and practice were clarified before embarking on the actual study.

Some of the criteria that were used in selecting my pilot case included convenience, access and geographical proximity. The school used as my pilot case was in my home area and I could visit the school at any time of the day. I was also able to observe some of the after school activities. As a researcher, I needed to establish a prolonged relationship with the participants as was done in the actual study. I assumed that these mentioned factors guided and provided a meaningful trial run before the actual study (Yin, 2014). The pilot case provided room for detailing with protocol for the actual study and observing diverse phenomenon from varied perspectives on a trial basis. The pilot case reports were a point of reference in executing the actual study and helped to shape the processes of the actual study.

In this study, the pilot case was utilised to detect weaknesses in the main study. One school which was not in the selected sample was used as a pilot case to fine-tune interview questions, refocus aspects to be observed during mentoring sessions and direct document analysis. The chosen pilot case was selected because it had similar participants and presented similar settings to one of the schools found in the main study (Chilisa and Preece, 2005). The chosen school was a day rural secondary school which operated with two sessions. Forms three and four were in the morning session which started at 0730 and ended at 1530. Forms one and two were in the 'afternoon session' and started school at 1000 and ended at 1730. Each stream had two classes and the school buildings could not accommodate all the classes at the same time, hence the division of the school into two sections for operational purposes.

The pilot case pre-tested all the research tools which were used in the actual study. Some of the interview questions were rephrased so that they became clearer and more focused on aspects of mentoring contexts and practices. The observation schedule was also revisited during the trial run of the pilot case. Participants for the pilot case were the two pre-service teachers who were at the pilot school and their mentors. One pre-service teacher was teaching forms one, two and

three while the other was teaching forms two, three and four. The mentoring pairs were interviewed and also observed during mentoring sessions to gain in-depth knowledge of the mentoring contexts and practices. The school and participants were purposively selected on the basis of their being information-rich (Creswell, 2014). The pre-service teachers were on the PGDE programme and on Teaching Practice in their final semester. The mentors were qualified teachers and had been assigned the task of mentoring the pre-service teachers.

I used pseudonyms to protect the identity of mentors and pre-service teachers who participated in the pilot study. The pre-service teacher, Anesu, was mentored by an experienced teacher, Mr. Shava. The other pre-service teacher, Henry, was mentored by Mrs. Shoko, the senior woman at the school. The profiles of these participants are shown in the Table 3.1 below.

Table 3.1: Mentor and Pre-service Teachers' Profiles

Description details of participants	**Pre-service teachers**		**Mentors**	
Name	Anesu	Henry	Mr. Mhofu	Mrs. Shoko
Mentoring relationship	Mr. Mhofu's mentee	Mrs. Shoko's mentee	Anesu's mentor	Henry's mentor
Age in years	25	27	48	40
Highest teaching qualification	Bachelor of Arts	Bachelor of Science (Honours)	Diploma in Education (Secondary)	Bachelor of Education
Teaching experience	No previous teaching experience.	Two years teaching experience as an unqualified teacher	22 years of secondary school teaching	15 years of secondary school teaching
Subject specialisation	Business Studies and History	Geography and Mathematics	Physical Education	Mathematics
Subjects	History (Forms 1, 2 and 3); Commerce (Forms 1, 2 and 3)	Mathematics (Forms 2, 3 and 4); Geography (Form 2).	Science (Forms 2, 3 and 4)	Mathematics (Forms 1, 2, 3 and 4)
Post of responsibility	Netball coach	Class teacher	Sports director	Senior woman

The student and mentor teachers were interviewed individually for approximately 50 minutes each and five mentoring sessions for each pair were observed. School and teaching documents were also analysed. The next sections have details of the interviews, observations and document analysis. The coding results from the pilot study are presented in Table 3.2 in section 3.14.2.

3.12.2 Interviews

In this qualitative study, it was important to ask participants questions to collect information and to learn about views, beliefs, behaviours and opinions on contexts and practices of school-based mentoring of pre-service teachers through the eyes of the participants (Clark and Ivankova, 2016). There are different types of interviews which can be used to collect participants' views in a research study. In this study, I used the semi-structured interviews to gather information on mentoring contexts and practices from student and mentor teachers. These participants were considered to be in a position to give detailed information about their views on the contexts and practices of school-based mentoring of pre-service teachers since they were active participants in the mentoring process. The pre-service teachers were being mentored by qualified teachers as they were learning how to teach. These participants gave their views as people who were experiencing the mentoring process either as mentees or mentors. A semi-structured interview is a method of understanding how people behave without restricting these behaviours to pre-determined sectors which confine the sphere of enquiry. In other words, these are focused interviews which have questions listed in an interview guide although the sequencing of the questions is not uniform for all the participants (Chilisa and Preece, 2005). The interview guide ensures that the same issues are dealt within each interview and this makes it easier when one wants to compare and contrast participants' responses.

I produced the interview questions and developed the interview protocol using information gained through reading. The study research questions guided the focus of the interview questions. The interview questions were on the frequency of mentoring, when, where and how the mentoring was being conducted. Some of the questions also sought suggestions from the participants on how mentoring of pre-service teachers could be improved. The interviews provided information about schools' and participants' backgrounds, mentoring experiences and suggestions on how to improve school-based mentoring. The interviews were carried out to clarify the mentoring contexts and practices which existed in schools from the perspectives of mentor and pre-service teachers. The questions were open ended to gain a comprehensive understanding of the context and practice of school-based mentoring of pre-service teachers.

In this study, the semi-structured interviews were conducted on an individual basis. There were two sets of questions for the participants. One set was for pre-service teachers and the other was for mentors. Each interview lasted for about fifty minutes. The aim was to solicit participants' views on the mentoring practices as they were experiencing the mentoring in their schools as mentees or mentors. Interviews were audio-taped and then transcribed verbatim.

The semi-structured interview enabled me to probe the participants for more detailed information on the conditions in which mentoring was taking place and their views on their mentoring experiences (Yin, 2011). The issues that were interrogated in the interviews helped me to focus on some of the key mentoring activities to answer the sub-questions, which in turn, answered the main research question. In addition, the interviews helped me to check if my interpretations of what I had observed during the school visits and document analysis were correct. During the interviews, I sought to confirm, clarify or further probe into some moments I had observed as critical yet not quite explicit to me as I analysed documents or visited schools and classrooms.

Among other reasons, the interviews were used in this study because they provided useful information which I could not get by directly observing participants in mentoring sessions (Creswell, 2012). For example, I could not get the participants' detailed personal information from observations. As the interviewer, I also had better control of the types of information I got, as compared to the observer, as I could ask specific questions to elicit this information. The agenda for the interview originated from my research questions for this study and the moment the interview commenced, I was in total control of the proceedings as I could decide the issues to be focused on. I was also able to notice the non-verbal forms of communication, such as, gestures during the interview sessions and deduce their meanings. The participants seemed to be more comfortable to give me information about their mentoring partners verbally as I had assured them about the confidentiality of all their responses. They felt comfortable to give their views on the roles of their mentoring partner as they knew that no conflict would arise from how they perceived their mentoring experiences. The assurance of the confidentiality of the participants' responses also mitigated the weakness of lack of anonymity in interviews

(Creswell, 2014). It was also essential to create rapport with the participants before the data collection in order to build trust between the pre-service teachers and mentors and myself. This enabled the participants to be more willing to divulge even sensitive information during the conversations (Yin, 2011).

3.12.3 Observations

I considered observing mentoring activities in classrooms in different schools as an effective way of getting thick descriptions about school-based mentoring of pre-service teachers. I also considered observation to be an appropriate method of having a deeper understanding of the contexts and practices of school-based mentoring of pre-service teachers. Observation enabled me to witness first-hand the mentoring activities and engage in a process of collecting non-categorised information at selected schools (Creswell, 2012). In other words, the mentoring activities were observed taking place in natural settings which were the schools. As a data gathering tool, observations made a significant contribution to studies of a descriptive nature like a qualitative multiple case study, such as this one (Creswell, 2014). The observation technique enabled me to find out the manner in which mentoring activities were being carried out in schools and how they influenced pre-service teachers' classroom practice. In addition, I was also able to verify the information that was gathered from participants during interviews and document analysis (Leedy and Ormod, 2015). The observation of the mentoring practices engaged in by the mentor and pre-service teachers facilitated an elaborate discussion of mentoring practices, and triangulation of information gathered through interviewing student and mentor teachers and analysing documents (Chilisa and Preece, 2005).

In this study, I visited the schools to observe mentoring sessions without taking any active part in the discussions as I would be seated at the back of the classroom to have a full view of the proceedings. I was an observer as participant, according to Creswell (2012) and I considered this as the most appropriate for this study. An observer as participant is different from the other types of observers, such as the participant as observer, complete participant and the complete observer as revealed by literature (Chilisa and Preece, 2005). A complete participant would have become

part of the teaching and learning process and would have disguised his or her role as an observer to the participants. On the other hand, a participant as observer would have negotiated his or her way into the teaching and learning process and slowly find a way to take part in what will be happening during the lessons. The last type of an observer is the complete observer who would not have taken part in the teaching and learning process and would not even have been noticed by the participants.

In this study, I had to develop rapport with the teacher, pre-service teacher and learners to be accepted as a colleague and researcher so that I could freely ask questions during the data generation period. My interactions with the participants enabled me to gather more detailed information on the contexts and practices of school-based mentoring as I could observe and ask for clarifications whenever I was not sure about my observations during mentoring sessions. However, one of the limitations of the observer as participant, which I had to consider, was that I could not openly correct the participants or suggest alternative ways during lessons. Since I had established rapport earlier, I always found a way of indirectly making my views known on some issues as a way of adding value to the classroom interactions. I had also to assure the participants of the confidentiality of my research findings so that they would not behave differently during mentoring sessions since they were aware that they were being observed (Creswell, 2014).

What I observed during mentoring sessions formed the basis of further discussions and informal conversations I had with pre-service teachers and mentors. There was need to seek clarification on the background information pertaining to participant's background and the school culture, traditions, myths, values and practices in an effort to have a deeper understanding of the settings and contexts in which mentoring was taking place in schools. In practice, as I was observing, I also made use of the other data generation methods like document analysis and interviewing. For example, when observing mentoring sessions, I would also come across teaching practice documents from which I could analyse supervision patterns. As I jotted field notes, some questions could be noted for further investigation and discussion with the pre-service teacher and mentor teacher. The observation of mentoring sessions was also done in phases following the

mentoring phases in actual lessons. These are the pre-teaching and post-teaching phases of mentoring, and then the actual teaching phase. Consequently, mentoring takes place during each of these phases and in this study the focus was on understanding the mentoring context and practices in which this happened and its effects, if any, on pre-service teachers' classroom practices. I can argue that the data collection techniques used in these qualitative multiple case studies were entwined throughout the data gathering process.

Before making use of the observation, as a data gathering technique in this study, I considered the objective of the observation data. I made informal observations that allowed me to obtain a complete impression about the setting of the study (Chilisa and Preece, 2005). As a result, I started visiting the schools which were part of the study earlier. This was at the same time I was carrying out the pilot case study. I started compiling notes in my research journal on the schools in the study in order to have an informative write-up of the study setting for each of the schools. I conducted observations of the schools to enable an elaborate discussion of specific issues related to mentoring context and practice, school-based mentoring, and pre-service teacher's classroom practice. It was important to develop observation protocols with guides on what to observe using the guide. I finalised on the actual schools that were to be used in the main research study and the observation programme with time schedules (Creswell, 2012). I developed the observation instrument for this study, which had open-ended questions, which I answered as part of the compilation of field notes. I focused on what the mentoring pair did before, during and after the lesson and where, when and how they conducted the mentoring sessions. I observed five mentoring sessions for each mentoring pair using an observation protocol (see Appendix 11) which focused on specific aspects as shown in Table 3.2 below.

Table 3.2: Areas Focused on During Observations

Aspect Observed	Focus of Observation	Timing of Observation	Participants Involved
Observation setting	School, class, place, time, duration, mentor, mentee, topic	Before lesson	Mentor Pre-service teacher Learners
Interview follow up	Issues/ aspects noted during school visits, interviews. This was done to clarify or verify what was noted during school visits and interviews	Before, during and after the lesson	Mentor Pre-service teacher
Document analysis follow up	Issues/ aspects noted during school visits and document analysis. This was done to clarify or verify what was noted during school visits, analysis	Before, during and after the lesson	Mentor Pre-service teacher
Mentor-pre-service teacher discussions	Mentor/pre-service teacher's role during the discussions and the mentor/pre-service teacher's contributions and questions/responses	Before, during and after the lesson	Mentor Pre-service teacher
Pre-teaching discussion and interactions	Mentor/pre-service teacher's role during the discussions and the mentor/pre-service teacher's contributions and questions/responses	Before the lesson	Mentor Pre-service teacher
During teaching discussions	Mentor/pre-service teacher's role during the discussions and the mentor/pre-service teacher's contributions and questions/responses	During the lesson	Mentor Pre-service teacher Learners
Post-teaching discussions and interactions	Mentor/pre-service teacher's role during the discussions and the mentor/pre-service teacher's contributions and questions/responses	After the lesson	Mentor Pre-service teacher

3.12.4 Documentary analysis

Documents provided a valuable source of information in this qualitative research (Leedy and Ormod, 2013). In order to have a deeper understanding of the context in which mentoring was taking place, I found it necessary to analyse public and private records that were in the research sites, namely the schools. The public records included the published documents, such as national curriculum handbooks, national subject syllabi, and ministry circulars whereas private

documents included teachers' schemes of work, lesson plans, class records, learners' written work and supervision reports (Creswell, 2014). Document analysis in this research study had the advantage of being in the language and terminology of the participants. In addition, the documents were also ready for analysis as there was no need for transcription as was the case with interview and observational information (Creswell, 2012). In this study, documents as data sources were analysed to complement the main methods of data collection which were the observations and interviews. In a way, it was a strategy for enhancing the trustworthiness of these two methods. The documents that were analysed helped to have a deeper understanding of the contexts in which pre-service teachers were learning how to teach under the guidance of a qualified teacher. The school timetables showed how the teaching and mentoring were organised at each of the schools in the study. The supervision reports had indicators of the quantity and quality of mentoring which existed in the schools. I was also able to infer the kind of support the pre-service teachers were getting from the school and their university from the document analysis. In addition, I managed to verify some of the issues which were picked from the interviews and observations from the perusal of relevant documents.

The context in which mentoring takes place in schools can only be better understood if some of the documents which stakeholders produce in the preparation and monitoring of teaching practice are interrogated as was done in this study. The pre-service teachers' university prepares a tutorial package in the form of tutorial letters, handouts, circulars and teaching schemes and lesson plan templates to assist and guide pre-service teachers and their mentors during teaching practice. The schools and the Ministry of Primary and Secondary Education (MoPSE) also had documentation to support the mentoring of pre-service teachers on teaching practice. I found it necessary to analyse these documents in order to have a more informed understanding of the context and practice of school-based mentoring of pre-service teachers learning to teach under the guidance of a more knowledgeable other (MKO) when viewed through the Vygotskian lens.

3.13 PROCESS OF DATA ANALYSIS AND MANAGEMENT

I collected information from school visits during which mentors and pre-service teachers were interviewed and observed to gain insight into the mentoring contexts and practices. The interviews were semi-structured in order to guide the dialogue to remain focused on mentoring contexts and practices during the face-to-face interactions with both the pre-service and mentor teachers (Leedy and Ormod, 2013). Some of the mentoring activities mentioned in interviews formed the basis of the observations I conducted during mentoring sessions. The school-based mentoring practices were observed during mentoring sessions as mentors were guiding and advising pre-service teachers on how to learn to teach. School and policy documents, like the schemes of work and teaching handbooks, were also analysed to understand the differences in mentoring contexts in the research sites. The document analysis of public and private documents also enabled me to cross-check findings from interviews and observations as part of the triangulation process to enhance credibility in the study (Clark and Ivankova, 2016).

In this study, data analysis was linked to the data gathering and took place at the same time with the data gathering process, as well as at the close of the study (Chilisa and Preece, 2005). Data analysis commenced at the beginning of the research study and came to an end while compiling the final results (Johnson and Christensen, 2008). Data examination in this study was focused on searching for hidden messages, which involved revealing notable trends, themes and classifications in the data. The text from interviews, observations and document analysis was so dense and rich in such a way that not all the information was utilised (Creswell, 2012). Using hand coding, I had to go through each line of transcription text to assign codes, themes and categories.

Analysis of data took place at two levels. Firstly, the analysis followed a general procedure that consisted of interconnected and interactive stages proceeding from the bottom to the top as illustrated in Figure 3.2 below (Creswell, 2014). Secondly, the analysis stages were rooted within the case study design which involves the detailed description of the schools and the mentor and pre-service teachers involved in the mentoring process, ending with an examination of the data

for trends and emerging themes in mentoring contexts and practices in the five schools. It was also critical that the voices of the mentor and pre-service teachers were heard "…through the use of direct quotes" of what they said during our interactions (Chilisa and Preece, 2005: 174). This added detail enhanced the credibility of the study as responses could be traced back to the specific mentor and pre-service teachers involved in this study. However, the participants' real names were concealed in this study as an ethical principle.

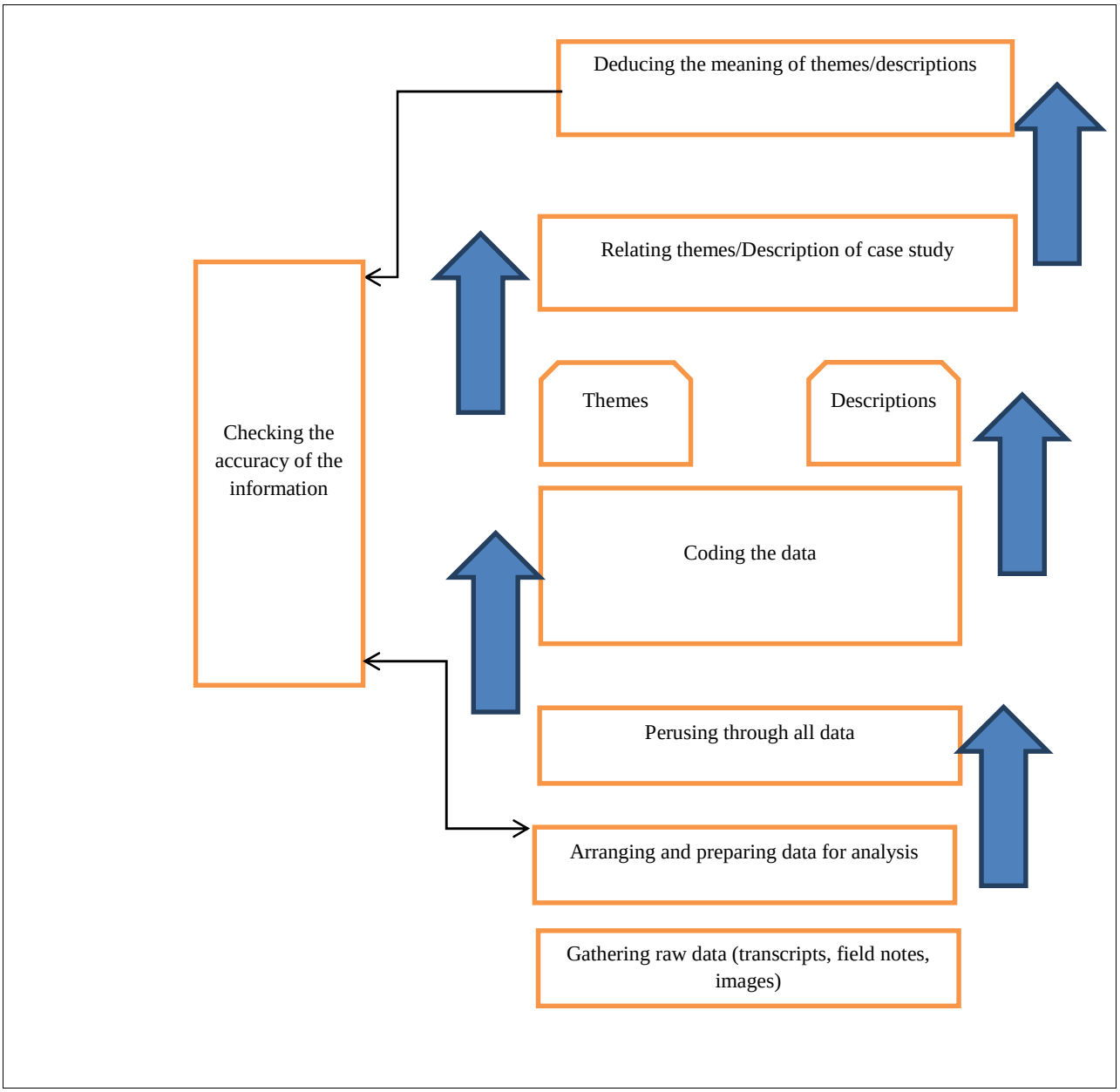


Figure 3.2: Data Analysis in a Qualitative Case Study *(Adapted from Creswell, 2014: 197)*

The above figure suggests that in the process of analysing qualitative data, I had to go through a great deal of information in a complex and time-consuming process (Leedy and Ormod, 2013). However, the interpretation of the data could have been influenced by my personal biases as I

was the main instrument for data collection in this study. As a result, I deliberately attempted to minimise the influence of my personal prior experiences, values and beliefs. Some of the strategies I used to minimise personal biases included the use of interviews, observations and document analysis to collect the same information on mentoring contexts and practices and their influences on pre-service teachers' classroom practice. I also obtained the mentor and pre-service teachers' views on the same aspects of mentoring contexts and practices. In addition, I have to acknowledge my experiences in teacher education as a tutor and teaching practice supervisor to enable the readers to take them into account when reading this study (Creswell, 2014).

3.13.1 Coding of data

I had to code my qualitative data from the interviews, observations and document analysis as soon as I started collecting the data (Neuman, 2014). The other data came from my reflective notes which I compiled throughout the research process in my research journal. I had to first transcribe the data from these methods into text and then use codes to categorise the data into themes. In this qualitative case study, "coding was a solitary act" as I was dealing with only five cases which I considered manageable to code manually (Saldana, 2016: 36). However, I was able to discuss with a colleague during the coding process to clarify my thinking on the categories and codes. The categorisation of the data was at basically three levels, "using open, axial and selective coding" (Neuman, 2014: 481). My first attempt involved reading through the data to assign broad themes to the transcribed data using open coding (Cohen, Manion and Morrison, 2011). The coding had been refined during my pilot study. The broad themes of the initial coding were shaped by the research questions of this study and framed by my chosen theoretical framework which had main tenets of social interaction, a more knowledgeable other (MKO) person in a learning situation and the zone of proximal development (ZPD). The literature I had read also helped me to conceptualise the themes that I identified during open coding (Neuman, 2014). In addition, my twenty years' experience as a teacher educator had an effect on my conceptualisation and understanding of the themes I created. As a teacher educator, I had interacted with some of the mentor teachers and pre-service teachers who were involved in the mentoring process. My personal experiences as a teacher educator could have influenced my

interpretations of the data I came across and the codes I ascribed to the transcribed data (Creswell, 2014).

During my second interrogation with codes, I was now focusing on the initial coded themes rather than on the data to establish links and relationships between themes which were a product of open coding in the process of axial coding (Flick, 2011). During axial coding the challenge was to cluster together categories or themes that were related. I had to identify a theme around which a number of categories revolved as the name axial coding implies (Cohen *et al.*, 2011). For example, themes related to mentoring contexts were grouped together and those that were related to mentoring practices had a different axial code. My understanding of mentoring practices as teaching behaviours which shape a pre-service teacher's classroom practice informed me on what to include under the theme of mentoring practices. However, I was also influenced by my research questions which focused on addressing the nature of mentors' and pre-service teachers' realities in school-based mentoring and deepening my understanding of mentoring of pre-service teachers. The research questions, in a way, determined the focus of my coding at every stage and what I selected as relevant content for my study.

One of my research questions was stated as: "In what ways do mentoring contexts and practices shape pre-service teachers' classroom practices?" This particular question focuses on the knowledge and understanding of mentoring. There are a number of anchor themes and categories to be considered to be able to answer such an epistemological research question (Saldana, 2016). This involved going through all the codes and themes in a selective manner to choose those cases that illustrate how mentoring contexts and practices influence pre-service teachers' classroom practice. This can only be possible if one has identified the major themes and how they are related with their respective categories as regards their effects on pre-service teachers' classroom practices. This then enabled me to look for relationships between and among themes by going through the themes several times using some form of constant comparison (Thomas, 2009). Constant comparison enabled me to fine tune my ideas as I compared pieces of information as I thoughtfully moved to the next phase of conceptualisation (Taylor *et al*., 2015). Using the above

research question as an example, I was looking for indicators of mentoring contexts and practices which were visible in the classroom practice of a pre-service teacher. This last process of scanning through the previous codes and themes in an effort to identify those themes that illuminated a chosen theme is referred to as selective coding (Neuman, 2014). In this study, research questions were focused on deepening my understanding of school-based mentoring and had many interrelated themes which were a product of selective coding. In fact, selective coding was some form of axial coding which was at a higher level of abstraction and focused on a careful selection of related codes (Flick, 2011). However, it has to be pointed out that though the coding levels seem to be set out in some linear form, the practical coding process was in an iterative manner (Cohen *et al.*, 2011). There was also a possibility of failing to capture the context and timing in which textual data was coded in this cross-case analysis study. I had to make reference to the background and supplementary information for all the transcribed texts for interviews, observations and document analysis as part of "the process of discounting data" in this study (Taylor *et al*., 2015: 179). My personal reflections compiled during interviews, observations, document analysis and coding reminded me of the settings and contexts in which I had created the codes.

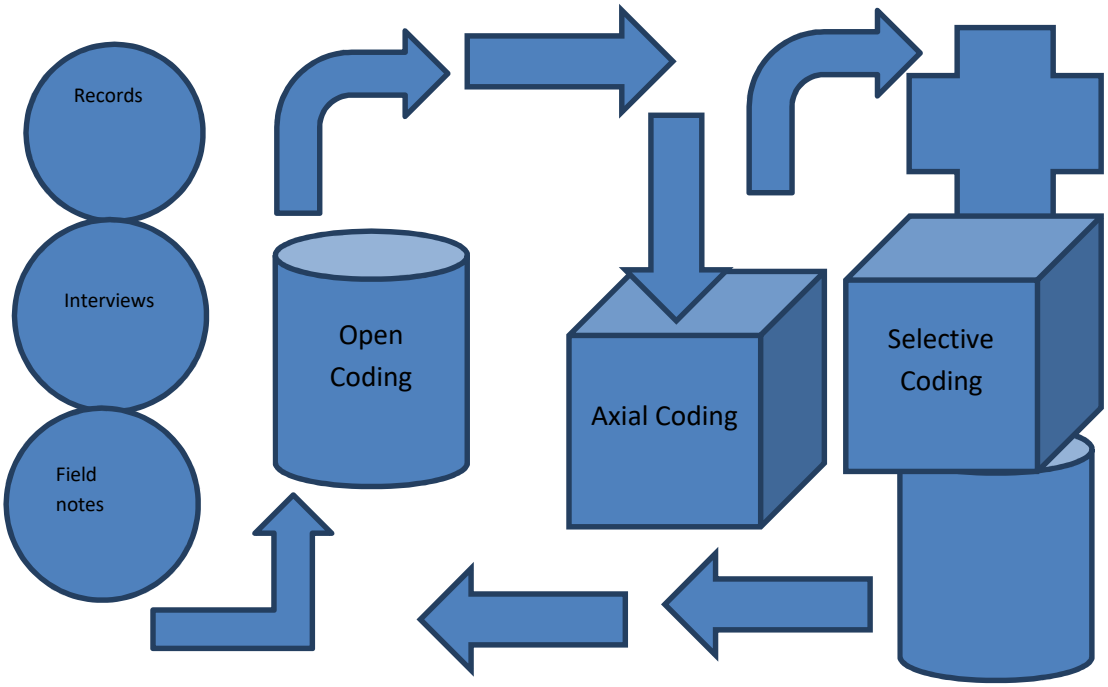


Figure 3.3: Coding Levels of Qualitative Data in This Study

Figure 3.3 illustrates the levels of coding textual data which were applied in this study. However, the diagrammatical representation may fail to vividly show the iterative process of coding which took place as a result of the influences of reflection, personal experiences, research questions and the theoretical perspectives adopted for this study. There was movement forwards and backwards between the levels during coding as I tried to refine the categories and aligning them with my research questions and theoretical framework.

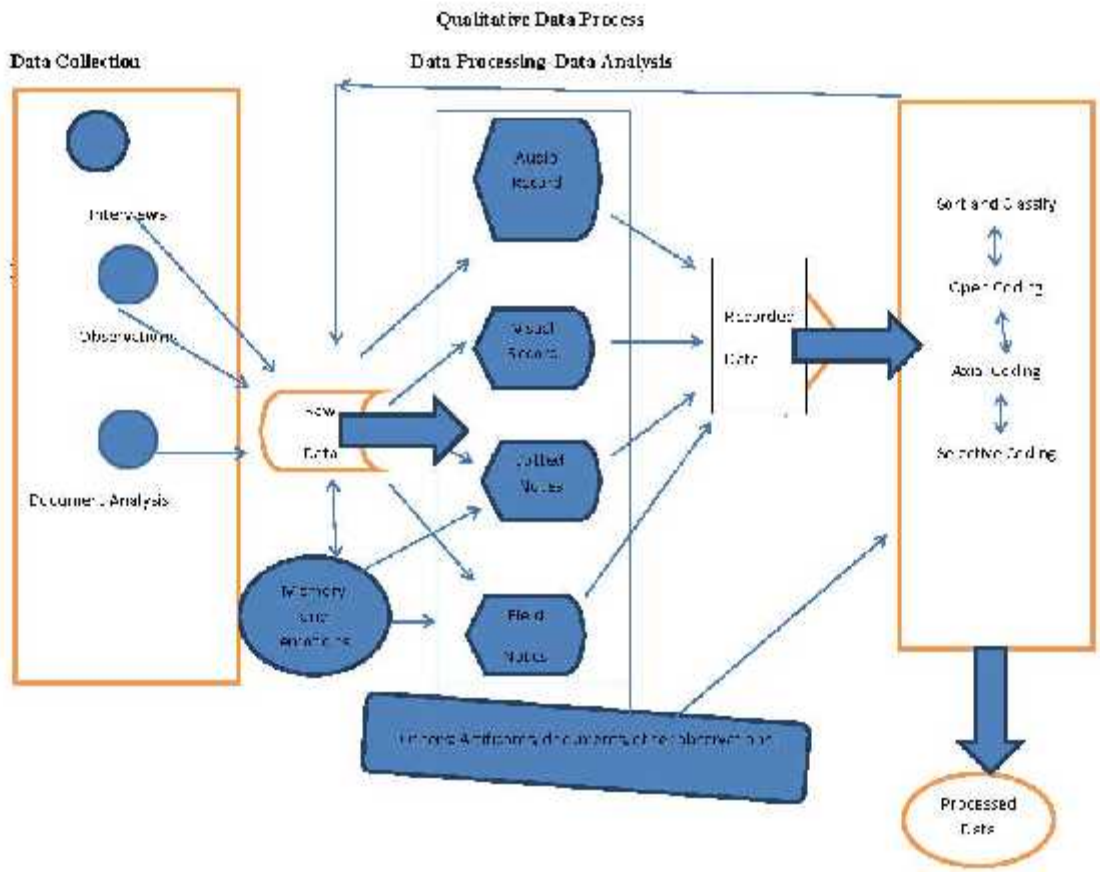


Figure 3.4: The Qualitative Data Analysis Process *(Source: Adapted from Khairie, 2012, 00:14:02)*

Figure 3.4 sums up, in diagrammatic form, the data collection, processing and analysis which I implemented in this study. The processed data was presented in the next chapter after a brief discussion of the pilot study findings in this chapter.

My coding of the data from the interviews, observations of mentoring sessions, document analysis, school visits and my personal reflections was on the basis of the results I had obtained from my pilot study. These results shaped the coding framework for my main study. Guided by

my research questions, I was in a position to come up with the anchor a priori themes and their respective sub-themes and categories (Stuckey, 2015).

3.13.2 Summary of coding results of the pilot study data

The coding results of my pilot study are summarised in Table 3.3 below.

Table 3.3: Summary of Coding and Categorisation of the Pilot Study Data

Sub-questions	Data Gathering Methods	Broad a Priori Themes	Sub-themes from Transcribed Interviews, Mentoring Session Observations and Documents	Categories
a) What are the differences in mentoring contexts in secondary schools?	A. School visits B. Classroom and office visits C. Interviewing mentors and mentees D. Observing mentoring sessions E. Documents analysis F. Personal reflections G. Informal discussions	**Theme 1: Contexts**	1.1 Mentor and pre-service teacher pairings	1.1.1 School appointed mentors
				1.1.2 Pre-service teacher selected mentors
			1.2 Time for mentoring	1.2.1 Experienced teachers
				1.2.2 Teachers with other responsibilities
			1.3 University preparations for mentoring	1.3.1 University tutorials and newsletters
				1.3.2 Lecturers' school visits
			1.4 School environment and resources	1.4.1 School supervision
				1.4.2 School material support
			1.5 Mentoring support	1.5.1 School support
				1.5.2 University support 1.5.3 Resources for mentoring
			1.6 Mentoring policies	1.6.1 University requirements
				1.6.2 School expectations
			1.7 Informal mentoring	1.7.1 Mentoring schedule
				1.7.2 Informal discussions
			1.8 Motivating	1.8.1 Incentives for

			mentors	mentors
				1.8.2 Mentor recognition
b) How do different contexts shape and give rise to particular mentoring practices?	A. School visits B. Classroom and office visits C. Interviewing mentors and mentees D. Observing mentoring sessions E. Documents analysis F. Personal reflections G. Informal discussions	**Theme 2: Mentoring practices**	2.1 Teaching and mentoring duties	2.1.1 Class visits
				2.1.2 Supervision visits
			2.2 Mentor guidance	2.2.1 Mentoring policies
				2.2.2 Policy implementation
			2.3 School support for mentoring	2.3.1 School resources
				2.3.2 Mentor support
				2.3.3 Mentors' offices
			2.4 Assisting pre-service teachers	2.4.1 Preparation of instructional media
				2.4.2 Teaching resources
			2.5 School-based supervision	2.5.1 Lesson observations
				2.5.2 Mentoring discussions
				2.5.3 Supervision comments
			2.6 Benefits of mentoring	2.6.1 Professional growth
				2.6.2 Improved teaching approaches
			2.7 Mentoring policies and practices	2.7.1 University Requirement
				2.7.2 School practices
c) In what ways do mentoring contexts and practices shape pre-service teachers' classroom practices?	A. School visits B. Classroom and office visits C. Interviewing mentors and mentees D. Observing mentoring sessions E. Documents analysis	**Theme 3: Pre-service teachers' classroom practices**	3.1 Mentoring tasks	3.1.1 Class visits
				3.1.2 Lesson observations
				3.1.3 Observation feedback and follow-up
			3.2 Lesson observations for pre-service teachers	3.2.1 Observation reports
				3.2.2 Oral reports
			3.3 Interaction with colleagues	3.3.1 Discussion with colleagues
				3.3.2 Sharing experiences
			3.4 Lesson observation follow up	3.4.1 Mentor class visits

	F. Personal reflections			3.4.2 After observation report back
	G. Informal discussions		3.5 Post mentoring practices	3.5.1 School-based assessments
				3.5.2 Improved classroom practice
			3.6 Pre-service teacher reflections on classroom practices	3.6.1 Comments from mentors
				3.6.2 Trying alternative teaching methods
				3.6.3 New classroom practices
			3.7 Pre-service teacher classroom practices	3.7.1 Reflecting on comments
				3.7.2 New methods of teaching
All sub-questions (a, b and c)	A. School visits B. Classroom and office visits C. Interviewing mentors and mentees D. Observing mentoring sessions E. Documents analysis F. Personal reflections in memos G. Informal discussions	**Theme 4: Improvements in mentoring of pre-service Teachers**	4.1 Mentoring selection	4.1.1 Teaching experience of mentors
				4.1.2 Subject expertise
			4.2 Motivating mentors	4.2.1 Recognition for mentors
				4.2.2 Incentives for mentors
			4.3 Benefits of mentoring	4.3.1 Professional growth of mentoring pair
				4.3.2 Incentives for mentors
			4.4 Mentoring training workshops	4.4.1 University organised seminars and workshops
				4.4.2 Cluster and school-based workshops
				4.4.3 Use of ICT tools
			4.5 School and university partnerships	4.5.1 School and university workshops and programmes-
				4.5.2 More school

				involvement
			4.6 Strategic professional development	4.6.1 Life-long learning for teachers and mentees
				4.6.2 Teacher education curriculum

The results from the pilot study fed into the main study as research tools were fine tuned to have more focused interviews and observations. In addition, my data coding skills were improved and I found the coding of data in the main study to be smoother and more convincing.

3.13.3 Data organisation and management

The audio recorded mentor and pre-service teacher interviews were organised and sorted into folders. The folders were stored on a password-protected computer to which I was the only person with access. I also kept a hardcopy of a research journal in which I wrote supplementary notes on each of the interviews and observations. These notes included the preliminary data I gathered before interviews, such as the bio-data of participants and any other observations I considered significant during the school and class visits. The research journal, the observation reports and documentary analysis commentaries I compiled during the research process were kept in a locked cabinet at my home. Hard copies of documents including the transcribed notes from the discussions with participants and observations were also kept in the same cabinet. For easy reference, all the documents were organised by dates. All the research documents were safely secured in such a way that no other person would have access to them.

Pseudonyms were used for all participants and schools in the study. This ensured that the principles of confidentiality and anonymity were adhered to in this research. It was not possible to link a participant to any information presented in this study. The plan is to destroy all hardcopies and electronic transcripts used in this research five years after the successful completion of this academic study.

3.14 TRUSTWORTHINESS AND CREDIBILITY OF STUDY

In this qualitative research, I had to cater for concerns of trustworthiness of findings because this is an area in which "some positivists feel the concepts of validity and reliability have not been adequately catered for in qualitative studies" (Chilisa and Preece, 2005: 166). Qualitative researchers have come up with equivalent terms for validity and reliability in their research studies. They have equated internal validity with aspects of believability of results, in simple terms, its credibility, and external validity is transferability, referring to generalisability (Chilisa and Preece, 2005). Reliability is equated with dependability and objectivity with confirmability. In quantitative research, validity refers to the ability of a research to measure what it was intended to measure and how the results are a true representation of the actual outcomes. Reliability is considered to be the extent to which results are the same even at different times so that they can be reproduced under similar conditions repeatedly (Clark and Ivankova, 2016). Thus, in this qualitative study, the accuracy and authenticity of a research was described in terms of trustworthiness, credibility, transferability, dependability and confirmability (Chilisa and Preece, 2005).

Trustworthiness in this qualitative research refers to the extent to which study findings can be believed and relied upon to be repeated in similar contexts by other researchers (Creswell, 2007). In other words, this is about the quality of the research. Findings of this study are believable and credible because the research was based on a well-thought out multi-case study which made use of relevant participants, namely mentor and pre-service teachers, who were directly involved in the mentoring of pre-service teachers and could give detailed information on mentoring contexts and practices as they had experienced it in their schools. Credibility in a qualitative study means that the results are realistic and convincing. Some of the strategies I used to enhance the credibility of this study were the prolonged engagement in the schools and methodological triangulation as reflected by the use of interviews for mentors and pre-service teachers, observations of mentoring sessions, and document analysis. I was in the schools for more than ten weeks, interacting with pre-service and mentor teachers. I also gave opportunities to the pre-service and mentor teachers to check the accuracy of the transcriptions of their responses in

interviews and descriptions of mentoring practices from the observation sessions as part of member checking in this study (McLeod, 2011). The mentoring contexts which existed in the schools were documented using dense background information so that one could determine the transferability of the research findings. The idea was to enable readers to draw their conclusions from the findings of this study as they relate them to other similar studies carried out in similar contexts (Leedy and Ormod, 2013).

Triangulation, as a process of pursuing to support evidence from mentor and pre-service teachers, and at the same time from interviews, observations and document analysis, was one of the strategies used in this study to enhance dependability of findings (Creswell, 2012). Report findings, based on the use of multiple data sources and multiple processes of data collection which included interviewing of pre-service teachers and their mentors, observing mentoring sessions and analysing documents used in the mentoring of pre-service teachers, provided dependability indicators for this study. In addition, the findings of this study could be traced back to the mentor and pre-service teachers and their respective schools. This was a process of providing an audit trail which enhanced the confirmability of this research study (Chilisa and Preece, 2005). In short, confirmability in this research study provided some form of objectivity which positivists thrive to achieve in quantitative research.

3.15 PRESENTATION OF FEWER CASE STUDIES FOR ANALYSIS

After going through the findings from the five cases from the five secondary schools and using the unit of analysis of mentor-pre-service teacher pairing in each school, I decided to make use of only three cases that I purposefully selected to show different contexts and practices in the mentoring of pre-service teachers (Creswell, 2012). The selection enabled me to present mentoring contexts and practices ranging from the typical to those that were extreme in nature. I discovered that findings for School A and School D were similar as both secondary schools were day schools operating with single session classes which had one stream from forms one to four. There were no new different insights from these cases as there was saturation (Creswell, 2012). They were not different in terms of the context and practice of school-based mentoring of pre-

service teachers. The only difference was that one school was in a rural setting while the other had an urban setting. Both schools were electrified and had almost the same teaching and learning resources. Presenting findings from these two cases would have come with unnecessary repetitions as they had the same mentoring contexts and practices. The conditions and circumstances under which mentoring took place in the two schools were not different. The two schools had the same conditions for mentoring of pre-service teachers especially in terms of time and other resources needed by mentor teachers as they supported, guided and advised pre-service teachers on Teaching Practice. The same argument can also be presented for School B and School E which were both day secondary schools and were operating with double-session classes with the classes alternating to use the classrooms. The difference was that School B was in a rural setting whilst School E was in an urban setting. Findings for School B were not different from findings for School E as they had the same mentoring conditions. As a result, the three cases to be presented in this section are the mentoring pairs for Schools A, B and C. These three schools represent different mentoring contexts as School A was a day school with single stream classes, School B operated with double session classes and School C was a boarding educational institution. The similarity of findings for Schools A and D, and then that for Schools B and E led to the compression of the case studies from five to three which were used to present findings from each of the three cases using the interview data, document analysis, observation notes and research journal compilations. The three schools (A, B and C) had different conditions for mentoring of pre-service teachers in terms of time, resources and the way the teaching and learning programmes were organised. Consequently, three particularistic cases are to be presented in the next chapter. Furthermore, the cases' findings enabled me to have a deeper understanding of the context and practice of school-based mentoring of pre-service teachers in Zimbabwe. However, these are not the only contexts which exist for school-based mentoring of pre-service teachers.

3.16 LIMITATIONS

The findings of this qualitative study are unique to the schools, pre-service and mentor teachers who participated in this study. However, the onus is on the reader, after reading through the

settings, contexts and participants of this study, he or she can think about the transferability of the research findings. This is why it was necessary to come up with dense descriptions of the research settings and context as a strategy for enhancing transferability of this study (Creswell, 2014). Moreover, the influences of researchers are also likely to be varied and would differently impact on findings in similar researches. Though measures were taken to ensure the dependability, confirmability, transferability and credibility of this study, the uniqueness of personal biases could be a factor in trying to generalise results of a qualitative study. This could explain why some literature would not want to talk about generalisation in a qualitative case study, such as this one but rather transferability of a study (Chilisa and Preece, 2005). The findings of this study could be transferable to studies in similar situations experiencing the same conditions.

3.17 SUMMARY OF THE CHAPTER

The researcher made use of the qualitative research approach to explore the contexts and practices of school-based mentoring of pre-service teachers. I regarded the multiple case studies to be an appropriate research design for this study since the research study aimed at having a deeper understanding of the various contexts and practices of mentoring pre-service teachers existing in different secondary schools. Views of both pre-service and mentor teachers were sought in interviews, and through observations of mentoring sessions and document analysis. The participating schools, pre-service and mentor teachers were purposively selected in order to have information-rich data on mentoring contexts and practices. A pilot study was used to test the research tools before the actual study and the results were used to fine tune the research instruments of the main study. Use of triangulation and a number of data gathering tools enhanced the overall quality of this study. The data collection and analysis were intertwined as these were simultaneous processes in this study. Raw data went through various stages which included organisation, reading through the data, coding the data as part of categorisation of themes, interrelating themes and interpreting of the themes. The research questions of this study provided the anchor themes which I used throughout the data collection, processing and analysis entwined stages of this study. It was important to check the accuracy of the data at every stage of

the data analysis spiral (Leedy and Ormod, 2013). There was a deliberate attempt to minimise the researcher's biases in this research by highlighting my role in carrying out the study.

In the next chapter, the research findings of this study are presented and analysed.

CHAPTER 4

FINDINGS OF THE STUDY

4.1 INTRODUCTION

This chapter presents the findings of the study, in the form of three case stories followed by a cross-case analysis. The findings are based on five levels of analysis of case studies (Cope, 2005). The first level started with the collection of data using interviews, observations and documentary analysis. The second level involved the transcription of the research data which involved the personal reading and re-reading of the transcripts. The third level involved the analysis of transcripts and notes as I developed them into write-ups of each case story which allowed for cross-case analysis in the next level. The cross-case analysis sought to find out what the commonalities and differences were among the cases (Stake, 2006). The last level which is part of the next chapter involved the discussion of findings in the context of extant literature and especially the Vygotskian perspective which frames this study. The Vygotskian socio-cultural theory with its main tenets of mental development based on social interaction, the use of the more knowledgeable other (MKO), and the zone of proximal development (ZPD) was used to interpret the contexts and practices of school-based mentoring of pre-service teachers in the context of the purpose of this study.

4.1.1 Purpose of the study

This study was aimed at deepening understanding of how the various contexts and practices of school-based mentoring of pre-service teachers in Zimbabwe shape their classroom practices. I studied a group of Post Graduate Diploma in Education (PGDE) students at one university in Zimbabwe and their mentor teachers during the school placement experience. Data for this study were collected in five secondary schools, in the second half of the year, from July to November 2017. The PGDE students were on Teaching Practice, in their final semester of the one and half year teacher education programme. The purpose of this study was guided by the central research question: How is school-based mentoring of pre-service teachers practiced in various school

contexts of Zimbabwe and with what consequences for the classroom practices of the pre-service teachers?

The following sub-questions were used to unpack the central question:

a) What are the differences in mentoring contexts in secondary schools?
b) How do different contexts shape and give rise to particular mentoring practices?
c) In what ways do mentoring contexts and practices shape pre-service teachers' classroom practices?

In the process of gathering and analysing data to answer the above questions, I ultimately came up with three cases of "mentor-pre-service teacher" pairs as I avoided unnecessary repetition of case findings as mentioned in section 3.15 of Chapter 3. The background information for each case included a profile of the mentoring pair before the presentation of the information from the interviews, observations and document analysis. The within-case analysis incorporated the interpretive commentary for each case story. The three cases are presented as stories of the mentoring pairs in the next section.

4.2 REPORTING RESEARCH FINDINGS

The next sections report on the research findings of this study, beginning with the research sites and the participants who make up the three cases that are presented as stories. Details of the cases are shown below.

4.2.1 Research sites and participants

The cases are made up of three mentoring pairs from three different sites as shown below.

Table 4.1: Mentoring Pairs in Schools

Case	Research Site	Mentor-Pre-service Teacher Pairing	School Description
1	School A	Mr. Sibanda-Sheila	Rural day single-session school with single stream classes.
2	School B	Mrs. Moyo-George	Rural day double-session school and classes alternate to use the classrooms.
3	School C	Mr. Simango-Augustine	Boarding school with forms one to six.

A pre-service teacher was paired with one mentor teacher. In this study, one mentoring pair at each school forms the unit of analysis and the mentor teacher is named first in each of the pairings. The team of mentees included one female pre-service teacher, Sheila, and two male pre-service teachers, George and Augustine. Two male and one female mentor teachers were selected as they were the mentors of the pre-service teachers. There was one same gender pair, with the other two being male-female pairs.

The three secondary schools constituted different settings and represented different operations for teaching and learning. School A had single sessions with single stream classes, while schools B and C had double sessions with two streams of classes and a boarding school set up with a large enrolment of about 850 students respectively. The mentors and pre-service teachers taught different classes within the same department. The profiles of the mentors and pre-service teachers are presented below:

4.2.2 CASE 1: The Story of Mr Sibanda and Sheila-: *"Hold on for now"*

Background information

The demographics of the mentoring pair are shown in Table 4.2 below:

Table 4.2: Case 1 Mentor and Pre-service Teacher's Profiles

Category	Mentor Teacher	Pre-service Teacher
Name	Mr. Sibanda	Sheila
Age in years	41	27
Highest teaching qualification	Master of Science in Education (Biology)	Bachelor of Science (Honours)
Teaching experience	15 years of secondary school teaching	3 years teaching experience as an unqualified teacher
Subject specialisation	Biology and Combined Science	Biology and Agriculture
Subjects being taught	Biology (Forms 3 and 4); Combined Science (Forms 2 and 3)	Biology (Form 3); Agriculture (Form 2)
Teaching load (Number of periods per week)	24	10
Post of responsibility	Head teacher and Head of Sciences Department	Chess club coach and patron

Mr Sibanda, Sheila's mentor, is also the head of the school. They are both in the Sciences Department. The mentor teacher, Sibanda, and pre-service teacher, Sheila, have a common teaching subject, Biology, and Agriculture was part of the Sciences Department. The mentoring pair was constituted by the head of school on the basis of subject specialisation. However, it could be useful to present more information on the mentoring pair by presenting their individual profiles as discussed below.

Profiles of the mentoring pair

Mr Sibanda- head of school, head of Sciences and Biology teacher

Mr Sibanda has been in the teaching field for more than a decade. He is of the view that he is an experienced and highly qualified Science teacher who rose through the education system to deservedly become a substantive head of school. He has taught at two secondary schools and believes he has the relevant teaching and mentoring experience as he had previously worked with

pre-service teachers from colleges and universities. In my first encounter with Mr Sibanda, I had asked him about his experience in the teaching field. Thus he responded as follows:

> *I have come a long way and I think I am part of the future of education as I intend to contribute to education and teacher development as a head of school and as a mentor and educational manager. With the qualifications I have, I could have even been promoted to some higher post in the ministry or teachers' colleges long back were it not for the government freeze on filling posts in the civil service. However, at the moment I am here and have to serve my people as the authorities have directed.*

Sibanda is justified to aim high as he is highly qualified and experienced as he holds a master's degree and has taught for 15 years in secondary schools. He considers himself highly qualified as the minimum qualification to be a secondary school head is a recognised first degree in teaching. It would appear that he thinks he has to move to a higher post as he acquired a higher qualification. His school could be characterised as a small school in terms of learner enrolment and staff complement. In my observations, when I first arrived at the school on the afternoon of 28 September 2017, he was attending to parents, teachers and some learners and appeared to be engrossed in what he was doing. Somehow, he was able to notice my arrival and excused himself from the discussion he was having with a teacher to attend to me. I would say the teacher was "put on hold" as they seemed to have not completed their discussion. This scenario of "putting people on hold" who seek his services was confirmed in my subsequent visits to the school up to the end of November 2017. On these other visits, I only had to signal to him that I had arrived and ready to go on with my research. As usual, he would "put someone on hold" and signal to me to continue with my research and normally would join us later as he was one of the participants in this research. My initial encounter with Mr Sibanda gave me the impression of a busy man at work. Indeed, this impression was confirmed to me in all my subsequent visits to the school as our interactions revealed that Mr Sibanda was the head of school, head of department and Biology teacher. Despite his busy schedule, Mr Sibanda soldiers on hoping for a better post as he climbs up the professional ladder. However, the lumping of several roles on an individual

including that of mentor teacher could compromise how Mr Sibanda mentors the pre-service teacher (Jaspers *et al*., 2014). Aspfors and Fransson (2015) argued that when a teacher has other roles, such as teaching, the mentoring becomes secondary. As a result, the pre-service teacher may not get the expected assistance and guidance.

Sheila - A pre-service teacher, chess club coach and patron

In my first encounter with Sheila, on 28 September 2017, she gave me her background information. In further interactions with her up to the end of the November 2017, Sheila opened up and I had the opportunity to understand her work better. Sheila, a 27 year old single mother, taught for 3 years in primary schools as an unqualified teacher, prior to enrolling in the PGDE programme. She enrolled for the PGDE programme on the basis of her Bachelor of Science Honours specialising in Biology and Agriculture. As an unqualified teacher, Sheila was not assigned a mentor teacher when she was teaching in the primary school. Mentor teachers are assigned to pre-service teachers who will be on Teaching Practice in schools as spelt out in the University Teaching Practice Tutorial Letter: *"The school should appoint an experienced teacher to mentor the student for the whole duration he/she is on Teaching Practice" (Teaching Practice Guide 2017: 4).* As a result, Sheila already had an idea of what the mentor teacher was supposed to do before she enrolled on the course as she had interacted with colleagues who were mentor teachers. As a teacher of Biology and chess club coach, Sheila thinks she has a lot to offer:

> *I have managed to establish a chess club and as patron, I was able to source the necessary resources for my club to meet on a weekly basis. As regards Biology teaching, I have established a Science learning centre that has seen teachers and learners get more interested in the teaching and learning of Science subjects that include Agriculture, my other teaching subject. The learning centre is actually a collection of teaching and learning resources. These resources are being extensively*

used by both teachers and learners. My aim is to improve learners' achievement in public examinations.

Besides teaching Biology, Sheila seemed to be contributing in some significant way in co-curricular activities as she attempts to raise her teaching profile. This could be a possible indicator of the level of interest she has for the teaching profession. This could also be the reason she taught for three years as an unqualified teacher in primary schools. She was of the view that;

I became more interested in teaching as time went on as I learnt new things each day. I have decided to continue learning as I teach and this PGDE programme has even renewed my interest in the profession. I am learning every day and I have embraced the life-long learning mantra being promoted by our university.

Normally unqualified teachers teach on short-term contracts of at least a term. If Sheila had not enjoyed teaching she could have terminated her contract before the end of the three years when she taught as an unqualified teacher. She also expresses an eagerness to learn and expects mentoring to offer opportunities for professional growth (Ambrosetti, 2014) when she said: *"I have taught before without a mentor in primary schools but this time I have a mentor, more teaching experience and more content."* She reckons the mentor and her newly acquired teaching experiences and content were likely to positively impact on her teaching. It would appear that the pre-service teacher is of the view that the mentoring process would add value to her teaching (Draves, 2013).

Sheila and her mentor teacher, Sibanda, have a common teaching subject, Biology. Her other teaching subject, Agriculture, was part of the Sciences Department at their school. Sheila explained how she had a seemingly lighter teaching load of ten periods per week:

I had to ask for special permission to be allowed to continue to teach in the primary school as I wanted to raise tuition fees for my teacher education programme. Although I am grateful to the authorities for granting me this special permission, this

really pushes me to work very hard to satisfy the demands that come with teaching in two institutions. If all goes well this will be my final semester and I will be qualified for my dream profession. Hopefully I will be deployed in a secondary school full time.

Sheila has negotiated with her university and the Ministry of Primary and Secondary Education officials to be allowed to teach at the nearby primary school in the mornings so as to be able to raise funds towards her tuition fees for the PGDE programme. She enrolled on the programme whilst teaching at the nearby primary school. As a result of her commitments and teaching duties at the primary school, Sheila has to go to the secondary section in the afternoon to do her TP lessons. Her teaching timetable shows that she teaches forms 2 and 3, Agriculture and Biology respectively in the afternoon from Monday to Friday, daily except on Thursday. The Agriculture lessons were on Mondays and Tuesdays and Biology lessons were on Wednesdays and Fridays as shown on the teaching timetable below.

Table 4.3: Sheila's Teaching Timetable

Sheila's Teaching Timetable *NB. Afternoon lessons only*		*1400-1435*	*1435-1510*	*1510-1545*	*1545-1620*
Monday	*Lunch*	*2 Agric*	*2 Agric*		
Tuesday	*Lunch*	*2 Agric*	*2 Agric*	*2 Agric*	*2 Agric*
Wednesday	*Lunch*		*3 Bio*	*3 Bio*	
Thursday	*Lunch*				
Friday	*Lunch*	*3 Bio*	*3 Bio*		
		NB. Key: 2 Agric = Agriculture (Form 2) *3 Bio = Biology (Form3)*			

Though the load looks seemingly light, Sheila observed that: "*The relationship I have with my mentor and other teachers in the school, has afforded me the opportunity to observe their lessons*

whenever I am not having a class to teach." In her interactions with colleagues, Sheila was likely to be in a position to shape her teacher identity (Yuan, 2016). The interaction she had during her class visits to other teachers' classroom was likely to culminate in a social process that may take the pre-service teacher to new levels of knowledge and skills in teaching, according to the socio-cultural perspective that frames this study (Heeralal, 2014). However, the observations needed to be planned and focussed on what was being observed in each of the lessons for the pre-service to benefit substantially. Unfortunately in this case Sheila's lesson observations were not planned.

Context

School A is a rural day single-session secondary school with single stream classes from forms one to four. The school lessons start from 7:30 in the morning and finish at 16:30 on each school day with form teachers meeting their classes at the end of each school day. The secondary school operates next to the primary school sharing a common boundary. The school has an enrolment of about 183 learners with almost the same number of boys and girls with an average class size of about 42 learners. There is no staffroom and teachers use storerooms as offices. Originally the secondary school classes were housed at the primary school before it located to the new site five years ago. It is not a well-resourced school, especially in terms of teaching and learning facilities. However, in terms of human resources, at the time of study, the school was well staffed as all the teachers were trained and Sheila was the only pre-service teacher at the school. Though the school culture encourages collaboration, surprisingly not all teachers were observed teaching as some were not keen to be observed teaching by a pre-service teacher. The teachers are expected to have a better appreciation of their school especially that it promotes professional development (Ramnarian, 2015). In addition, the school facilities seem not to support mentoring as there are no individual offices where the mentoring pair could carry out mentoring sessions in privacy and confidence. At the time of this study, the mentoring pair conducted their mentoring sessions in the headmaster's office. To minimise on disturbances, the mentoring pair met before lessons and after lessons. Some of the mentoring sessions I attended during the term included those held on 2 October 2017; 10 October 2017; 16 October 2017; 27 October 2017 and 6 November 2017. The

mentoring sessions lasted for about 40 minutes as in most cases these were held in phases. The phases could be termed pre-lesson, during the lesson and post-lesson. However, the lack of proper office for use during mentoring saw the disruptions of each of these mentoring sessions that were conducted in the head of school's office. At times the mentor teacher asked his colleagues to assist with mentoring when he was busy with other school duties: *"I can request other senior teachers to assist with mentoring whenever I am busy."* When I probed on how these mentors were selected, the response was that he needed to expose the pre-service teacher to all the teachers in the school. Head of school considered the issue of collaboration in mentoring and the exposure of the pre-service teachers to different mentoring practices (Wang, 2001).

Mentoring relationship

Sibanda and Sheila have the same subject specialisation. Sibanda thinks that he was the best placed person to mentor Sheila as they both taught Biology and the fact that the mentee had other teaching duties at the nearby primary school. He justified his appointment as Sheila's mentor:

> *Besides teaching the same subject, I have the relevant mentoring experience and understand her situation better as she has other teaching duties at the nearby school. As head of the school, I was in a strategic position to liaise with the primary school headmaster on Sheila's teaching duties and her unique teaching arrangement which requires her to report to two structures at the same time*

The head of school seemed to value levels of authority and thought that he was the best placed person to talk to another head of school. However, this same kind of thinking may become problematic when it comes to mentoring as the mentor and mentee would not be at the same level. As a result, such line of thinking may not augur well for a mentoring relationship.

When I asked about their mentoring relationship, Sheila was of the view that their relationship could have been even stronger where it not for that her mentor was a busy head of school, HOD and mentor:

The mentoring relationship seems to improve with time as we get used to each other. In the process we become closer. I now have a better understanding of my mentor and the challenges I face as a novice. I presume he also has a better understanding of how I am struggling to cope with the demanding task of teaching. It would appear if he had more time to sit in my classes our understanding of each other's needs could be up there by now……We are now closer than we were at the beginning… but maybe with more time I could be having less worries when I stand in front of those guys….the learners.

Sheila seemed to suggest, though she had a good relationship with her mentor, this could have been better if they had been together for a longer time. However, though it was not explicitly stated it would appear the mentor's other school duties reduced the time they were together as a mentoring pair. Research seems to suggest that mentoring requires that the mentoring pair understand each other' needs in order to have a healthy mentoring relationship (Draves, 2013).

Mentoring, teaching and administration

When Sheila introduced herself as a pre-service teacher seeking a place to do her TP, she showed Sibanda all the introductory letters and supporting documents from her university. Sibanda just browsed through them as he was already familiar with most of the documents from working with student teachers before this particular one. When Sheila mentioned that her major subject was Biology, Sibanda had no hesitation in taking on Sheila as his mentee. In my interview with Sibanda, he justified his appointment of himself as Sheila's mentor by saying:

The pairing was on the basis of subject expertise. I am the only other Biology teacher in the school, so being the head I considered it logical that I become her mentor. I am in a position to assist the student teacher (mentee) in a number of

aspects including subject content and subject specific teaching methods which she would not have got from my colleagues in other subject areas.

Sibanda also doubled up as a Head of Department (HOD) and thought that he was well positioned to assist Sheila as they taught the same subjects. As Sheila's head of school, HOD and mentor, Sibanda had clearly assigned himself multiple roles in the professional development of the pre-service teacher. He was responsible for pairing mentors and pre-service teachers at the school as he was the headmaster. At the time of this study, Sheila was the only pre-service teacher at the school. Considering that Sibanda had other demanding school duties, one would have expected him to assign another teacher as Sheila's mentor as the pre-service teacher may not get the attention she was supposed to get. Research has highlighted the challenges faced by mentor teachers with dual roles as they may consider the mentoring role as secondary (Jaspers *et al*., 2014; Aspfors and Fransson, 2015).

At school A, the HOD's office was also used as a storeroom and the mentoring pair did not use it during mentoring sessions. Most of their mentoring discussions took place in the headmaster's office as Sibanda was also the headmaster, HOD and mentor for Sheila. During an interview session Sheila noted that, *"Our discussions are usually very brief because at times people will be queuing outside the office to see the head of school for other administrative duties. The head has to attend to parents, teachers, learners and other visitors."* Although the mentor had two offices the mentoring pair could not freely use these offices for their mentoring sessions. Inadequate infrastructure at the school compelled the HOD to use his office as a storeroom. The other office for Sibanda was a public office as the headmaster had to attend to teachers, learners, parents and other stakeholders on a daily basis. This affected the duration and frequency of their mentoring sessions as the head needed to attend to other school administrative duties. Time for mentoring was usually limited and the mentor indicated this as one of the reasons why he had arranged for Sheila to conduct her lessons in the afternoon when he would be less busy with the other administrative duties. Part of the evidence for this lack of time was illustrated by the brief mentoring session that took place on 16 October 2017 in the head of school's office and was

interrupted by two members of the School Development Committee who wanted to discuss school matters with the head. The vignette showing this kind of interruption is shown in the next section under "*How school A supports mentoring and professional development*". This was also buttressed by their teaching timetables which were availed to me as I shadowed the mentoring pair. Sibanda wore several hats and this affected his mentoring duties as his other designations had their own responsibilities and were often more imposing and urgent. Consequently, the pre-service teacher could not easily gain access to her mentor, at all times, during the day. Furthermore, the mentoring time was also limited as the mentor had to attend to other clients seeking the services of his offices. The physical offices also could not be freely used for mentoring sessions for different reasons. The HOD's office was used as a store room and the head's office was an administrative office for the school.

How school A supports mentoring and professional development

As a mentor, Sibanda saw to it that the school supported the mentoring process. He considered his school as not well resourced but appreciated what the school was doing to support the mentorship programme by saying:

> *As a school, we are very supportive of the mentoring programme. We provide all the resources, if we have them that teachers require for mentoring pre-service teachers. In the case of Sheila, the school also considered that she has other duties at the primary school. The teaching timetable was designed in such a way that she could come and have all her secondary school lessons in the afternoon. As her mentor, I am also freer in the afternoon as there will be less administrative tasks. I get more time to assist her in the afternoons. However, it is unfortunate that, as a small school, we are unable to provide all the specialist teaching and learning materials. We end up depending on the pre-service teachers' creativity as we expect them to improvise so that learning takes place even in the absence of the real materials.*

As the head of school, Sibanda made sure that the school supported mentoring of the pre-service teacher as he was also the mentor. Besides the teaching resources he provided as a mentor, he also made special arrangements to accommodate Sheila's special request who had other teaching duties at the nearby primary school. The scheduling of her lessons in the afternoon was a way of supporting the mentoring process. However, Sheila thought her university could have supported her better by arranging for more visits by the lecturers. She remarked that:

> *Though the university lecturers visit us during TP, we expect them to make more school visits. Not all of these visits need to be assessment visits. The first visits could be used to familiarise the lecturers with the schools and the environment in which we are learning to teach. This will make our assessors appreciate the context and the challenges we face during TP. Our school-based supervisors will also get the opportunity to interact with our lecturers and get to understand what we are expected to do as we learn to teach. This way the school-based supervisors will be more confident when they assist and guide us during TP.*

Sheila expressed the view that the university staff needed to have a better understanding of the conditions in which they are mentored so as to better appreciate the challenges pre-service teachers have to negotiate when they are in the schools. She also alluded to the fact that there was need for more interaction between school-based supervisors and university lecturers. Similarly, Zeichner (2010) argues for more collaborative initiatives between teacher education stakeholders, such as schools and colleges of education involved in the development of pre-service teachers.

Sheila also explained how the school supported her during TP and made her experiences more enjoyable when she said:

> *The school supports my TP in a number of ways. For example, the school personnel observe my lessons and compile the written reports which are required by the university. The school also gives us teaching materials, such as charts, exercise*

books, teachers' guides and syllabuses. In fact, as student teachers, we are given all the teaching materials we need. We do not buy anything except box files for our TP files and teaching notes. We came with these files, maybe if we had not brought them the school could have provided them. We had prepared these files as part of coursework assignments in one of the courses as part of preparation for TP.

In addition to assigning a mentor to the pre-service teacher, the school also provided teaching resources during the TP period. The pre-service teacher felt that she had the support of the school and as a result, confidently approached her work as a classroom practitioner. In addition, Sheila benefited from mentoring discussions the pair held in the head of school's office. However, the vignette presented below shows that mentoring discussions in the head's office were often disrupted from time to time since the head had to attend to other clients who would have visited his office. The mentoring pair was involved in a pre-lesson discussion of a form 2 Agriculture lesson on fencing materials and tools. The mentoring session took place in the head of school's office on 16 October 2017 during the lunch break in preparation for afternoon lessons and was interrupted by two members of the School Development Committee (SDC) who wanted to discuss school matters with the head. The mentor teacher (MT) was discussing with Sheila (PT) on how best to handle the practical lesson. The vignette showing this kind of interruption is shown below:

MT: I hope the learners are prepared for this practical lesson.

PT: Yes sir; I reminded them after the last theory lesson.

MT: After the introduction, use questions to check on learners understanding.

PT: I wanted to give different questions to different groups

MT: Yes - a good teaching strategy but I suppose these questions are related to their group tasks.

PT: I have written the questions at the back of the cards with the group tasks. However, during the report back others can add on to the group responses.

*MT: How are you going to relate the advantages of different fencing materials to what we have in the school already? Umm……..OK.., **just hold on**……we have SDC members who have come….Think about my question and use your class to fence the flower beds area..*[Discussion could not continue.]

The discussion could not continue as the head had to attend to the SDC members. The discussion was about to focus on the main learning task of this practical lesson. An opportunity for the mentoring pair to collectively think deeply on the learning tasks was lost as the mentor had just started posing questions that were encouraging the pre-service teacher to think about how the relevance of the content was to be related to learners' everyday experiences. However, the lesson interruption could have been expected as the head of school had many roles in the school and the SDC members seemed to have assumed that coming during lunch time would not cause any disruptions to the head's duties as they might not be aware of his mentoring role.

Despite Sibanda being overwhelmed with his other school duties, Sheila felt that she learned a great deal from him whenever they got time to interact. In an interview, Sheila noted a number of areas in which she had benefited from her mentor:

> *The mentor assists with some of the lesson planning, especially the formulation of lesson topics and objectives. At first I had problems in these aspects but I have since*

improved because of his guidance as he is also a Biology specialist. I have benefited a lot from his subject expertise in Biology. When I teach the mentor observes some of the lessons and I have been assisted on how to make use of learning media and small groups during teaching. The mentor also provided a lot of guidance on the assessment of students using exercises and tests. In the beginning, I was not quite sure of how practicals were to be used to assess students' learning as I was poor on time and class management. As you know without proper class management very little learning takes place, especially in Biology as we use practicals and group activities which rely on order and high levels of discipline.

Sheila appreciated what the mentor had done in her professional development in the limited time they interacted. In two of the mentor's reports, Sheila was commended for her hard work and *'use of a variety of learner centred methodologies which made learners to actively participate throughout the whole lesson using effective instructional media'*. The reports were dated 20/09/2017 and 29/09/2017. The lesson on 20 September 2017 was a form 3 Biology lesson on cells and cellular activities. The mentor's comments on the lesson delivery were as follows:

The teacher's introduction was motivating and academically appetising. A variety of teaching methods were used by the teacher which were pupil centred and catered for individual learning styles. A lot of teacher-learner and learner-learner participation was observed. The teacher concluded the lesson by asking questions to summarise the lesson (Mentor report, 20/09/2017).

The other lesson on 27 September 2017 has similar mentor comments on lesson delivery:

Appropriate introduction was used by the teacher to prepare learners for the day's lesson. The teacher also used a variety of learner centred methodologies which made learners actively participate throughout the whole lesson. A chart showing the female reproductive system was effectively used as media. Active teacher-pupil interaction indicated the good communication skill and questioning techniques. The

lesson was concluded by questions that summarise the whole lesson (Mentor report, 27/09/2017).

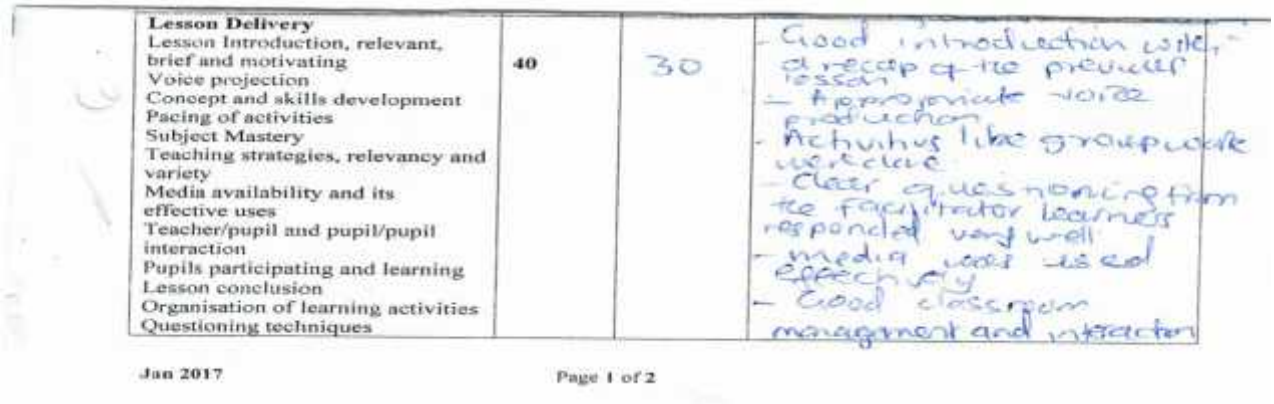
The comments seem to show that although Sibanda had indicated that as a subject specialist he would give more guidance on subject content, there appears to be little, if any, reference to subject content in the reports on lesson delivery. However, the reference to use of the chart used to show the female reproductive system in the second report of 27/09/2017 could have been followed up with other supportive comments detailing how the chart simplified the main content and/or enabled learners to accomplish the lesson's central learning task. The pre-service teacher was likely to have benefited from comments focusing on concept development and subject mastery aspects. Research acknowledges the significance of knowledge of subject content and pedagogical content knowledge in mentoring of pre-service teachers (Reese, 2016; Kerin and Murphy, 2015). The expectation was that Sibanda's comments would have more indicators of subject expertise as he had argued that he was the only other Biology teacher in the school who could assist Sheila on subject content.

Lessons observations and discussions

Other members of staff were also involved in observing some of Sheila's lessons. She remarked that the school-based supervisors who observed her lessons comprised of the head, deputy head, senior teacher and senior woman. She made an important observation that:

> *Supervisors who are not from my subject area do not comment much about the appropriateness of the lesson content as they tend to focus on the technical aspects of teaching, such as the size of groups, time management, presentation of chalkboard work, use of instructional media, catering for diverse learners, assignment of learning tasks and organisation of students for learning. However, this does not mean their observations are not guiding but I suppose I also want to know how my students are learning the subject matter. This explains maybe the advantage of being observed by both subject and non-subject specialists.*

Among the school-based supervisors, at least one had the same subject specialisation as Sheila. She was of the view that the mentorship was likely to be more valuable in the case in which the mentor had the same subject specialisation. The assumption was that the same subject mentor would be in a position to comment on the content aspects of the lesson. However, this was not quite evident in the supervision reports compiled by school-based supervisors for Sheila. The following extracts with comments on lesson delivery by non-subject specialists school-based supervisors provide part of the evidence that they focused on technical aspects of teaching. The form 3 Biology lesson on plant and animal cells was observed on 18 October 2017 by the senior woman. The senior woman's comments read as shown on the picture below:



Lesson Delivery Lesson Introduction, relevant, brief and motivating Voice projection Concept and skills development Pacing of activities Subject Mastery Teaching strategies, relevancy and variety Media availability and its effective uses Teacher/pupil and pupil/pupil interaction Pupils participating and learning Lesson conclusion Organisation of learning activities Questioning techniques	40	30	- Good introduction with a recap of the previous lesson - Appropriate voice production - Activities like groupwork worksheet - Clear questioning from the facilitator learners responded very well - media was used effectively - Good classroom management and interaction

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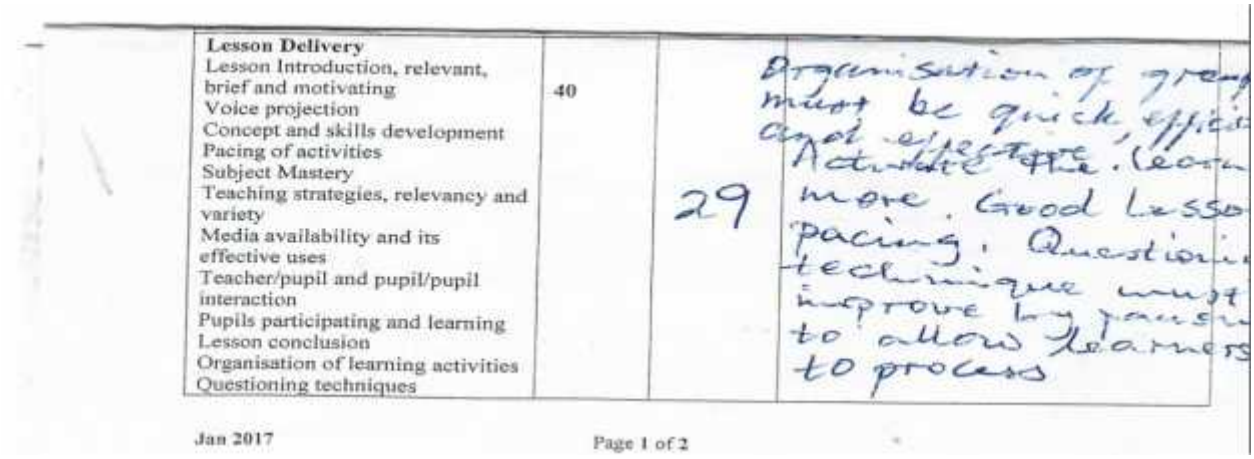
Figure 4.1: Senior Woman's Report on Lesson Delivery

A similar observation report on lesson delivery by the senior teacher on a form 3 Biology lesson on importance of photosynthesis in an ecosystem on 10 November 2017 is captured as shown on the picture below:



Lesson Delivery			
Lesson Introduction, relevant, brief and motivating Voice projection Concept and skills development Pacing of activities Subject Mastery Teaching strategies, relevancy and variety Media availability and its effective uses Teacher/pupil and pupil/pupil interaction Pupils participating and learning Lesson conclusion Organisation of learning activities Questioning techniques	40	29	Organisation of group must be quick, efficient and effective. Activate the learners more. Good lesson pacing. Questioning technique must improve by pausing to allow learners to process

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Figure 4.2: Senior Teacher's Report on Lesson Delivery

These reports seem to confirm what Sheila said about the comments given by non-subject specialists. They seem to focus on organisation of teaching and learning activities. It would appear in both reports there is no mention of content aspects of the lesson. Very little reference, if any, was made to concept and skills development, subject mastery or significance of content. However, the comments given by the school-based non-subject specialists may still be useful as the pre-service teacher builds her repertoire of teaching skills. Nonetheless, these observations may need to be complemented by subject specialist observations to fully enrich the professional development of pre-service teachers. The complementary nature of subject matter knowledge and classroom practitioner knowledge in mentoring of pre-service teachers could be likened to Zeichner's (2010) 'third space' in teacher education that implies the non-hierarchical nature among academic, craft and community knowledge. Observation of pre-service teachers' lessons by both subject specialists and non-subject specialists is likely to provide the pre-service teachers with more opportunities for professional development. These lesson observations culminated into mentoring discussions.

The quality of mentoring sessions was deduced from what was discussed during mentoring sessions. Sibanda and Sheila met almost daily to discuss during the planning, teaching and evaluation stages of the lessons. Though at times these meetings were very brief as they lasted

between 5 minutes and 15 minutes but the participants valued these interactions. These brief mentoring sessions will be discussed later in this section. Sibanda summed up what he discussed with Sheila as follows:

> *Before the lesson we discuss how she intends to deliver the lesson. If there are any shortcomings, I give suggestions to fine-tune the lesson. I have found this pre-observation discussion to be very helpful as it also gives her confidence when she teaches the lesson. During the lesson we normally do not have opportunities to discuss. However, after the lesson we have a post-observation discussion where we discuss the strengths, weaknesses and suggestions for improvement of future lessons. Normally, I encourage her to take notes during our discussions for her own reflection sessions as some of the things we discuss may not be captured in my written supervision reports.*

Sheila also seemed to corroborate her mentor's suggestions when she commented on mentoring sessions:

> *The mentoring sessions give me confidence as I would know that I am being guided. I have found the pre-lesson and post-lesson discussions to be very helpful in my teaching. The pre-lesson discussion gives me opportunities to fine-tune my documentation and my planned lesson delivery. Equally important is the post-lesson discussion that mainly focuses on evaluating the lessons. The evaluations in some way direct all the subsequent lessons as I use these to deliver better lessons in future. Maybe you now understand why any form of interruption of our mentoring sessions is the last thing I expect this semester. However, we have devised ways of minimising these interruptions by having most of our mentoring sessions before lessons and after lessons. I have my lessons in the afternoons so it's a blessing in disguise as I have more time to consult the mentor before teaching.*

Despite the measures the mentoring pair had put in place to minimise interruptions of mentoring sessions. Four of the five mentoring sessions I observed were interrupted by a teacher, learner, parent or visitor. The interruptions varied in terms of durations. However, the interruptions did not affect the whole three-phased mentoring session. A mentoring session has the pre-lesson stage, followed by during the lesson phase, and the last phase is the post-lesson. The least interrupted phase was during lesson one as this was only interrupted once on 27 October 2017 during a form 3 Biology lesson.

Another interrupted pre-lesson phase was during one of the mentoring session discussions in the head of school's office when Sheila was encouraged to take notes. This was in the first of the five series of mentoring sessions I observed on 2 October 2017. The following vignette illustrates the interruption of the mentoring session.

MT: During these sessions you may not be able to capture everything.

PT: You are right; there are so many things that are new to me that I have to remember.

MT: There are a number of ways that you can use to capture what we discuss.

PT: I suppose the one way is to write notes as I cannot audio tape the discussion.

MT: You will find these notes to be helpful later.

PT: I will refer to the notes when I am planning the next lessons. I will also use my notes to reflect on all the comments from our discussions and see how I can enact them in the teaching and learning process.

MT: I suggest that you have a note book for all these discussions and see how it goes……..okay, ***just hold on****……we have visitors.* [Discussion could not continue.]

The notes were likely to provide a point of reference for future lessons as Sheila could cross check with what had been suggested during the mentoring sessions. The notes could prove to be

valuable when Sheila decides to reflect-on-action in the mentoring process (Denis, 2015). Reflection-on-action is some form of deep looking back on what will have transpired in a lesson. However, the ideal thing could have been to record these mentoring sessions for future use by both the mentor and pre-service teacher. Furthermore, this may prove to be costly for the pre-service teacher and the not well-resourced school A. In addition, if the mentor had time he could go over the notes with the pre-service teacher to make sure that she had captured everything accurately before she decides to make decisions on the basis of the notes.

Mentor monitors the pre-service teacher

Responding to an interview at the beginning of this research study, Sibanda explained how he was able to monitor Sheila's work during TP. Sibanda described how he assisted Sheila in her teaching:

> *I check on her TP file daily to see whether she is complying with the requirements of the school and university. I also check on the documents to see if they are up to date. We also discuss teaching methods; whether they are appropriate for teaching science. I ask on how she is going to use instructional media in her lessons and how she is going to manage the class and the whole learning process. These discussions also help her to conceptualise and visualise how she will conduct the lesson. If there are any gaps she quickly thinks of how to close these before the lesson.*

Sibanda wanted to make sure that Sheila was doing the correct thing, hence checking on a daily basis. Sheila also had to clarify what she wanted to do in the lessons. However, Sheila was of the view that they needed more time as she needed to explain all her teaching strategies:

> *I am of the view that the whole process needs more time. Unfortunately, my mentor will be needed elsewhere. However, the brief interactions are helpful and the checking, besides giving me confidence, helps me to maintain the expected standards as the approval by the head signifies the university requirements are being adhered*

to. The fact that my documents will be having a school stamp when my lecturers come means a lot…it is some form of seal of approval by the school as a whole.

The monitoring of the pre-service teacher ensures that there is 'compliance mentoring' as the expected university standards have to be maintained (Mukeredzi *et al.,* 2015). Compliance mentoring is likely to ensure that there is uniformity in the mentoring of pre-service teachers. However, the challenge is that the schools may be having different contexts and uniformity may be difficult to achieve.

At times the post-lesson discussions were used to advise and guide the pre-service teacher on how to conduct similar lessons in future. This was likely to help the pre-service teacher in thinking deeply on the content to be taught and how effectively it was to be delivered. A typical example was when the mentoring pair briefly discussed in the head of school's office. The discussion focussed on a nutrition lesson for a form 2 class soon after the lesson was conducted on 18 October 2017.

MT:	*Why do you think this lesson on nutrition was suited for an outdoor lesson?*
PT:	*I wanted to show the learners different fruits in our orchard.*
MT:	*So, we could say this was a relevant field trip.*
PT:	*The field trip was appropriate, but as you saw, I had not planned for some of the activities which the learners engaged in when we were outside.*
MT:	*In future you need to plan for all the activities which all the 42 learners have to be engaged in to avoid unnecessary distractions.*
PT:	*I now realise that outdoor learning activities have to be timed and leading questions can be used to direct learning activities at each stage of the lesson.*

Similar discussions were held after a lesson and these helped the mentor to monitor and advise the pre-service teacher as they collectively reflected on the lesson. In the above mentioned

scenario the mentoring pair was interrogating the learning activities and their related challenges. The mentor was advising the pre-service teacher on the effective use of the field trip and the need to plan for all learning activities to avoid unnecessary distractions. The use of field trips became a challenge because the pre-service teacher was teaching a fairly large class of about 42 learners. The advice given was likely to come handy when teaching similar outdoor lessons. A lot of preparation goes into delivering a lesson using a field trip as other factors may distract learners' attention. The teacher may need to come up with detailed lesson plans showing how the learning activities will constitute the central learning task of a given lesson.

The mentor also monitored and assisted the pre-service teacher in the formulation of lesson objectives. The monitoring was aimed at the professional growth of the pre-service teacher. I observed a form 2 Agriculture lesson on cooperatives conducted on 27 October 2017 in which lesson objectives were refocused during the planning stage. The lesson objectives were reorganised as shown below:

The original objectives were stated as:

By the end the lesson, learners should be able to:-

(a) outline the benefits of cooperatives

(b) explain problems faced by cooperatives

The reorganised objectives read:

By the end the lesson, learners should be able to:-

(a) define agricultural cooperatives

(b) state benefits of agricultural cooperatives

(c) explain problems associated with agricultural cooperatives

(d) suggest solutions for problems associated with agricultural cooperatives

The refocusing of the objectives was aimed at making them more specific in terms of the scope of the content to be covered. In the first objective learners need to understand the concept of agricultural cooperatives. The content's focus was on agricultural cooperatives not cooperatives in general. There was also need to include high order objectives in the lesson to enable learners to show their understanding of agricultural cooperatives and the problems related to these. The refocusing of the objectives broadened the content coverage and encouraged learners to think of solutions which they may not find in a textbook.

Limited time for mentoring

Though Sibanda was the most experienced teacher at his school, he found it necessary to consult his colleagues, especially on the requirements of universities for pre-service teachers on TP. He observed that:

> *I usually find time to discuss informally with fellow teachers professional matters. In some of our informal discussions I get to hear of changes taking place in teachers' colleges and universities. Some of my colleagues are recently graduated from these institutions and they brief us on changes taking place regarding current issues in our education, such as new learning areas in colleges. However, some of these issues are in the college and university newsletters but I may not have time to read everything. At times I may also assume that things are still the same and yet they will have changed. I also share my experiences with colleagues as we chart during tea time and when we meet in the corridors.*

Normally the university informs schools if there any changes through Semester Tutorial Letters. For example, the Tutorial Letter II of 2017 communicated changes on files for Teaching Practice: *"PGDE students should have two separate files for their Curriculum Subject Option 1 and Curriculum Subject Option 2."* (TP Tutorial Letter, 2017: 4). Without reading the Tutorial Letter one would not have picked up this change as previously students used one file for the two subjects. The other change was that: *"All students on TP should have at least one week of class*

observation to get the necessary orientation from the class teacher/mentor/HOD." (TP Tutorial Letter, 2017: 5). This was a necessary change as it gave the pre-service teachers opportunities to familiarise themselves with the contexts in which they will be teaching. However, interactions with colleagues may not pick up some of these critical changes. It may be necessary to read all the communications from the university to properly guide pre-service teachers during TP.

Sheila shared her mentoring experiences with other students. At times they made use of information and communication technology (ICT) in their discussions and sharing of teaching and mentoring experiences as shown by what Sheila said:

> *We have created social media groups on WhatsApp to share our experiences with other students. These platforms are very helpful as we can exchange ideas even well after school when we are planning at home. We also share some of the challenges we are facing as pre-service teachers. The advantage of using social media is that we can even share our experiences with fellow pre-service teachers in other schools, districts and provinces.*

However, I noted that Sheila did not mention that she discussed her mentoring experiences with her mentor via social media. When I made further enquiries, I was told that, as a member of the older generation, the mentor was less comfortable using some of the ICT tools for communication as compared to the other members of staff. This seemed to confirm what Chere-Masopha (2018) found in her study in Lesotho that concluded that mentor teachers lagged behind in the use of ICT tools in classrooms for communication and teaching. This may be an area in which mentor teachers need to be staff developed. Sibanda may benefit from such staff development programmes if he creates time to be involved in such school programmes.

Sibanda was also aware that he had a number of duties which limited his time for mentoring. When expressing his views on how he handled his mentoring and teaching duties, Sibanda had this to say:

As the head of school, head of department and mentor, I feel over burdened with the duties at times. The administrative duties take most of my time and I end up delegating some of my duties, including mentoring. However, I am aware that it is not the best of arrangements but this is the reality. These are some of the challenges we face as mentors on the ground.

The mentor was aware of the time constraints and felt that more could have been done to assist the pre-service teacher if he had more time. I also observed that the mentor often asked for the pre-service teacher's daily lesson plans and would stamp them to show that he had seen them and/or had approved their use in the lessons. Considering his busy schedule, Sibanda approved by stamping the lesson documents without really scrutinising the content of the these lesson plans as he would be in a hurry. The stamping in reality just meant that the lesson plans were available. The checking of TP documents was also done to comply with the university requirement on the need to monitor pre-service teachers' teaching documents on a regular basis. Mukeredzi *et al.* (2015) termed this 'compliance mentoring' whereby mentor teachers undertook some mentoring tasks just for the sake of complying with certain university requirements. However, this form of compliance seems not to benefit the pre-service teacher as not much thought is given to the processes. Nonetheless, it is at this stage of teacher preparation when pre-service teachers may need more help and guidance in the drawing up of lesson plans and other aspects of teaching.

The mentor also found time to give suggestions for correcting lesson plans. One of the lesson plans was corrected by the mentor as he focussed on some parts of the lesson. Part of the form 2 lesson plan on fencing materials and tools is shown in the vignette below.

Lesson Plan
School: *A*
Class*: Form 2* ***Number of learners****: 42*
Topic: *~~Fencing~~ Fencing materials and tools* ***Lesson Topic****: ~~Fencing~~ Materials and tools used in fencing*

Date*: 16 October 2017* ***Time****: 1400-1510*

Lesson Objectives*: By the end of the lesson pupils should be able to:*

1.identify materials used in fencing

2.name materials used in fencing

3 name tools used in fencing

4. explain the criteria used to select suitable fencing materials

Assumed Knowledge:

Pupils are familiar with different types of fences used at home and school

Introduction

Content*: ~~Fences~~ Types of fences*

Activities*: Pupils to describe different types of fences for gardens, grounds, fields, homes, fowl runs, roads*

Step 1

Content*: Materials used in fencing*

Activities*: Pupils to identify and name different types of fences and their main purposes*

Step 2

Content: *Tools used in fencing gardens*

Activities*: Pupils to name different tools used in fencing*

Step 3*:*

Content*: Suitable fencing materials for gardens, grounds, fields, homes, fowl runs, roads*

Activities: *Pupils to selects suitable fencing materials using examples from their environment*

Conclusion

Content*: Materials and tools used in fencing for gardens, grounds, fields, homes, fowl runs, roads*

Activities*: Pupils to answer main questions on naming materials and tools used in fencing. Group tasks will be on explaining criteria to be used in selecting suitable fencing materials.*

For easy tracking of the changes, I have to indicate these in red in the vignette. The changes made to the lesson plan and the rephrased topics made the plan to be more detailed and specific in terms of lesson content and activities. The lesson topics needed to be more specific by breaking down the syllabus content into more manageable teaching units. The noted corrections were discussed and justified as the mentoring pair exchanged notes. The mentor used his experience and teaching knowledge in correcting the lesson plan. The indicated corrections, such as lesson topics, objectives and content breakdown are often problematic areas for pre-service teachers to document. However, the mentor needed time to assist the pre-service teacher from the planning stages and the indicated revision may be an indicator that the mentoring pair had not found time to jointly plan the lesson. A jointly planned lesson plan could have been more focused as it will be having input from both the mentor and pre-service teacher (Reese, 2016)

Reflecting on teaching and mentoring practices

Sheila was of the view that she had used the comments from her school-based supervisors to improve on her teaching skills, such as chalkboard work, class management and assigning of learning tasks. She observed that:

> *As I have said before, there are lots of things I do not know as a pre-service teacher. I have used comments from my mentor to improve my teaching and I can say my teaching has improved in areas, such as chalkboard work, questioning skills, class and classroom management, use of teaching aids and assigning of written and learning tasks according to ability. I keep on approaching my mentor for further guidance on any other challenges I face during my lessons, such as assigning learning tasks according to ability during group activities and written exercises.*

Sheila revealed that the improvement of her teaching skills was a result of reflecting on both oral and written comments from the mentor teacher and supervisors. The comments from the school-based supervisors may be considered as indicators of interactions among classroom practitioners.

The interaction that took place was critical in the socio-cultural perspective and anchors the professional development of pre-service teachers (Hudson *et al*., 2013).

Sheila said her classroom practices changed for the better when she used the observation comments. When I followed up on her views on the changing of classroom practices in the interview, Sheila responded as follows:

> *I use a simple strategy to improve my classroom practices on the basis of comments given. I simply unpack the mentioned weaknesses in the observation comments. I think of strategies to improve the noted weak areas. I make a deliberate effort to try out my new strategies in the following lessons. In my evaluations, I make it a point that I comment on the previously noted areas requiring improvement.*

The subsequent supervision reports seemed to confirm Sheila's views. Two consecutive supervision reports commented on noted weaknesses. Supervision Report 1 on 7 November 2017 noted*: "Records to be more informative. State concepts tested in progress record*". Supervision Report 2 on 21 November 2017 observed: *"Increase the number of extension work to be written per week" (Supervision Report, 2017).*

In the follow up supervision report it would appear the earlier noted weaknesses had been rectified. The next supervision report focused on the quantity of extension work given to learners. The extension work is for fast learners and this would imply the basic information pointed out in the previous report had been attended to. However, it would also have been a good mentoring strategy if the supervisor had acknowledged the improvements noted on record keeping.

Sibanda, using his years of experience in the teaching field, suggested that, *"As schools, we could improve the mentoring process by matching the mentor and pre-service on the basis of subject specialisation."* Discussing the same subject, Sheila referred to her personal experiences in mentoring when she suggested that:

> *In general, each student teacher needs to be matched to one mentor teacher, preferably, teaching the same subject so that they will have more to share including subject content. As a mentee, I would want to be guided more on the content aspects and how to simplify the content to the learners' level. I suppose the subject specialist can easily do this. In mentoring, the non-subject specialists could complement subject specialists as they normally highlight organisational and managerial aspects in teaching and learning. This is not to say that mentors from other subject areas are not important but I would also want to be guided on the suitability and relevance of content I will be sharing with my learners.*

Sibanda and Sheila were of the view that mentor selection criteria needed to be explicitly stated in the university TP guidelines which were given to schools through pre-service teachers. Literature highlights the importance of selecting mentors on the basis of subject expertise (Orland-Barak and Hasin, 2010; Mukeredzi *et al.*, 2015). However, the university TP Tutorial Letter is not explicit on the criteria to be used to select mentors for pre-service teachers on TP as it states that *"The school should appoint an experienced teacher to mentor the student teacher for the whole duration he/she is on Teaching Practice" (Teaching Practice Guide, 2017: 4)*. The stated criterion has no specification on subject expertise. Sibanda and Sheila separately suggested that the TP documents package which included introductory letters, tutorial letters, scheme and lesson plan templates, assessment instruments and code of conduct be sent to every school hosting pre-service teachers. In addition, to improve the mentoring process, subject expertise of teachers and teaching experience needed to be explicitly documented as the selection criteria of teachers to be mentors. However, Sibanda acknowledged that he had not read all the documents that Sheila brought from her university assuming that they were not different from the previous documentation brought from the same university. This could imply that if there were any changes Sibanda would not be aware of such changes since he would not have read the documents. As a result, the pre-service teacher may not get the expected guidance from the

mentor. Perhaps the university could request schools to acknowledge that they have read the TP package documents as this may compel school heads to read the documents.

Responding to interview questions, Sibanda was of the view that as a mentor he has benefited from his interaction with Sheila and in the process he has been acquainted with the changes in the school curriculum and recent developments in teacher education being implemented by universities and colleges.

> *Mentoring has kept me updated on changes in the school and teacher education curriculum. Though we have attended workshops on the updated curriculum, it would appear those coming from colleges have more information on the curriculum changes. In addition, pre-service teachers seem to have been equipped with the accompanying new teaching methodologies. We have been getting the latest on the curriculum from our people coming from colleges and universities. I always say we have literally been in-serviced without attending any teacher education institution.*

However, Sibanda was also of the view that mentors were playing a critical role in the development of teachers and the university needed to recognise their efforts by giving mentors certificates of mentorship and recognition. He suggested that: *"Mentors' contribution needed to be recognised and in the absence of financial rewards, some form of certificates would suffice."* He made reference to the case of some local colleges which give mentorship certificates to schools which produce distinctive student teachers during TP as a form of recognition and incentives. His suggestion was to have some form of incentives for mentors to motivate them. In addition, then he suggested that, "*the university could consider reducing tuition fees for mentors who would want to enrol for modules on mentoring."* His argument was that Teaching Practice was done in schools and lecturers visited the schools on few occasions with most of the supervision being conducted at school level. His suggestions were aimed at having more robust school-university partnerships in teacher development (Bradbury, 2010). In a way, this could be a way of giving back to the schools that assist the university in developing teachers.

Though Sheila appreciated what the mentor was doing without mentor training, Sheila, had this to say in response to an interview follow up question on the need for mentors to be trained:

> *Mentor teachers need to be trained even through workshops organised at school level. The university could facilitate such staff development sessions. Alternatively, the university could train a core team of mentor teachers in each cluster who would then train other teachers. This training strategy would be cost effective and would, in the long run, create a useful specialist human resource base for mentoring in schools.*

Sheila was of the view that some form of training for the mentors would have added value to the mentoring process. She had noticed that her mentor could have needed more information from her university especially regarding university expectations on lesson observations and supervision reports. Some of the supervision reports needed to be more detailed to guide her and other supervisors. For example, report on weaknesses section made on 5 October 2017 after observing a lesson read: *"Some of the records were not in the TP file."* The report did not mention the records which should have been filed. The records could have been singled out to remind the pre-service teacher of the records to be kept for the class.

Sibanda also suggested the cascade training model for cluster mentors who would train others to produce many trained mentors in a short period of time. Currently the university sends newsletters and TP Tutorial Letters with information for both mentors and pre-service teachers. To improve on this, the university, in consultation with the schools, could come up with the training programmes for mentors. However, the standard and quality of training would need to be closely monitored to have a uniform and acceptable training programme for all mentors. In addition, there could be need for follow up workshops to update the mentors on new trends in teacher education.

Interpretative commentary

The school supported the mentoring of the pre-service teacher. A mentor was assigned to the pre-service teacher and the school was also able to make special arrangement for the pre-service teacher to teach her lessons in the afternoon. However, the mentor assigned to the pre-service teacher had other school responsibilities as head of school and head of department which seemed to limit the time for mentoring. It was also not easy for the pre-service teacher to access the mentor as he would be attending to learners, parents, teachers and other visitors. The dual roles of the mentor teacher affected how he conducted the mentoring process (Aspfors and Fransson, 2015; Hudson, 2012). The unavailability of department and teachers' offices for mentoring meant that the mentor and the pre-service teacher had to meet in the headmaster's office. However, this affected the mentor-pre-service teacher interactions as only brief mentoring sessions could be held in the headmaster's office. This could be considered to have affected the context in which mentoring was carried out (Ramnarian, 2015; Wang and Odell, 2007).

The mentor-pre-service teacher pairing which was done by the head of school on the basis of subject specialisation, though well intended, seemed to have limited the instructional leadership the pre-service teacher was exposed to during TP. Instead of having different instructional leaders in the form of head of school, head of department and mentor, the mentor had assumed all these leadership roles. Opportunities for the pre-service teacher to experience distributed leadership could have been lost (Hudson *et al*., 2013). This arguably could have limited the interactions the pre-service teacher had with colleagues at the school as these interactions were expected to affect the pre-service teacher's professional growth.

The collegial environment at the school enabled the pre-service teacher to learn from colleagues in the school who observed her lessons (Kerin and Murphy, 2015). The mentor also shared ideas with fellow teachers which he utilised in mentoring. However, the pre-service teacher regarded contributions from subject specialist as more valuable than those by teachers without the same subject specialisation. Surprisingly, written supervision comments by the subject specialist were

not different from the non-subject specialists as they also made little, if any, reference to subject content. Nonetheless, the pre-service teacher acknowledged the role of the colleagues' observations in her professional growth as these enabled her to reflect on classroom practices (Draves, 2013). Improvements were noted in areas pointed out as needing the pre-service teacher's attention in subsequent lesson observations.

As expected, the pre-service teacher learned from the mentor but the mentor also admitted to have been in-serviced on the job by interacting with the pre-service teacher. In addition, the pre-service teacher was of the view that the mentor still needed more support in the form of training workshops from the university to be more confident in mentoring. Literature also argues that mentors need training to perform their duties more effectively (Everston and Smithey, 2010; Samkange, 2015). On his part, the mentor suggested that the university needed to motivate mentors by way of recognition and incentives. The mentor also wanted to be motivated through discounted fees for university mentoring courses in recognition of the role they are playing in teacher development in partnership with the universities. Moreover, such courses could provide the university with a larger pool of more knowledgeable mentors.

4.2.3 CASE 2: The Story of Mrs Moyo and George-: *"Sharing the pieces"*

Background information

The mentoring pair's demographics are shown in the Table 4.4 below as part of the background information of participants of Case Study 2.

Table 4.4: Case 2 Mentor and Pre-service Teachers' Profiles

Category	Mentor	Pre-service Teacher
Name	Mrs. Moyo	George
Age in years	50	28
Highest teaching qualification	Bachelor of Technology in Business Studies	Bachelor of Commerce Honours in Accounting
Teaching experience	23 years of secondary school teaching	2 years teaching experience as an unqualified teacher
Subject specialisation	Business Studies	Accounts and Commerce
Subjects being taught	Commerce (Forms 3 and 4); Business Studies (Forms 5 and 6)	Commerce (Form 1,3, 4); Accounts (Forms 4 and 6).
Teaching load (Number of periods per week)	28	26
Post of responsibility	Head of Department	Form teacher and patron of the School ICT Club.

Mrs Moyo, George's mentor, is also the head of the Commercials Department. They are both in the same department. The mentor teacher, Moyo, and pre-service teacher, George, both teach Commerce and their other subjects are Business Studies and Accounts respectively. The two were paired for mentoring purposes by the head of school on the basis of subject specialisation. Moyo is also the most experienced teacher in the department having taught for over two decades. George is in the final semester of the PGDE programme but previously he taught as an unqualified teacher for a couple of years. The mentoring pairs' individual profiles are presented below as part of background information for case 2- *"The story of Mrs Moyo and George- Sharing the pieces"*.

Profiles of the mentoring pair

Mrs Moyo- Commercial subjects teacher and head of department (HOD)

The 50-year-old Moyo is a holder of a Bachelor of Technology in Business Studies and is one of the most experienced teachers in the school as she has been teaching for about 23 years. Mrs Moyo was appointed the mentor teacher for George by the head of school on the basis of her experience and her supervisory role for all the teachers in her department. In addition, Moyo has previously mentored other pre-service teachers who have successfully completed their Teaching Practice at the school. As the head of department (HOD) and mentor, Moyo helps George to understand and practice the school's working culture. Though Moyo is in the twilight zone of her teaching career, she still has passion for teaching and normally works well with all her mentees. Besides being professional in her approach, as she teaches and supervises, she also shows all her learners including mentees motherly love. She insists on sharing of knowledge and during every orientation session for new teachers she says "let us share what we know". She believes everyone can contribute in the teaching and learning process, thus her insistence on "sharing the pieces"- be it knowledge, skills, values or technical know-how in teaching and learning. She explains her beliefs in teaching, learning and mentoring:

> *In all my years of teaching I have come to appreciate that we all bring something to the classroom either as teachers or learners. With that in mind, I look forward to sharing knowledge with my learners, colleagues and all those I interact with in the teaching and learning process. This belief and approach has worked for me in teaching and learning. Recently, I have also seen that this belief is especially applicable in mentoring as mentees will be coming from university or teachers' college they need to be given opportunities to try out what they learnt in college and share with us current trends, knowledge and teaching methods.*

Moyo's approach to teaching and learning makes her colleagues and subordinates respect her. As a result, she says she has a good working relationship with all the members in her department.

Consequently, members in her department are keen to cooperate with Moyo to the extent of even sharing teaching resources. Moyo is every teacher's friend and she seems to enjoy how she relates with colleagues and learners. Moyo has been teaching for a long time and may have realised the only way she could remain updated on current trends in education is to share and interact with colleagues and mentees who will be at colleges and universities.

George - A pre-service teacher, Commercials teacher and ICT club patron

George, a 28 year old married man and father of one boy, taught for 2 years in secondary schools as an unqualified teacher, before enrolling in the PGDE programme. She enrolled for the PGDE programme on the basis of his Bachelor of Commerce Honours in Accounting degree. George excels in all computer related courses from his high school days. George got interested in computers when he was still a high school student as his school was well-resourced and made use of information and communication technology (ICT) in the teaching and learning process. He has a passion for computers and teaching others especially using ICT tools. He tries some of the ICT skills at home using his four year old son. At school, George is admired for his seemingly superior ICT skills and other teachers consult him from time to time on the use of ICT tools in the teaching and learning process. He is the patron of the school ICT club that he established when he came to the school. The club has become one of the most popular clubs at the school and members meet at least once a week to sharpen their ICT skills mostly by researching on the internet. George teaches Commerce and Accounts but has approached the head of school to be allocated some computer classes next term. He teaches Commerce and Accounts to forms 1, 3, 4 and 6 and has teaching load of 26 periods in a week. When I first met George on 29 September 2017, it did not take long for him to tell me about his interest in computers and how he had excelled in the course Computer Applications in Education in first year. He even told me how he teaches his son to play some computer games as he took me to his head of department's office as he had been requested by the head of school.

When I asked George how he makes use of his computer knowledge in teaching, he responded:

If we take Commerce for example, almost all the topics can be related to computers in one way or another. Some of the topics include trade, production, marketing, transport, finance and banking; the internet can be used in real life in all these topics. For example, the quickest way to market any product would be through the internet. I could give many examples but the short of it is that computers and ICT in particular drives commerce and industry at the moment.

The good thing is that George finds the usefulness of computers in whatever he teaches. His passion for computers is likely to be of use as he teaches his two school curriculum subjects, Commerce and Accounts. As expected, George has a bias for use of ICT tools in his teaching. His mentor expects George to share his knowledge in computers with fellow teachers and learners. However, the mentor teacher expects to enrich her own experiences with computers in the process of interacting with George. Mentoring can be a reciprocal learning process for both the mentor and pre-service teacher (Yuan, 2016).

Context

School B is a rural day, double-session secondary school and classes alternate to use the same classrooms during school days. The school has two streams of classes for forms one to four and also has lower and upper six classes. The school has an enrolment of about 630 students with almost the same number of boys and girls with an average class size of about 35 learners. Forms three to six come to school at 7:30 and finish at 15:30 and forms one and two start school at 10:00 and finish later in the day at 17:30. Students who start school at 7:30 are said to be in the 'morning session' while those who start later at 10:00 are said to be in the 'afternoon session'. George teaches in the morning and afternoon sessions. However, when public examinations are in session, use of classrooms is reserved for examination classes. Teachers use the staffroom and Heads of Departments' offices for their lesson preparations and marking of learners' work. There are no individual offices where the mentoring pair can carry out mentoring sessions in privacy and confidence. Currently, the mentoring pair conducts most of their mentoring sessions

in the HOD's office. To minimise on disturbances, the mentoring pair conducts mentoring sessions before lessons, after lessons and during their free periods when they are not having a class. I attended some of the mentoring sessions and these include those held on 3 October 20127; 11 October 2017; 19 October 2017; 26 October 2017 and 9 November 2017. The mentoring sessions lasted for close to 40 minutes and in most cases these were held in phases. The mentoring phases could be termed pre-lesson, during the lesson and post-lesson. However, the lack of a secluded place for use during mentoring saw some of the mentoring sessions being disrupted as these were conducted in the HOD's office. The HOD's office is a very busy office considering that the HOD services two sessions of the school. As a result, HOD has to be present throughout the day as she supervises teachers and learners of the morning and afternoon sessions.

Mentoring relationship

Moyo and George belong to the Commercials Department and the head of school considered Moyo to be the best person to mentor George. The head of school envisaged that the HOD would combine her supervisory and mentoring duties. Moyo has mentoring experience having worked with other pre-service teachers from teachers' colleges and universities. George has worked in schools before as an unqualified teacher but this was his first time to be assigned a mentor teacher as required by the university. The university expects mentor teachers to be assigned to pre-service teachers who will be on Teaching Practice in schools as spelt out in the University Teaching Practice Tutorial Letter: *"The school should appoint an experienced teacher to mentor the student teacher for the whole duration he/she is on Teaching Practice" (Teaching Practice Guide, 2017: 4)*. Moyo as an experienced teacher of 23 years of secondary teaching qualifies to be a mentor but her other roles and duties of HOD may affect the mentoring of George. In addition, the university criteria for assigning mentor teachers could have been more explicit rather than simply saying "an experienced teacher" can be appointed mentor. Other accompanying conditions for the experienced teacher could have been spelt out for the information to be more guiding to schools. Moreover, as HOD, Moyo is the immediate

supervisor of George. As a result, George may not feel free to challenge his superior in the course of being mentored. Additionally, Moyo may have limited time to guide and advise George as she will be busy with other departmental supervisory duties. Ambrosetti (2014) also observes that if the mentor teacher has other school duties mentoring is considered secondary as it will be regarded as an aside.

Moyo seems to be looking at past experiences and thinks the head of school did the correct thing of appointing her a mentor:

> *We teach in the same department and the head has been consistent as he always appoints me a mentor whenever we have student teachers in our department. He reckons I have done this mentoring before and maybe he thinks I can now use my experience to mentor these pre-service teachers. In fact, I am now experienced and have collected a lot of materials on mentoring requirements from various teachers' colleges and universities. I am more than ready to mentor George.*

However, it is not a matter of consistency in the selection of mentors rather it is about the criteria of selecting a teacher to be a mentor. Moyo could have done mentoring before but the issue is about the criteria that should be used to assign a mentor teacher. The issue is: What factors need to be considered when assigning a mentor of a pre-service teacher? It is not about having mentoring experience but perhaps how the experience was acquired over the years. However, barring these issues Moyo is ready to mentor George and the consolation maybe that she is keen and willing.

How teaching was organised

The way teaching is organised at school B meant that Mrs Moyo, the mentor, who is also a head of department, may have limited time for mentoring because of her other supervisory duties. The HOD is in charge of the two sessions which operate at the school. Mrs Moyo, as the HOD, supervises the teaching and learning process in her department throughout the day. In addition to

her own teaching load, Mrs Moyo, manages both the ‘morning’ and ‘afternoon’ sessions in her department.

George and Mrs Moyo teach in different sessions most of the time but this is not a problem when it comes to mentoring since the mentor is at the school throughout the whole school day. As a result, George has more opportunities to consult his mentor but the challenge is of office space where they can discuss without disturbances from other teachers or learners who will be in need of the services of the HOD.

The teaching timetables for the pre-service and mentor teachers are shown below.

Table 4.5: George’s Teaching Timetable

	07 30	**08 05**	**08 40**	**09 15**	**09 50**		**10 45**	**11 20**	**11 55**	**12 30**	**13 05**		**14 00**	**14 35**	**15 10**	**15 45**	**16 20**	**16 55**	**17 30**
M	C6	C6		F3		*B*	C4	F4		F1		*L*							
T				C6	C6	*R*		F3		C4	F1	*U*							
W				F4		*E*			F3	C6	C6	*N*							
T				C4		*A*		C6	C6	F4		*C*				F1			
F					F4	*K*		C4		F3		*H*			C6	C6	F1		
	Key: C4/6= Accounts; F1/3/4= Commerce.																		

Table 4.5 shows that most of George’s lessons were in the first three days of the school week before lunch.

Table 4.6: Moyo's Teaching Timetable

	07 30	**08 05**	**08 40**	**09 15**	**09 50**		**10 45**	**11 20**	**11 55**	**12 30**	**13 05**		**14 00**	**14 35**	**15 10**	**15 45**	**16 20**	**16 55**	**17 30**
M	F5	F5		F6	F6	*B*		F3	F4			*L*							
T		F3		F4		*R*	F5	F5				*U*							
W		F4		F5	F5	*E*	F6	F6	F3			*N*							
T		F6	F6			*A*	F5	F5				*C*							
F		F4		F6	F6	*K*		F3	F5	F5		*H*							
	Key:F3/4= Commerce; F5/6= Business Studies																		

The mentor and George's timetables show that their lessons are before the lunch break on three days. The mentor has no afternoon lessons. George's teaching load is spread over the whole day as he teaches all forms except forms two and five. I also noted that George and his mentor would informally discuss whatever George would bring up for discussion during their 'free periods'. Free periods are lesson times when a teacher will not be having a class to teach.

I also observed that the mentor rarely initiated any discussion during their informal mentoring sessions. One typical example was after a lesson on 11 October 2017, the vignette below captures the interaction between the mentor (MT) and pre-service teacher (PT) in the HOD's office during their free period. The lesson on Business Communication was conducted in a form 3 class.

PT: I wanted to give learners more tasks for homework. What could I have assigned as homework on this topic?

MT: You could have asked the class to bring some examples of formal business communication for the next lessons.

PT: So they would have to research on formal business communication?

MT: In future you need to encourage the class to read ahead and you could even assign the tasks according to ability.

PT: In future I may make use of the existing groups to assign these research tasks

MT: Yes, that way you also encourage teamwork which is good for a mixed ability class. The class will find that content on formal business communication has a lot of relevance in real life.

This shows the pre-service teacher has more to gain from engaging the mentor. Fortunately, he has got more information than he had initially sought. The information on structuring learners and researching on the topic could have not been given to the pre-service teacher if he had not initiated the dialogue. I am of the view that the pre-service teacher is the one who has more to learn and so should be eager to seek more information from the more experienced partner in mentoring pair. The mentor as the more knowledgeable other (MKO) is there to guide the pre-service teacher and the novice needs to tap on the mentor's knowledge base (Bekiryazici, 2015). It was during the lesson that the pre-service teacher had limited opportunities to engage the mentor as there will be learners to attend to at the same time. In addition, at times during the lesson it can be difficult for the pre-service teacher to pick up some of the non-verbal indicators from the mentor.

School support for mentoring

Mrs Moyo was delighted that her school provided teaching resources which she used to support pre-service teachers. She expressed her views on the kind of support the school provided for mentoring:

The school has been very supportive as it provides all the teaching resources we require as mentors. However, we still lack some ICT tools which George would have wanted to use. As you can see the school is not well-resourced but efforts are being made to have the basic teaching equipment, such as projectors, white boards and other electronic gadgets. We have to credit George for the strides we have made in sourcing for some of this equipment. We are now realising what we have been missing in our classrooms.

It would appear that George is also advising the mentor on what the school could provide in terms of modern day teaching resources. The pre-service teacher seems to be sharing his expert knowledge on the use of ICT tools in teaching. This information sharing could be considered as some form of professional development as the classroom practitioners are enhancing their teaching skills. Hudson *et al*. (2013) highlights reciprocity in mentoring that signifies the two-way learning that takes place as both the mentor and pre-service teachers learn during mentoring.

George was of the view that the school was doing its best to support the mentoring of pre-service teachers by providing teaching resources which the school had the capacity to provide. George observed that:

The school is making an effort to include issues of teaching resources in staff development programmes with a view of capacitating school-based supervisors and mentors. Mrs Moyo, as one of the conveners of the staff development sessions, is always looking for ways in which the school could help teachers to be better mentors through some of the school-based staff development programmes. Recently, our staff development programmes have focused on how the teaching resources, the school is providing, can be efficiently and effectively used considering that some of the teaching equipment is fragile and delicate.

The mentoring pair was actively involved in making the school provide teaching resources through a school committee. Moyo, as a senior member of the school, was getting ideas from George to enable the school staff development committee facilitate the provision of resources.

The school provided teaching and learning materials, in addition to observing George's lessons and submitting assessment reports to the university. Moyo also thought that her school gave her support in the mentoring of George as it provided materials and offices to mentors. She had this to say on the support she got from the school:

> *The school support comes in the form of teaching materials and reading textbooks which we use for assisting and guiding pre-service teachers on how to scheme and plan for their classes. We also have storerooms which we use as offices to tutor pre-service teachers, for example, when we hold our pre- and post-lesson observation discussions.*

Mrs Moyo's school supported her mentoring of George. As an HOD, she also had an office where they discussed with George. However, her office was a busy one since she had to attend to teachers and learners of the morning and afternoon sessions as part of her supervisory duties as an HOD. George also acknowledged the school support when he said, *"The school has been very helpful, especially in the provision of some teaching resources and this helped me to be fully inducted into the school culture and the teaching profession. Slowly I discovered my strong points as a teacher."* The provision of teaching resources was considered critical in the mentoring process by both participants and this enabled the mentoring pair to focus on their respective roles in the mentoring process. However, the challenge was the provision of a quiet place to conduct mentoring sessions as illustrated by an incident in which a mentoring session was interrupted.

Part of evidence of a mentoring session that was interrupted was on 3 October 2017 before a form 1 Commerce lesson on telecommunication services. The mentoring session took place in

the HOD's office before the lesson commenced. The lesson was interrupted as George (PT) and his mentor teacher (MT) were in a pre-lesson discussion as shown in the following vignette.

MT:	*I suggest the lesson topic be narrowed down to "Telecommunication devices and services" as "Telecommunications" could be too broad for a lesson.*
PT:	*I had assumed the objectives would specify the focus of the lesson.*
MT:	*But we will have other lessons on 'telecommunications' so we need to specify the scope of this particular lesson.*
PT:	*So, can I add another objective on services.*
MT:	*No, but you could rephrase the last objective on services to be of high order. For example you could ask the learners to explain the use of the telecommunication services, such as telephone, cell phone and internet.*
PT:	*Fine, I could also ask the learners to go and research on the internet as homework so that they understand the relevance of the content of this lesson.*
MT:	*Yes, ummm. Sorry, I have to attend to the teachers who have come to collect their set of textbooks and teaching equipment. I hope you will be fine…just fine-tuning the plan and you will be okay. Thanks, wish you the best.*

The mentoring pair had to cut short their discussion as the mentor had to attend to other teachers. Moyo could not continue to use her office for the mentoring sessions as she had to attend to the other teachers. To resolve such a challenge, the mentoring pair resorted to having their mentoring meetings very early in the morning before school lessons started and at the end of the day after school lessons. If the discussion had not been interrupted maybe the pre-service teacher could have got more guidance on how he was going to structure the learning activities. Perhaps they could have also discussed the learning tasks and how these were to be monitored and evaluated.

Thus, a critical learning phase had been missed in this instance because the mentor teacher had other school duties that were imposing and urgent to be attended to. Ambrosetti (2014) argues that it is usually the mentoring role that suffers when a mentor teacher has multiple roles.

On workshops, George was of the view that the university needed to play a more critical role in having workshops to deepen understanding of challenges facing classroom practitioners. He suggested that:

> *The university could hold joint TP workshops for mentors and pre-service teachers. At such workshops, all the critical issues pertaining to school-based supervision, assessment criteria, TP documentation, and use of teaching resources could be discussed and clarified before TP. The lecturers will also get to know the challenges schools face and why we cannot use some of the ICTs they recommended when we were preparing for TP. Schools will also use the opportunity to strengthen partnerships with university to source for teaching resources.*

George's passion for use of ICT in teaching was always evident whenever he talked about teaching. Use of ICT tools in teaching has also been highlighted in Ministry of Primary and Secondary Education Handbook on Teacher Professional Standards (2015: 8) that directs teachers that: "*For competent delivery of lessons, teachers should have the ability to use a variety of teaching strategies and resources including Information Communication Technologies (ICTs).*" This probably explains why use of ICTs in schools is one of the themes in the updated curriculum that gives a new focus on competencies to be achieved at various levels of the education system as it is assumed to be one of the drivers of human development. Therefore, mentoring of pre-service teachers seems to be making a deliberate attempt to enhance teachers' use of ICTs in modern day classrooms (Chere-Masopha, 2018).

Another form of support came from school-based supervisors who assisted George by observing some of his lessons and they also invited him to observe some of their lessons. George remarked

that school-based supervisors had made him to change how he taught and viewed his own teaching when he said:

> *My school-based supervisors are the headmaster, the deputy head, the senior teacher, the senior woman, the head of department and the mentor. However, some of these supervisors do not give me written comments but we discuss and share their observations orally. The other day, I had to remind the head and deputy that I needed at least two written reports to submit to university as part of my final assessment in TP. As a result of these written reports, I now have better understanding of schemes, lesson plans and record books. I read and re-read these reports and analysed their comments to get a deeper understanding of what they wanted me to do. At first I did not understand how schemes, plans and records were linked in the teaching and learning process. I now critically look at my teaching and how I can improve it using these documents.*

Written reports provided some form of feedback that George was able to refer to from time to time. In a way, the reports provided him with a point of reference and he could literally tick off those items he would have corrected or attended to. The reading and re-reading of the supervision reports forced him to reflect on his teaching and this was likely to affect his teaching as he would be trying to implement the suggested changes. However, in practice the written report may not capture all the supervisor could have noted in a lesson. This is why a written report may need to be complemented with an oral report. In addition, the oral report may need to be given early whilst it is still fresh in the observer's mind. This may explain why George was worried about the feedback that was given late:

> *The nature of our teaching timetables makes it difficult for teachers to leave their classes unattended in order to discuss my teaching. Even if I follow them to their classes to discuss their observations, I face the same problem in that I also have a class to take care of. This situation can delay our discussion of observations made*

during my lesson. However, at times our discussions end up being informal as the members of staff would be busy with their own classes.

In some instances feedback that comes late lacks detail as specific examples or illustrations would have been forgotten. However, if there are facilities to video record this could help to go around the mentioned challenge of not accounting for some examples. Nonetheless, video recording may not be able to capture all that one sees with the naked eye and there is also the lack of real-time interaction between the mentor and mentee during lesson observations and unavailability of opportunities for 'inside-the-action' mentoring (Reese, 2016).

School-based supervision reports provide some of the evidence that George was guided and assisted during his teaching practice. However, some of the supervision reports were not elaborate enough to guide the pre-service teacher. To illustrate the point I reproduce part of the supervision report focussing on two sections of the report. I reproduce in the vignette below comments on a form 1 Commerce lesson on the topic "Enterprise" conducted on 19 October 2017.

Lesson planning

Objectives were stated. Pupil-teacher activities were well sequenced.

Lesson delivery

The introduction captured learners' interest. Voice projection was good. Pupils participated.

The teacher is encouraged to avoid repeating a question.

The comments given for the two sections could have been more detailed to guide the pre-service teacher. For example, it said "*objectives were stated*" but there could have been need to explain how these were stated so that the pre-service teacher could work on coming up with better objectives next time. Similarly, more could have been written on the pupil-teacher activities. The

comment says *"pupil-teacher activities were well sequenced"* but nothing is mentioned about how these facilitated concept or skills development. In fact, nothing is mentioned about how these activities engaged with the content of the lesson. The same could be said about the section on '*lesson delivery*'. All the comments under '*lesson delivery'* could have been related to the content of the lesson which was on *enterprise*. The comments could have assisted the pre-service teacher if they were more detailed and informative. Informative comments may also assist subsequent supervisors as they would also be able to follow up on what the pre-service teacher was advised to improve on.

The above mentioned report seems to provide evidence that school-based supervision reports lacked detail to guide the pre-service teacher. This becomes critical in light of what George said about the lack of time for school-based supervisors to engage in elaborate post-lesson conferences. In addition, the University TP Tutorial Letter II (2017: 2) explains that: "*The major aim of supervision is to assist, advise, suggest, discuss and direct the student teacher to improve the curriculum, instructional skills and the learning of pupils."* The above discussed supervision comments may not be answering to the stated aim of supervision in university documents. This could be the problem of assuming that school-based supervisors will read the university documents on mentoring sent to schools. As a result, there could be a disconnection between what happens in schools and institutions of higher education (Zeichner, 2010).

Mentoring guides the pre-service teacher

In response to an interview question, Mrs Moyo outlined her main mentoring tasks as she assisted George in his teaching.

> *My main task involves assisting the pre-service teacher with his planning, observing lessons and evaluating lesson delivery. I also provide him with the national and school syllabi. I give him the school assessment requirements and also check on his TP file from time to time as this is one of my duties as an HOD. I am happy because of the progress I have noticed so far.*

Mrs Moyo combined her mentoring and supervisory duties as she assisted George. She helped him to overcome any challenges he faced in the teaching and learning process. She remarked that:

> *We join hands to solve any challenges George faces in his teaching and learning. The induction programme for pre-service teachers should be considered as ongoing. The onus is on the pre-service teacher to bring forward the challenges he will be facing and I am more than willing to assist as the mentor. However, if the challenges are not within my sphere of influence we take it up to the school administration as I am the HOD.*

Mrs Moyo believed the collaborative approach helped to overcome challenges they faced in the mentoring process. If the challenge seemed too much for the mentoring pair they would seek the assistance of the higher offices at the school with the mentor acting as a link between the school administration and the mentoring pair. The induction of the mentee was viewed as a process and this implied new knowledge could be acquired as the mentoring progressed. However, the challenge possibly comes with being a supervisor and a mentor at the same time. A supervisor is a line manager for the pre-service teacher and a mentor is a critical friend for the pre-service teacher. They are in the business of teaching together and the mentor is there to assist and guide the pre-service teacher as he finds or negotiates his way up the professional path. The mentor is there for the pre-service teacher providing him with the necessary scaffold to make the big jump in his professional life. In short, the mentor nurtures the pre-service teacher as he grows (Mudzielwana and Maphosa, 2014). On the other hand, as supervisor, Moyo represents school management at the departmental level and has authority over all members of the department. As a line manager, Moyo, monitors and directs members of the department, including the pre-service teacher, as they perform their teaching duties. Therefore, it may become difficult for the pre-service teacher to honestly critique the work of his supervisor and superior and yet this is what is expected in a mentoring relationship. It may also be problematic for Moyo to criticise George's work since she was supposed to develop him and guide his professional growth in

teaching. Armstrong (2001) argues that it may be difficult for a line manager of a pre-service teacher to be a mentor at the same time. As a result, an HOD, Moyo, could find it problematic to be a mentor of a pre-service teacher, George, in her department as she would be indirectly monitoring her own contribution in the professional development of the mentee.

An example of mentor's comments that were used by George during his teaching practice is shown below as part of a supervision report. The comments were based on an observed form 3 Commerce lesson on 'Warehousing' on 3 October 2017. The mentor's comments are reproduced in the following vignette:

Supervision Aspect	***Comments***
Schemes of Work	*Adequate and up to date. Break down content into teachable units. Recommended format used. Meaningful evaluations.*
Lesson Planning	*Objectives to be SMART. Well formulated DLPs but state content at each stage and for all teacher-pupil activities. Reflective evaluations.*
Lesson Delivery	*Introduction needs to be motivating and stimulating. Good voice projection. Well-paced activities. Vary teaching strategies. Improve on use of media. Good teacher-pupil interaction. Organise learning activities to keep pupils busy throughout the lesson.*
Class/Classroom Management	*Good class control. Clear instructions. Good teacher-pupil rapport. Interact more with pupils.*
Records	*Neat and well-kept file with all records available but do not bunch learners for remediation.*
Personal Dimensions	*Smart, good conduct and attitude. Improve on creativity.*
Strengths	-
Weaknesses	-
Advice and overall comments	*Satisfactory but make pupils to be more active during the lesson.*

George was of the view that the comments from mentors had helped him *"to be a better teacher and student of teaching"*. He said that: *"I take my time to closely look at the mentor's comments to see how I can improve my teaching."* In addition, he said he studied the comments in order to have a deeper understanding of the demands of teaching. George indicated that he had used his mentor's comments to improve classroom practices. He said a lot more had changed as he reflected:

> *I have changed the way I scheme and plan. In the beginning, I found it difficult to breakdown the content into teachable units. I am now able to formulate measurable and specific objectives. Even the lesson development stages are now much detailed and reflecting content in the content column of lesson plans. I used to state activities such as "recap", "group work", "written work" in the content column of plans.*

He said the practical aspect of scheming and lesson planning was different from what they had done theoretically at university. He said *"this was the real TP"*. In addition, he observed that:

> *The schemes that I am drawing up are the real deal because when I get into the classroom the learners may not learn the content in the weeks I had set aside for the topic. This means I have to adjust my plans to accommodate my learners' pace. In most cases I have seen that some topics will need more time because of what the students will have experienced previously. Planning has lots of adjustment to be made not only in lesson plans but also in test and progress records. However, I am getting to know more about my learners' learning abilities and the kind of learning tasks I have to plan for them. I now realise why my mentor used to say know your learners. I am now using those ideas in my teaching and planning.*

The foregoing views seem to suggest that the pre-service teacher appreciates what his mentor had said about teaching, planning and learners. It would appear some of the mentor's ideas only started to make sense to the pre-service teacher when he had attempted to implement without success what he had been taught at university. Perhaps some of the comments took long to be

properly implemented as the pre-service teacher needed more time to try out these in real life classrooms. Comments from the mentor seem to have embraced the dimensions of mentoring that are relational, developmental and contextual in nature (Ramnarain, 2015). The relational dimension can be traced back to interpersonal relations. Mentoring comments aimed at the individual and professional growth of both the mentor and the pre-service teacher could be considered to be of a developmental nature. Comments on school practices, values, norms, beliefs and traditions may help to clarify the context in which mentoring takes place. However, the dimensions of mentoring inferred from the above comments could be relevant to similar contexts and practices in the mentoring of pre-service teachers when viewed through a socio-cultural lens (Fani and Ghaemi, 2011). The mentor's comments could be considered as part of the social interaction that was facilitated by a more knowledgeable other (MKO), to use socio-cultural terms, as the pre-service teacher was assisted to learn new teaching skills.

Limited space and time for mentoring

George and his mentor have the challenge of office space as the HOD supervises two sessions in the school. Teachers and learners from both sessions wanted to consult the HOD at different times throughout the day. This left limited time for George to discuss with his mentor. Responding to an interview question, George observed that, *"At times our discussions are interrupted by either a teacher or student. We also cannot make use of the staffroom for our discussions as it is not conducive."* The staffroom was always occupied by teachers who were 'off session' and would be marking learners' work or planning their next lessons. There are teachers who belong to one session and are said to be 'off session' if they are at school during the time for the other session's lessons. Teachers on 'free periods' would also use the staffroom. Mentoring requires office space where the mentor and pre-service teacher can sit down and discuss and exchange ideas on their lessons. I observed the shortage of office space for mentoring for Moyo and George even on my preliminary visit to the school on 29 September 2017 when George took me to the HOD's office. The HOD's office services the whole department and the HOD was busy attending to teachers and learners during my brief visit.

However, I also noted that four mentoring sessions that I observed on 11 October 2017, 19 October 2017, 26 October 2017 and 9 November 2017 that took place before and after school lessons were not disrupted by anyone. Only the first mentoring session that I observed on 3 October 2017 was interrupted as it was held when lessons were in progress. In between lessons, Mrs Moyo and George would hold brief informal discussions on their teaching experiences even in the corridors. George was of the view that their mentoring sessions could have been more intense if they had more time for these. He remarked that:

> *If the mentor had more time, maybe we could have considered having more mentoring sessions. We could have also considered having more frequent scheduled meetings on mentoring than the single weekly meetings we have every Friday. We have realised that we could meet briefly and more often before and after lessons. This has worked well since my mentor is motherly and very supportive. In order to save time, I also prepare in advance some questions for our informal meetings.*

The mentoring pair had strategised to come up with alternative ways of meeting before and after lessons when the mentor would not be engaged in her other school duties. The arrangement to meet outside teaching time showed commitment on the mentoring pair's part. However, since the HOD was part of the school timetable committee, she could have influenced the allocation of teaching time so that the pair had more common 'free periods' when they were not teaching so that they could meet more often and for a longer period during lesson time.

Part of evidence of a mentoring session that was interrupted was on 3 October 2017 after a form 3 lesson on methods of payment. The mentoring session took place in the HOD's office when lessons were in progress. The Commerce lesson was interrupted as George (PT) and his mentor teacher (MT) were reviewing the lesson as shown in the following vignette.

PT:	*I needed more time for this lesson. The learners had a lot to contribute and wanted to show the rest of the class that they had researched on methods of payment.*
MT:	*But I think you did well and you gave examples of what is taking place in the banking sector.*
PT:	*At the moment as I explained, some of the financial institutions are going paperless. So, some of the examples are no longer quite practical. Who would pay with a cheque these days?*
MT:	*So, you did well to discuss on current methods of payment in use today.*
PT:	*I wanted to teach what is happening and not what is in the textbook as there are new methods of payment.*
MT:	*Sorry, I have to attend to these students who have come. Their teacher is away. Thanks for the lesson, we will continue our interesting discussion if we get time.*

The mentoring pair had to cut short their discussion as the mentor had to attend to learners. It would appear the discussion would have gone on if they had time. The mentor had not even suggested on how the pre-service teacher could have improved the lesson when they deferred their discussion to some other time. The interruption could have caused lack of continuity in the discussion. If they had more time they probably could have discussed the lesson when it was still fresh in their minds. Their discussion had not even gone to a stage where the mentor was likely to suggest what could have been done to improve the lesson. An opportunity to collectively and critically reflect and analyse the observed lesson was missed in this instance because of the interruption. There was no way the mentor, who was the HOD, could have not attended to a class without a teacher and opted to attend to one pre-service teacher. As expected, the mentor chose to attend to the class rather than the pre-service teacher. Jaspers *et al.* (2014) observes the

challenge of the dual role for a mentor teacher and how mentoring assumes a secondary role in such situations.

Lessons from mentoring

According to Moyo, more consultations could have been done when pairing her with George. She explained the importance of consultations when appointing a mentor and how the head of the school appointed her to be George's mentor. She remarked that:

> *There was little, if any, consultation when the head of school appointed me to be the mentor for George. The head could have made more consultations before appointing me. Though I have worked with other student teachers before, this time I would have suggested someone else in our department to mentor George. I now have more responsibilities as an HOD. Moreover, George is very much into computers and we could have found someone who is more comfortable with computers to mentor him as George would have found him more useful regarding use of computers in teaching and learning of Commerce and Accounts. I have told George that* ***we have to share*** *whatever each one of us brings to the classroom. I am learning more about computers from him and I suppose he is learning from me about the school culture, record keeping, and class and classroom management.*

Moyo acknowledges that her other duties as an HOD could be an impediment in the mentoring of George. In addition, she has noted that George has better computer competencies than her and would have benefited more from a mentor who had more computer skills than her. She seems to be alluding to the notion that the mentor has to be more knowledgeable than the mentee to be able to assist and guide the mentee (Bekiryazici, 2015). She also suggested that the appointment of the mentor could have been deferred until such a time that George was inducted into the operations of the school and its teaching personnel. As HOD, she suggested she could have inducted the pre-service teachers and then the mentor would take off from there. She was of the idea that the pre-service teachers needed to be familiar with how the teaching programmes were

organised and administered at the school before a mentor was selected to guide and advise the pre-service teacher as he or she grows in the teaching profession.

In addition, Moyo observed that:

> *The careful selection of a mentor could have been preceded by an elaborate induction process of the pre-service teacher into the school life. The pre-service teacher should get to know the culture of the school and special expertise of possible mentors so that they could even be consulted to give their input on their preferences for the mentor to be paired with. The university could also send the pre-service teachers to schools on specified school visits the semester before the TP for purposes of familiarisation. The school visits would have enabled the pre-service teachers to have a better appreciation of the school culture, practices and challenges*

The mentor was of the view that mentor selection could be improved by considering the input from the pre-service teacher since he or she was the person to work with the mentor on a daily basis. She assumed that the pre-service teacher would opt for a person he or she considered to be easy to relate and work with as mentorship is about relationships and compatibility of teaching styles and practices of the mentoring pair (Draves, 2013). Moyo's views are critical in the sense that the school had considered her the best person to mentor George. However, the mentor thinks that she is busy with other school duties and reveals this could limit the time for mentoring. She also acknowledges that if other criteria such as computer competence had been considered they were other mentors who could have done a better job. Nevertheless, these seemly sound reasons were not considered in the appointment of the mentor as there was no wider consultation by the head of school. Perhaps, if the appointment of the mentor had been on the basis of a collective decision-making process a more compatible mentor could have been paired with George.

Moyo was also of the view that she had benefited from the mentoring process as she had gone on to use in her classes the teaching methods she observed George using. She said she had learned from George when she said that:

By observing George's lessons, I have always learned something new, especially on the aspects of the interactive methodologies he uses in his lessons. He also seems to be quite comfortable with the use of some of the ICT tools, such as the computer, projectors and other electronic gadgets. Some members of the department consult him regularly when it comes to the use of the ICT tools in teaching as they may not have been exposed to these when they trained as teachers. The ICT club he helped to establish has enhanced computer skills of both learners and teachers who are members. It has become one of the most popular clubs in the school as members value its relevance not only in teaching and learning but in real life as well.

The mentor was acknowledging that as a mentor she was learning in the process of mentoring a pre-service teacher. Hudson *et al*. (2013) consider this as reciprocity in mentoring as it becomes a two-way learning process involving the mentor and pre-service teacher. However, Mrs Moyo noted it was not only her who was in need of computer skills as other teachers also consulted George on the use of ICT tools in teaching. This could imply that there are some areas in which pre-service teachers may be more knowledgeable than the teachers since these areas may have been introduced when teachers had graduated. Therefore, teachers at the school may have been informally in-serviced by George on the use of ICT tools in the teaching and learning process. However, the identification for such gaps in the teachers' knowledge could be used to mount formal capacity building development programmes for teachers to effectively mentor pre-service teachers in areas, such as ICTs (Aspfors and Fransson, 2015). Additionally, the school may approach the university for partnerships to staff develop its teachers.

On their part, George said that among his fellow pre-service teachers, they had created interactive WhatsApp groups to *"share ideas on problematic aspects during teaching practice, the requirements and implementation of the updated curriculum"*. This was in a response to an informal interview probing question on how pre-service teachers were using social media during teaching practice. I had asked George on his views on the use of social media after detecting his passion for ICT in one of our informal discussions in between mentoring sessions on 11 October

2017. The use of social media in sharing mentoring and TP experiences was mentioned by George when he said, *"We have shared ideas on social media particularly on the updated curriculum as some of the new learning areas have new demands regarding continuous assessment. So, we have a lot to share as pre-service teachers."*

George argued that the use of social media in mentoring was convenient and cheap. He said they were able to communicate after hours and share ideas on any problematic aspects. I observed that George had a smart phone so it was easy for him to use social media platforms, such as WhatsApp, to share his teaching and mentoring experiences even after work as they planned and evaluated their work. However, the exclusion of the mentor in the WhatsApp groups could be a cause for concern as she was expected to interact with pre-service teachers on a more regular basis. In addition, the exclusion of the mentor from WhatsApp groups may have failed to enrich the activities of the virtual professional learning community (PLCs) of practitioners the pre-service teachers had set up (Hudson *et al.*, 2013). This could have also presented the mentor with opportunities to guide, advise and support the pre-service teacher during TP. Nonetheless, the exclusion of the mentor from the WhatsApp groups may have enabled the pre-service teachers to discuss more freely and question some of the mentoring practices they were experiencing in their respective classrooms and schools.

Mrs Moyo said she was speaking on behalf of other mentors when she said the university needed to capacitate teachers in mentoring. She observed that very few, if any; teachers had studied mentoring when they were at college or university (Marimo, 2014; Ambrosetti, 2014). Mrs Moyo suggested a need for the training of mentors when she commented that:

> *The university could mount workshops on mentoring to capacitate mentors and pre-service teachers on their roles during the mentoring process. The university could involve school personnel as trainers in these workshops. Involvement of school personnel would increase their interest and ownership in the training programmes.*

These programmes could be done at school level where the concerned school could support such initiatives as part of their staff development programmes.

This was a cry for the university to be more involved in school mentoring programmes. Zeichner (2010) calls for strong partnerships between schools and universities to enhance the professional development of pre-service teachers and mentors. However, the universities may need to carry out more research on the implementation matrix of mentor training programmes if they were to be carried out in schools without disrupting other school programmes. The mentor teachers could be involved from the needs assessment stage for such programmes as they are more conversant with school programmes that take place during the school year. Moreover, the proffered suggestions for the mentor training programmes may need to be sustainable if they were to have the support of all stakeholders.

Interpretative commentary

The mentor was appointed by the head of school on the basis that she was the head of department. The head wanted the HOD to combine the supervisory and mentoring roles. As HOD, the mentor provided the pre-service teacher with a direct link to the school administration, as a line manager, especially in cases when the mentoring pair needed school resources (Armstrong, 2001). However, the mentor was of the view that though the head of school was being consistent in his criteria of appointing mentors, there was need for wider consultation when pairing a pre-service teacher and a mentor. Moyo alluded to the fact that this time around there were other teachers who could have done a better job if they had been appointed George's mentor. There were other teachers who had more time and skills to mentor George more effectively.

The mentoring conditions at the school determined how the mentoring pair conducted their mentoring sessions. For example, they could not freely use the staffroom and departmental office for their mentoring sessions. Thus, the mentoring pair had to schedule most of its mentoring sessions before and after lessons to minimise on interruptions during discussions. In addition, the

mentor's other supervisory duties in the department meant that she had less time for interacting with the pre-service teacher though she was at the school throughout the day. Research has shown that when a mentor has competing roles, usually it is the mentoring role that is disadvantaged as mentoring will be considered as a secondary role (Aspfors and Fransson, 2015; Hudson, 2012; Jaspers *et al*., 2014).

Though the school was not well resourced, the participants agreed that the school was doing its best to support the mentoring programme by availing some of the teaching resources. The school could not avail some of the ICT tools that the pre-service teacher had been exposed to at university and looked forward to using during TP. Nonetheless, members of the department including the mentor ended up consulting the pre-service teacher on the use of some ICT tools in teaching as he seemed to be better acquainted with use of ICT in teaching. This illustrated the reciprocal learning that took place during mentoring between the mentor and the pre-service teacher. Hudson *et al*. (2013) also highlight how mentors and their mentees learn from each other during the mentoring process as they bring varied experiences to the mentoring table.

Interacting with colleagues, who observed and invited the pre-service teacher to observe their lessons, enhanced the professional growth of the pre-service teacher. The pre-service teacher was exposed to different teaching, learning and supervisory styles and this offered him opportunities to reflect on these and adapt some of them as he shaped his teacher identity. However, there was need to consider the context in which the teaching was taking place so that the pre-service teacher understands that schools have different cultures and practices. Furthermore, the pre-service teacher needed to be exposed to as many schools as possible and different teachers, including those in formal and informal leadership positions, in schools. This was likely to give the pre-service teacher a wider perspective of teaching and instructional leadership as he developed his own teacher identity (Izadinia, 2015).

Suggestions of improvement in mentoring pointed to the need for closer partnerships between the university and schools. Zeichner (2010) views strong partnerships between schools and

universities as a strategy of reducing the gap between the two so that teacher preparation is related to what happens in schools. Participants were of the view that there was also need for more direct communication between the university and schools especially on university expectations in the mentoring of pre-service teachers on TP. Furthermore, both the mentor and pre-service teacher were of the view that mentors needed to be capacitated through training workshops (Everston and Smithey, 2010; Samkange, 2015). However, involvement of the university lecturers in the workshops could need input from school personnel so that they would have a sense of ownership of the capacity building workshops taking place in their schools.

4.2.4 CASE 3: The Story of Mr Simango and Augustine-: *"Excel to stand tall"*

The mentoring pair's demographics are shown in the Table 4.7 below as part of the background information of participants of case study 3.

Table 4.7: Case 3 Mentor and Pre-service Teachers' Profiles

Category	**Mentor**	**Pre-service Teacher**
Name	Mr. Simango	Augustine
Age in years	55	32
Highest teaching qualification	Bachelor of Education	Bachelor of Science (Honours)
Teaching experience	27 years of secondary school teaching	5 years teaching experience as an unqualified teacher
Subject specialisation	Mathematics	Mathematics and Physics
Subjects being taught	Mathematics (Forms 2, 3 and 4)	Mathematics (Forms 1, 3 and 6)
Teaching load (Number of periods per week)	18	28
Post of responsibility	Head of Department	Form teacher

Mr Simango, Augustine's mentor, is also the head of the department. They are both in the Mathematics Department though Augustine also teaches Physics classes. Mr Simango has taught for over two decades and is one of the longest serving members of the school as he has been at the school for over 12 years. The mentoring pair has Mathematics as their common teaching subject. They were paired for mentoring on the basis of same subject specialisation. Augustine is in the final semester of the PGDE programme but has 5 years teaching experience as an unqualified teacher. Augustine is also a form teacher for form 1A. The mentoring pair's individual profiles are presented below as part of background information for case 2- *"The story of Mr Simango and Augustine:-Excel to stand tall"*

Profiles of the mentoring pair

Mr Simango- Mathematics teacher and head of department (HOD)

The 55-year-old Simango is a holder of a Bachelor of Education degree and is one of the most experienced teachers in the school as he has been teaching for about 27 years. The degree was attained after he had obtained a Certificate in Education with a distinction in Mathematics. The mentor, Simango, is the head of the Mathematics department and one of the senior members among the teaching staff. In addition, Simango has previously mentored other pre-service teachers who have successfully completed their Teaching Practice at the school. As the head of department (HOD) and mentor, Simango, helps Augustine to understand and practice the school's working culture. Simango believes in excellence and in the past three years he has mentored distinctive pre-service teachers who were on Teaching Practice (TP). He hopes to maintain this trend as he wants to excel to be noticed especially by the universities whose students he has mentored. His motto is *"Excel to stand tall"* as he believes that as he continues to produce distinctive pre-service teachers, one day he will get noticed and be rewarded. His ambition is to study for a higher degree in education but requires some form of financial assistance to fund his studies as he has no capacity to do so because of his other family commitments. Simango, as the head of the department, has instilled a working culture which

shows a lot of commitment to teaching in his colleagues in the department. At times members of the Mathematics Department can work late at night during students' study time.

Augustine- A pre-service teacher and form teacher

Augustine, a 32-year old man, holds a Bachelor of Science (Honours) degree. He majored in Mathematics and Physics at university. He has taught as an unqualified teacher in secondary schools before he enrolled on the PGDE programme. He has been teaching at the present school for the past four years. He is one of the form teachers and has a teaching load of 28 periods per week. Augustine is known for producing some of the best results in public examinations in the cluster. Teachers in nearby schools were surprised when they heard that Augustine had enrolled on the PGDE programme as they had assumed that he was a qualified teacher. As a pre-service teacher, he appreciates what the mentor has done to orient and induct him into the teaching profession when he joined the school some years before he had registered on the PGDE programme.

Augustine knows about the performance of pre-service teachers previously mentored by his mentor who obtained distinctions in TP and is under pressure to maintain or even surpass the high standards set by his predecessors. The mentor's work ethics seem to have inspired Augustine as he would stay late at school to make sure that his schemes, lesson plans and records were up to date. He shows the determination and focus by saying:

> *I have seen my mentor doing excellent work for the school and university. I am glad to be guided by him. He has produced brilliant results for the school in public examinations and has gone on to produce distinctive student teachers who were on TP in the past three years. This, in a way, inspired me to join the programme and the pressure is on me not to break his streak of distinctive students on TP. I am determined to do well and with his guidance I hope I will achieve my set goals. This has made me to work even extra hard to the extent of stretching my working hours late in the night on some days.*

The pre-service teacher was determined to do well during his Teaching Practice and he believed, with the assistance of Simango, he would achieve his goals. That self-belief and confidence is critical as Augustine was building his teacher identity (Izadinia, 2015). It would appear the mentoring pair of Simango and Augustine was determined to excel in the mentoring process as they pursued their individual goals in their careers.

Context

The mentoring pair is teaching at a boarding secondary school, C, with forms one to six and lessons start at 7:30 and finish at 16:30 on each school day and learners also have supervised one and half hours evening studies during school days. The school has an enrolment of about 850 learners with almost an equal number of boys and girls. The classes have an average enrolment of about 50 learners as the demand for places is very high. Most parents would want to send their children to a boarding school. Teachers have individual offices and the staffroom for preparing their work and marking of learners' work. Teachers also have access to departmental offices and storerooms in which they keep their teaching resources and equipment. The school is well resourced and the mentoring pair has the teaching and learning resources they have requested from the school administration. Teachers can also work in their offices at night during learners' study times. The pair of Simango and Augustine sometimes use the night study times for their mentoring discussions. These discussions are normally done in the mentor's office as the pre-service teacher goes to the mentor for guidance.

The teachers' teaching load in the school averages about 28 periods per week. As expected, the mentor has a lighter teaching load and he explains that this is because he has other duties as HOD. The mentor makes use of the time when he is not teaching to assist and guide the pre-service teacher and manage the department but the mentoring pair has discovered that the available time is inadequate for their mentoring sessions, hence, their arrangement of conducting some mentoring sessions outside teaching hours.

Mentoring relationship

The mentoring pair of Simango and Augustine was constituted by the head of school in consultation with members of the school supervisory team. The school-based supervisory team comprise of the headmaster, deputy headmaster, senior master, senior woman and heads of departments (HODs). The mentor and pre-service teacher are known for producing some of the best results in public examinations in the cluster. The school also considered Simango to be the best mentor for the seemingly capable Augustine on the basis of the results he had produced when he worked with other pre-service teachers who had excelled in their Teaching Practice. The mentor's work ethics seemed to have inspired Augustine as he would stay late at school to update his teaching documents and assessing learners' work. Augustine was free to consult the mentor even outside their scheduled daily meetings as the mentor had an open door policy for both teachers and learners. They were all free to visit his office without an appointment.

Mentor and pre-service teacher pairing

The school-based supervisory team which was consulted by the head when he paired Augustine and Simango had considered the track record of the mentor. Simango had also been consulted as a member of the supervisory team. He was one of the most successful mentors at the school. The school supervisory team was of the view that Simango, because of his good reputation as a mentor and experienced teacher would be a good representative of the school when university lecturers come to visit the school to supervise pre-service teachers as they would interact with him more often on their school visits. The school also regarded Simango to be the best qualified teacher to mentor the promising Augustine because of the results he had produced when he mentored other pre-service teachers who had excelled in their Teaching Practice. The school considered the mentor a hard worker who would instil his work ethics into the pre-service teacher and would inspire Augustine to also work hard to maintain the high standards set by his predecessors. The mentoring pair would meet several times in a day even after school lessons. During some of my school visits on 3 October, 9 October, 17 October, 24 October, and 7

November 2017, I observed that Augustine was eager to consult the mentor for advice and support from time to time, even outside their scheduled weekly review meetings. However, Augustine said that at times the HOD, because of his other duties; he was not always available to assist him in his teaching duties. Augustine mentioned that, *"On some days I have to consult my mentor before the start of the day's lessons as he may be busy throughout the day. The other advantage is that he checks my TP file daily."* As expected the HOD had other supervisory duties that needed his attention and these dual roles were bound to affect mentoring (Ambrosetti, 2014).

Support for mentoring and professional growth

School C is well resourced in terms of office space and as a result, daily mentoring meetings were held between the mentor and the pre-service teacher. There was adequate office space to carry out mentoring sessions in an atmosphere which provide privacy and confidentiality. Simango and Augustine have individual offices which they use for preparing lessons, marking of the learners' work and their mentoring sessions though most of these were held in the mentor's office. It was Augustine who would go to the mentor for advice and guidance. The school was also well resourced in terms of teaching equipment, for example, teachers had laptops. The department also had projectors, cameras, television sets and white boards. If Simango and Augustine failed to meet during the day for some of their mentoring sessions they held some of these meetings during the period they were supervising evening studies when they were on night duty. They would have failed to hold the meetings during the day as the mentor, as an HOD, would be busy with his administrative, supervision and teaching duties. As a result of the mentor's other commitments, they ended up having most of their scheduled mentoring sessions after teaching their lessons. The mentor's other duties which included teaching and supervision of the department tended to limit his time for mentoring Augustine. Despite the busy schedule of the mentor, they made it a point that they would interact on a daily basis even informally or through checking of the TP file. The TP file was submitted to the mentor who was the HOD on a daily basis and he would go through that day's lesson plans and other records. When the HOD

went through the file he could make some adjustments by scribbling some corrections on some lesson plans as a way of guiding the pre-service teacher.

A typical example was when the mentor made some adjustments on a form 3 Mathematics lesson plan on transformations. The lesson topic was 'enlargements' on 9 October 2017. The mentor made adjustments on the lesson objectives. Augustine had listed the lesson objectives as follows:

By the end of the lesson, the learners should be able to:

a) enlarge triangles about origin by a given scale factor

b) use geometrical instruments to enlarge given triangles

c) describe an enlargement of given triangles

The mentor then indicated the rephrased version of these objectives to make them more specific as follows:

By the end of the lesson, the learners should be able to:

a) enlarge plane figures about the origin by a rational scale factor

b) use geometrical instruments to enlarge given plane figures

c) describe fully an enlargement of given plane figures

The mentor noted these changes and explained the need for making the topic and objectives more specific and broad in the sense of not just focusing on triangles only but other plane shapes as well. The rephrased lesson topic was *'enlargement of plane shapes'*. The mentor also encouraged the pre-service teacher to capture the discussions they held in a diary that they could refer to later on if they wanted to follow up on some of the issues. This was likely to assist the pre-service teacher in future assignments on formulation of learning objectives and scope of content in a lesson. However, other factors, such as the ability of the class and time available for the lesson may need to be considered when formulating such objectives and this could have been discussed as well. This presented an opportunity for professional growth for the pre-service teacher.

The mentors also had opportunities for professional growth provided by the school. Simango explained the efforts of the school in supporting mentors at the school. The school provided support for the mentoring process as noted by Simango:

> *We have workshops as HODs and during these workshops we are also able to interact with HODs from other schools which are government, private, mission and council owned. At such workshops, we share our experiences and develop professionally. When we come back to school we implement the ideas from the workshops in our mentoring of pre-service teachers. These workshops feed into our own school workshops and as HODs we cannot complain as the school is very supportive. We have not missed any workshop because of the support we get from the school. The school pays for our attendance and caters for our travel and subsistence allowances. However, if funds permitted maybe all teachers needed to be involved in such workshops.*

Simango pointed out that their school held workshops for HODs where they shared their mentoring experiences. He also said that at these workshops, they interacted with HODs from other schools. The school was in a position to fund their attendance to the extent of paying for travel and subsistence allowances. This showed that the school was well resourced as it was able to fund such activities. However, it is the exclusion of other teachers who are not HODs in the workshops that could be a cause for concern for those worried with the quality of mentoring in schools.

Augustine was also of the view that the school could go further in supporting such workshops by making use of information and communication technology (ICT). He suggested that *"...such workshops could be audio or video recorded for the benefit of teachers who would not have been able to attend."* He seemed to base his suggestions on the fact that he considered the school to be well-resourced to be capable to implement his suggestion. The school would then encourage the

setting up of WhatsApp groups for teachers, mentors, pre-service teachers and lecturers to share information. He noted that,

> *Mentoring should take advantage of the modern information technology so that there is constant interaction among the lecturers, mentors and pre-service teachers. Such an interactive platform would provide an innovative way of improving mentoring contexts in schools. All these stakeholders would even be able to share their experiences using various ICT platforms since most of us have smartphones.*

Augustine's idea was that the WhatsApp groups could be extended to include university lecturers. The pre-service teacher was already interacting with his mentor and lecturers through WhatsApp but he envisaged a situation in which all three could interact in the same interactive forum such as a WhatsApp group. However, the challenges of such a grouping could be convergence of topics or issues of interest for discussion at any given time given their diverse backgrounds and numbers involved.

A WhatsApp group of school-based supervisors and pre-service teachers at a school could be more manageable. School-based supervisors had instances in which they used social media to mentor Augustine. Though it was an innovative way of using social media platforms, Augustine had some reservations on its use in supervision and mentoring:

> *Social media cannot be equated to face-to-face interaction as some actions could not be effectively illustrated on these platforms. The oral reports also tend to be very brief and in most cases only focus on areas to be improved as space is limited. The written reports on social media also tend to be brief to maximise on space. At times one cannot keep these reports for other supervisors who would want to assist you to use them since they will be on the phone. As a result, not all supervisors would be able to access the pre-service teacher's phone.*

Augustine had recalled some instances in which some of the supervisors had engaged him in a discussion on social media on their observations. He was also eager to get these reports as soon as possible so that he would use the comments in his next planning and teaching sessions. Comparison of the school-based supervision to when he was observed by university lecturers was unavoidable. Lecturers compile the supervision reports during the lesson observation and will hand these to the pre-service teacher before they dash off to the next school. The lecturer has to produce the written report on the spot as it is easier to compile the report before visiting the next pre-service teacher. Moreover, there is the danger of mixing up the reports as the lecturers can supervise several pre-service teachers in one day. However, the lecturer has no time to discuss in detail his or her observations and meanwhile, the pre-service teacher will be more eager to get the mark awarded by the lecturer. This presents a situation in which both the lecturer and pre-service teacher want the discussion to end as soon as possible.

On the other hand, I witnessed an instance in which Simango advised Augustine on the effective use of group work during a form 3 Mathematics lesson on enlargement of plane shapes on 24 October 2017 so that all learners were actively involved in the learning process. Simango (MT) gave hints on how to use group work effectively in his discussion with Augustine (PT) after observing the lesson. Their discussion is captured in the following vignette:

MT:	*Not all learners were actively involved in the group work activity on finding centre of enlargement using the construction method. What could be the reason?*
PT:	*I think I could have made the groups smaller for all the learners to be actively involved.*
MT:	*Yes, the groups can be smaller but at the same time make sure that the tasks will force everyone to play an active role in the group.*
PT:	*You mean each member of the group should be doing something like measuring, constructing, recording and calculating the enlargement factor?*
MT:	*Yes, the members of each group should assign each other tasks as they start to work on the group task.*
PT:	*I see. Next time I think I have to think deeply about what the learners will do during group tasks. I now realise group work involves elaborate lesson plans and notes.*
MT: Assign the group leaders the extra task of monitoring members in their groups.	

Augustine was assisted on when and how to use group work effectively. This was a strong teaching point since pre-service teachers tend to rush to put learners into groups without thinking deeply about what each of the learners will be doing during the group work. This post observation discussion presented the pre-service teacher with an opportunity to deeply reflect on the use of group work in future lessons to the extent of visualising the individual tasks within each group. Group work needed to be planned in more detail as it could be more involving than what pre-service teachers think. Individual tasks that are undertaken as part of group compel the teacher to think deeply about the central learning task that the learners will perform as a group. The presented post lesson discussion was likely to assist in the delivery of future lessons.

Usually, a post observation conference followed the lesson delivery though the timings of these conferences differed. The informal and brief post observation conferences were held soon after the lesson but the more elaborate ones were held in the HOD's office and after school lessons. The pre-service teacher actively participated in all these discussions and was keen to ask questions. The pre-service teacher was encouraged to take notes during these discussions. The

pre-service teacher would make reference to these notes when planning the next lessons. Occasionally, I also observed the mentor taking notes and would also ask for clarifications on some teaching aspects. For example, Simango asked Augustine on how he determined the number, design and shades of slides in one of his PowerPoint presentations. The mentor may also learn from the mentee during mentoring as it can present opportunities for two-way exchange of knowledge for the mentoring pair (Hudson *et al*., 2013).

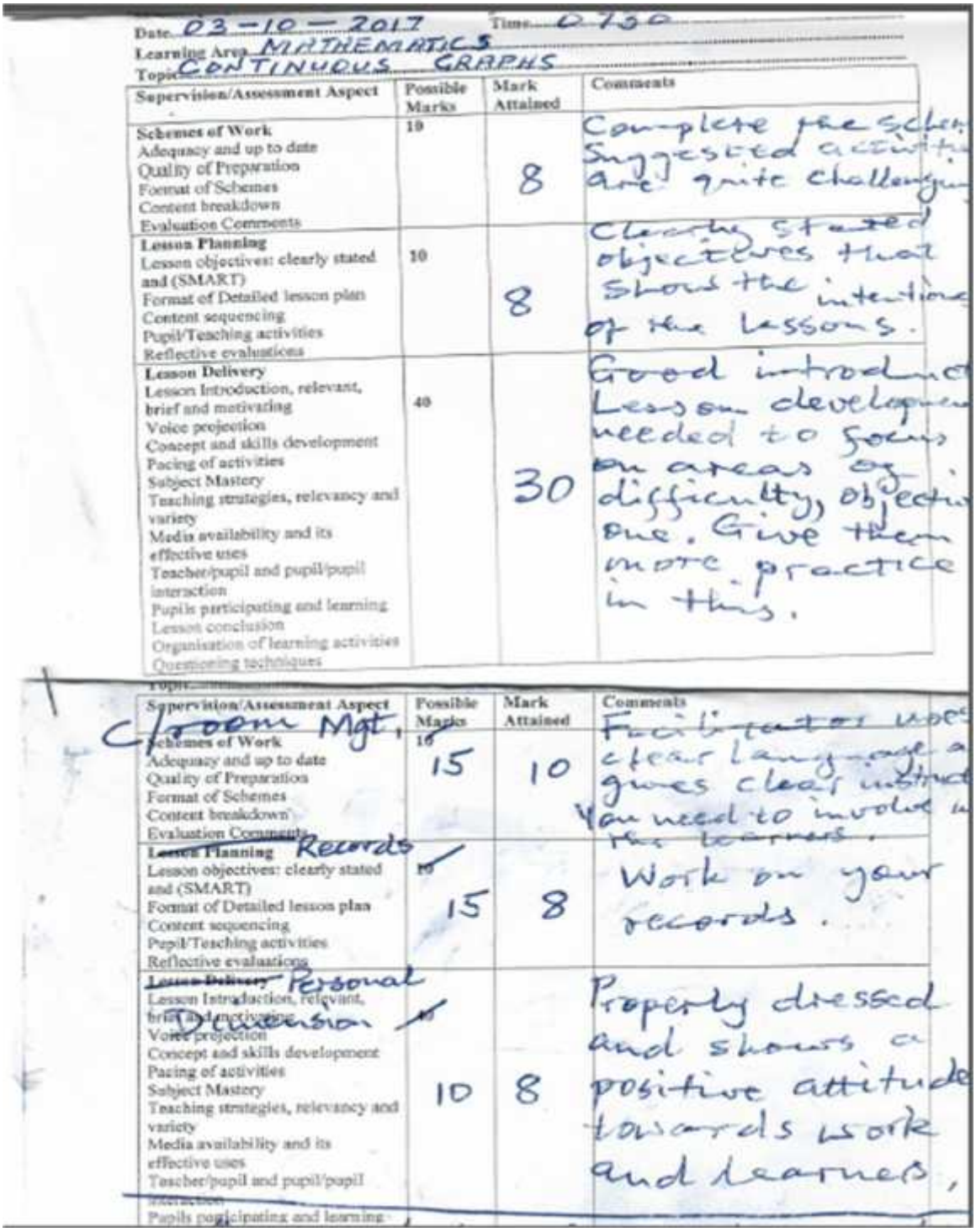
Team-work in mentoring

Teachers at school C worked as a team as they would assist the mentor when he was busy with other school tasks. They would even observe Augustine teaching and also invite him to observe them teach. Responding to an interview question, Augustine who benefited from teachers' team-work observed that:

> *When my mentor is busy with his other duties, other staff members are willing to come to assist us as pre-service teachers. However, their own teaching loads could also be a limiting factor. Because of the new regulations on non-replacement of teachers who are on leave or have retired, our colleagues are over stretched in terms of teaching loads. This leaves little time for other staff members to assist pre-service teachers on TP. When they get time, they come for lesson observations and at times they have invited pre-service teachers to observe them teach. I have benefited a lot from interacting with other teachers in the school.*

Other staff members, despite their own teaching duties, were also involved in the mentoring of pre-service teachers and this gave the pre-service teacher opportunities to learn from different teachers who had different teaching styles. However, there could be lack of continuity in the professional development of the pre-service teacher's teaching skills as these teachers may not have had time to follow up on some of their suggestions. I also observed that there were few written reports by the other staff members on the pre-service teacher's lessons they had observed. One such report is presented below with the intention of discussing on how the

mentoring pair discussed it. Furthermore, I observed that the mentoring pair created time to discuss what the teachers had observed during their visits. One member of the school supervisory team compiled a supervision report for the university. This report could be considered as part of 'compliance mentoring' as it combined supervision and assessment (Mukeredzi *et al.*, 2015). The report, compiled on 3 October 2017, was based on a form 3 Mathematics lesson on continuous graphs but also included all TP documents. The picture of the supervision report is as shown below:



Date 03-10-2017 Time 0750

Learning Area MATHEMATICS

Topic CONTINUOUS GRAPHS

Supervision/Assessment Aspect	Possible Marks	Mark Attained	Comments
Schemes of Work Adequacy and up to date Quality of Preparation Format of Schemes Content breakdown Evaluation Comments	10	8	Complete the scheme. Suggested activities are quite challenging
Lesson Planning Lesson objectives: clearly stated and (SMART) Format of Detailed lesson plan Content sequencing Pupil/Teaching activities Reflective evaluations	10	8	Clearly stated objectives that show the intentions of the lessons.
Lesson Delivery Lesson Introduction, relevant, brief and motivating Voice projection Concept and skills development Pacing of activities Subject Mastery Teaching strategies, relevancy and variety Media availability and its effective uses Teacher/pupil and pupil/pupil interaction Pupils participating and learning Lesson conclusion Organisation of learning activities Questioning techniques	40	30	Good introduction. Lesson development needed to focus on areas of difficulty, objective one. Give them more practice in this.

Topic

Supervision/Assessment Aspect	Possible Marks	Mark Attained	Comments
C/room Mgt, **Schemes of Work** Adequacy and up to date Quality of Preparation Format of Schemes Content breakdown Evaluation Comments	15	10	Facilitator uses clear language and gives clear instructions. You need to involve the learners.
Records **Lesson Planning** Lesson objectives: clearly stated and (SMART) Format of Detailed lesson plan Content sequencing Pupil/Teaching activities Reflective evaluations	15	8	Work on your records.
Personal Dimension **Lesson Delivery** Lesson Introduction, relevant, brief and motivating Voice projection Concept and skills development Pacing of activities Subject Mastery Teaching strategies, relevancy and variety Media availability and its effective uses Teacher/pupil and pupil/pupil interaction Pupils participating and learning	10	8	Properly dressed and shows a positive attitude towards work and learners.

Figure 4.3: Lesson Supervision Report

The mentor and mentee met on the same day to discuss the supervision report. They met after lessons at 16:30 in the mentor's office. They read all the comments and discussed possible alternatives for areas or aspects that needed to be improved. The focus of their discussions was that if the lesson was to be taught again what could be done differently so that there would be more effective learning. This encouraged deep reflection and as usual, the pre-service teacher was asked to document the main teaching points of the discussion.

Among the areas noted for improvement from the report was the completion of the schemes of work. It was also noted that the lesson development needed to focus on plotting of points for the continuous graph. The mentor suggested that the learners needed to formulate a table and use this to show the corresponding values of the variables for the graph. It was also pointed out that the learners needed more practice on this aspect as was suggested by the supervisor. The other suggestion was that all the learners needed to be involved. The comment "work on your records" implied that the records were not up to date. The mentor explained the importance of records in their discussion of the report:

> *Records show whether you are monitoring your pupils' learning and these must always be up to date. You should have entries in all records and re-organise the social record for it to have provision for updating entries in the event of changes. Marks in the progress can be analysed for use in evaluating pupil performance in the recorded tests*

The mentoring pair's discussions deliberately did not focus much on the noted strengths of lesson delivery, classroom management and personal dimensions related to the teacher. It was on the noted weak areas that the mentoring pair needed to come up with alternatives. However, in the absence of the writer of the report some issues could have been interpreted in a different way. It would have been better to discuss this report in the presence of the supervisor who compiled the report since he or she was school-based. Nonetheless, observation of the lesson by someone other than the mentor was likely to be beneficial as this exposed the pre-service teacher to other

supervisors who may have different supervisory styles. Exposure to different supervisory styles is more likely to be enriching for a pre-service teacher as mentors are likely to promote their own teaching styles (Yuan, 2016)

Assistance from colleagues

Mr Simango and Augustine interacted with colleagues both informally and formally. The informal interactions would at times include aspects of mentoring. The informal discussions I observed involved other teachers contributing as the mentoring pair were discussing informally some of their lesson observations. The other teachers went on to give advice to Augustine on how to handle early finishers in a Mathematics lesson using some of the methods mentioned in the Zimbabwe Mathematics Syllabus (2015). This informal discussion was in the staffroom in between lessons on 7 November 2017 and was based on a section in the Zimbabwe Mathematics Syllabus. A section showing some of the suggested methods in the syllabus document is reproduced in the picture shown below.

5.0 METHODOLOGY AND TIME ALLOCATION

It is recommended that teachers use teaching techniques in which mathematics is seen as a process which arouse an interest and confidence in solving problems in both familiar and unfamiliar contexts. The teaching and learning of mathematics must be learner centred. Multi-sensory principles should also be applied during teaching and learning of mathematics. The following are some of the suggested methods of the teaching and learning of mathematics

- Guided discovery
- Discussion
- Interactive e-learning
- Exposition
- Demonstration and illustration
- Problem solving
- Individualisation
- Simulation
- Visual tactile
- Educational tours
- Expert guest presentation

Figure 4.4: Suggested Teaching and Learning Methods of Mathematics (Source: Zimbabwe Mathematics Syllabus, 2015: 2)

The teachers suggested that each of the mentioned methods could be used to cater for early finishers. The early finishers need to be challenged by using different methods from those used by the rest of the class. A different method is likely to be more interesting and engaging for the early finishers. The content may also be varied for it to be more challenging as the early finishers would have proved that they will have grasped the concept or skill. However, some of the suggested methods may need more time and may not be suitable for early finishers considering the constraints of teaching time especially in a secondary school. In a secondary school setting there seems to be less flexibility in terms of ending a lesson in the stipulated time as another teacher will be waiting to teach the next lesson. The informal discussion may have enriched the

pre-service teacher as the teachers used the informal discussion to share their teaching experiences that may impact on how the pre-service teacher would handle early finishers in future lessons.

The teachers also suggested to Augustine the use of past examination questions on the topic he would have taught to challenge fast learners as normally examination questions are more demanding. This suggestion triggered some interesting discussions among the teachers. Augustine now remembered why Simango had asked him to have past examination papers in his resource file:

> *I was asked to keep a collection of examination papers in my resource files. I think these can be used with my early finishers as examination papers have all the topics. The questions are challenging and can be used to prepare the early finishers for exam type questions. My mentor will be happy that I am now using the questions he had asked me to collect. I was actually keeping them for exam revision at the end when we have completed the syllabus.*

Simango had advised Augustine to have past examination question papers as part of his resource teaching materials. This is one example in which interaction among colleagues was used to boost the pre-service teacher's repertoire of practical knowledge in teaching. Augustine now realised that this could be one of the teaching strategies that made Simango's classes do well in public examinations. He was of the view that the discussion with other teachers had made him to have a deeper understanding of what his mentor had been advising him on having teaching resources. Shooshtari and Mir (2014) also argue that social interaction as one of the tenets of the socio-cultural theory is critical as one learns to teach, as in the case of Augustine.

Time for mentoring

The mentoring pair showed their innovativeness when they realised that the mentor had other school responsibilities which limited their face-to-face interactions during the day. Since it was a

boarding school and both of them would be available during study time, they decided to utilise that time. The pre-service teacher and the experienced mentor decided to think outside the box since they had limited time for their mentoring sessions, thus Augustine commented that:

> *The mentor has a busy office and at times we fail to discuss the lesson whilst it is still fresh in our memories. In a number of cases, I have to approach the mentor even after school hours, for example, during evening study time to ask for his views on some aspects of teaching. I am happy to say he has been very helpful even during these odd hours as he understands that we do not have adequate time to interact during the day.*

The mentor had mentored other excelling pre-service teachers using the same strategies and the mentoring pair believed that the same strategies would give them similar results. This in itself motivated the mentoring pair, especially Augustine. He thought the mentoring pair had a point to prove:

> *I want to prove that the good results my learners are getting in public examinations are not a fluke and that indeed I am a good teacher. I have to get a distinction in TP to silence my critics and vindicate myself. As a pair we want to maintain our good record, we have to keep on excelling.*

However, the bottom line was that these mentoring strategies were put in place because of limited mentoring time during the normal school teaching time. As an experienced teacher and mentor, Simango knows the strategies that will yield good results for the mentee. However, focusing on results may not be best option in the mentoring process as the pre-service teacher has to be properly and ethically guided to achieve the desired distinctive results. Reflections on practice may help to produce the desired results in mentoring and teaching.

Reflecting on practice and mentoring

Augustine reckoned that he had used the comments from the mentor in his record keeping as he had adopted a more elaborate way of capturing marks for tests. He had changed *"the way of*

recording test marks by including indicators of learners' performance in the analysis, such as highest and lowest marks, mark range, average mark, mode and median." He was able to realise the importance of these comments when he was analysing his learners' achievement levels in a series of tests. He had developed a basis of comparison using these measures and would take possible remedial action if there was a need. He was now able to analyse the learners' performance in tests and was in a position to cater for diverse learners in his class who included fast and slow learners. In response to an interview question, Augustine also noted what he had done differently when he said that:

> *My scheming and lesson planning has drastically changed in terms of how I break down the topics into teachable units per lesson and the way I formulate specific objectives for all my lessons. I now fully understand the logic behind the lesson stages and this has greatly improved how I deliver lessons and assess learners' learning.*

Augustine highlighted what he had done differently after discussing with his mentor. It would appear what he had done differently positively affected his classroom practice in terms of documentation, lesson delivery and learner assessment. In addition, Augustine revealed that the way the mentor had assisted him to analyse the syllabus and its objectives in particular, has helped him to have a better understanding of content breakdown and formulation of lesson objectives. The mentoring pair went through each of the syllabus objectives and categorised all the topics under the syllabus objectives. This has made it easier when breaking down content for each lesson. The syllabus objectives that were analysed are shown in the picture below.

4.0 SYLLABUS OBJECTIVES

The learners should be able to:

- use mathematical symbols, terms and definitions in problem solving
- construct appropriate mathematical models that can be applied in solving problems in life
- draw inferences through manipulation of mathematical data
- communicate mathematical ideas and information clearly and effectively in various contexts
- solve a wide range of problems involving algebraic and geometric concepts
- apply mathematical concepts in other learning areas
- use I.C.T tools in problem solving
- conduct research projects including those related to enterprise

Figure 4.5: Mathematics Syllabus Objectives (Source: Zimbabwe Mathematics Syllabus 2015: 2)

The objectives can be easily related to all the topics in the syllabus and the analysis of the syllabus content becomes easier when analysed in the context of the broad syllabus objectives. The task for the teacher will be to make the above objectives topic specific and then formulate measurable lesson objectives that will be achievable by the end of a lesson. This could be an illustration of how a pre-service teacher can be assisted to reflect on syllabus content as they drawn up daily lesson plans for their classes.

Reflecting on how the school selects mentors, Simango pointed out that mentor selection should not be a rushed decision as the whole mentoring process could be negatively affected by pairing a mentor and a pre-service teacher with incompatible teaching styles. To improve the pairing of a mentor and a pre-service teacher, he suggested that *"the pre-service teacher could make pre-visits to the respective school before the beginning of the attachment period in schools."* The

idea would be to expose the pre-service teachers to different mentors before a decision is made on who would be the most suitable mentor for a particular pre-service teacher. He observed that:

> *From my experience, I have realised that mentorship thrives in a situation in which the mentoring pair establishes good rapport on the basis of friendly relations based on mutual respect. Particularly the pre-service teacher should have trust and confidence in the mentor and this emanates from an established relationship which could be set up well before the pairing. At times it takes time for the mentoring pair to gel in their teaching and this could be understandable since there are also power relations in mentoring. I have usually used unconventional means to study my partner to understand his or her teaching style, such as literally spying on her or him when she or he thinks no one is observing her or his lessons. I have used this to understand their teaching styles.*

The mentor admitted that at times he used unorthodox means to familiarise himself with the teaching styles and personal characteristics of the pre-service teacher. The mentor teacher will only know the mentee's teaching style if he has interacted with the mentee, for example, during pre-deployment visits to the school as suggested by the mentor. Wang and Odell (2007) observe that there are different mentoring perspectives that a mentor can adopt in mentoring. The perspectives are likely to determine how a mentor relates with the pre-service teacher. The humanistic perspective that aims to help the pre-service teacher smoothly transit to teacher with the emotional support of the mentor implies understanding the mentee's character. However, the duration and timing of school visits before deployment could be problematic as there will be limited time to fully study the mentee's character.

Simango's school had assigned him a lighter teaching load as a way of the incentivising him as a mentor and HOD. The justification was that Simango, as a mentor and an HOD, had an extra load of mentoring a pre-service teacher and this took most of his teaching time. In addition, as HOD, he also had the responsibility of supervising teachers in the department. He said that:

I am looking forward to more recognition especially from the university. I hope the university will at least acknowledge me when lecturers visit the school to supervise pre-service teachers on TP. What I have done in the past three years in mentoring merit recognition by the university. I hope to be enrolled to further my studies at the university as a way of the university showing gratitude to the immense and consistent contribution I have made to teacher education.

He wants to study for a master in education degree and he thinks that will be the greatest benefit he could get from the university. However, he said that he wants to *"keep on producing distinctive pre-service teachers until the powers that be at the university take notice."* He was excelling to be noticed, hence his motto *"Excel to stand tall"*. He vowed to remain an effective mentor in order to get recognition in the near future. Garza and Harter (2016) are of the view that good teachers are not necessarily good mentors. However, Simango has proved that he is a good teacher and good mentor as he has excelled both as a teacher and mentor. Nonetheless, he still wants to improve himself as a mentor and teacher by getting higher educational qualifications.

Augustine wants to see more use of ICT to improve the mentoring of pre-service teachers. He was of the view that ICT could be incorporated in the mentoring process. At their level, pre-service teachers were using ICT tools in their teaching and interactions with colleagues especially through social media using WhatsApp groups. The pre-service teachers had formed various social media groups and these enabled them to keep updated with developments at the university and in schools. Augustine was among those pre-service teachers who were vocal on stepping up on the use of ICT in mentoring. He went further to suggest the use of electronic mail in sending teaching documents to mentors. For example, he said *"schemes, lesson plans and test items could be sent by electronic mail to school-based supervisors for checking and approval."* In addition, he suggested the following:

The updated curriculum has suggested more use of ICT in teaching. The university and schools need to capacitate all teachers so that they can make use of more ICT

tools in teaching and mentoring. For example, lesson observations could be video recorded for further analysis by the mentor and mentee. Computers, projectors and whiteboards need to slowly replace the traditional instructional materials. Who would have imagined that a few years ago a cell phone was prohibited in classrooms but now with the updated curriculum it is a 'must have' for learners in secondary school. Similarly, in schools we must embrace ICT especially in mentoring as it promises to enhance efficiency and effectiveness. The challenges of affordability could be a stumbling block in the initial stages but as time goes on; institutions would overcome these through various resource mobilisation strategies.

The foregoing suggestion comes with challenges. One of the challenges is to capacitate mentors in the uses of ICTs in teaching and mentoring. Mentors could be capacitated to use ICTs in teaching and mentoring through training workshops and staff development programmes (Chere-Masopha, 2018). The capacitation of mentors would be aimed at improving school-based mentoring and consequently, university could partner schools to empower teachers so that they have a broader perspective of teacher development (Everston and Smithey, 2010). Furthermore, schools and university could partner other stakeholders so that the required ICTs are availed for teaching and learning purposes in schools.

Interpretative commentary

A school committee was consulted when the head of school paired the mentor and pre-service teachers. It was a collective decision and the school saw merits in the pairing. However, some of mentoring sessions were held outside the normal time of teaching as the mentor was busy with his other school responsibilities (Aspfors and Fransson, 2015). The committee's decision was passed on what the mentor had achieved in mentoring other pre-service teachers. The school wanted to maintain its good reputation in mentoring. As a result, other teachers were not considered for mentoring pre-service teachers who came to the school. The other teachers may have been denied the benefits of mentoring pre-service teachers, if they are any.

The school was well resourced and supported the mentoring process. It had infrastructure that was supportive of mentoring as it had offices in which mentoring took place in a conducive atmosphere even outside school teaching time. The contextual factors in the school seemed to support mentoring of the pre-service teacher (Wang and Odell, 2007). However, the pre-service teacher felt that more could be done with the ICT resources in the school in enhancing mentoring. Lesson observations and workshops were given as examples in which ICT could be used to capture these for further analysis and sharing in the mentoring process.

The importance of interaction in mentoring was evident in the lesson observations and as the participants interrogated their classroom practices. Team-work came to the rescue as other teachers were able to assist the pre-service teacher in the absence of the mentor. The interactions also gave the pre-service teacher the opportunity to be exposed to other classroom practitioners with alternative teaching approaches and educational philosophies (Izadinia, 2016). However, the interactions were reported to be brief as these teachers had their own classes which they would not have liked to leave unattended. This showed that teachers considered the needs of their learners first before those of pre-service teachers. As a result, mentoring is considered as an aside and an additional role in mentoring (Jaspers *et al.*, 2014).

Despite the apparent smooth running of the mentoring programme in the school, participants still had suggestions for improving the mentoring of pre-service teachers. The introduction of school and class visits before the allocation of mentors would have helped the pre-service teachers to familiarise themselves with different potential mentors. This would have helped pre-service teachers to make informed decisions when they are asked for their preferences for mentors. Mentors with teaching styles that are compatible with those of the pre-service teacher would be preferred to reduce conflicts and tensions during mentoring (Wang and Odell, 2007; Ngara and Ngwarai, 2012). Mentors on their part, expected to be incentivised and motivated as they considered that they were contributing in teacher preparation. In addition, mentors expected the university to capacitate them in ICT and other contemporary educational issues to make them more effective mentors (Chere-Masopha, 2018).

The next table sums up the three cases presented above and also introduces the cross-case analysis for these.

Table 4.8: Summary of Cases Presented

CASE	**1**	**2**	**3**	**Remarks**
School	A	B	C	The schools have different settings
Mentor teacher (MT)	Sibanda	Moyo	Simango	Schools appointed HODs as mentors
MT's age	41	50	55	
Pre-service teacher (PST)	Sheila	George	Augustine	Paired with their HODs
PST's age	27	28	32	
Type of school	Single session school	Double session school	Boarding school	Schools operate differently
Teaching department	Sciences	Commercials	Mathematics	Mentoring pairs teach within same department
Mentoring theme/belief/practice	Hold on for now	Sharing the pieces	Excel to stand tall	Mentor's guiding practice/beliefs
Mentor's designation(s)	Head of school, head of department, and subject teacher	Head of department and subject teacher	Head of department and subject teacher	Posts of responsibility
Pre-service teacher's designation(s)	Student teacher and Chess Club coach and patron	Student teacher and ICT Club patron	Student teacher and form teacher	Teaching duties
Mentor's teaching load (Number of periods per week)	24	28	18	
PST teaching load (Number of periods per week)	10	26	28	Sheila also teaches in primary school

The table summarises the details about each of the three within-cases presented above. At a glance the tables shows how the mentoring pairs operate in their different schools. All the mentors are qualified teachers and the pre-service teachers are PGDE final semester students on Teaching Practice (TP). The mentoring pairs are different and conduct the mentoring process in different settings with different contexts and practices. Therefore, the next section uses a cross-case analysis to explore these differences and any commonalities among the cases.

4.2.5 The cross-case analysis

The themes and sub-themes that emerged across the three cases from the coding of data gathered from interviews, observations and documents are presented as part of the cross-case analysis for this study. The cross-case analysis is used to bring out what is common and what is particular in the three cases (Stake, 2006). The themes and categories partly emerged from coding and partially from the research questions of this study (Saldana, 2016). The common beliefs and perspectives of participants from the within-case narrative interpretations of school-based mentoring of pre-service teachers are highlighted as the commonalities and the differences show the diversity across the cases using the mentoring pair as the unit of analysis. The cross case analysis is structured along the lines of the presentation used in the individual cases and data is compared across the cases for similarities and differences, The cross case analysis focuses on the context and practice of school-based mentoring of pre-service teachers in Zimbabwean secondary schools and its consequences for the classroom practices of pre-service teachers. The themes and sub-themes emerged from the categories I created from each of the data source for each case. Key findings about the context and practice of school-based mentoring of pre-service teachers which emerged from the data analysis seem not to have been challenged by any discrepant data (Neuman, 2014). The main themes that guide this analysis and discussion are contexts, mentoring practices, pre-service teachers' classroom practices and improvements in mentoring of pre-service teachers.

Table 4.9: Themes and Their Selected Sub-themes

Themes	Contexts	Mentoring practices	Pre-service teachers' classroom practices	Improvements in mentoring of pre-service teachers
Sub-themes	Mentor and pre-service pairing	Teaching and mentoring duties	Mentoring tasks	Mentor selection
	School environment and resources	School support for mentoring	Interaction with colleagues	Benefits of mentoring
	Time for mentoring	School-based supervision	Pre-service teachers' reflections on classroom practices	Mentor training workshops
	Mentor support			

The selected sub-themes for each of the main themes are shown in Table 4.9.

The discussion of background information of the mentoring pairs in the next section helps in understanding the context and practice of school-based mentoring of pre-service teachers.

4.2.5.1 Background information of mentoring pairs

The mentoring was structured in such a way that in each of the three cases one pre-service teacher was attached to one mentor. They were paired on the basis of subject specialisation and were teaching in the same departments. All the mentors were qualified teachers and were older than the pre-service teachers. The schools appointed heads of departments (HODs) to be mentors. In the case of Sibanda, he was also the head of school and had appointed himself to be mentor of Sheila. Sibanda considered himself to be highly qualified as he had a master's degree. He was of the view that he deserved to rise further in the education system. He boasted that:

> *With the qualifications I have, I could have even been promoted to some higher post in the ministry or teachers' colleges long back where it not for the government freeze on filling posts in the civil service.*

He has the highest qualification among all the participants in this study. He also has experience in mentoring since he has worked with student teachers before. His other school duties as head of school, HOD and Biology teacher seem to leave him with less time for mentoring. The mentee, Sheila, came to teach in the afternoons as she had other teaching duties at the nearby primary school. The head had deliberately arranged for her lessons to be in the afternoon as he would be having less administrative work in the afternoon. She has shown interest in teaching as she has previously taught for 3 years before joining the PGDE programme.

The other mentoring pair of Mrs Moyo and George was also experienced as the mentor has 23 years teaching experience while the mentee has taught for a couple of years as an unqualified teacher. Moyo was the oldest and most experienced among the research participants. Moyo was in charge of a department at a school with double sessions and this forced her to be at school the whole day supervising teachers and learners in the Commercials Department. Her philosophy of sharing stems from her belief when she says:

> *In all my years of teaching, I have come to appreciate that we all bring something to the classroom either as teachers or learners. With that in mind, I look forward to sharing knowledge with my learners, colleagues and all those I interact with in the teaching and learning process.*

As a result of her philosophy, she is ready to learn even from mentees and her subordinates. She was keen to learn more on ICTs from her mentee, George, who has a passion for ICTs from his high school days. George excels in computers and has set up a viable ICT club at the school. The ICT club was one of the most popular clubs for both teachers and learners as they would research on the internet for information. George would also advice mentor of what ICT tools the school could buy.

The last but not least mentoring pair of Mr Simango and Augustine comprised of teachers who produced good results in public examinations. Simango has mentored three distinctive students in TP in the last three years and Augustine has vowed not to break this streak of distinctive students mentored by Simango. Simango has vowed: "*To excel to stand tall"* as per his motto until the university notices his good work and reward him with a place to acquire a master's degree in education. Augustine is already considered a good teacher in the cluster but he wants to silence his critics and explained, *"I have to get a distinction in TP to silence my critics and vindicate myself. As a pair we want to maintain our good record, we have to keep on excelling."*

The mentoring pairs' backgrounds seem to show that pre-service teachers were being mentored by experienced teachers. The mentors were also supervisors as they were HODs and could be considered as line managers of the pre-service teachers. However, the combination of the mentoring and supervisory roles could be problematic for both the mentor and pre-service teachers. Pre-service teachers may find it difficult to question decisions and practices of their supervisors in the mentoring process. Supervisors may also find it difficult to criticise their mentees as they would be indirectly criticising their own work as mentors of the pre-service teachers. Armstrong (2001) argues that line managers may not efficiently perform the duties of a mentor.

4.2.5.2 Contexts

The schools in this study presented different conditions under which mentoring of pre-service teachers took place. These conditions related to the environment in which mentor teachers were paired with pre-service teachers, organisation of teaching programmes, school resources which were availed for mentoring, time for mentoring, and the monitoring of pre-service teachers. The theme which emerged from these stated conditions was **'contexts'**. For example, the pairing of the mentor and pre-service teacher provided a condition in which mentoring took place as part of the mentoring context that existed in secondary schools.

The heads of schools paired all the mentors and pre-service teachers though the school supervisory team was consulted in school C. In school A, Sibanda justified his own appointment

as the mentor, *"Besides teaching the same subject, I have the relevant mentoring experience and understand her situation better as she has other teaching duties at the nearby school."* Subject specialisation is important in mentoring as the mentee needs to be guided in subject content among others (Reese, 2016). In school B, Moyo, was of the view that her appointment as mentor was justified, *"…I have done this mentoring before…. I can now use my experience to mentor these pre-service teachers."* Previous experience may equip a mentor with some of the specialist skills required in mentoring. Simango was appointed a mentor on the basis of the previous excellent results he had produced in the past three years when he worked with pre-service teachers. He had also proved to be a good teacher by producing learners who excelled in public examinations. Good teachers are likely to be good mentors but literature shows that it is not all good teachers who may be good mentors (Feiman-Nemser, 2001; Garza and Harter, 2016). Simango seemed to be one of the few good teachers who also excelled as a mentor.

Schools supported mentoring of pre-service teachers in various ways. One way all schools in this study supported mentoring was by appointing qualified teachers to be mentors of the pre-service teachers. In addition, school A supported Sheila by allowing her to continue with her duties in the primary school and then come to teach her secondary school classes in the afternoons. Sheila said, *"I had to ask for special permission to be allowed to continue to teach in the primary school as I wanted to raise tuition fees for my teacher education programme."* However, this arrangement made Sheila to teach only ten periods per week. One could argue that this may not have given her adequate teaching practice in secondary schools during TP since she was training to be a secondary school teacher. However, for the period she was teaching she acknowledged that, *"The school also gives us teaching materials, such as charts, exercise books, teachers' guides and syllabuses."* In addition, Sheila also benefited from the interactions she had with other school-based supervisors.

In school B, George acknowledged the support that was provided by the school, *"The school has been very helpful, especially in the provision of some teaching resources and this helped me to be fully inducted into the school culture and the teaching profession."* Though George had some

teaching experience as an unqualified teacher, he needed to be inducted into the school culture when he came as a new teacher. The mentor was also involved in supporting mentoring by including mentoring issues in the school staff development programmes as she was one of the conveners. The mentor also highlighted the kind of support the school provided, "*The school support comes in the form of teaching materials and reading textbooks which we use for assisting and guiding pre-service teachers on how to scheme and plan for their classes.*" The support that was provided included aspects related to the professional growth of the mentee as he was assisted in scheming and planning (Marimo, 2014).

At the well-resourced school C, the mentor and pre-service teacher were provided with individual offices that they used for planning their lessons and conducting mentoring sessions. The school also funded teachers going for workshops and teachers had opportunities even to interact with teachers from other schools. The mentor explained the value of such workshops, *"At such workshops, we share our experiences and develop professionally. When we come back to school we implement the ideas from the workshops in our mentoring of pre-service teachers."* Interactions in which mentors exchanged ideas were likely to enrich the professional growth of both mentors and their mentees (Draves, 2013).

In all the cases, time for mentoring was limited as the mentors had other school duties as HODs. Sibanda's other administrative duties took most of his time and he said that, *"I end up delegating some of my duties including mentoring."* There were also cases when mentoring sessions were interrupted by people who wanted to see the head of school. For example, I witnessed a mentoring session that was interrupted when members of the School Development Committee (SDC) wanted to discuss school matters with the head. The mentoring session was taking place in the head of school's office on 16 October 2017. The head and mentee could not finish discussing the form 2 Agriculture lesson on fencing materials and tools. The mentoring discussion ended abruptly as the head had to attend to the SDC members. The SDC members had to see the head of school that also had teaching and mentoring duties. The head of school's multiple roles were interfering with his mentoring role. This was made worse by the fact the

mentoring pair were using the head of school's office for their mentoring sessions. It could be argued that the SDC members had gone to the right place but it is the mentoring session that was being conducted in an inappropriate place.

In school B, Moyo was literally an HOD of two schools as she supervised two 'sessions' and was busy throughout the school day. Moyo and George at times arranged to meet before and after school hours to discuss their teaching to avoid interruptions of their mentoring sessions. One such interruption of a mentoring session I observed was on 3 October 2017 when they were in a pre-lesson discussion of a form 1 Commerce lesson on telecommunication services. Although Moyo was at school the whole day her time for mentoring was limited as she had other supervisory duties that included supervision of teaching and learning for the two sessions that operated at her school. The meeting times for mentoring discussions at school C were more relaxed as they could meet even during evening study times especially when they were on departmental night study supervision duty. This was possible because school C is a boarding school; therefore, the mentoring pair had more time for mentoring and teaching. This became an alternative since they would have failed to meet during the day as the HOD would be busy with other supervisory duties in the school. Augustine observed that, *"In a number of cases, I have to approach the mentor even after school hours, for example, during study time to ask for his views on some aspects of teaching."* In short, all the mentoring pairs had to devise some strategy to cater for the limited time of mentoring as the mentors had other administrative duties which took part of their time.

Despite the constraints of time and multiple roles of mentors, the pre-service teachers' professional growth was monitored during mentoring. One way of monitoring the pre-service teachers was by checking their TP files. Sibanda said, *"I check on her TP file to see whether she is complying with the requirements of the school and university."* I also observed Sheila being assisted in the formulation of lesson objectives for a form 2 Agriculture lesson on cooperatives on 27 October 2017. She was assisted to come up with more specific and focused lesson objectives. This is a critical skill when one is learning to teach. However, it would appear that if

the mentor had more time the mentee could have been assisted in the formulation of lesson objectives at the beginning of the term. Moyo outlined how she monitored George by saying, *"My main task involves assisting the pre-service teacher with his planning, observing lessons and evaluating lesson delivery."* She also pointed out that she did this as part of her supervisory role. In the third case, Simango and Augustine would interact on a daily basis even informally or through checking of the TP file. The mentor would scribble some corrections, if there were any, on the plans as a way of guiding the pre-service teacher. A case in point was when adjustments were made to lesson objectives of a form 3 lesson on enlargements of plane figures on 9 October 2017. In all the three cases, mentors monitored the pre-service teachers as they carried out their routine duties as supervisors and mentors. However, the combining of supervisory and mentoring roles remains an issue of debate (Armstrong, 2001). It has been argued that it is problematic to combine the two roles as they focus on different aspects in the professional development of a pre-service teacher. In supervision, one wants to make certain that teaching is done correctly whilst in mentoring the mentor is there to offer support and advice on the mentee he or she is in charge of.

The way teaching was organised in the schools meant there were different conditions in which mentoring was conducted. However, the common aim was to assist and guide the professional growth of the pre-service teachers. As a result, boarding school C has more time and resources for the mentoring pair to interact. This was unlike in school B that operated with double sessions and classes were literally sharing the learning time and learning facilities. In the last case, school A, a single session school, with single stream classes that was not well resourced, saw mentoring sessions being conducted in the head of school's office. As a result, there were a number of interruptions of mentoring sessions as other stakeholders sought the services of the head of school. Therefore, the differences in the pairing of mentors and pre-service teachers, school resources that were availed for mentoring, organisation of teaching programmes, time for mentoring, and the monitoring of pre-service teachers epitomise the differences in mentoring contexts in secondary schools.

4.2.5.3 Mentoring practices

Mentoring practices are aimed at enhancing the professional development of the pre-service and mentor teachers as they interact and reflect on teaching and learning activities. The practices refer to how a teacher behaves and acts in the classroom as he or she provides opportunities for the pre-service teacher to learn how to teach in the context of the school's socially constructed beliefs, values, traditions and goals (Ramnarian, 2015). The mentor's action in the process of teaching his or her class and the pre-service teacher that enriches the teaching competences of the pre-service teacher is considered part of the mentoring practices. This section examines what the mentor did as he or she facilitated the learning of the learners or pre-service teacher that culminated in the professional growth of the pre-service teacher. A selection of these critical moments is used to explain the mentoring practices in the three cases that are in this study.

The way learning and teaching was organised and the school culture determined how mentor teachers interacted and guided pre-service teachers. The data from the observations of mentoring sessions, interviews and document analysis gave rise to the emergence of the theme **'mentoring practices'**. The theme explores how mentors supported, guided and advised pre-service teachers during teaching practice. The focus will be on the mentors' classroom practices that enhanced the teaching capabilities of the pre-service teachers. Examples from the teaching contexts in the schools, organisation of teaching programmes, support for mentoring, interactions with mentors and colleagues, and reflections on mentoring are used to illustrate some of the mentoring practices that were evident in the cases.

Two of the three schools were day schools and one was a boarding school. Mentors had their own classes to teach and two of the pre-service teachers had a normal teaching load though they were attached to a mentor. The other pre-service teacher, Sheila, had a special arrangement as she had other teaching duties. She explained her case, *"I had to ask for special permission to be allowed to continue to teach in the primary school as I wanted to raise tuition fees for my teacher education programme."* This was a special arranged as pre-service teachers are expected to be full time in schools during teaching practice (Teaching Practice Guide, 2017).

All the mentors were HODs and combined supervisory, mentoring and teaching duties. The mentors had to mentor the pre-service teachers at a time they had no class to teach. The mentors had to schedule mentoring sessions when they were not teaching and this meant during their 'free' time. However, it was during their 'free' time when mentors attended to their other administrative duties. Among the three cases, Sibanda had more duties compared to the other mentors since in addition to being an HOD he was also the head of the school. Sibanda had to schedule Sheila's lessons in the afternoons as he observed that, *"As her mentor, I am also freer in the afternoon as there will be less administrative tasks."* However, even some of the afternoon mentoring sessions were interrupted as was the case on 2 October 2017 during a pre-lesson discussion and on 16 October 2017 during a pre-lesson discussion on a form 2 Agriculture lesson on fencing materials and tools held in the head of school's office. Among some of the fruitful mentoring sessions were those on 18 October 2017 focusing on nutrition lesson and on 27 October 2017 in which Sheila was guided on the formulation of lesson objectives for agricultural cooperatives for a form 2 class. She was assisted in the use of the outdoor method in teaching nutrition and coming up with specific lesson objectives. This could have enriched Sheila's knowledge on these aspects in teaching as part of her professional growth (Douglas, 2012).

George noted that they ended up having most of their mentoring discussions before and after school lessons. I observed that these mentoring sessions were informal and it was the pre-service teacher who initiated the discussions as he would be seeking guidance on how he could handle specific teaching tasks. One of the mentoring sessions in which the George initiated the mentoring discussion was on a form 3 lesson on Business Communication on 11 October 2017 in the HOD's office during their free period. George needed guidance of the type of homework to be assigned to learners on formal business communication and how ability grouping could be used in assigning learners tasks as they researched on formal business communication.

The way the teaching and learning were organised at the boarding school allowed Simango and Augustine more time for mentoring though the mentor also had other school administrative duties as an HOD. The other difference with the other mentoring pairs was that this pair was

together for a longer period of time to the extent of having some of their mentoring discussions during the evening when they were supervising learners' night studies. Augustine explained some of their mentoring routines, *"On some days I have to consult my mentor before the start of the day's lessons as he may be busy throughout the day. The other advantage is that he checks my TP file daily."* Augustine saw the checking of his TP file on a daily basis as an advantage as he would be corrected if there were any aspects to be corrected. For example, Simango made some adjustments on the topic and objectives of Augustine's form 3 lesson plan on transformations on 9 October 2017 (as was discussed above in section 4.2.4). The lesson topic was rephrased for it to be more specific. The objectives needed to have a broader scope to include all plane shapes and not just dwell on enlargement of triangles only. Such mentoring sessions were directed at enhancing the syllabus content analysis and interpretation skills of the pre-service teacher.

All the schools supported mentoring of pre-service teachers though the levels of support differed. School A was not well resourced and could not afford to provide some of the specialist equipment Sheila and Sibanda needed in their classes. Sibanda explained the need to improvise as the school could not provide all the real teaching materials:

> *We end up depending on the pre-service teachers' creativity as we expect them to improvise so that learning takes place even in the absence of the real materials.*

It was important for the mentor to highlight that pre-service teacher needed to improvise as their school had no capacity to provide some of the teaching materials. Improvisation becomes critical as the pre-service teacher builds her repertoire of teaching skills. However, Sibanda was able to assist Sheila on other teaching aspects that did not require materials, such as lesson planning as was acknowledged by the pre-service teacher:

> *The mentor assists with some of the lesson planning, especially the formulation of lesson topics and objectives. At first I had problems in these aspects but I have since improved because of his guidance as he is also a Biology specialist.*

Lesson planning is a key skill in teaching and it was important that Sheila be equipped with such a skill in a real classroom situation during her teaching practice. Though these skills are introduced in pre-service teachers' methods course at university but the lack of practical application is likely to be evident when they are in schools (Zeichner, 2010).

School B was bigger and better resourced compared to school A. George was exposed to more resources and supervision styles as he interacted with more teachers compared to Sheila. George remarked that school-based supervisors had made him to change how he taught and viewed his own teaching when he said:

> *My school-based supervisors are the headmaster, deputy head, senior teacher, the senior woman, head of department and mentor…….As a result of these written reports, I now have better understanding of schemes, lesson plans and record books. I read and re-read these reports and analysed their comments to get a deeper understanding of what they wanted me to do.*

However, I observed that some members of staff seemed not to be very keen on writing supervision reports but seemed to rely on oral reports for their lesson observations. The value of written reports was highlighted when George said that, "*The advantage of written reports is that I can refer to them from time to time and try to implement whatever suggestions will have been suggested. Other supervisors can also use them to gauge my growth in the profession."* The value of written feedback as a basis for reflection and subsequent supervision reports cannot be over emphasised (Hudson *et al*., 2009).

School C was the most resourced among the schools and the pre-service teacher made more use of ICT tools in his lessons, such as overhead projectors, computers, whiteboards and videos. The pre-service teacher at this school was presented with more opportunities to make use of a variety of instructional media including ICT gadgets. Augustine suggested that more ICTs could be used:

> *Mentoring should take advantage of the modern information technology so that there is constant interaction among the lecturers, mentors and pre-service teachers. Such an interactive platform would provide an innovative way of improving mentoring contexts in schools. All these stakeholders would even be able to share their experiences using various ICT platforms since most of us have smartphones.*

Use of ICTs at school C presented Augustine with opportunities to try some teaching strategies he had learnt at university. However, he was of the view that more could be done in mentoring to embrace ICTs. Perhaps the issue to be debated is how such opportunities could be availed to more or all pre-service teachers during school-based mentorship so that they will be able to teach effectively in any school in future.

In addition, Augustine benefited professionally from the practice of discussing supervision reports with his mentor. The mentoring pair discussed a supervision report compiled on 3 October 2017 based on a form 3 Mathematics lesson on continuous graphs and TP documents. The report is pictured in figure 4.3 and presented in section 4.2.4. The discussion of this report helped the mentoring pair to collectively reflect on the lesson and comments given by the supervisor. Such discussions seem to be an indicator of a good mentoring practice as the pre-service teacher will likely be assisted to deliver better lessons and TP documents in future as he implements the suggested comments from the discussion. However, discussions of such supervision reports may be more meaningful if the supervisor is present to explain some of the comments, such as *"You need to involve the learners."* This comment is not very clear on when the learners are to be involved and at which stage of the lesson. The comment could be referring to involving the learners throughout the lesson. If the supervisor had not explained this comment as part of his oral feedback comments on the lesson the mentoring pair may not be able to do justice to the suggestion in their discussion. Hudson *et al*. (2009) argue for the oral comments to complement the written comments when giving feedback in mentoring as one kind of comments may fail to give a more holistic picture of the observation.

In all the cases, the mentors were eager and willing to assist the pre-service teachers. As expected and as discussed above, mentoring pairs faced different challenges. The challenges included non-availability of some teaching resources, lack of time for mentoring and offices to use during mentoring sessions. On a comparative basis, the schools faced the challenges not on the same scale and these in turn presented different conditions under which pre-service teachers were guided to learn to teach in the different schools. As expected the well-resourced school had less challenges than the other schools. As a result, the mentoring pair in school C had more time for mentoring and their mentoring sessions were conducted in teachers' offices were without interruptions. This was unlike in school A, where mentoring sessions held in the headmaster's office were brief as they would be interrupted by visitors to the office. In school B, the mentoring pair met during their 'free periods' and formally before and after lessons, as the mentor was busy with her supervisory role of two sessions which took most of her time. Thus, these different conditions that exist in the schools represent the different contexts under which mentoring took place in the schools and these dictated how mentoring was carried out. The contexts seem to have an effect on teacher's actions and behaviours in the process of teaching his or her class and the pre-service teacher that ensures professional growth of the pre-service teacher and at times the mentor. Therefore, the contexts in the schools seem to have shaped the mentoring practices.

4.2.5.4 Pre-service teachers' classroom practices

Classroom practices are the instructional processes that take place in the classroom as part of the teaching and learning activities facilitated by the teacher's classroom management strategies as the learners acquire new knowledge, skills, values and attitudes (Li and Oliverira, 2015). The learning takes place in the context of existing conditions to cater for diverse learning needs of all learners by ensuring that the instructional practices among others focuses on individualisation, team-work and reliable assessment. However, instructional processes may be affected by some factors which are situated either within or outside the classroom. One of the factors could be the mentoring process. Pre-service teachers' classroom practices are guided by the mentor as the mentor assists the mentee to learn how to teach.

Mentoring focused on enhancing the professional growth of pre-service teachers. Whenever the mentor carried out his or her mentoring tasks, interacted with colleagues, and encouraged pre-service teachers to reflect on their classroom practices, the aim was to refine the teaching skills of pre-service teachers as evidenced by their classroom practices. All the mentors assisted the pre-service teachers to improve their classroom practices in different ways. The mentoring tasks in which the mentors were seen engaged in, interactions with colleagues, monitoring of pre-service teachers, reflections on practice focused on improving pre-service teachers' classroom practices. The theme which emerged from these was **'pre-service teachers' classroom practices'**. This section uses pre-service teachers' classroom practices from the cases in this study to explain how mentoring contexts and practices shape classroom practices of pre-service teachers.

Schools in this study supported pre-service teachers' classroom practices in various ways. In school A, Sheila explained how she was supported in her classroom practices:

> *When I teach the mentor observes some of the lessons and I have been assisted on how to make use of learning media and small groups during teaching. The mentor also provided a lot of guidance on the assessment of students using exercises and tests. In the beginning, I was not quite sure of how practicals were to be used to assess students' learning as I was poor on time and class management.*

The school provided a supportive environment that saw the pre-service teacher improving on her instructional skills through the guidance provided by the mentor. The arrangement that existed in the school of assigning a particular person to guide the pre-service teacher and then the mentoring pair making arrangements to observe and discuss the lessons in an effort to improve Sheila's classroom practices is a sign of support. In school B, George also reported that he made use of his mentor's comments to improve on his classroom practices: "*I am now able to formulate measurable and specific objectives. Even the lesson development stages are now much detailed and reflecting content in the content column of lesson plans.*" With a supportive mentor

and school, a pre-service teacher could change his classroom practices. George is now able to realise that his content analysis and breakdown in lesson plans was faulty.

In school C, a typical example of a supportive mentor is used to illustrate when Augustine was helped to improve on instructional processes as the lesson objectives of a form 3 Mathematics lesson on enlargements of plane shapes on 9 October 2017 were rephrased were as follows:

> *By the end of the lesson the learners should be able to:*
>
> *a) enlarge plane shapes about by a given scale factor;*
>
> *b) use geometrical instruments to enlarge given plane shapes;*
>
> *c) describe fully an enlargement of given plane shapes*

The mentor had the time and facilities to go through these objectives with the pre-service teacher. When teaching this lesson the instructional processes mandate Augustine to deliver a more focused lesson with specific learning outcomes. This mentoring practice seems to have direct influences on the classroom practices as regards this and similar lessons in future.

On lesson observations in case 1, Sheila was applauded for her "*use of a variety of learner centred methodologies which made learners to actively participate throughout the whole lesson using effective instructional media*". This report was based on a lesson presented on 20 September 2017 and the report was discussed in detail in section 4.2.2. The mentor's comments on the lesson delivery were as follows:

> *The teacher's introduction was motivating and academically appetising. A variety of teaching methods were used by the teacher which were pupil-centred and catered for individual learning styles. A lot of teacher-learner and learner-learner participation was observed. The teacher concluded the lesson by asking questions to summarise the lesson.*

This report captures the indicators of the classroom practices as witnessed by the mentor when he observed the lesson. The classroom practices were likely to influence mentoring practices as

the mentor could make reference to what he had observed in this particular lesson when commenting on another lesson or when assisting in the planning of other lessons. However, these observations may not necessarily be applicable in all lessons as other factors, such as ability of the class and availability of resources came into play when planning and teaching a lesson for a different class. Still on lesson observations, George explained how he used observation reports to improve on his classroom practices:

> *I read and re-read these reports and analysed their comments to get a deeper understanding of what they wanted me to do. At first I did not understand how schemes, plans and records were linked in the teaching and learning process. I now critically look at my teaching and how I can improve it using these documents.*

The comments seem to have impacted on his classroom practice as he examines his own teaching and attempts to improve the way he has been teaching. The fact that George confesses that at first he was lost in the way he developed his teaching documents alludes to the fact that mentoring assisted his professional growth. In short, the mentoring advice and practice seem to have influenced his classroom practices.

In case 3, the mentoring pair had an opportunity to discuss a supervision report on a form 3 Mathematics lesson on 'continuous graphs'. The report is pictured in figure 4.3 and was also discussed in section 4.2.4.The mentor highlighted the impact of records on classroom practices:

> *Records show whether you are monitoring your pupils' learning and these must always be up to date. You should have entries in all records and re-organise the social record for it to have provision for updating entries in the event of changes. Marks in the progress can be analysed for use in evaluating pupil performance in the recorded tests*

The mentoring pair's discussion was based on observations made by a supervisor who had supervised Augustine in his line of duty as a school-based supervisor (Armstrong, 2001). This

report was used to mentor Augustine. A mentoring context had been provided for the mentoring pair by the availability of this supervision report whose content included aspects of classroom practices that needed to be fixed by the pre-service teacher. Thus, the pre-service teacher's classroom practices provided the fulcrum of the mentoring process that implicitly included the mentoring context and practice.

Classroom practices were also evident in the cases when participants reflected on their teaching experiences. Sheila, a participant in case 1, reflected that:

> *I have used comments from my mentor to improve my teaching and I can say my teaching has improved in areas, such as chalkboard work, questioning skills, class and classroom management, use of teaching aids and assigning of written and learning tasks according to ability.*

This illustrates that comments from mentoring can be used to improve on teacher actions in the classroom. Use of the chalkboard is a basic teaching skill but without proper guidance, its use could be problematic especially for a pre-service teacher. Questioning skills need special techniques for them to be effective in a classroom situation. Class management provides an environment that is conducive for learning. Use of teaching aids has to be planned especially in cases of large classes of mixed ability. Classroom practices involving these aspects could determine the success or failure of a lesson. In the case of Sheila, she reflects that her classroom practices involving these aspects improved her teaching. What was done by the mentor had improved her classroom practices involving chalkboard work, questioning skills, class and classroom management, use of teaching aids and assigning of written and learning tasks according to ability. Hence, mentoring practice shaped classroom practices.

Moyo, a mentor, reflected on how she had found the teaching methods she observed George using to be useful such that she had gone on to use these in her classes. She said in practical terms she had learned from George to mentor:

> *By observing George's lessons, I have always learned something new, especially on the aspects of the interactive methodologies he uses in his lessons. He also seems to be quite comfortable with the use of some of the ICT tools, such as the computer, projectors and other electronic gadgets.*

Moyo had used methods learned from George to teach her own classes. Furthermore, using her experiences from using these teaching methods she has been able to mentor George. Hudson *et al*. (2013) have highlighted the notion of reciprocity in mentoring. Moyo could not be mentoring George on the methods per se but could be advising him on their applicability in different scenarios of dealing with other related content. Consequently, George's initial classroom practices were used by the mentor to influence her own way of teaching that would ultimately be used to shape George's classroom practices as a result of the mentoring process.

Using evidence from case 3, my last example on the influences of classroom practices is on the reflections made by Augustine in an interview question. He remembered what he had done differently as a result of mentoring:

> *My scheming and lesson planning has drastically changed in terms of how I break down the topics into teachable units per lesson and the way I formulate specific objectives for all my lessons. I now fully understand the logic behind the lesson stages and this has greatly improved how I deliver lessons and assess learners' learning.*

Augustine explained what he had done differently after discussing with his mentor. It would appear what he had done differently in terms of documentation, lesson delivery and learner assessment affected his classroom practices positively. Augustine's views seem to be corroborated by the comments in the supervision report pictured in figure 4.3 when he was supervised teaching. Comments such as *"clearly stated objectives that show the intentions of the lesson"* show that the instructional processes of the lesson are well articulated. This could be considered a good indicator of the classroom practices resulting from the mentoring practices.

However, the opportunities that may have been provided for the compilation of such reports may signify the existence of a conducive mentoring environment. Thus, a favourable mentoring context may have provided opportunities for mentoring practice that shaped Augustine's classroom practices.

This section provided the main theme of this study and used existing examples from the cases of this study to explain how mentoring contexts and practices shape pre-service teachers' classroom practices. In addition, the discussion, using examples from the study, has also gone on to show that pre-service teachers' classroom practices can also influence mentoring contexts and practices. The discussions lead to the emergence of the theme '*improvements in mentoring of pre-service teachers'* and this is presented in the next section.

4.2.5.5 Improvements in mentoring of pre-service teachers

In the process of conducting this study, findings indicated that school-based mentoring of pre-service teachers could be improved. Participants' views and practices gave rise to the emergence of a theme, namely, '***improvements in mentoring of pre-service teachers'***. The suggestions that could be used to improve mentoring of pre-service teachers include what I experienced during the course of this study. Improvements in mentoring of pre-service teachers are on the basis of the themes discussed in this study

In all the three cases, mentors were heads of departments. In one case, Sibanda was the school head in addition to being a head of department and mentor. He had many school responsibilities and ended up delegating some of his duties including mentoring. It would appear he had realised that he had burdened himself with all these duties when he said:

> *As the head of school, head of department and mentor, I feel over burdened with the duties at times. The administrative duties take most of my time and I end up delegating some of my duties, including mentoring. However, I am aware that it is not the best of arrangements but this is the reality. These are some of the challenges we face as mentors on the ground.*

In a case like this, it is the mentoring role that is likely to be neglected as it is considered secondary (Yuan, 2016). Delegation of the mentoring role may not be one of the best solutions.

In the second case, Moyo, as HOD of a school with two 'sessions' was busy throughout the day with departmental duties. Then in the last case, Simango, also an HOD, ended up having some of the mentoring sessions during the evening study time as he would be busy during the day. However, this type of an arrangement could not be applied in the other two non-boarding schools.

All the mentors were selected by the school administration but the practices seemed to suggest the selection of mentors needed to be improved. The school administrators considered teaching experience, subject expertise and seniority. However, the selection of mentors may need more consultation among members so that members are involved in the decision-making. It may be one way of clarifying the present obscure mentor selection criteria.

Although the mentors were well positioned to mentor pre-service teachers as they provided a more direct link between the mentee and the school administration, they seemed to be overwhelmed with other school duties to have adequate time for mentoring pre-service teachers attached to them. In addition, the supervisory and mentoring roles seem to have conflicting interests in the professional development of pre-service teachers (Armstrong, 2001). The mentoring practices of the HODs seemed to suggest that other experienced teachers with the same subject specialisation as the pre-service teacher could have had more time to support, guide and advise pre-service teachers during mentoring.

Even though participants felt that they benefited from mentoring, they were of the view that more could be done to motivate mentors. Mentors felt that they were contributing to teacher development and their efforts needed to be recognised especially by the university. Simango suggested that the university could consider assisting successful mentors to further their studies. The mentors could be offered places to attain higher qualifications in education in appreciation of what mentors would have done in mentoring pre-service teachers during TP. Besides

motivating the mentors, such an initiative would also empower mentors with more knowledge and skills in mentoring. At school level, not much was done to motivate the mentors who struggled with a normal teaching load which, coupled with the other administrative duties, gave them less time to mentor pre-service teachers attached to them. Mentors seemed to have realised that the issue of monetary benefits was not practical in their situation and instead came up with suggestions for non-monetary benefits for mentoring such as certificates of recognition. In addition, the pre-service teachers may need to be exposed to different schools during TP so that they would be more prepared to teach at any type of school when they graduate.

The other major suggestion to improve mentorship was to capacitate mentors and pre-service teachers through mentor training workshops ((Everston and Smithey, 2010, Samkange, 2015; Marimo, 2014). There was a suggestion from participants that the university needed to be more actively involved in training of mentors, especially with the view of making the university expectations during TP, to be more explicit and visible to all stakeholders. The university, according to the participants, needed to take mentor training workshops to the schools and the lecturers and mentors needed to be actively involved in the teacher education programmes which took place in schools (Zeichner, 2010). Mentors wanted to be more involved and the university to take responsibility for their capacitation for mentorship. They suggested that since the updated school curriculum had new demands, such as the use of ICTs in the teaching and learning process, mentors needed to upgrade their ICT skills to effectively mentor pre-service teachers. The suggestion was based on the observation that some of the pre-service teachers seemed to be more conversant with the use of ICTs in their teaching compared to their mentors. Some of the mentors, like Moyo, acknowledged that mentors were learning from the pre-service teachers in the use of ICT tools in teaching (Hudson *et al*., 2013). Further, there was also the suggestion that more ICTs could be used in mentoring to the extent of sending TP documents to mentors through electronic mail and video recording lessons for further analysis by mentoring pairs. In addition, participants wanted mentors to make more use of the social media platforms in their interactions with pre-service teachers. Mentors' ICT skills needed to be enhanced to a level higher than those

of pre-service teachers and the university could partner schools to capacitate teachers in schools in the use of ICT in teaching and mentoring.

4.2.5.2 Summary of emergent themes

The data analysis process resulted in the emergence of the main themes and selected sub-themes from the categories. The main themes are contexts, mentoring practices, pre-service teachers' classroom practices and improvements in mentoring of pre-service teachers. The themes which emerged from the data when reconstructed enhance deep understanding of school-based mentoring of pre-service teachers. Suggestions for improvement are in relation to school-based mentoring of pre-service teachers in the studied cases at the time of this study. The emergent themes are shown in figure 4.6 below.

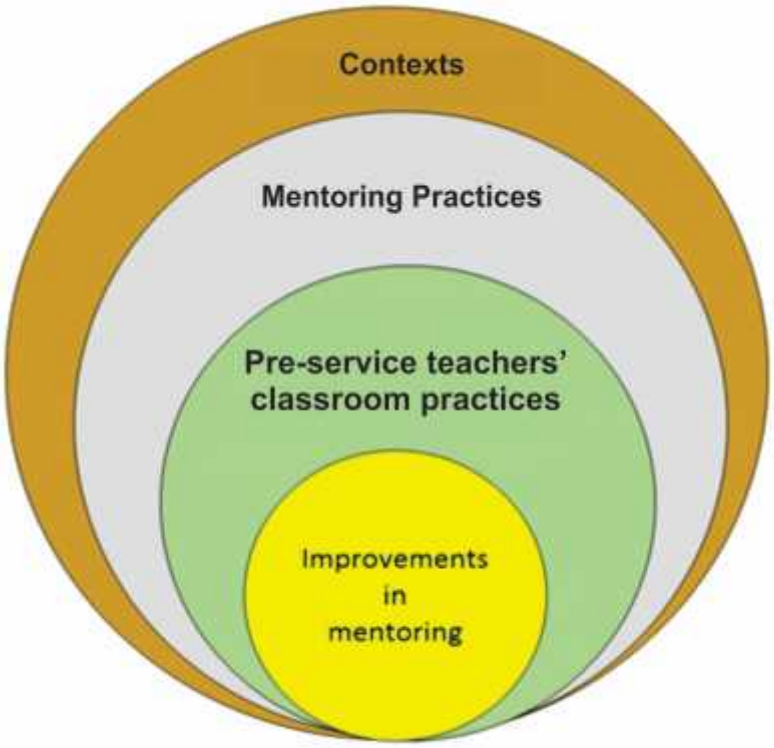


Figure 4.6: Emergent Themes

The figure 4.6 shows the universality of the mentoring contexts and the centrality of improvements in mentoring as one aims to deepen understanding of how school-based mentoring of pre-service teachers is practiced in various school contexts of Zimbabwe and with what consequences for the classroom practices of the pre-service teachers.

4.3 CHAPTER SUMMARY

This chapter presented findings of a multi-case study. The purpose of the study was to deepen understanding of how school-based mentoring of pre-service teachers is practiced in various school contexts of Zimbabwe and with what consequences for the classroom practices of the pre-service teachers. Initially the studied cases were five and then they were reduced to three to allow for a deeper understanding of the conditions in which pre-service teachers learn to teach under the guidance of a qualified teacher in different secondary schools. The reduction in the number of cases ensured that there was no unnecessary repetition in case findings and this was done after noticing saturation of data between cases (Creswell, 2012). The unit of analysis in each of the studied cases was the mentoring pair. The findings on the mentoring contexts and practices were presented and analysed on the basis of the stories of the three case studies. The interpretative commentaries were part of the with-in case analysis and explained the contexts and practices of school-based mentoring of pre-service teachers. Four themes and selected sub-themes emerged from the cross-case analysis and appeared to suggest that the schools provided different contexts which influenced mentoring practices which shaped pre-service teachers' classroom practices in various ways. However, the schools which operated differently with diverse resources provided varied opportunities for pre-service teachers as they learned to teach under mentor teachers who had been assigned the role of teacher educators.

The next chapter will discuss a comprehensive interpretation of the findings in the context of extant literature and Vygotsky's socio-cultural theory. The chapter will also include a summary and conclusion with implications and recommendations for practice and for further research.

CHAPTER 5

DISCUSSION OF FINDINGS AND CONCLUSIONS

5.1 INTRODUCTION

This qualitative multi-case study is aimed at deepening understanding of how school-based mentoring of pre-service teachers is practiced in various school contexts of Zimbabwe and with what consequences for the classroom practices of the pre-service teachers. The aim is compatible with a multi-case design as school-based mentoring takes place in different school contexts under the guidance of mentor teachers, who also bring diverse experiences and practices to the relationship. As a result, data on school-based mentoring were gathered from multiple sources to enable a broader exploration of the contexts and practices of school-based mentoring of pre-service teachers. I carried this study in natural settings of secondary schools. The specific research sites were five secondary schools. However, ultimately only three cases were used for the thesis to avoid unnecessary repetition of the emerging themes. As part of its objectives, the study sought to provide a deeper understanding of how school teachers, who are not trained as teacher educators but are expected to mentor pre-service teachers, cope with the task. In addition, the study wished to contribute insights on how different mentoring contexts shaped mentoring practices. Finally, the study uses evidence from the case studies to explain how mentoring contexts and practices shape pre-service teachers' classroom practices and concludes with suggestions on how to improve the school-based mentoring of pre-service teachers in Zimbabwe.

5.2 MAIN FINDINGS

The main findings of this study are presented in relation to the emerging themes of this study, namely, contexts, mentoring practices, and pre-service teachers' classroom practices. The findings on contexts of mentoring will be presented under various sub-themes that include assignment of mentors, time for mentoring, resources for teaching and mentoring, and mentor support. Mentoring practices will also be discussed under sub-themes that include teaching and

mentoring duties, school support for mentoring and school-based supervision. In addition, the discussion on pre-service teachers' classroom practices will be on the basis of sub-themes such as mentoring tasks, interaction with colleagues and reflections on classroom practices.

As regards mentoring contexts in schools, all the participants are of the view that schools supported the mentoring of pre-service teachers by assigning experienced teachers as mentors and providing pre-service teachers with teaching resources. However, as expected, the mentors' other school duties limit the time they have for mentoring pre-service teachers. Concerning mentoring practices, the participants express the view that existing school practices, cultures and available resources help to improve opportunities offered to those learning to teach under the guidance of mentor teachers. Regarding pre-service teachers' classroom practices, the observation of mentoring sessions and the other data collection methods show that the practitioners reflect on their teaching practices as they teach their learners. Suggestions on improving mentoring of pre-service teachers during Teaching Practice are that there could be need for workshops to capacitate mentors and pre-service teachers on university expectations. The study also observes that mentoring seem to provide opportunities for practicing teachers to be kept abreast of changes taking place in teacher education as they interact with pre-service teachers and university lecturers. In addition, I also observe that mentoring probably provides some form of in-service education to classroom practitioners as they interact and observe pre-service teachers as they enact emerging teaching technologies and other class management techniques. Furthermore, some participants suggest that the university could partner schools in mounting training workshops to equip mentors with the necessary mentoring skills as mentoring is considered to be more demanding than teaching. Additionally, some of the pre-service teachers are of the view that mentor teachers need more training in the use of ICT tools to be able to effectively assist, advise and support pre-service teachers during Teaching Practice.

Using the Vygotskian lens that frame this study, the mentor teachers as the more knowledgeable other (MKO) are expected to have better teaching skills and content to take the pre-service teacher to a higher level as they learn how to teach (Fani and Ghaemi, 2011). After stating these

findings I found it prudent to give meaning to the findings in the context of my literature review and theoretical framework in the next sections.

5.3 INTERPRETATION OF FINDINGS

The last level in the presentation of the findings of this multi-case study which is part of this chapter involves the discussion of findings in the context of extant literature and the Vygotskian perspective which frames this study. The Vygotskian socio-cultural theory with its main tenets of mental development based on social interaction, the use of the more knowledgeable other (MKO), and the zone of proximal development (ZPD) was used to interpret the contexts and practices of school-based mentoring of pre-service teachers (Shooshtari and Mir, 2014). Using the emerging themes related to the research questions of this study, the interpretation of the findings is presented first. The main research question which was unpacked using sub-questions was interpreted on the basis of the main findings of these sub-questions in the context of the literature review and the Vygotskian perspective which frames this study.

5.3.1 Mentoring contexts

The first related research sub-question was, "*What are the differences in mentoring contexts in secondary schools?*" The main finding for this related research sub-question was that different conditions which existed in the different schools offered different opportunities for pre-service teachers to learn how to teach under the guidance of qualified teachers. The differences in the conditions led to the emergence of the theme 'contexts' with the sub-themes of (a) the mentor and pre-service teacher pairings, (b) time for mentoring, (c) school environment and resources, and (d) mentoring support. The differences in mentoring contexts are discussed under each of the stated sub-themes.

(a) The mentor and pre-service teacher pairings

The mentoring pairing was done by heads of schools and all the appointed mentors were heads of departments who were experienced teachers. In practice, the heads of schools seem to expect the head of departments to combine their subject supervisory and pre-service teacher mentoring

duties. As a result, mentors were expected to perform a number of duties which included teaching, mentoring and supervision. As might be expected, this arrangement resulted in mentors having limited time within which to carry out the mentoring duties against the other duties. This finding is consistent with previous research on the time constraints for mentoring support by teachers (Jaspers *et al*., 2014). However, Ambrosetti (2014) points out that when a mentor performs other duties besides teaching, the role that becomes primary role is that of teaching and the other duties (including mentoring) become secondary. When a mentor performs the mentoring role, it is often considered as an aside and the mentor first and foremost makes sure that his or her learners are learning. This probably begins to explain why the mentors in this study had limited time to focus on mentoring as they needed to attend to their classes and could only discuss with the pre-service teachers during their 'free periods' when they were not teaching. In addition to having a full teaching load, the mentors in this study were also heads of departments (HODs), a role that also took a chunk of their time. For instance, as HODs the mentors also needed to supervise teaching and learning in their departments. In the case of Sibanda, the situation was made worse by the fact that he was also the head of school, in addition to being an HOD, a mentor and a subject teacher. This highlights a picture of someone who was overloaded with so many other school responsibilities besides the mentoring he was asked to do. In the second case of Moyo, she was an HOD and a subject teacher in a school with double sessions. As a result, she had to be present at the school the whole day, supervising teaching and learning in her department. Whenever, the supervision and mentoring roles competed for attention, the mentoring role was considered secondary. The mentor would attend to learners and departmental issues before attending to needs of the pre-service teacher. In the third case of Simango, he was also an HOD and a subject teacher in a boarding school of about 850 learners. He had to also attend to departmental issues and mentoring tasks. His supervisory duties at times involved supervision of learners' night study. The mentoring duties were lowly ranked in terms of importance and urgency. The pairing of a pre-service teacher and a mentor who had other school responsibilities seems to have limited the exposure of the pre-service teacher to his or her mentor an opportunity to learn how to teach due to limited time for interaction. The conditions

for mentoring in the schools seemed to have presented limited opportunities for the pre-service teacher to be mentored as the mentor had to attend to other school duties. However, the appointment of a head of department as mentor resonates with the Vygotskian perspective that advances the notion that for learning to take place there has to be a more knowledge other (MKO) who has to take the pre-service to the next level in the zone of proximal development (ZPD) (Bekiryazici, 2015). The ZDP represented the new teaching skills that were to be acquired by the pre-service teacher. The HOD as an experienced member of the department was in a position to advise and guide the pre-service teacher as he or she learned to teach. In principle, the MKO has the necessary experience and subject expertise to mentor the pre-service teacher. However, the MKO's personal characteristics need to be compatible with those of the pre-service teachers in order to have a healthy mentoring relationship.

In the case studies the pairings by heads of schools seemed not to have considered the compatibility of personal characteristics of the pair as suggested in literature (Son and Kim, 2012; Wang and Odell, 2007). Mentoring is about relationships but it would appear the heads of schools did not consider this important aspect when they paired the mentor and the pre-service teacher. A good mentoring relationship was likely to result in less tension and conflict during the mentoring process (Draves, 2013). This observation is explained by some researchers (Yuan, 2016; Izadinia, 2015) who argue that there were fewer chances of conflict and tension when the mentoring pair are on talking terms and have a similar philosophy of education. The mentor and pre-service teacher are free to share ideas on how the lessons are to be conducted and the dominant means of facilitating learning during the course of the lesson. In this study, though the personal characteristics of the mentors and mentees do not seem to have been considered when the heads paired the mentor and the pre-service teacher, all mentoring pairs had a healthy mentoring relationship. There could be possible reasons why this finding seems to be contrary to previous research (Kerin and Murphy, 2015; Izadinia, 2015**).** Firstly, the reason could be that the pre-service teachers were in their final semester of the programme. They could have matured as learners and would not have liked to be seen as argumentative as this could jeopardise their chances of successfully completing the programme. Secondly, the power relations in a mentoring

pair seem to suggest that there is nothing to be gained in engaging in opposing views during mentorship as the mentor has more power and authority. The mentor was likely to be at an advantage and the resolution of possible conflicts would be likely in the mentor's favour. Thirdly, all the mentors were older than the pre-service teachers, as shown in the previous chapter, and in their culture one cannot openly dispute an elder's views.

The pairing of pre-service teachers and their head of departments also ensured that pre-service teachers were mentored by their subject specialists. It would appear the heads of schools were aware of the importance of subject expertise in the mentoring of pre-service teachers. For example, Sibanda made reference to this aspect when he justified his own selection as a mentor when he said

> *The pairing was on the basis of subject expertise. I am the only other Biology teacher in the school, so being the head I considered it logical that I become her mentor. I am in a position to assist the student teacher (mentee) in a number of aspects including subject content and subject specific teaching methods which she would not have got from my colleagues in other subject areas.*

School A was a small school with single stream classes, so Sibanda also had limited choices since he was the only Biology teacher in the school. In the case of Moyo, her head of school also considered her mentoring experience, in addition to being a subject specialist, since she had worked with other pre-service teachers before. Moyo defended the head of school's choice of her mentorship:

> *We teach in the same department and the head has been consistent as he always appoints me a mentor whenever we have student teachers in our department. He reckons I have done this mentoring before and maybe he thinks I can now use my experience to mentor these pre-service teachers.*

The choice of Moyo as a mentor seems to be well justified. In the last case of Simango, his appointment was on the basis subject expertise and having mentored distinctive pre-service teachers in the last three years. The school supervisory committee had concurred with the head of school's choice when it was consulted. All the schools had considered subject expertise and experience in the appointment of mentor teachers.

This resonates well with findings in other research studies (Kerin and Murphy, 2015; Chien, 2015). The importance of knowledge of subject matter and pedagogical content knowledge has been widely acknowledged to be critical in mentoring and supervision (Reese, 2016; Kerin and Murphy, 2015). Kerin and Murphy (2015) observe that the mentor is there to enhance the professional development of the pre-service teacher in four main aspects. These four aspects are subject knowledge, pedagogical knowledge, pedagogical content knowledge and curricular knowledge. The heads of schools by picking heads of departments as mentors seemed to have catered for this critical consideration in mentorship. In a school the HOD could be regarded as the subject specialist who has the ability and capacity to mentor the pre-service teacher in these aspects. However, the hierarchical nature of the mentor pairing could be a challenge because the mentor, as an HOD, also had a supervisory role. The combining of supervisory and mentoring roles could be problematic as the two roles have different focuses in the pre-service teachers' professional development (Armstrong, 2001). Supervision is mainly about monitoring to ensure that teaching is done correctly whilst mentoring focuses on nurturing and supporting the trainee as he or she grows in the profession. Furthermore, it could become difficult for the pre-service teacher to question his or her superior's decisions and suggestions in the teaching and learning process. Consequently, this could stifle the professional growth of both the pre-service teacher and mentor.

(b) Time for mentoring

Unsurprisingly, time for mentoring was limited as mentors had other school duties which included supervision of teaching in their departments and teaching their own classes. However, it

appeared mentors in this study somehow created time and opportunities to interact with the pre-service teachers outside the official teaching times. In one case, involving Mr Simango and Augustine, mentoring was done even during evening study time. In the case Moyo and George, mentoring sessions were held before and after school lessons besides the 'free periods' times when they were not teaching. Sibanda and Sheila also used almost the same mentoring strategy though their mentoring sessions were often interrupted by other stakeholders as Sibanda held other posts in school as head, HOD and subject teacher. In some instances Sibanda's mentoring sessions held in the headmaster's office during the lunch hour break were also interrupted. This shows the extent to which mentors went out of their way to assist pre-service teachers in their professional growth. This becomes more significant if one considers that the mentors were not paid extra for mentoring pre-service teachers. This could be a possible pointer to the level of professionalism exhibited by the mentor teachers in this study. The mentor teachers' professionalism seemed to have served them well in mentorship. It would appear that being a teacher provided a foundation for mentoring though the mentors were not specifically trained in mentoring. This finding was consistent with other research study findings (Msila, 2015). Studies have been carried out which showed that teachers without training in mentorship and performing dual roles of teacher and mentor were able to assist and guide pre-service teachers during their periods of school placement (Aspfors and Fransson, 2015; Hudson, 2012).

Garza and Harter (2016) were of the view that some good teachers could be inhibited from being effective mentors by contextual factors as these could have an effect on how teaching and mentoring takes place in the classrooms. The other school duties, such as department headship and subject teaching, that mentors were performing could be regarded as some of the contextual factors that affected how mentoring was conducted in the schools in this study. All the mentors had other school duties as subject teachers, with one being a head of school while heading a department like the other two. The mentors who had other school duties that demanded their time when at school could have presented a mentoring context that was not so conducive as mentoring ended up competing for time with the mentors' other school duties. The contextual factors

present in the schools offered varied opportunities to learn for both the mentor and the pre-service teacher (Wang and Odell, 2007). By being appointed HODs, the mentors could be assumed to be good teachers but contextual factors could have presented an environment in which mentoring had restricted time and as a result, pre-service teachers were offered less opportunities to learn how to teach under the guidance of teachers. In addition, literature highlights that good teaching is a necessary but not a sufficient condition for effective mentoring (Feiman-Nemser, 2001; Garza and Harter, 2016).

(c) School environment and resources

The schools provided supportive mentoring environments as they gave pre-service teachers mentors, teaching and learning resources. Mentors assigned to pre-service teachers proved to be critical as they acted as a support system in the mentoring process (Chien, 2015). Mentoring resources included offices though they proved to be a challenge in schools A and B. In school A, the mentoring sessions were conducted in the head of school's office as teachers had no offices. In school B, Moyo and George used the HOD's office for their mentoring sessions. However, mentoring sessions were often interrupted as different people also needed to be served by the same offices. In these two cases, mentor teachers had to be innovative to find conducive places and time for conducting some of mentoring discussions. The shortage of teachers' offices in two of the schools was an indicator of some of the contextual factors that affected mentoring. Such contextual factors were institutional related and limited mentoring opportunities for both the mentor and pre-service teacher (Wang and Odell, 2007). However, pre-service teachers and mentors in this study showed that even in the absence of a proper and quiet office they could improvise to find alternative places and ways to carry out their mentoring sessions. Though Simango and Augustine had no challenges of office space, they still had the challenge of time and resolved to conduct some of their mentoring sessions during the time of learners' night study.

Social media platforms and other ICT tools were used by pre-service teachers to interact even after working hours as they planned and evaluated their lessons. Sheila interacted with other pre-service teachers using social media. However, she did not interact with Sibanda via social media. In school B, George suggested that schemes and plans could be sent to the mentor for approval by electronic mail. School C as a well-resourced school made more use of ICT tools in teaching, using computers, whiteboards, videos and overhead projectors. Augustine had argued that more ICTs could be used at the school. This finding on the use of ICTs in schools or by the mentees seems to suggest ICTs could have a place in the mentoring of pre-service teachers. With the use of ICTs, even in the absence of proper offices mentoring may still be undertaken in schools if schools and participants embrace the use of ICTs in teaching and learning as advocated for in the updated curriculum in Zimbabwe (Zimbabwe Ministry of Primary and Secondary Education, 2016). Nonetheless, this finding was not consistent with the findings of Reese's (2016) study that investigated the utilisation of video technology in virtual conferencing as pre-service teachers interacted with experienced teachers during teaching practice. The findings of the Reese study showed that there were a number of challenges in using technology in mentoring. Some of the challenges included the limitations of using cameras when observing lessons, the lack of real-time interaction between the mentor and mentee during lesson observations and unavailability of opportunities for 'inside-the-action' mentoring. Inside-the-action mentoring is the guidance and advice given by the mentor during the lesson and the mentor-mentee interaction which feed into the lesson development. Moreover, the Vygotskian perspective which frames this study places emphasis on the critical role of social interaction in the process of learning to teach. Without inside-the-action mentoring, there would be less social interaction that is regarded critical in mentoring of pre-service teachers in this study. However, the differences in the findings could be attributed to the research focuses of the studies. Reese's study mainly focused on the challenges of virtual mentoring unlike this study that aimed to deepen understanding of contexts and practices of school-based mentoring of pre-service teachers. Furthermore, the use of ICTs comes with its own challenges which could require further research before thinking of using it in school-based mentoring of pre-service teachers. Nonetheless, the use of ICTs in mentoring may

offer alternatives on what can be done after school hours outside offices. Thus, the use of ICTs in mentoring remains debatable as alluded to by research (Reese, 2016).

(d) Mentoring support

The mentors assisted the pre-service teachers by checking on their schemes and lesson plans, discussing supervision reports, observing some of their lessons and supervising them on behalf of the school and university. Sibanda observed Sheila teaching form 3 Biology lessons on 20 September 2017 and 29 September 2017 and wrote comments on lesson delivery as shown in section 4.2.2. Though the comments had little, if any, reference to subject content they were able to guide Sheila on teaching strategies and class management techniques. In the case of Moyo and George, the mentor's comments were given to assist the mentee on a form 3 Commerce lesson on Warehousing on 3 October 2017. The mentor's report is reproduced in a vignette in section 4.2.3. The comments are on different aspects of the lesson and include areas that George needed to improve on. In the last case of Simango and Augustine, the pair discussed a form 3 Mathematics lesson report on 3 October 2017 on 'continuous graphs'. The supervision report that was discussed is pictured and presented in figure 4.3. The focus of their discussion was on what could be done differently to improve the lesson. The cited three cases, among others, help to illustrate that observing lessons and lesson observation reports may offer a source of professional growth for the mentor and pre-service teachers (Draves, 2013). The mentor could get an opportunity to observe the pre-service teacher implementing some of the teaching methods and strategies recommended by the university. Some of these methods and strategies may be unfamiliar to the mentor who left the teacher education institutions some years back. The lesson observations may provide some form of teaching knowledge and skills renewal for the mentor. As expected, the pre-service teacher benefits from the mentor's lesson observations as the mentor uses his experience and craft knowledge to guide and assist the pre-service teacher**.** This was consistent with other research on roles of mentors (Hobson, 2002; Ambrosetti**,** 2014). Ambrosetti (2014) argues that mentoring provides opportunities for life-long learning for both

the pre-service teacher and mentor. The classroom practitioners may use the knowledge gained from mentoring in their professional life. The mentor is likely to use this knowledge to mentor other pre-service teachers in future. The pre-service teachers' repertoire of knowledge for teaching and learning may be boosted from engaging in discussions with the mentor on lessons observed. This showed that the pre-service teachers were learning to teach in an environment which was supportive and impacted positively on their professional growth.

The assigned mentors and the supervision reports sent to the university on the pre-service teachers are part of the evidence of mentoring support. In all the cases, the school assigned mentors for the pre-service teachers. As part of their duties, mentors observed pre-service teachers' lessons and submitted reports to the university, among others. By assigning a mentor, the schools were providing an environment that enabled the pre-service teacher to develop his or her teacher identity under the guidance of a more knowledgeable other (MKO) in the context of the socio-cultural theory (Fani and Ghaemi, 2011). The MKO guided and advised the pre-service teacher as he or she was already familiar with what the pre-service teacher was experiencing for the first time. The MKO had gone through teaching practice as a pre-service teacher and understood the school culture and practices as a teacher and member of the school administration. The pre-service teacher was presented with a situation in which there was someone to support his or her professional growth in the transition from student teacher to teacher. The mentors compiled supervision reports for the university as some form of feedback as they monitored the pre-service teachers' professional growth. This finding was consistent with findings of a research conducted at the University of KwaZulu-Natal (UKZ) in South Africa (Mukeredzi *et al*., 2015). The Mukeredzi *et al.* (2015) study explored school-based mentoring experiences of part-time Postgraduate Certificate in Education (PGCE) students. The PGCE student teachers acknowledged receiving guidance and feedback which helped them to develop professionally, especially with respect to pedagogical content knowledge in their subject specialisations. In addition, the study also reported collegial collaboration as teachers supported each other with resources in the mentoring process. Furthermore, the study reported on what they

termed ‘compliance mentoring’ in which mentors completed assessment reports for the university. Though the participants did not value these reports, they provided feedback to the university and student teachers’ performance during teaching practice. Interestingly, there are similarities in the UKZ programme and the PGDE programme of this study. Both programmes aim to professionalise unqualified teachers who have first degree qualifications. However, the noted differences in the studies were that the twenty participants in the UKZ study were self-selected whereas in this study the mentoring pairs are purposively sampled. The other difference was that this study makes use of observations and interviews whereas the UKZ study had questionnaires. This study includes observations as it seeks to understand the mentoring contexts and practices.

5.3.2 Mentoring practices

The second related research sub-question was, *“How do different contexts shape and give rise to particular mentoring practices?”* The key finding for this related research sub-question was that existing conditions in schools that afforded pre-service teachers opportunities to learn to teach in secondary schools determined how they taught with the help of a qualified teacher as they put into practice what they learned at university. The existing conditions in the schools gave rise to the emergence of the theme ‘mentoring practices’ and the sub-themes of (a) teaching and mentoring duties of mentors, (b) school support for mentoring, and (c) school-based supervision. The way pre-service teachers were guided and supported as they learned to teach in a manner that enhanced the professional growth of pre-service and mentor teachers is described under each of the stated sub-themes.

(a) Teaching and mentoring duties of mentors

The mentors’ other duties, in all the three cases, besides mentoring seemed to limit the mentors’ interactions with pre-service teachers and as a result the mentoring pairings had to reschedule some of the mentoring sessions to suit their situations. In the case of Sibanda, being head of school, HOD and subject teacher seemed to limit his interactions with Sheila. Mentoring sessions were interrupted, for example, as on 16 October 2017 when members of the SDC interrupted a

mentoring session in the headmaster's office. In the case of Moyo, the mentoring also experienced a post-lesson interrupted mentoring session on 3 October 2017, to give an example, when they were discussing a form 3 Commerce lesson on 'methods of payment' in the HOD's office. To minimise on these interruptions they had resorted to having some of the mentoring sessions before the start of school lessons early in the morning or after school teaching time. In the case of Simango, their mentoring sessions were not interrupted as they had spacious and quiet individual offices to conduct these unlike in school A. However, at times because Simango would be busy with other school duties they held some of their mentoring sessions during study time in the evening. The conditions that exist in schools seem to have a bearing on how mentors availed opportunities for the pre-service teachers to learn how to teach under the guidance of a seemingly busy mentor teacher.

The lack of adequate time for mentoring, as illustrated in the mentioned instances, could be attributed to the dual role mentors were expected to play. This came with challenges as highlighted in research (Ambrosetti, 2014; Marimo, 2014; Yuan, 2016). The mentor has his or her own class to teach besides mentoring the pre-service teacher. Mentoring is regarded as secondary as the primary concern for the mentor is that his or her class is learning. Mentoring is considered as an aside and as a result mentors tend to attend to their classes first before they attend to the pre-service teachers (Ambrosetti, 2014). Consequently, it is the time for mentoring that is affected as the time for teaching is not tampered with. Research supports this finding. In a research study that examines mentor teachers' perceptions and experiences of dual roles of being a mentor and teacher, Jaspers *et al*. (2014) reveal the challenges of 'dual loyalty'. One of the challenges that are highlighted is lack of time to effectively carry out mentoring and teaching duties simultaneously. The two duties demand that the teacher pays attention to both the learners and the pre-service teacher. Though the pre-service teacher is also a learner, the teacher considers that his or her class is his or her primary concern. The mentor is engaged primarily to teach the class. Then later on, the pre-service teacher is assigned to the mentor so that he or she could learn to teach under the guidance of an experienced classroom practitioner. The second

challenge is the conflict of the two roles. In their teacher role, the mentors want to protect their learners from the pre-service teachers' mistakes. Meanwhile, in their mentor role, mentors want the pre-service teachers to learn from the problematic teaching situations. The pre-service teacher expects to be provided with opportunities to try out the teaching methods they are taught at university. This seems to describe the challenges, Sibanda, Moyo and Simango, experienced in this study as they were mentoring the pre-service teachers, Sheila, George and Augustine respectively. More so, that they were heads of department responsible for the learning in their departments.

Though Jaspers *et al.*'s (2014) study involved primary education mentors in the Netherlands; the results could be used to explain the challenge of dual roles experienced by mentors in this study. The mentors in this study also had dual roles. In one of the cases, Sibanda had more than two roles as he was also the head of school. As a result, he wanted to succeed in all his three roles. The conflict could be assumed to be even more in his case. Consequently, he had even less time for mentoring as compared to the other mentors as he had more responsibilities. The multiple roles of mentors left the mentors with less time to interact with pre-service teachers. The mentoring pairs met fewer times and in two of the cases for brief periods as the mentors wanted to attend to their other roles. However, the context of mentoring at a boarding school could be an area needing further research as this study found that they had more time for mentoring though it was outside the normal teaching time as the mentor was also busy during the day. Furthermore, I did not come across research studies that investigated contexts and practices of school-based mentoring of pre-service teachers at a boarding secondary school in Zimbabwe. Such a study could have provided a basis for comparing and contrasting this particular finding of this research study and other research findings. Nonetheless, the studied cases also help to show how contexts influence mentoring practices.

(b) School support for mentoring

In the case studies, schools support mentoring of pre-service teachers by assigning them experienced and senior teachers who are also heads of departments. Pre-service teachers are in schools for professional development and experienced teachers are in a position to provide this. In all the cases, the mentors have mentored other pre-service teachers before and they are expected to use their previous mentoring knowledge to mentor the newly assigned pre-service teachers. In this study, the mentors are experienced as the least experienced, Sibanda has 15 years of teaching experience and the most experienced, Simango, has taught for 27 years. Simango also has the experience of producing distinctive pre-service teachers on TP in the past three years. Buhagiar and Tonna (2015) also highlight the issue of experience in mentoring as the mentor is expected to share his or her teaching experience with the pre-service teacher. Mentors in this study showed this by interacting with their pre-service teachers during mentoring sessions. Sibanda used his experience when advising Sheila when correcting a form 2 Agriculture lesson plan on fencing materials and tools. Almost each part of the lesson was corrected for it to be more specific and focused. With this one thorough revision of the lesson plan, Sheila may be able to use this knowledge when drawing similar lesson plans in future. The mentoring practice engaged in is likely to enhance the teaching competences of Sheila. In the other cases, Moyo mentored George in an informal session on the basis of a form 3 Commerce lesson on 'Warehousing' on 3 October 2017. There might not be enough time to have a formal mentoring session and the mentoring practice of using informal sessions could contribute to the professional growth of the mentee. In another notable mentoring practice, Simango created an opportunity for other teachers to discuss informally, in between lessons on 7 November 2017, with Augustine methods that can be used to cater for early finishers in Mathematics on the basis of a section on teaching methods extracted from the Zimbabwe Mathematics National Syllabus (2015). The syllabus section is pictured and presented in figure 4.4. Besides developing syllabus interpretation skills, Augustine also enriched his repertoire of teaching methods for a special ability group in a mixed class. These scenarios help to explain how mentoring practices, in given contexts, may contribute towards a pre-service teachers' professional growth. In the same vein,

the conditions that exist in these scenarios, that are the contexts, are compelling the mentor to put into practice strategies that the mentee will use in resolving learning tasks, for example, describing and demonstrating effective methods to be used with early finishers in a Mathematics lesson. These are mentoring practices that have resulted from the contexts.

In these cases, mentors have developed their mentoring practices from a given context. The mentor could also be considered as part of contextual factors in solving the learning tasks. The school supports the mentoring in the sense of being the part of context that includes the mentor teachers, resources, teaching and learning activities that are designed to resolve the problem. However, at times what the mentor experienced some years back could be different from what is taking place. For example, there are changes in the Zimbabwean updated curriculum that make mentoring difficult for the mentors as they have not yet experienced the requirements of the updated curriculum. An example from this study is in the case of Moyo who seemed not to be comfortable with knowledge of computers from George's lessons and ICT club activities. In some instances the mentors' teaching experiences are not always relevant as they interact with the pre-service teacher. Nevertheless, there are aspects which need someone who has experienced and lived through the happenings, such as school culture, to be able to guide the pre-service teachers as they could be new to such experiences. The mentors in this study have a better understanding of the school cultures in which they were inducting the pre-service teachers. Simango is an example of mentor who has consistently produced good results in learners' public examinations and mentoring. He seems to understand the demands of the school and the universities in the mentoring of pre-service teachers. As the MKOs, mentors are expected to have a better appreciation of the school culture for them to be able to take the pre-service to a higher level in the zone of proximal development (ZPD) according to the Vygotsky's socio-constructivist perspective of learning (Ramnarian, 2015). The schools have different cultures and practices and the mentors as part of the school leadership, as they are heads of departments, may be in the forefront of promoting their school cultures and practices. These mentors may have the advantage of understanding the contexts in which they enrich the teaching competences of pre-

service teachers. However, some of the school cultures and practices could curtail the sense of experimentation in the pre-service teachers as they seek to conform to their schools' cultures and practices as pronounced by the head of department (Draves, 2013). In the department, the HOD is the face and voice of the school. This could be one of the reasons the HODs were appointed mentors for all the three pre-service teachers.

In these case studies the heads of departments are subject specialists for the areas the pre-service teachers are teaching. Participants consider subject specialisation to be critical in mentoring and this is consistent with what is observed by research (Chien, 2015; Reese, 2016). The mentor is expected to have subject expertise to enable him or her to give professional support to the pre-service teacher during teaching (Siyepu, 2013). By pairing the mentor and the pre-service teacher, the assumption is that the mentor will support the pre-service teacher's practical knowledge development, in the important domains of content, learners, methodology, curriculum, pedagogical content knowledge, learning settings, and class management (Ambrosetti, 2014). A subject specialist creates a learning context in which the social interaction between the mentoring pair is likely to be enhanced as they have a common area of specialisation. Consequently, mentoring by subject experts create a context in which the mentoring pair has a common subject language that make it easier to share teaching knowledge. The mentoring pairs could focus on other aspects in their discussions, such as pedagogical approaches and class management issues. The approval and presence of subject specialists seem to boost the confidence of the pre-service teachers as they develop their teacher identities (Izadinia, 2015). However, the mentors are not always present when the pre-service teachers are in action as they have their own classes to teach and other school duties to attend to. Nonetheless, the mentors' contribution is still felt from the pre-lesson conferences as they will have discussed how the lessons are to be taught. In some of the cases, the mentors insist on going through the pre-service teachers' files on a daily basis. This somehow, gives the pre-service teachers confidence that what they teach has the approval of a subject expert. However, in this study the pre-service teachers need more guidance on pedagogy as they have almost the same

level of subject expertise with their mentors as they have first degrees in the subjects in which they are teaching. Moreover, the mentors in this study have been teaching for a long time and may be in a position to share effective teaching methods with their mentees as they practice mentoring. The mentors in this study, being subject specialists and experienced teachers guiding same subject pre-service teachers, provided contexts that influenced mentoring practices.

(c) School-based supervision

School-based supervision involves a number of senior members of staff who observe pre-service teachers' lessons and they also invite the pre-service teachers to observe their lessons. These observations are then used to reflect on the teaching and learning that would have taken place. Sheila's form 3 Biology lessons were observed by the senior woman and senior teacher on 18 October 2017 and 10 November 2017 respectively. The supervision reports on these lessons focused on lesson delivery and are pictured in figure 4.1 and figure 4.2 respectively. The reports mainly focus on organisation of teaching and learning activities. These supervisors were not Biology specialists. However, the comments given by the school-based non-subject specialists may still be useful as the pre-service teacher builds her repertoire of teaching skills. Nevertheless, these lesson delivery comments may need to be complemented by subject specialist observations to fully enrich the professional development of Sheila. This seems to suggest that in some instances a combination of mentoring practices are likely to be more beneficial for the pre-service teacher. In the context that exists at school A it may be necessary to expose the pre-service teacher to both school-based non-subject specialists and subject specialists as these complement each other.

In the case of George, the school-based supervision written report on a form 1 Commerce lesson on the topic "Enterprise" on 19 September 2017, focusing on lesson planning and lesson delivery reproduced in a vignette in section 4.2.3, is not detailed enough to guide the pre-service teacher. The supervisor could have explained in detail most of the comments, such as "Objectives were stated". It could be argued that may be it is the oral comments that were more detailed. However,

this could explain some of the advantages of written comments as these provide a record for future supervisors to follow up on comments made. The reasons for the brief comments could be related to the conditions in which these comments were made. The supervisor could have been of the view that it would have been more effective to explain the observation comments orally in detail rather than writing them down. Nonetheless, this represents a mentoring practice that could have been influenced by other contextual factors. If these supervision comments were meant for other supervisors, such as university lecturers following up on the pre-service teacher, they needed to be more detailed. Thus, the context in which the supervision would have been done would have influenced the mentoring practice for this situation.

Evidence of school-based supervision in case 3 is represented in the form of an informal discussion that involved Augustine and other teachers in the staffroom on 7 November 2017. The discussion was meant to assist Augustine on handling early finishers in Mathematics lessons. The teachers made reference to a section in the Zimbabwe Mathematics Syllabus that listed suggested methods of teaching and learning Mathematics. The syllabus section on methods is pictured and presented in chapter 4 in figure 4.4. The observation was that each of the listed methods could be used to cater for early finishers depending on how the method was used. However, the way the group discussed and shared ideas and experiences on how they had used the methods in their own contexts and situations provided various mentoring practices. The grouping of teachers and their engagement in a discussion was itself a mentoring practice that suited the situation in which Augustine was. The discussion had unexpectedly resembled a professional learning community (PLC) (Hudson *et al.*, 2013). The PLC provided an environment and opportunity in which it wanted to assist Augustine with selection of appropriate teaching methods. The context could be considered to have helped to shape the mentoring practice. Conversely, this mentoring practice may be appropriate in situations teachers can group for a discussion when they have the relevant teaching and reference materials. The mentoring practice in a way dictates the context in which teachers group for a discussion. They would need a room where they can congregate and interact and interrogate the relevant teaching materials.

Mentoring practice would have influenced the context that provides opportunities for a pre-service teacher's teaching competences to be enriched.

This finding is consistent with the findings of Douglas' (2012) study. Douglas' study analyses the learning opportunities offered to pre-service teachers when taking part in British primary schools during teaching practice. The pre-service teachers were enrolled in a Postgraduate Certificate of Education (PGCE) programme and were teaching in schools for 18 weeks. The interview findings showed that the pre-service teachers and mentors emphasised the supportive nature of the mentoring process. The findings also revealed that the mentors' personal support for the pre-service teachers discouraged mentors from challenging pre-service teachers' teaching practices. The other interesting finding was that discussions of lessons tried to avoid tensions as part of the normal way of working in a school set up. In addition, the apprenticeship model in mentoring did not promote a two-way learning protocol as it prioritised mastery of teaching skills and class management at the expense of development of inquiry minds and reflective approaches. These findings resonate with this study's findings in a number of ways. Pre-service teachers in this study were on teaching practice for a semester with duration of about 15 weeks. However, the teaching practice was in secondary schools. The mentors in this study were in support of the mentoring programme and they devised different ways to assist the pre-service teachers despite the mentors' other demanding tasks in the schools. There was no observed tension and conflict during the mentoring process. Both the mentors and pre-service teachers acknowledged to have learned from each other during the mentoring process (Orlando-Barak and Hasin, 2010). Mentors said that they were updated on new trends in teaching methodologies that pre-service teachers had brought from their university courses. Pre-service teachers also acknowledged how mentors had refined their teaching skills and enhanced their professional growth from interacting with their mentors and their colleagues. However, the absence of intriguing debates and arguments on best practices of lesson delivery could be worrying. The participants could have missed opportunities to interrogate some of the teaching practices they observed in the lessons taught. The non-engagement in debates and arguments could possibly

curtail their levels of reflection and analysis that are so critical in the professional life of classroom practitioners. In particular, the interaction between the pre-service teacher and the mentor could have had a significant influence on the pre-service teacher's professional growth as they shared and interrogated teaching experiences during the mentoring process (Wang and Odell, 2007). The restricted debates and arguments seem not to have enhanced social interaction which would have been promoted when mentors and pre-service teachers shared ideas on lessons observed. However, social interaction, a tenet of the socio-cultural theory, needed to have facilitated professional growth of participants as school-based supervisors mentored the pre-service teacher during their informal and formal discussions. Through interaction, involving intriguing debates, the pre-service teacher could have had a better appreciation of the school values and context in which the teaching took place (Wang, 2001). According to Heeralal (2014), social participation and interaction as a human activity anchors the Vygotskian perspective which views school-based mentoring as a collaborative learning initiative facilitated by more capable peers. However, the interaction between the mentor and the pre-service teacher could have been affected by the hierarchical nature of the mentoring relationship that seemed to favour the mentor's decisions in the decision-making process. The relational dimension of mentoring focuses on the interpersonal relations between the mentor and pre-service teacher (Ramnarain, 2015). As a result, the mentor was assumed to have more powers. Consequently, the pre-service teacher would not want to be seen to be challenging his or her superior who was responsible for reporting the pre-service teacher's progress and capability to both the school and university. On the mentor's part, the conception of the mentor as a guide and helper seemed to limit his or her critique inclination in the mentoring process. Such a conception of mentoring seemed to lead to fewer tensions and conflicts during the mentoring process and as result, compromised the quality of mentoring (Ngara and Ngwarai, 2012). It would appear it is not only contexts but also conceptions of mentoring, especially when viewed through the socio-cultural lens, which may affect mentoring practices.

5.3.3 Pre-service teachers' classroom practices

The third related research sub-question asked, "*In what ways do mentoring contexts and practices shape pre-service teachers' classroom practices*?" The emerging theme was '*pre-service teachers' classroom practices'*. The key finding for this theme was that whatever the mentors did as part of their mentoring tasks had an influence on what pre-service teachers did as part of their classroom routines and practices. In their interactions with mentors and colleagues, pre-service teachers were able to pick out the best practices and try them out in their own classes. Pre-service teachers would then reflect on the comments they received from mentors during classroom observations. They would go on to implement some of these comments in their teaching and then reflect on their applicability and effectiveness in their own classrooms. The pre-service teachers' practices and reflections were particularly enriched by (a) mentoring tasks, (b) the interactions with colleagues, and (c) reflections on classroom practices.

(a) Mentoring tasks

As mentors carried out their mentoring tasks which included observing lessons and scrutinising TP documents, pre-service teachers' classroom practices were enriched. Pre-service teachers were advised on more effective ways of teaching the observed lessons. Pre-service teachers were assisted with planning, teaching, class management and assessment of student learning in the mentoring sessions. The pre-service teachers were able to plan, teach, manage class and assess student learning differently as a result of interacting with mentors as they were carrying out their mentoring tasks. Reference is made to specific mentoring tasks in each of the cases. The mentoring tasks are to there to highlight the instructional processes that take place in the classroom as the pre-service teacher facilitates learning.

In case 1, Sheila was assisted and guided on the content and use of the field trip in an outdoor form 2 Agriculture lesson on nutrition on 18 October 2017. Sibanda emphasised on the need to plan for all activities to avoid unnecessary distractions during learning activities. He said all learners have to be engaged in some form of timed learning tasks. The implications of these were

that Sheila needed more detailed lesson plans and notes that show detailed learning tasks at each stage of the lesson. Class management had to make use of group and pair work for effective control of learners throughout the lesson. The mentoring tasks enabled Sheila to think deeply on how to improve her classroom practices.

In the case of George, Moyo assisted him as part of her mentoring task on a form 1 Commerce lesson on "Telecommunication devices and services" during a mentoring session in the HOD's office. The lesson topic was rephrased as "Telecommunications" was considered to be too broad and one of the objectives was reformulated to *'explain the use of telecommunication services such as telephone, cell phone and internet.'* In addition, learners were tasked to research on the internet as part of their homework in preparation of the next lessons. However, this promising mentoring session was interrupted when the mentor had to attend to teachers who were collecting textbooks and teaching equipment for their next lessons. Nevertheless, George had been assisted on content analysis, objectives formulation and assignment of homework tasks. The mentoring task assisted in George's professional growth. Similarly, Augustine was assisted in the planning of a form 3 Mathematics lesson on transformations when all the lesson objectives were reformulated for them to be more focused on the plane shapes that were to be geometrically enlarged. During the mentoring sessions the mentee was also advised to take notes and make reference to these in future lessons. The discussion on the lesson and the reformulated objectives are presented in section 4.2.4. The mentoring tasks were used to improve on the classroom practices of pre-service teachers. Consequently, there was professional growth and pre-service teachers were of the view that this influenced their classroom practices in a positive way. These findings were consistent with some findings of previous research (Yuan, 2016; Aspfors and Fransson, 2015; Son and Kim, 2012) but also inconsistent with others (Marimo, 2014).

Yuan's (2016) study explored student teachers' professional learning through their interactions with school mentors and university tutors during teaching practice in China. The research study examined pre-service teachers' identity formation with regards to the mentoring they got from

school mentors during teaching practice. The data for the qualitative multiple case study were collected from semi-structured interviews and field observations which centred on the student teachers' interactions with their mentors during teaching practice. The case by case presentation of Yuan's findings showed that one of the two student teachers in the study was compelled to comply with the mentor's advice and guidance due to her lower status in the school as she was attached to a more experienced teacher who would assign her duties on a daily basis. The mentors also prescribed their teaching styles and pace to the student teachers. However, the contradictions between the student teachers' ideal and ought identities were noticed in their teaching practices. Nonetheless, some of these conflicts were subdued because the student teachers complied with the Chinese traditional values which cherished harmonious interpersonal relations and respect for authority.

This current study had a similar methodological approach as it also used multiple cases to understand the various contexts and practices of school-based mentoring of pre-service teachers. Similarly, semi-structured interviews and observations were also used in this study. As part of their mentoring duties, mentors in this study monitored pre-service teachers' classroom practices. The guidance and advice given to pre-service teachers' was based on the mentors' own experiences. Therefore, it could be argued that the mentors could have encouraged the pre-service teachers to adopt the mentors' teaching styles. There were no glaring conflicts noticed between the mentors and the pre-service teachers in the current study. Just like the Chinese culture, the Shona culture in which participants of this study were practising had a lot of respect for elders and authority. All the mentors in this study were older than the pre-service teachers and were the pre-service teachers' line managers, as heads of departments, in the school structure. The mentors had authority and control over the pre-service teachers (Armstrong, 2001). However, these two studies seem to suggest that professional growth of the pre-service teachers could be enhanced as the mentors carried out their duties but at the same time it could be said to be contested, as the mentors could stifle the pre-service teachers' professional development as they show them their preferred ways of teaching and managing classes.

On the contrary, in a study analysing school-based mentors' experiences in supervising pre-service teachers on teaching practice in Zimbabwe, Marimo (2014) revealed that despite positive experiences during the practicum in schools, mentor teachers had challenges in the supervision of pre-service teachers as they lacked confidence in mentoring pre-service teachers doing teaching practice. The findings also showed that the mentor teachers did not equip pre-service teachers with all the pedagogical skills necessary for preparing teachers. The Marimo study attributed these findings to lack of collaboration between the schools and teacher education institutions which was reflected by ineffective mentoring practices and mentoring relationships. On the basis of the findings, Marimo recommended that teacher education institutions could organise workshops for school-based mentors to capacitate them on mentoring and the institutions' teaching practice expectations. In contrast, the participants of the current study appreciated the professional growth they got from the mentoring process. The pre-service teachers mentioned instances in which they had adjusted their teaching practices as they implemented the mentors' advice and suggestions for improvement. These findings seemed to contradict the findings of Marimo (2014) who highlighted the unpreparedness of mentors to positively influence pre-service teachers' teaching practices. However, all the findings seem to be justified as mentoring involving school-based personnel and faculty members was still in its infancy in Zimbabwe (Majoni and Nyaruwata, 2015). It would appear that not all pre-service teachers were getting the same opportunities to learn to teach in their schools as mentor teachers were not specifically trained for this important role of mentoring. Notwithstanding, mentor teachers were well-placed to guide and advise pre-service teachers as they were acquainted with the school cultures and practices. Mentors, as the more knowledgeable others (MKOs) in the socio-cultural perspective, had relevant experience to support pre-service teachers who wanted to reach the next higher level in the zone of proximal development (ZPD) of their body of teaching knowledge. Mentoring tasks involving interactions within the mentoring pair were assumed to be critical in learning to teach as they shaped pre-service teachers' classroom practices.

(b) The interactions with colleagues

Participants interacted with colleagues during mentoring. Interactions of pre-service teachers with colleagues in particular, helped them to improve their teaching as this provided opportunities to critically interrogate their teaching with the help of colleagues. In some cases, interaction involved the use of social media, especially among the pre-service teachers. Some interactions were informal and others were formal when colleagues observed pre-service teachers' lessons and then came up with observation reports. The pre-service teachers were particularly interested in the sections in which the reports highlighted areas which needed to be improved.

In one of the formal interactions Sheila was observed teaching by the senior woman and senior teacher on 18 October 2017 and 10 November 2017 respectively. In the first instance, she was observed teaching a form 3 Biology class on plant and animal cells and in the second instance it was also a Biology lesson with the same class on importance of photosynthesis in an ecosystem. The pictures of the observation reports are presented in Chapter 4 in figure 4.1 and figure 4.2. The reports are extracts focusing on lesson delivery. After the lesson observations they had an opportunity to discuss their findings from the lessons. Their interactions mainly focused on explaining their written comments. However, the written comments seem to have focused on strengths and weaknesses depending on the supervisor. The senior woman's comments mainly highlight strengths noted in the lesson such as "good introduction, appropriate voice projection, media was used effectively," among others. The senior teacher's comments are on weaknesses noted, such as "organisation of groups must be quick, efficient and effective, activate the learners more, questioning techniques must improve by pausing to allow learners to process" among others. However, neither of the comments refers to content development. Nonetheless, the two sets of comments are likely to benefit Sheila as their combination provides a balanced analysis of her strengths and weaknesses as a classroom practitioner. This also shows that there are merits in interacting with different colleagues especially if they are commenting on lessons taught. This is likely to enrich the pre-service teacher's classroom practices.

Informal interactions with colleagues were evident in case 2 when George created an interactive WhatsApp group to share teaching experiences with other pre-service teachers. George explained that,

> *We share ideas on social media particularly on the updated curriculum as some of the new learning areas have new demands regarding continuous assessment. So we have a lot to share as pre-service teachers.*

The mentor had not been included in the WhatsApp group. The group may have benefited from having a more inclusive group as they would get views from mentors. In case 3, other staff members were involved in observing Augustine's lesson. One member of the school supervisory team compiled a report for a form 3 Mathematics lesson observed on 3 October 2017. The picture of the report is presented in figure 4.3. This is the same report that was discussed by the mentoring pair on the same day as explained in section 4.2.4. The supervisor and the pre-service had also discussed the same report soon after the lesson. The pre-service teacher discussed the same report twice with different people, the supervisor and then the mentor. There were advantages of discussing the same report twice as the pre-service teacher could get different perspectives on the same issues. This was likely to provide alternative classroom practices for the pre-service teacher when teaching similar lessons in future.

In the cases studied, the interactions provided a form of support as the pre-service teachers developed their own identity as they considered who they were and what they thought they should be as classroom practitioners (Izadinia, 2015). Arguably, the present study added support to the findings of Izadinia's (2015) study conducted in Australia on role of mentors in influencing student teachers' classroom practices and professional identity. Izadinia (2015) conducted a study that explored how the relationship between mentor teachers and student teachers shaped the change in student teachers' professional identities during a Graduate Diploma of Education Secondary (GDES) programme. The GDES programme involved student

teachers assigned to one main mentor teaching in secondary schools. The study involved five female and two male student teachers who were teaching either music or drama. They were aged between 20 and 40 years with five of them teaching music and two teaching drama. The study was a qualitative multi-case study. The analysis of the data was based on both the within-case analysis and then the cross-case analysis. The focus of the analysis was on how the participants' professional identities were shaped by their mentoring experiences. The main findings of the study were that the ways the mentors related to student teachers had an influence on the development of the student teachers' classroom practices and professional identities. Among the ways that were mentioned was open communication between the mentoring pair that helped the student teachers to develop self-confidence to articulate issues. The other three findings were that firstly, mentors positively or negatively informed student teachers' professional identity though they were unable to radically change it. Secondly, the dynamic process of development of a teacher identity began in initial teacher education and continued to evolve as the beginning teachers assumed the role of an educator. Thirdly, student teachers needed different kinds of support based on their personal experiences, contexts and future requirements. However, when they experienced tensions and conflicts, student teachers were likely to hesitate to express their opinions and feelings. Nonetheless, findings of the Izadinia (2015) study could be related to the current study.

In the current study, mentor teachers positively influenced the pre-service teachers' confidence as they were provided with opportunities to teach and try out what they were taught at university. The pre-service teachers continued to grow professionally as they interacted with their assigned mentors and other teachers in the school. Participants gave narratives of how they benefited from the mentoring process to the extent of doing some things differently after discussions with their mentoring partner. Lastly, the mentors considered the conditions in which they supported the pre-service teachers as they learned to teach. As a result, the support the mentors rendered to the different pre-service teachers was not the same as they dealt with individuals in different contexts. However, the findings of these two studies could also be said to be different as they had

different settings and contexts. For example, different programmes were studied and the education systems had different mentoring processes. Admittedly, findings from different processes could not be considered to be the same. However, the studies have been used to show how interactions with mentors and colleagues could affect pre-service teachers' professional identities. The evolving professional identities seem to affect pre-service teachers' classroom routines and practices as they reflected on their interactions with mentor teachers.

In another study, Hudson *et al.* (2013) investigated 27 experienced mentors' understandings about professional learning communities (PLCs), mentoring and leadership. The study participants were involved in a three-day professional development programme that was organised to promote a professional learning community (PLC). All the mentors had mentored at least one pre-service teacher previously in Australian educational institutions. The participants answered some open-ended questions as they freely expressed their views on their experiences in mentoring. The findings showed that mentoring was understood as a reciprocal arrangement in which both parties learned from each other. This finding resonates with the results from the current study as mentors and pre-service teachers acknowledged that they learned from each other. The mentors had remarked that they were of the view that they were being indirectly in-serviced as educators when they interacted with their pre-service teachers. Moyo admitted to that she was learning much about computers from George. The mentors seemed to have particularly benefited from pre-service teachers regarding use of ICTs in teaching and the use of interactive methodologies. As expected, pre-service teachers learned from mentors as they enhanced their repertoire of teaching strategies. The second main finding of the Hudson *et al*. (2013) study was that the PLCs were a necessary structure in schools as they promoted the professional growth of teachers by offering opportunities in which teachers shared their experiences in a forum which did not use the existing recognised structures in the institution. However, this finding was inconsistent with the findings of this study as there were no formal PLCs in the schools. The interactions between mentoring partners were not in the context of PLCs. Consequently, the mentors and pre-service teachers in this study could have missed opportunities to share their

experiences in a PLC structure that had no top-down pattern of communication and in which there was shared leadership as other teachers who were not formal leaders in the school could be given responsibilities to drive the activities of the PLCs. The third finding was that the PLCs had potential to promote and support teacher professional growth through collaborative problem solving activities at school level. The current study's participants seemed to have missed this great opportunity by not engaging in PLCs. However, interactions in other groupings that involved teachers, such as co-curricular clubs could have offered limited opportunities for professional growth as these lacked the inclusivity and networking that characterise PLCs. PLCs could have provided opportunities for mentors and pre-service teachers to learn together through collaborative work, particularly when they had to reflect on their classroom practices. Nevertheless, in the stances PLCs were constituted unconsciously as in the case Augustine was assisted on handling of early finishers in Mathematics pre-service teachers' classroom practices were shaped. However, use of PLCs need not be accidental but should be planned.

(c) Reflections on classroom practices

Pre-service teachers' reflections on classroom practices were particularly aided by the written supervision reports which explicitly stated areas needing improvement. In addition, in response to the interview question: *"What have you done differently after discussing with your mentor?"* - The pre-service teachers mentioned what they had done differently. The question compelled pre-service teachers to reflect on their classroom practices. The classroom practices were likely to have been influenced from the pre-service teachers' discussions with mentors. Typical and representative responses from each case help to describe the pre-service teacher's reflections on classroom practices. The reflections could be termed 'reflection-in-action' and 'reflection-on-action' (Denis, 2015). Both types of reflections are likely to affect classroom practices as the pre-service may use these at different stages in teaching. At one stage the reflection could be implemented during the lesson and the other stage could be after the lesson. Both reflections are likely to affect classroom practices.

In case 1, Sheila had reflected on her classroom practices:

> *I have used comments from my mentor to improve my teaching and I can say my teaching has improved in areas, such as chalkboard work, questioning skills, class and classroom management, use of teaching aids and assigning of written and learning tasks according to ability. I keep on approaching my mentor for further guidance on any other challenges I face during my lessons, such as assigning learning tasks according to ability during group activities and written exercises.*

Mentoring has affected Sheila's classroom practices and she seems to have benefited from mentoring as she hopes to continue to be guided in the event of new challenges. In case 2, George said that the comments from the mentor helped him *"to be a better teacher and student of teaching"*. George reckons he can study teaching, meaning this could be on-going as a student of teaching continues to analyse the process as long as it is in process. He added:

> *I have changed the way I scheme and plan. In the beginning, I found it difficult to breakdown the content into teachable units. I am now able to formulate measurable and specific objectives. Even the lesson development stages are now much detailed and reflecting content in the content column of lesson plans.*

George's instructional processes had changed. The mentor's influence could be dictated in the way planning and teaching of lessons had changed. The supervisor's comments on a form 3 Commerce lesson on "Warehousing" on 3 October 2017 seem to corroborate George's comments as the report cited some of these aspects as areas that needed to be improved on that day. Therefore, for him to mention that he had improved in the same areas means the mentoring had an influence on classroom practices. Similarly, Augustine expressed almost the same sentiments on what he had done differently as a result of mentoring:

> *My scheming and lesson planning have drastically changed in terms of how I break down the topics into teachable units per lesson and the way I formulate specific*

objectives for all my lessons. I now fully understand the logic behind the lesson stages and this has greatly improved how I deliver lessons and assess learners' learning.

It is as if Augustine and George had the same mentor; however, this shows that mentorship had almost the same positive influence on their classroom practices. The changes could also be tracked back to the supervision reports from mentors and supervisors. For example, in the case of Augustine, the report in figure 4.3 is part of the evidence in the audit trail of changes in his classroom practices. The report has indicators of professional growth as there are noticeable changes in his classroom practices. This resonates well with findings in previous research and the Vygotskian perspective framing this study (Hobson, 2002; Fani and Ghaemi, 2011; Goodnough *et al*., 2009).

In a study exploring the advantages and challenges of pre-service teachers and cooperating teachers taking part in a triad model, Goodnough *et al.* (2009) suggested that both pre-service teachers and cooperating teachers improved their classroom practices from reflecting on the triad model's teaching practices. Besides, having more members, the triad model had more sources of feedback than the traditional model as there were two pre-service teachers and a cooperating teacher in the same class. Whoever was teaching benefited from having feedback from the pre-service teacher's lens as well as from the cooperating teacher's lens. The findings of the study revealed that the fellow pre-service teacher gave more feedback comments as compared to the cooperating teacher. However, the cooperating teacher seemed to have considered the levels at which the pre-service teachers were operating and wanted to gradually take them through the various levels in teaching. The pre-service teachers were more honest and critical when they provided feedback. However, in this study the pre-service teachers got most of the feedback from their mentors as they were operating using the traditional model in which one pre-service teacher was attached to one mentor. Other teachers and fellow pre-service teachers came to observe the pre-service teachers' lessons by invitation. It was also observed that when other teachers observed the pre-service teachers' lesson they were not keen to write reports as they preferred to

give oral reports. Nonetheless, one of the pre-service teachers, Augustine, indicated that he preferred written comments as he referred to these from time to time as he planned and taught future lessons. As an indicator of professional growth, the pre-service teachers did not want to see the next supervisors commenting on the same weaknesses pointed out by the previous supervisors or assessors. This indirectly forced the pre-service teachers to reflect on their classroom practices and improve it on the basis of the feedback provided by mentor and other colleagues. In this study, one of the participants, Augustine, had to reconfigure his record keeping and, the other participant, Sheila acknowledged that she had changed how she managed her class and presented chalkboard work. This finding supports previous research that revealed that pre-service teachers improved their classroom practices on the basis of the feedback they received during mentoring (Hudson *et al*., 2009; Hudson, 2012). However, though the Hudson *et al*. (2009) study revealed that mentors provided feedback as part of their mentoring practices in science teaching, the mentees rated oral feedback higher than written feedback. This was unlike in this study, as the pre-service teachers were more comfortable with written feedback as they would refer to it as they planned and taught future lessons. Nonetheless, feedback was also shown to be critical in Hudson' five model mentoring of primary science teachers (Hudson, 2005). Furthermore, in a follow up study Mudavanhu and Zezekwa (2009) carried out a research in Zimbabwe focusing on pre-service and in-service teachers' perceptions of their mentoring practices using the Hudson five-factor model. Among other findings, 59% of the participants reported that their mentors encouraged them to reflect on their classroom practices. However, there were significant differences between pre-service and in-service teachers' views on how the mentors helped them to develop reflective practice. The pre-service teachers had a more positive perception of the mentors' contribution than the in-service teachers' perceptions. The in-service teachers could have experienced some of the aspects they were being mentored on as they were already teaching. In this study, the pre-service teachers reported that the mentoring they had received helped them to critically reflect on their classroom practices. This finding resonates with the findings of the Mudavanhu and Zezekwa study.

5.3.4 Improvements in mentoring of pre-service teachers

The fourth theme to emerge from the findings was *'improvements in mentoring of pre-service teachers'*. The finding for this theme was that the participants were of the view that mentoring of pre-service teachers could be improved if schools and the university were to enrich the environment in which mentoring was taking place. Among other measures to be taken to improve mentoring of pre-service teachers was (a) mentor selection, (b) benefits of mentoring, and (c) mentor training workshops

(a) Mentor selection

Mentor selection and pairing could be improved as noted in all the studied cases. The participants were of the view that the university criteria for the selection of a mentor teacher in the Teaching Practice Guide (2017: 4) was not explicit as it states that, *"The school should appoint an experienced teacher to mentor the student teacher for the whole duration he/she is on Teaching Practice"*. In case 1, Sibanda and Sheila were of the view that mentor selection criteria needed to be explicitly stated in the university TP documents. Sibanda said that, *"As schools, we could improve the mentoring process by matching the mentor and pre-service teacher on the basis of subject specialisation."* Sheila added that it was important, *"to attach one student teacher to one mentor teacher, preferably teaching the same subject."* The mentoring pair seems to be stressing on the importance of subject expertise in mentoring. In case of Moyo, she suggested that pre-service teachers needed be inducted first through school visits to familiarise themselves with the school and teaching programmes before they asked for their input in the selection of the mentor. In the third case, Simango also suggested that, *"the pre-service teacher could make pre-visits to the respective school before the beginning of the attachment period in schools."* School visits are to be used to expose the pre-service teachers to different mentors before making an informed decision on pairing on the basis of compatibility of teaching styles.

In the current study, pre-service teachers received content specific mentoring (Mukeredzi *et al.*, 2015). The mentors who were heads of departments were subject specialists as they taught the same subjects with their pre-service teachers. However, the criterion for selection of mentors

having the same subject specialisation with the pre-service teacher needed to be explicitly stated for all hosting schools so that mentors would be appointed on this basis not that they will be able to supervise the pre-service teachers since they would be their heads of departments. Subject specialisation could be regarded as the determining factor in all mentor selection at secondary school level if school-based mentoring was to improve (Orland-Barak and Hasin, 2010). However, the onus could be on the university to explain and justify to schools the importance of considering subject expertise in selecting mentors for pre-service teachers. School heads, as administrators, seem to be more interested in appointing a mentor who would be able to supervise the pre-service teacher. This could be understandable as heads of schools would like to see their schools running smoothly. However, the challenge could arise in cases where the head of department oversees a number of subject areas. In such a scenario, the head of department would not necessarily be the best person to mentor the pre-service teacher as they could be teaching different subjects. Hence, the need for considering subject expertise if mentoring of pre-service teachers is to be improved in secondary schools.

The mentoring pairings by heads of schools seem to have considered the importance of subject expertise in mentoring as heads of departments who were subject specialists were selected as mentors for the pre-service teachers. Among previous research with similar findings were the Orland-Barak and Hasin (2010) and Mukeredzi *et al.* (2015) studies. Orland-Barak and Hasin argue that good mentors are sources of subject knowledge and that they are able to use it for mentoring purposes. The good mentors are able to draw on their rich pedagogical knowledge that enables them to represent seemingly complicated problems in a comprehensible manner. In the Mukeredzi *et al*.'s study, student teachers who received mentoring related to subject knowledge got informative guidance that enhanced the development of their pedagogical content knowledge (PCK) in their areas of subject specialisation. In addition, the study also revealed that three of the 20 participants who were mentored by mentors without subject expertise noted lack of confidence and effectiveness in their mentors. This was attributed to lack of appropriate subject

knowledge. Hence, the need for considering subject expertise if mentoring of pre-service teachers is to improve in secondary schools.

(b) Benefits of mentoring

In case 1, Sibanda admitted to have benefited from his interactions from Sheila particularly on being exposed to emerging and contemporary issues in teacher education in his interactions with pre-service teachers and university lecturers.

For Moyo and other teachers in school B, their unexpected benefit of mentoring was that they were informally in-serviced on use of ICTs in teaching. George's mentor and other teachers in the school benefited from his seemingly superior knowledge of the use of ICT tools in teaching. As a result, the school ICT club George had established became popular among both teachers and learners as they wanted to enhance their ICT skills. This finding is consistent with Blais *et al.*'s (2016) study findings. Blais *et al.* reported on a student teacher's displayed passion for using information and communication technology that the mentor acknowledged to have brought new content and methodology in his teaching. The study reported how the mentor and the learners had benefited from the use of technology throughout a semester. The study had focused on exploring the advantages of a Mentored-Teaching Programme (MTP) for student teachers and teachers in Canada using the mentor's lenses. The new content that included the use of technology in teaching presented a refreshing approach to learning to the learners and the mentor. The learners were presented with opportunities to learn from an alternative expert who had brought new teaching approaches from university. The mentor had in the process been also in-serviced in the aspects of use of technology in teaching and learning.

The notion of reciprocity in mentoring seemed to make participants expectant in the mentoring process. Each member of the mentoring pair expected to benefit from the process. Simango, a mentor at school C, thought he had made a significant contribution in the mentoring of pre-service teachers to merit recognition:

I am looking forward to more recognition especially from the university. I hope the university will at least acknowledge me when lecturers visit the school to supervise pre-service teachers on TP. What I have done in the past three years in mentoring merit recognition by the university. I hope to be enrolled to further my studies at the university as a way of the university showing gratitude to the immense and consistent contribution I have made to teacher education.

Sibanda seemed to concur when he said that: *"Mentors' contribution needed to be recognised and in the absence of financial rewards, some form of certificates would suffice."* Two of the mentors thought that they deserved to benefit from the mentoring process as they are contributing in teacher development. Mentors were of the view that they could be more motivated if they were certificated as a form of recognition in the absence of financial rewards. This finding is consistent with Hudson *et al.*'s (2013) research findings that exalted the reciprocity of benefits in mentoring. Hudson *et al*. (2013) observed that reciprocity in mentoring originated from a 'two-way street' in a mentoring relationship which did not see the benefits skewed in the pre-service teacher's favour. Mentoring benefits were not to be viewed as primarily flowing from the mentor teacher to the pre-service teacher. The mentors expected to also benefit from mentoring pre-service teachers.

(c) Mentor training workshops

One major finding of this study was that the participants were of the view that there was need to capacitate mentors and mentees through workshops and seminars. Moyo and George were of the view that university and schools needed to partner to mount capacitation workshops related to mentoring and other cross cutting issues, such as use of ICTs in teaching. In the other case, Simango and Augustine expected to see more use of ICT in teaching and mentoring. The workshops could be some form of university-schools partnerships to prepare teachers for the dual role of mentor teachers. The mentoring pair of Sibanda and Sheila suggested that mentors needed some form of training to be more effective, especially regarding their roles. This finding

can be related to other research findings which emphasise the need to train teachers as mentors (Jaspers *et al.*, 2014; Mukeredzi *et al.*, 2015; Samkange, 2015; Marimo, 2014; Maunganidze, 2015). Jaspers *et al.* (2014) made recommendations on the need for mentors to be inducted through professional orientated activities for them to fully understand their dual roles. They observed that mentors needed to recognise pre-service teachers as teachers and as well as learners. The mentors had to be capacitated to pay special attention to and sufficient reflection on the development of the teacher and learner roles, and when applicable a differentiation of the mentor and teacher roles. In this study, it would appear the participants felt that the mentors needed more support to comprehend their mentoring roles that were generally considered as an additional duty. As a result, mentors felt whenever their duties clashed; it was the mentoring task which had to be sacrificed. Consequently, mentoring sessions were scheduled during times they would not clash with the mentors' other responsibilities, such as teaching and supervision of teaching in the departments. However, it would appear the university had not explicitly stated what the mentors were supposed to do during mentoring. For example, there were no set criteria on selection of mentors and how and when mentoring sessions were to be held. As a result, each mentoring pair ended up deciding on when, where and what they did as regards their mentoring activities. The mentoring pair seems to have been guided by existing contexts in their schools and it were the contexts that influenced how the mentoring took place. The pre-service teachers' classroom practices also seemed to shape mentoring contexts as mentors used these practices in their own classes to provide opportunities for learning how to teach to pre-service teachers in future lessons.

5.3.5 Context and practice of school-based mentoring of pre-service teachers

The primary research question asked, *"How is school-based mentoring of pre-service teachers practiced in various school contexts of Zimbabwe and with what consequences for the classroom practices of the pre-service teachers?"* To fully answer this primary research question there is need to describe the contexts, mentoring practices and pre-service teachers' classroom practices and the relationship among these in school-based mentoring of pre-service teachers in Zimbabwe. In this study, contexts of mentoring pre-service teachers are described in terms of

how teaching and learning are structured and organised in each of the three schools. In all cases, the mentors were appointed by heads of schools as they were HODs. Mentors and pre-service teachers are in the same department but teach in different classes. The mentors would arrange to visit the pre-service teacher's classes to observe lessons. Schools A, B and C presented different mentoring conditions. The mentoring pair of school C had more teaching and mentoring time as it is a boarding school. The teachers have individual offices and conduct their mentoring sessions in their spacious and quiet offices. However, as the mentor would be busy with other school duties, they would conduct some of their mentoring sessions at night during learners' study time. The mentor was an experienced teacher and mentor. The school was supportive of the mentoring process as it also provided the required resources in teaching and mentoring. School C was well-resourced. School B was not as well-resourced as C but also had an experienced teacher and mentor who also combined the supervisory and mentoring duties. School B operated with double sessions, the morning and afternoon sessions. It was literally two schools in one but the sessions shared resources, facilities, teaching and learning time. Some of the mentoring sessions were held before and after lessons to minimise on interruptions by teachers or learners who would be in need of the HOD's services. School A was small in terms of enrolment since it has single stream classes for form 1 to form 4. There was only one pre-service teacher at the school who was assigned afternoon lessons as she also taught in the primary school in the mornings. The head of school who was also the head of department, appointed himself the mentor of the pre-service teacher. The conditions in these schools represent the differences in the mentoring contexts in the secondary schools that are in this study. However, the differences have implications for school-based mentoring of pre-service teachers. The school contexts were different and provided pre-service teachers with different opportunities for learning how to teach (Orlando-Barak and Hasin, 2010).

The second key finding was that for different contexts there were different mentoring practices as was shown using schools A, B and C. The way the teaching and learning were organised at each of the schools, to some extent, dictated how the mentoring was carried out. The existing

conditions in the schools gave rise to how mentoring duties were aligned with the mentor's other duties, the kind of support that was given to the mentoring process, and the school-based mentoring of pre-service teachers. Some school contexts gave pre-service teachers more opportunities to be guided as they learned how to teach as the teaching and mentoring environments were different. For example, school C had more teaching time than B and C. Thus, more time for the mentoring pair to meet. Mentoring sessions in school A were brief as there were no offices specifically for mentoring sessions. This seemed to affect how mentoring was practiced. As expected, better resourced schools, such as school C, a boarding school, offered better opportunities for pre-service teachers to learn how to teach.

The third key finding was that mentoring contexts and practices that shaped pre-service teachers' classroom practices are related. The school's context is defined by its beliefs, traditions, values, practices and goals. Mentoring takes place in schools and the mentoring practices are likely to reflect the school's beliefs, values and goals. Mentoring practices refer to how a teacher behaves and acts in the classroom as he or she provides opportunities for the pre-service teacher to learn how to teach (Ramnarian, 2015). The practices are aimed at enriching the professional development of the pre-service and mentor teachers. The school context determines how the practices are carried out as the teaching and mentoring operates according to conditions existing in the school. Mentoring has an effect on pre-service teachers' instructional practices. The school context can influence mentoring practices that can also influence pre-service teachers' classroom practices. Pre-service teachers' classroom practices are guided by the mentor as the mentor assists the mentee to learn how to teach. If the mentor adopts a life-long perspective to mentoring, pre-service teacher's classroom practices can influence mentoring practices. The mentor will use the pre-service teacher's classroom practices in her or his teaching as he or she offers pre-service teachers opportunities to learn how to teach. The classroom practices can then be used in mentoring as these are used by the mentor in other lessons or classes. The mentor's new mentoring practices then provide a context for her or his new classroom practices. The good classroom practices are carried over and in some cases refined as part of the 'best practices' in

teaching. However, if the mentor does not believe in the 'reciprocity' or life-long perspective of mentoring, the pre-service teachers' classroom practices will not be used in other teaching and learning or mentoring situations (Buhagiar and Tonna, 2015).

The fourth key finding was that school-based mentoring provided professional development for both, the mentor and pre-service teachers. Firstly, mentoring offered opportunities for transition from pre-service teacher to teacher. Secondly, for practising teachers, mentoring provided some form of in-service training for the mentor as their teaching expertise were upgraded through interacting with pre-service teachers, university TP documents and university lecturers. Informal in-service training was mainly provided in the areas that included the use of ICT in teaching and other contemporary teaching methodologies that were introduced in teacher education when mentor teachers had graduated from teacher education institutions.

The last but not least key finding was that school-based mentoring could be improved. The university-schools partnership needed to be improved to enrich the environment in which mentoring of pre-service teachers was taking place by revisiting the mentor selection criterion, benefits of mentoring and mentor training workshops. The participants were of the view that the selection of mentors could be on the basis of explicit criteria that was anchored on subject specialisation to ensure that pre-service teachers were also guided on subject content and other pedagogical aspects. Teacher education institutions were expected to motivate mentor teachers by providing some form of certification or recognition by offering mentor teachers opportunities to further their studies by enrolling them for mentoring related programmes. Such programmes were anticipated to go a long way in capacitating mentor teachers in mentoring as some mentors lacked formal training in mentoring.

Research on contexts and practices of school-based mentoring pre-service teachers supports these findings. Wang (2001) used twenty-three mentor teachers from the United States of America (USA), United Kingdom (UK) and China to explore the relationship between mentoring contexts and mentoring practices. The comparative study showed that the contexts of mentoring

in the different countries offered beginning teachers different opportunities for learning how to teach. The major finding was that the instructional contexts that existed in the different countries influenced the mentoring practices and the learning opportunities that mentoring created for those that were learning to teach in different contexts. The implications from the study included that it was important to have an environment that supported mentoring to enhance opportunities for mentors to learn what and how to support beginning teachers in their professional growth. In other supportive research, Orland-Barak and Hasin (2010) examined exemplary mentors' views towards mentoring in diverse mentoring contexts in Israeli schools. Data were gathered through interviews and observations of mentors during mentoring sessions. The participants of the collective case studies were mentors, mentees, school principals and supervisors. The mentoring contexts were defined by how the schools were organised and structured for teaching and mentoring. The findings of the study revealed that despite the different contexts in which mentoring was practised, exemplary mentors shared similar views towards mentoring regarding their educational philosophies, anticipated roles and forms of support for the mentees. The other participants had similar views of the exemplary mentors and good mentoring practices were associated with good leadership practices in classroom practices. As a result, across mentoring contexts, the study identified a relationship between the practices of an exemplary mentor and an effective leader. Effective mentors were observed to have the ability to lead mentees towards empowerment, autonomy and critical reflection. However, in the Israeli education system, just like in the current study, the mentor lacked the transactional roles of leaders though they had functions of agents of change in education. The mentors did not have the final say in the remuneration and reward for the mentees.

Research also indicates that teaching practice provided pre-service teachers with opportunities to reflect on their classroom practices when they were teaching under the constant supervision of experienced and qualified teachers. Ogonor and Badmus (2006) examined pre-service teachers' perceptions of reflective teaching practice introduced by a Nigerian university's Faculty of Education and found that the pre-service teachers valued the opportunities they had professional

development as they practised reflective teaching. Ogonor and Badmus recommended that teachers should be well grounded in the rudiments of the profession and assisted to continuously improve themselves even after training so that they will be in position to support pre-service teachers to critically reflect on their classroom practices. In another similar research, Ngara and Ngwarai (2012) investigated the roles of mentors mentoring student teachers from two teachers' colleges in Masvingo in Zimbabwe and found that there were differences in the way roles of mentors were conceived by student teachers and mentors. The student teachers found a knowledgeable mentor to be more helpful in their professional growth as they reflected on their classroom practices. The mentors highly regarded a mentor who was a friend to the mentee and a networker for the mentee. They observed that the mentee felt freer to challenge the mentor and interact with other members of staff as they interrogated their classroom practices. However, participants felt that there were challenges in mentoring that needed to be addressed.

Research offers some insight into challenges that mentoring faced particularly in Zimbabwe regarding school-based mentoring of pre-service teachers. In an examination of school-based mentoring of pre-service teachers in Zimbabwe, Marimo (2014) found out that school-based mentors were not trained to mentor pre-service teachers on Teaching Practice. Consequently, the mentors lacked confidence in mentoring pre-service teachers. Marimo recommended collaboration between schools and teacher education institutions in the training of school-based mentors, preferably in all districts throughout the country. The training workshops needed to mainly focus on the teacher education institutions' expectations regarding mentoring of pre-service teachers on teaching practice. In other supportive research, Maunganidze (2015) explored the extent to which effective communication between teachers' colleges and primary schools affected the effectiveness of mentoring of pre-service teachers' on Teaching Practice. Maunganidze concluded that lack of communication between teachers' colleges and schools negatively affected mentoring. Though training workshops were recommended it was also noted that the timing of such workshops could be problematic as some participants would not want to

leave their classes unattended during the school term. School holidays could be an option though some teachers could be reluctant to work during school holidays.

Even though this current study revealed that the mentoring pairs benefited from school-based mentoring of pre-service teachers, findings indicated that the participants are of the view that the mentors needed some form of workshops to prepare mentors for the mentoring of pre-service teachers during Teaching Practice. Some of the mentors in the secondary schools seemed to have relied on the pre-service teachers to be updated on some of the current teaching methods. The pre-service teachers also seemed to be more comfortable with using ICT tools in their teaching as compared to the mentor teachers. The mentor teachers were expected to be the more knowledgeable others (MKOs) according to the Vygotskian perspective to be able to take the pre-service teachers to higher levels in the zone of proximal development (ZPD). The university and schools were expected to partner in capacitating mentors since they had not been adequately prepared for the new role of teacher educators (Zeichner, 2010). The contexts in which mentoring took place needed to be improved to enhance mentoring practices within the realm of the Vygotskian theoretical framework. The school infrastructure needed to provide a conducive atmosphere for social interaction between the mentors, pre-service teachers and other members of staff. The mentor teachers needed to have craft knowledge in mentoring to be able to assist pre-service teachers to acquire new practitioner expertise. This could be viewed through the socio-cultural theory lens.

5.3.6 Theoretical framework

The theoretical framework for this study was based on Vygotsky's socio-cultural theory. Vygotsky's theory is understood on the basis of the tenets of social interaction, the more knowledgeable other (MKO) and zone of proximal development (ZPD). Social interaction plays a critical role in the professional development of pre-service teachers. According to Vygotsky, a pre-service teacher's mental development appears on two planes. The first level or plane represents the social interaction among classroom practitioners and then the second plane is the psychological growth which takes place within the pre-service teacher (Bekiryazici, 2015). The

pre-service teachers' experiences enable them to initially depend on others for guidance before they gradually understand the context in which they can apply the knowledge. The social interactions can determine the pace of the professional development which goes on in the teaching career of teachers. In this study, in relation to social interaction data was collected through observations of mentoring sessions and interviews with pre-service teachers and mentors. The main interactions took place during the pre-lesson and post-lesson conferences between the mentor and pre-service teachers. This finding is consistent with the socio-cultural theory that acknowledges that social interaction determines the pace of the cognitive development of pre-service teachers. However, the social interactions benefited both the mentor and pre-service teacher as they realised the reciprocity of school-based mentorship benefits. The benefits of mentoring were two-way as both, mentor and pre-service teacher, professionally developed.

In the current study, the mentor teacher was the more knowledgeable other (MKO). The MKO had superior level of understanding and ability of the teaching and learning process (Shooshtari and Mir, 2014). The pre-service teacher depended on the mentor teacher for support during Teaching Practice as he or she learned how to teach. The mentor provided emotional and technical support to the pre-service teacher. The mentor also assisted with the practical and pedagogical aspects of teaching during Teaching Practice. The mentor assumed various roles during the mentoring process with the aim of assisting the pre-service teacher to be a qualified teacher. As the MKO, the mentor could have provided more professional support if he or she was properly trained for the task of mentor teacher. In all the studied cases in the current study, the MKO who was also the head of department was well positioned to guide the pre-service teacher as they were in the same department and was more conversant with the school culture and practices. However, the dual roles of mentors seemed to have reduced the contact time for mentoring. In addition, mentors were not specifically trained for the mentoring role which was also considered as an aside by the mentor.

The pre-service teacher operated within the zone of proximal development (ZPD) during Teaching Practice. The ZPD was the difference between what a pre-service teacher could do on his or her own and those things he or she could not do even with the assistance of the MKO (the mentor teacher). Any teaching which was outside the ZPD was not meaningful and well thought out. If the teaching was meaningful, it should not have been on what the pre-service teacher could already do on his or her own. The MKO was expected to take the pre-service teacher from the lower level to a higher level within the ZPD. The MKO provided opportunities to support the pre-service teacher to develop his or her teaching competencies during the mentoring process (Shooshtari and Mir, 2014), so that there would be a change in the levels within the ZPD. The mentor did this through scaffolding (Trif, 2015) resembled by the technique of gradual withdrawal of MKO support in the mentoring process as the pre-service teacher gained confidence in the teaching process (Bekiryazici, 2015). For this study, the mentors assisted the pre-service teachers to develop a repertoire of teaching skills as the mentors had craft knowledge from their teaching experiences. The assistance and guidance given to pre-service teachers was observed during mentoring sessions. However, viewing the contexts and practices of school-based mentoring of pre-service teachers through the Vygotskian perspective had its own methodological limitations though strategies to cater for these were proffered.

5.4 LIMITATIONS OF THE STUDY

As expected, there were limitations to this study. The findings of this study may not be transferable to other pre-service teachers outside the studied programme in which the data were collected. It would also be helpful to examine the contexts and practices of school-based mentoring of pre-service teachers in other teacher education programmes that have a component of Teaching Practice. However, the dense descriptions of the research settings and contexts can enable a reader to judge the transferability of the research findings to similar teacher education programmes with comparable research settings and contexts.

Furthermore, the other limitation of this study arises from the use of the case study design. The multi-case study was limited to secondary schools in one district in Zimbabwe. As a result not

all contexts and practices of mentoring pre-service teachers in secondary schools were studied as such a study would have required more time and resources than were available for the current study. However, the studied contexts enabled one to have a deeper understanding of the various contexts and practices of school-based mentoring of pre-service teachers, bringing out the commonalities and differences in the cases. This limitation could be mitigated by conducting a similar study involving all cases, requiring more time and funding to cater for all contexts and practices in the mentoring of pre-service teachers in secondary schools.

5.5 IMPLICATIONS AND RECOMMENDATIONS OF THE STUDY

Implications and recommendations of the results of this study relating to practice of mentoring, policy and future research are to be discussed in this section. The implications for the study are aimed at improving school-based mentoring of pre-service teachers whilst on Teaching Practice in secondary schools.

5.5.1 Implications and recommendations for practice

The contexts in which mentoring took place were different and as expected, there were different challenges which formed the basis for improving the practice of mentoring pre-service teachers in secondary schools. The mentor teachers needed to be trained in mentoring as they needed specialist skills in mentoring. Though the mentors were experienced and highly qualified teachers in their school subjects, mentor training could have equipped them with other critical mentoring skills to enhance the guidance and support for the professional development of pre-service teachers (Everston and Smithey, 2010). Mentor training could add value to school-based mentoring as the mentor teachers would have a deeper understanding of the contexts in which mentoring takes place and this could, as expected, positively affect their mentoring practices.

This study revealed that mentor teachers were selected by heads of schools. There was no consultation and as a result, all the selected mentors were heads of departments. There could be need for consultation with the teachers in the relevant departments and the pre-service teachers so as to have collective decision-making in the selection of mentors. The involvement of other stakeholders in decision-making could result in a more robust selection process of mentors.

Mentoring is not only about supervision of the pre-service teacher while on Teaching Practice. There could be other senior members of the department who could be less busy than the HOD and would be able to spend more time with the pre-service teacher as they would be having less school duties. There could be need to appoint mentors who are not HODs to avoid the appointment of a line manager of a pre-service teacher as a mentor. The line managers were also responsible for the assessment and appraisal of teachers in their sections and this could have affected the mentoring process as the pre-service teacher would have found it difficult to challenge the mentor teacher. Mentoring committees could also be established in schools to be in charge of pairing mentors and pre-service teachers. Alternatively, such a committee could be part of the already existing school staff development committees that report to heads of schools.

The study found that mentor teachers needed to be motivated as they considered mentoring as an aside in their teaching duties. Universities could offer to staff develop mentors through part-time open and distance learning (ODL) teacher education programmes at subsidised tuition fees as a form of reward for their role in teacher development. The universities would then take this opportunity to introduce mentoring courses as part of the degree modules. ODL courses will have the advantage that teachers will be able to learn whilst they were teaching as they would not attend their tutorials during school teaching time. Tutorials could be held during weekends and school holidays. Online courses could also be considered as a mode of delivery.

5.5.2 Implications and recommendations for policy

Some of the gaps revealed in mentoring in this study relate to policy issues in teacher education in general and teacher preparation in particular. Mentoring as a course could be taught to all pre-service teachers, not only to prepare them for their own Teaching Practice but to prepare them as future mentor teachers in their professional careers. Mentoring could be a core course in teacher education for all primary and secondary school pre-service teachers. This would enable all teachers to have deep understanding of the theories of mentoring and the opportunities provided by mentoring in teacher development. Policy makers would make it a point that all classroom

practitioners joining the teaching profession through whatever route, be it teachers' colleges, universities or polytechnics, would have studied mentoring as part of fulfilment of their teacher education programmes. However, there would still be need for refresher courses in mentoring as teachers would need to be updated on new developments in teacher education from time to time. One such area in which mentor teachers were found to lag behind was the use of ICT tools in classrooms as was also found in a similar study in Lesotho (Chere-Masopha, 2018). The reason advanced in the Lesotho study was that mentors had limited access to ICT tools and that their ICT knowledge and confidence were limited as was demonstrated by the mentoring pair of Mrs Moyo and George. This would imply that there is need for policy on training of teachers in ICT for them to be effective MKOs for the pre-service teachers even for those aspects dealing with use of ICT tools in teaching.

At school level, there should be clear policies on mentor selection, duties and responsibilities of mentor teachers. These policies could originate from teacher education institutions that needed to produce comprehensive handbooks on Teaching Practice spelling out their expectations regarding mentoring of pre-service teachers during Teaching Practice. A school mentoring policy needed to be crafted from the ministerial policy documents, such as the Zimbabwe Ministry of Primary and Secondary Education's Training Manual on Teacher Professional Standards (2015). The teacher education institutions needed to develop their mentoring policies from the national policy. Despite the differences in the contexts existing in schools, these policies at various levels would ensure some form of standardisation in the mentoring practices. However, in practice, implementation could vary because of some institutional factors; nonetheless, the policy provides some regulatory framework for the practitioners.

5.5.3 Implications and recommendations for future research

The findings of this study provide the basis for the implications for future research. There could be need for a longitudinal study to cater for all contexts and mentoring practices during school-based mentoring of pre-service teachers in the various teacher education programmes offered in the country. The present study did not have the resources and capacity to embark on such a

study. However, the studied cases have managed to provide a deeper understanding of the various contexts and practices of school-based mentoring of pre-service teachers in secondary schools with similar contexts and practices.

This study used the mentoring pair as the unit of analysis, future research might consider including the role of the university supervisor during Teaching Practice. There could be need to understand how university supervisors use their limited time in schools during Teaching Practice visits to help mentor teachers to become teacher educators. The extent of help teachers get during interactions with university supervisors could be providing some form of training in mentorship. These visits could have been used to capacitate mentors as teacher educators and could entail that the university supervisors would also need preparation for their new role just like the mentor teachers will. Future research can proceed to investigate how the university supervisors can contribute in school-based mentoring of pre-service teachers with a view of empowering both the mentor and pre-service teacher as they interact during Teaching Practice.

Furthermore, future research could consider situations in which a pre-service teacher would be given opportunities to teach in different schools with different contexts. Alternatively, a mentor teacher could be given opportunity to mentor pre-service teachers in different schools. The contexts and mentoring practices, as expected, would be different but the question would be how these affect the practitioners' classroom practices. Teaching and mentoring in different schools would enable a researcher to have a deeper understanding of the relationship of contexts and practices in school-based mentoring of pre-service teachers. In this study, participants were restricted to teaching and mentoring at their schools and it would add a new dimension in the understanding of contexts and practices of school-based mentoring of pre-service teachers if a mentoring pair practiced in different contexts.

5.5.4 Implications for social change

The present study charts the direction for teacher educators to strengthen teacher education programmes as its small positive contribution to social change at various levels. At a personal level, I now have a better understanding of the conditions in which pre-service teachers are

mentored by teachers who have assumed a new role of teacher educator. This study has made me appreciate that the teachers, despite not having formal training in mentoring; they are able to contribute to teacher development using their limited expertise in teacher education and at times limited resources. In some instances, mentor teachers found ways to support the professional development of pre-service teachers even outside the normal school teaching time. The various contexts in which mentoring of pre-service teachers took place presented challenges that shaped the mentoring practices and in the process influenced classroom practices of both the mentor and pre-service teachers. In the process each mentoring pair acknowledged the benefits of mentoring as they enhanced their repertoire of teaching skills.

At the institutional level, mentors, pre-service teachers, teachers, heads of schools and their associates could have a deeper understanding of mentoring after having been compelled to think deeply about school-based mentoring of pre-service teachers as they participated in this study. Findings of this study suggest that the different contexts offer mentors and pre-service teachers varied mentoring experiences. This study may also provide teachers, teacher educators and researchers with a deeper understanding of the relationship between institutional instructional contexts and practices of school-based mentoring of pre-service teachers in Zimbabwe and their influences on classroom practices. Research has offered some findings on the relationship between the contexts of teaching and mentoring and mentoring practices, and assumes there exists opportunities for pre-service teachers to learn to teach in various contexts (Wang, 2001). Wang (2001) argued that instructional contexts had an effect on mentoring practices and this study sought to have a deeper understanding of how the various contexts and practices in secondary school-based mentoring of pre-service teachers shape their classroom practices. Though the contexts may have institutional variations, the study may help researchers to have a deeper understanding of the opportunities the pre-service teachers were availed as they learned how to teach. However, as expected mentor teachers had an influence on pre-service teachers' learning as they had to align their daily duties with the task of mentoring. For example, mentors who had other school duties besides mentoring devised strategies to guide and advise pre-service

teachers even outside the normal school teaching time. They also had to be innovative to find appropriate rooms to conduct their mentoring sessions.

At the societal level, the contribution of this study relates to the current trends in teacher education that have seen schools playing a major role in teacher development. Consequently, teachers have assumed the additional role of teacher educators for which they were not prepared for during their teacher education programmes. Leadership in schools and the school community have to embrace the new responsibilities thrust upon school personnel and make strategic decisions to fully equip schools and staff for their new transformative roles in teacher development. Leadership in schools has been opened up to include mentor teachers. Parents and guardians have to understand the pre-service teachers as teachers of their children and learners from teacher education institutions. School stakeholders have to be convinced to appreciate the direction being taken in teacher education as they would be called upon to contribute in various ways to make teacher education in a developing country like Zimbabwe catch up with global trends in teacher preparation.

5.6 CONCLUSIONS

New trends in teacher education that are experienced worldwide have continued to influence teacher preparation in developing countries, such as Zimbabwe. Teacher education has literally shifted to include schools in recent years and placed new demands on teachers in schools. However, there has not been a corresponding capacitation of school personnel for their new roles. In addition to teaching, teachers are expected to play a critical role in teacher education as mentor teachers. The previous school infrastructure and structure has also not been reconfigured to accommodate the changes in teacher education. As a result, schools do not offer the same opportunities to pre-service teachers who are learning how to teach under the guidance of mentor teachers. Hence, as the findings in this study suggest, there is need to research on contexts and practices of mentoring pre-service teachers in secondary schools.

Schools have different infrastructure and operate with different instructional programmes as determined by their available resources. As a result, pre-service teachers on Teaching Practice

(TP) are made to fit into an existing operational school culture as they are mentored by qualified teachers. Some schools have more teaching time than others that operate with double teaching sessions in a day. As expected, the time for teaching and mentoring will be different in such schools. In the case of boarding schools, they have more time for teaching and mentoring as teachers and learners have more face-to-face contact time. Some schools are also better resourced as compared to other schools. The mentor teachers' practices are shaped by how the school operates and the teachers' other duties. Consequently, different schools have different mentoring contexts for pre-service teachers.

Situations that exist in schools dictate how mentoring is conducted. Some mentoring sessions were conducted in places that were not conducive because of lack of the appropriate infrastructure, such as offices. Other mentoring sessions were conducted after school hours as the mentors had other school duties during the normal school time. Inhibiting institutional factors resulted in less frequent and brief mentoring sessions. In addition, the mentors had other school duties which took most of their time for mentoring that was also considered as an aside by mentor teachers. Furthermore, the pairing of pre-service teachers with their mentor teachers, though well intended in terms of subject specialisation, has its own challenges as pre-service teachers cannot honestly critique their mentors' classroom practices. Moreover, the hierarchical structure of the mentoring pair tends to limit social interaction that promotes professional growth in both the mentor and pre-service teacher (Poleacovschi *et al*., 2017). However, mentoring pairs with educational philosophies face less conflict and tension and as a result, the mentor, as the more knowledgeable (MKO), positively influences the pre-service teacher's professional growth and identity. In addition, the professional growth of the pre-service teacher results from a supportive mentoring environment that also offers opportunities for the mentor to learn from his or her mentoring experiences. Furthermore, mentoring experiences informally in-service mentor teachers as they interrogate and practice contemporary instructional methodologies in their interactions with pre-service teachers and university supervisors. As a result, the way the pre-service teachers enact their classroom practices in turn shape the mentors' conception and

practices of mentoring that provide a context for learning how to teach to pre-service teachers. Therefore, contexts and practices in mentoring of pre-service teachers can be understood in the contexts of the mentoring practices.

Though teachers were not specifically trained as mentors, the way they have accepted their assumed new role of teacher educator in the schools can be commended for a number of reasons. Firstly, teachers show enthusiasm and commitment to contribute to teacher development. Their contribution becomes more magnified if it is considered that, in Zimbabwe, mentor teachers mentor pre-service teachers for no extra pay. Secondly, teachers as professionals have accepted to learn on the job to catch up with new trends in teacher education. Thirdly, teachers continue to make efforts to self-capacitate themselves in order to cope with ever changing demands of their profession. However, teacher education institutions need to come to the assistance of schools and teachers if they are to remain relevant and effective as teacher education continues to evolve as it services the demanding populace (Douglas, 2012). Specifically, the teacher mentor has to be capacitated to effectively mentor pre-service teachers to improve the quality of education in our schools. This may mean researching on new roles of school teachers and university supervisors as they contribute towards the professional development of pre-service teachers when they are on teaching practice in schools. This study has persuaded me to continue researching on this fertile area.

Findings of this study seem to suggest that to effectively mentor pre-service teachers in secondary schools, schools have to provide a supportive mentoring context. In turn, the supportive mentoring context has to provide opportunities for life-long learning for the mentoring pair. The mentoring helps the pre-service teacher as he or she prepares for a life-long career in teaching. In addition, the mentor teacher adopts a life-long strategy of learning from teaching and teaching from learning as he or she interacts with cohorts of pre-service teachers from teacher education institutions who come to teach in schools using contemporary teaching methodologies and emerging technological tools. As a result, schools and universities have to ensure that mentor teachers, pre-service teachers and other stakeholders are fully capacitated

through mentoring workshops that will be a product of school-university partnerships. These partnerships could also help to establish communities of practices in secondary schools along the lines of professional learning communities (PLCs) as advocated for by Hudson *et al.* (2013). However, the differences will be that, unlike the mentioned PLCs, these communities of practice will have the strategic goal of not only improving mentoring practices but the mentor training workshops as well. The training workshops will also enhance the school-university partnerships. These partnerships will be expected to enrich the context in which mentoring takes place by availing the requisite material, human and technical resources in secondary schools. Consequently, the resultant mentoring practices will lead to improved classroom practices that will be reflected in improved teaching and learning in secondary schools. The principal thesis of the current study is that the context influences the mentoring practices whilst at the same time mentoring practices also shape the mentoring contexts in secondary schools.

As a way of concluding this study, I propose a model for school-based mentoring of pre-service teachers that is informed by the findings. The suggested model as shown in Figure 5.1 below is tentative as this study had limitations and the studied contexts were not exhaustive, thus leaving room for modifying the model as more mentoring contexts are studied as part of furthering research in this area.

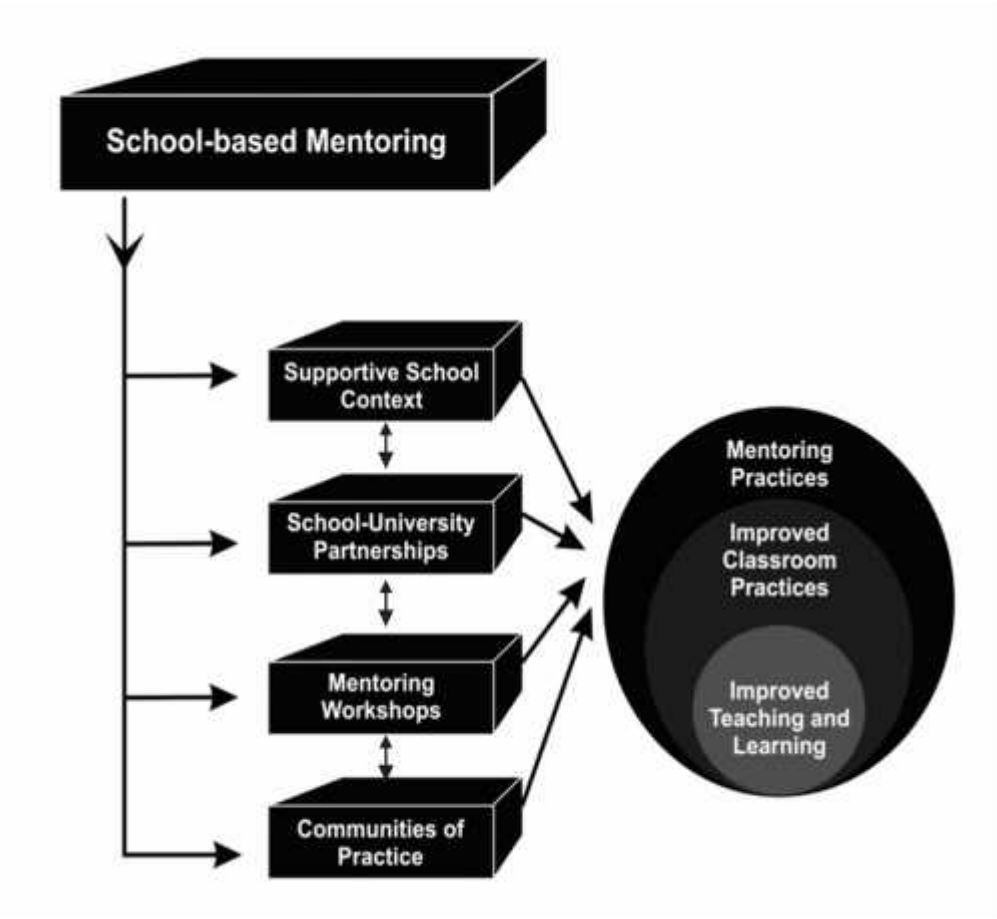


Figure 5.1: Suggested Model for School-based Mentoring of Pre-service Teachers

The ultimate product of improved teaching and learning as shaped by the mentoring practices is anchored on the mentoring contexts that provide opportunities for pre-service teachers to learn to teach. These opportunities may not be the same for all schools and the challenge would be to improve these opportunities for all pre-service teachers as they learn to teach under the guidance of trained teachers in different secondary schools in Zimbabwe.

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APPENDICES

APPENDIX 1: Curriculum Vitae for Barnabas Muyengwa

A. Personal details

- Name: Barnabas Muyengwa
- Student Number: 2016141042
- National Registration Number: 63-290281H-48
- Nationality: Zimbabwean
- Date of Birth: 7 December 1961
- Contact Number: +263 715 828 778 or +263 772 238 397
- Home Address: 8415 Zengeza 3, Chitungwiza, Zimbabwe.
- Business Address: Zimbabwe Open University, Department of Teacher Development, P.O. Box MP1119, Mount Pleasant, Harare.
- E-mail Address: muyengwabb@gmail.com

B. Educational Qualifications

- M.Ed. (Teacher Education) (UZ)
- B.Ed. (Mathematics) (UZ)
- Certificate in Education (UZ)

C. Work Experience

- 1984-1989: Secondary school Mathematics teacher
- 1989-2008: Primary teachers' college Mathematics lecturer
- 2008-to date: University lecturer in the Department of Teacher Development

D. Research Interests

- School-based teacher development
- Teaching practice supervision and assessment

- © Teacher education through open and distance learning
- © **Thesis topic**: The context and practice of school-based mentoring of pre-service teachers in Zimbabwe

APPENDIX 2: Ethical Clearance Letter

UFS·UV

[redacted]

Faculty of Education

I l-May-2017

Dear **Mr Barnabas Muyengwa**

Ethics Clearance: **The context and practice of school-based mentoring of pre-service teachers in Zimbabwe**

Principal Investigator: **Mr Barnabas Muyengwa**

Department**: School of Education Studies (Bloemfontein Campus)**

APPLICATION APPROVED

With reference to your application for ethical clearance with the Faculty of Education, I am pleased to inform you on behalf of the Ethics Board of the faculty that you have been granted ethical clearance for your research,

Your ethical clearance number, to be used in all correspondence is: **UFS-HSD2017/0514**

This ethical clearance number is valid for research conducted for one year from issuance. Should you require more time to complete this research, please apply for an extension.

W request that any changes that max take place during' the course of your research project be submitted to the ethics office to ensure we are kept up to date your progress and any ethical implications that may arise.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours faithfully

Dr. MM Nkoane

Chairperson: Ethics Committee

Education Ethics Committee
Office of the Dean: Education
T: +27 (0)51 401 96831 F: +27 (0)86 546 Il 13 E: NkoaneMM@ufs.ac.za
Winkic Dircko Building I P.O. Box/Posbus 339 | Bloemfontein 9300 | South Africa www.ufs.ac.za

APPENDIX 3: Permanent Secretary's permission to conduct research in schools

All communications should be addressed to Reference: C/426/3 Mash East

Telegraphic address : "EDUCA TION"
Fax: 794505

P.O Box CY121
Causeway HARARE

ZIMBABWE

16 May 2017

Ministry of Primary and Secondary Education

Barnabas Muyengwa

8415 Zengeza 3, Chitungwiza

PERMISSION TO CARRY OUT RESEARCH IN MASHONALAND EAST PROVINCE:

Reference is made to your application to carry out research at the above mentioned schools in Mashonaland East Province on the research title:

"THE CONTEXT AND PRACTICE OF SCHOOL BASED MENTORING OF PRE-SERVICE TEACHERS IN ZIMBABWE"

Permission is hereby granted. However, you are required to liaise with the Provincial Education Director, Mashonaland East Province, who is responsible for the schools which you want to involve in your research. You should ensure that your research work does not disrupt the normal operations of the school.

You are also required to provide a copy of your final report to the Secretary for Primary and Secondary Education.

Dr S.J Utete-Masango

SECRETARY FOR PRIMARY AND SECONDARY EDUCATION

cc: PED-Mashonaland East Province

PERMANENT SECRETARY
MINISTRY OF PRIMARY AND SECONDARY EDUCATION
2017 -07- 0
P.O. BOX CY 121 CAUSEWAY
ZIMBABWE

APPENDIX 4: Provincial Education Director's permission to conduct research in schools

Reference• C/ 440 /1 M

E. C. No. —

All communications should be addressed Ministry of Primary & Secondary Education Mashonaland East Province

P.O. Box 752 Marondera ZIMBABWE

Provincial Education Director

Mashonaland East Province

Telephone: 0279-24811/4 and 24792 ZIMBABWE

Telex :

Fax: 079-24791

18 JULY 2017

Mr./Mrs4Miss B. MUYENGWA

8415 ZENGEZA 3

CHITUNGWIZA

PERMISSION TO CARRY OUT RESEARCH IN SCHOOLS FOR EDUCATIONAL PURPOSES

STUDENT 1. D

~~MR~~/MRS/MISS MUYENGWA B. E. C. NO. —

201614 10 42 ~~HEAD/TEACHER AT~~ LECTURER ZOU ~~SCHOOL~~

Reference is made to your minute dated 10 JULY 2017

J. MAKONI

Please be advised that permission has been granted that you carry out research work in our schools. You are accordingly being asked to furnish the Ministry with information about your findings so that we share the knowledge for the benefit of the system as well as our nation at large. We wish you all the best and hope to hear from you after completing your project work.

HUMAN RESOURCES OFFICER - DISCIPLINE

FOR PROVINCIAL EDUCATION DIRECTOR MASHONALAND EAST PROVINCE

HUMAN RESOURCES SECTION
MIN. OF PRIMARY & SECONDARY EDUCATION (MASH. EAST PROV.)
2017 -07- 18
P.O. BOX 752, MARONDERA
ZIMBABWE TEL: 0279-24901

APPENDIX 5: Request to the Permanent Secretary to conduct the research in schools

8415 Zengeza 3,
Chitungwiza,
Zimbabwe.

12 April 2017

The Permanent Secretary
Ministry of Primary and Secondary Education
P.O. Box
Causeway,
Harare.

Dear Sir/ Madam

REF: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I hereby request for permission to conduct research in selected secondary schools in one district in Mashonaland East Province.

My name is Barnabas Muyengwa, and I am currently studying for a PhD with the University of the Free State (UFS). As part of my studies, I am required to conduct research on an aspect of interest with a view to making a contribution to our knowledge and understanding of the issues under study. The title of my thesis is:

The context and practice of school-based mentoring of pre-service teachers in Zimbabwe

The purpose of the study is to shed light on how school-based teachers participate in the development of new teachers. The research has potentially interesting prospects and lessons for both policymakers and teacher educators, in that it will document current challenges and opportunities for successful mentoring of pre-service teachers, and provide recommendations for improvement. To date, not many such studies have been done especially in the various contexts of developing countries, including Zimbabwe. The selected schools will benefit from this study since they are directly involved in the research and findings will be shared with these schools. The Ministry will also benefit as the findings will be shared with the authorities for possible policy amendments.

The study will involve: 1) Observations of five of the lessons and mentoring sessions of five pairs of mentor-pre-service teacher, in a way that does not disturb the classes in order to verify some aspects and to observe mentoring practices; 2) Document analysis of school and teaching

records; and 3) two interviews, at a time convenient to the mentors and pre-service teachers for the purposes of having a deeper understanding of the context and practice of school-based mentoring of pre-service teachers. The interviews with each of the mentors and pre-service teacher are expected to last not more than forty five minutes per session, and these will be done when they are not teaching.

A total of five schools will be used from the list below; the other additional schools will be used in case any challenge is encountered.

List of schools purposely selected:

1. AA High School
2. BB High School
3. CC Secondary School
4. DD High School
5. EE Secondary School
6. FF High School
7. GG Secondary School

I undertake to observe confidentiality and to protect participants from physical and/or psychological harm. No names of the schools and/or persons shall be used in any reports of the research. All participants will be asked to participate voluntarily in the study and may withdraw at any time should they so wish.

Upon the completion of the study, I undertake to provide the Ministry of Primary and Secondary Education with a copy of the research report and to share my findings with Ministry and school officials.

If you need any further information you can conduct the undersigned or my research supervisor Professor L.C. Jita on +2751401722 or JitaLC@ufs.ac.za.

Thank you in advance.

Yours faithfully,

Barnabas Muyengwa

04-764595/6/9 or Mobile 0715 828 778 or muyengwabb@gmail.com

APPENDIX 6: Request to the Provincial Education Director to conduct the research in schools

8415 Zengeza 3,
Chitungwiza,
Zimbabwe.

13 April 2017

The Provincial Education Director
Ministry of Primary and Secondary Education
Mashonaland East Province

Dear Sir/ Madam

REF: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I hereby request for permission to conduct research in selected secondary schools within your province.

My name is Barnabas Muyengwa, and I am currently studying for a PhD with the University of the Free State (UFS). As part of my studies, I am required to conduct research on an aspect of interest with a view to making a contribution to our knowledge and understanding of the issues under study. The title of my thesis is:

The context and practice of school-based mentoring of pre-service teachers in Zimbabwe

The purpose of the study is to shed light on how school-based teachers participate in the development of new teachers. The research has potentially interesting prospects and lessons for both policymakers and teacher educators, in that it will document current challenges and opportunities for successful mentoring of pre-service teachers, and provide recommendations for improvement. To date, not many such studies have been done especially in the various contexts of developing countries, including Zimbabwe. The selected schools will benefit from this study since they are directly involved in the research and the findings will be shared with these schools. The Ministry will also benefit as the findings will be shared with the authorities for possible policy amendments.

The study will involve: 1) Observations of five of the lessons and mentoring sessions of five pairs of mentor-pre-service teacher, in a way that does not disturb the classes in order to verify some aspects and to observe mentoring practices; 2) Document analysis of school and teaching

records; and 3) two interviews, at a time convenient to the mentors and pre-service teachers for the purposes of having a deeper understanding of the context and practice of school-based mentoring of pre-service teachers. The interviews with each of the mentors and pre-service teachers are expected to last not more than forty five minutes per session, and these will be done when they are not teaching.

A total of five schools will be used from the list below; the other additional schools will be used in case any challenge is encountered.

List of schools purposely selected:

1. AA High School
2. BB High School
3. CC Secondary School
4. DD High School
5. EE Secondary School
6. FF High School
7. GG Secondary School

I undertake to observe confidentiality and to protect participants from physical and/or psychological harm. No names of the schools and/or persons shall be used in any reports of the research. All participants will be asked to participate voluntarily in the study and may withdraw at any time should they so wish.

Upon the completion of the study, I undertake to provide the Ministry of Primary and Secondary Education with a copy of the research report and to share my findings with Provincial and school officials.

I have already applied for permission from the Ministry of Primary and Secondary Education.

If you need any further information you can conduct the undersigned or my research supervisor Professor L.C. Jita on +2751401722 or JitaLC@ufs.ac.za.

Thank you in advance.

Yours faithfully,

Barnabas Muyengwa

04-764595/6/9 or Mobile 0715 828 778 or muyengwabb@gmail.com

APPENDIX 7: Request to Head of Schools to conduct the research in schools

8415 Zengeza 3,
Chitungwiza,
Zimbabwe.

14 April 2017

The School Head
YY Secondary School
XX District

Dear Sir/ Madam

REF: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I hereby request for permission to conduct research with mentor and student teachers in your school.

My name is Barnabas Muyengwa, and I am currently studying for a PhD with the University of the Free State (UFS). As part of my studies, I am required to conduct research on an aspect of interest with a view to making a contribution to our knowledge and understanding of the issues under study. The title of my thesis is:

The context and practice of school-based mentoring of pre-service teachers in Zimbabwe

The purpose of the study is to shed light on how school-based teachers participate in the development of new teachers. The research has potentially interesting prospects and lessons for both policymakers and teacher educators, in that it will document current challenges and opportunities for successful mentoring of pre-service teachers, and provide recommendations for improvement. To date, not many such studies have been done especially in the various contexts of developing countries, including Zimbabwe. The selected schools will benefit from this study since they are directly involved in the research and the findings will be shared with these schools. The Ministry will also benefit as the findings will be shared with the authorities for possible policy amendments.

The study will involve: 1) Observations of five of the lessons and mentoring sessions of one pair of mentor-pre-service teacher, in a way that does not disturb the classes in order to verify some aspects and to observe mentoring practices; 2) Document analysis of school and teaching records; and 3) two interviews, at a time convenient to the mentor and pre-service teacher for the

purposes of having a deeper understanding of the context and practice of school-based mentoring of pre-service teachers. The interviews with the mentor and the pre-service teacher are expected to last not more than forty five minutes per session each, and these will be done when they are not teaching.

Your school is one the five schools that will be used from the list below; the other additional schools will be used in case any challenge is encountered.

List of schools purposely selected:

1. AA High School
2. BB High School
3. CC Secondary School
4. DD High School
5. EE Secondary School
6. FF High School
7. GG Secondary School

I undertake to observe confidentiality and to protect participants from physical and/or psychological harm. No names of the schools and/or persons shall be used in any reports of the research. All participants will be asked to participate voluntarily in the study and may withdraw at any time should they so wish.

Upon the completion of the study, I undertake to provide the Ministry of Primary and Secondary Education with a copy of the research report and to share my findings with District and school officials.

I have already applied for permission from the Ministry of Primary and Secondary Education Provincial Office.

If you need any further information you can conduct the undersigned or my research supervisor Professor L.C. Jita on +2751401722 or JitaLC@ufs.ac.za.

Thank you in advance.

Yours faithfully,

Barnabas Muyengwa

04-764595/6/9 or Mobile 0715 828 778 or muyengwabb@gmail.com

APPENDIX 8: Invitation letter to mentor teachers to participate in a research study

8415 Zengeza 3,
Chitungwiza,
Zimbabwe.

15 April 2017

The Mentor Teacher
YY Secondary School
XX District

Dear Sir/ Madam

REF: INVITATION TO PARTICIPTE IN A RESEARCH STUDY

I hereby kindly invite you to participate in a research study.

My name is Barnabas Muyengwa, and I am currently studying for a PhD with the University of the Free State (UFS). As part of my studies, I am required to conduct research on an aspect of interest with a view to making a contribution to our knowledge and understanding of the issues under study. The title of my thesis is:

The context and practice of school-based mentoring of pre-service teachers in Zimbabwe

The purpose of the study is to shed light on how school-based teachers participate in the development of new teachers in Zimbabwe.

You have been identified as one of the mentor teachers and whose mentoring practices I would like to observe and learn from and then come up with strategies for improvement of school-based development of new teachers. The study has the potential to benefit mentor teachers, pre-service teachers and schools, in that it will document current challenges and opportunities for successful mentoring of pre-service teachers, and provide recommendations for improvement.

The study will involve: 1) Observations of five of the lessons and mentoring sessions of one pair of mentor-pre-service teacher, in a way that does not disturb the classes in order to verify some aspects and to observe mentoring practices; 2) Document analysis of school and teaching records; and 3) two interviews, at a time convenient to the mentor and pre-service teacher for the purposes of having a deeper understanding of the context and practice of school-based mentoring of pre-service teachers. The interviews with the mentor and the pre-service teacher are expected

to last not more than forty five minutes per session each, and these will be done when they are not teaching.

I undertake to observe confidentiality and to protect participants from physical and/or psychological harm. No names of the schools and/or persons shall be used in any reports of the research. All participants will be asked to participate voluntarily in the study and may withdraw at any time should they so wish.

Upon the completion of the study, I undertake to provide the Ministry of Primary and Secondary Education with a copy of the research report and to share my findings with District and school officials.

I have already applied for permission from the Ministry of Primary and Secondary Education Provincial Office and school head.

If you need any further information you can conduct the undersigned or my research supervisor Professor L.C. Jita on +2751401722 or JitaLC@ufs.ac.za.

Thank you in advance.

Yours faithfully,

Barnabas Muyengwa

04-764595/6/9 or Mobile 0715 828 778 or muyengwabb@gmail.com
If you agree to participate in the study entitled:
The context and practice of school-based mentoring of pre-service teachers in Zimbabwe

Please complete the attached consent form

- I hereby give free and informed consent to participate in the above mentioned research study.
- I understand what the study is about, why I am participating and what the risks and benefits are.
- I give the researcher permission to use recording device (yes/no).
- I give the researcher permission to make use of the data gathered from participation, subject to the stipulations he has indicated in above letter.

Participant's Signature…….. Date……..

Researcher's Signature…….. Date……..

APPENDIX 9: Invitation letter to pre-service teachers to participate in a research study

8415 Zengeza 3,
Chitungwiza,
Zimbabwe.

15 April 2017

The Pre-service Teacher
YY Secondary School
XX District

Dear Sir/ Madam

REF: INVITATION TO PARTICIPTE IN A RESEARCH STUDY

I hereby kindly invite you to participate in a research study.

My name is Barnabas Muyengwa, and I am currently studying for a PhD with the University of the Free State (UFS). As part of my studies, I am required to conduct research on an aspect of interest with a view to making a contribution to our knowledge and understanding of the issues under study. The title of my thesis is:

The context and practice of school-based mentoring of pre-service teachers in Zimbabwe

The purpose of the study is to shed light on how school-based teachers participate in the development of new teachers in Zimbabwe.

You have been identified as one of the pre-service teachers and whose learning how to teach I would like to observe and learn from and then come up with strategies for improvement of school-based development of new teachers. The study has the potential to benefit mentor teachers, pre-service teachers and schools, in that it will document current challenges and opportunities for successful mentoring of pre-service teachers, and provide recommendations for improvement.

The study will involve: 1) Observations of five of the lessons and mentoring sessions of one pair of mentor-pre-service teacher, in a way that does not disturb the classes in order to verify some aspects and to observe mentoring practices; 2) Document analysis of school and teaching records; and 3) two interviews, at a time convenient to the mentor and pre-service teacher for the purposes of having a deeper understanding of the context and practice of school-based mentoring of pre-service teachers. The interviews with the mentor and the pre-service teacher are expected

to last not more than forty five minutes per session each, and these will be done when they are not teaching.

I undertake to observe confidentiality and to protect participants from physical and/or psychological harm. No names of the schools and/or persons shall be used in any reports of the research. All participants will be asked to participate voluntarily in the study and may withdraw at any time should they so wish.

Upon the completion of the study, I undertake to provide the Ministry of Primary and Secondary Education with a copy of the research report and to share my findings with District and school officials.

I have already applied for permission from the Ministry of Primary and Secondary Education Provincial Office and school head.

If you need any further information you can conduct the undersigned or my research supervisor Professor L.C. Jita on +2751401722 or JitaLC@ufs.ac.za.

Thank you in advance.

Yours faithfully,

Barnabas Muyengwa

04-764595/6/9 or Mobile 0715 828 778 or muyengwabb@gmail.com
If you agree to participate in the study entitled:
The context and practice of school-based mentoring of pre-service teachers in Zimbabwe
Please complete the attached consent form

- I hereby give free and informed consent to participate in the above mentioned research study.
- I understand what the study is about, why I am participating and what the risks and benefits are.
- I give the researcher permission to use recording device (yes/no).
- I give the researcher permission to make use of the data gathered from participation, subject to the stipulations he has indicated in above letter.

Participant's Signature…….. Date……..

Researcher's Signature…….. Date……..

APPENDIX 10: Interview Protocol

Questions for Mentors and Pre-service Teachers

(Before the interview, I will identify the following: name of interviewee, school, date and place for interview session)

Type of Interview: Face-to-face, one-on-one

The context and practice of school-based mentoring of pre-service teachers in Zimbabwe

INSTRUCTIONS

1. You are requested to respond to the following set of questions to the best of your ability.
2. You are kindly notified that the conversation will be recorded and after the research has been completed, they will be destroyed.
3. You will be expected to sign a consent form before the commencement of the interview.

MAIN RESEARCH QUESTION	How is school-based mentoring of pre-service teachers practiced in various school contexts of Zimbabwe and with what consequences for the classroom practices of the pre-service teachers?	
SUB-QUESTIONS	**MENTOR INTERVIEW QUESTIONS**	**MENTEE INTERVIEW QUESTIONS**
d) What are the differences in mentoring contexts in secondary schools?	) How were you paired with your mentee?) How were you prepared for mentoring by the school and university?) In what ways does the school support your mentoring of pre-service teachers?) In what ways does the university support your mentoring of pre-service teachers?	) How were you paired with your mentor?) How were you prepared for mentoring by your university and school?) In what ways does the school support your teaching practice?) What form of support do you get from your university during teaching practice?) How does the school

	) How does the school support you as a mentor teacher?) How do you share your mentoring experiences with colleagues?) What are your views on teaching and mentoring duties?	support you as a pre-service teacher?) How do you share your teaching practice experiences with colleagues?) What are your views on school-based mentorship?
e) How do different contexts shape and give rise to particular mentoring practices?	) How do you organise your teaching and mentoring duties?) How do you carry out your mentoring tasks?) What facilities and resources do you need to mentor pre-service teachers?) How do you assist pre-service teachers?) How often do you assist pre-service teachers?) How have you benefited from mentoring?	) How does your mentor assist you in planning, teaching and assessment student learning?) When does the mentor assist you in your teaching?) What facilities and resources do you need from the mentor for your teaching?) How do other staff members assist pre-service teachers?) How have you benefited from being mentored?
f) In what ways do mentoring contexts and practices shape pre-service teachers' classroom practice?	) How has the school assisted the pre-service teachers during their TP?) Who observes pre-service teachers' lessons during TP?) What do you discuss with your pre-service teacher before, during and after the lesson?) How are pre-service teachers given feedback on lessons observed?) How does the school follow up on lesson	) Who observes your lessons during TP?) What do you discuss with your mentor before, during and after the lesson?) How have you used comments from your mentor in teaching?) How are you given feedback on lessons observed?) How does the school follow up on lesson observation comments?

	observation comments? - What has the pre-service teacher done differently after your mentoring sessions?	- What have you done differently after discussing with your mentor?
	- How has your teaching experience helped you in mentoring? - What can be done differently to improve mentoring? - How can the school and university improve the mentoring of pre-service teachers?	- How can you be more prepared for the mentoring process? - What can be done differently to improve mentoring? - How can the school and university improve mentoring of pre-service teachers?

Thank you very much for your time and responses to my questions.

APPENDIX 11: Observation Guide for Mentoring Sessions

- ✓ Type of observer: Non-participant

Observations seek to have a deeper understanding of mentoring practices.

Mentoring sessions will be observed to analyse the following:

1. Differences in mentoring contexts
2. Influence of different mentoring contexts on mentoring practices
3. Influences of mentoring contexts and practices on pre-service teachers' classroom practice
4. Improvements on mentoring of pre-service teachers

- ✓ Before the observation, record the preliminary details such as date, time, setting, duration, class and number being observed.

  [Note details on date, duration, class and how the mentoring sessions are conducted]

- ✓ Observation of mentoring sessions

  [Sit in and observe the mentoring activities: when, where and what they discuss during these sessions. Take note of the mentor's role during the discussions and the pre-service teacher's contributions and questions.]

- ✓ Observation focus: Follow up on items and issues from interviews and document analysis during data collection.

  [Focus on aspects noted during school visits, interviews and document analysis. This is done to clarify or verify what was noted during school visits, interviews and document analysis.]

- ✓ Observe: Pre-teaching, teaching and post-teaching mentoring activities.

  [What takes place during these phases that guides the pre-service teacher? What does each of the partners in the mentoring relationship do? What forms of guidance and advice are offered to the pre-service teacher by the mentor?]

- ✓ Sit in during the mentoring sessions.

[What is discussed? What do the mentor and pre-service teacher do and say? Forms of interactions during the sessions will be noted.]

- ✓ Observe mentor, pre-service teacher and learners' actions and behaviours which have an influence on pre-service teacher's classroom practice.

  [Note mentor and pre-service teacher actions during mentoring sessions and lessons. Who does what and at what point?]

- ✓ Record fieldnotes during the observations

  [Keep a detailed record of all observations and discuss with participants to clarify unclear issues during the observations.]

APPENDIX 12: Document Analysis

Focus is on analyzing documents which are used during mentoring sessions.

- Identify types of public and school records to be perused and analysed.
- Seek permission to use the documents from the responsible individuals.
- Examine the following documents for accuracy, completeness, and usefulness in answering the research questions of this study:

- Ministry Handbooks [How are these used by mentors to mentor pre-service teachers?]
- Education Secretary Circulars [How do these guide what the mentors do during mentoring? Are they ever discussed or used during mentoring sessions? How do these influence what mentors and pre-service teachers do during mentoring?]
- School Curriculum Handbooks [How are these used during mentoring? What forms of guidance and advice do these provide to mentors and pre-service teachers?]
- National Syllabi [How are these used to guide and advise pre-service teachers?]
- School Syllabi [How are these used to mentor pre-service teachers?]
- Schemes of Work [How are these developed? What shows that the pre-service teachers were guided when they teach?]
- Lesson Plans [What are the indicators of guidance in the development and implementation of plans when pre-service teachers teach?]
- Minutes of School Meetings [What are the indicators of school support discussed during meetings and who initiated these discussions?]
- Supervision Reports [What can be said about the quality and focus of supervision given to pre-service teachers?]
- University Documents on Teaching Practice [What forms of guidance and support is given by the pre-service teacher's training institution?]
- Learners' Written Work [Who assesses the learners' work? What is quality of assessment of learners' work? In what ways are pre-service teachers guided in monitoring learners' work?]
- Assessment Records [How are these maintained and used in teaching and learning process?]