AN ANALYSIS OF MENTORING PRACTICES EXPERIENCED BY STUDENT TEACHERS DURING TEACHING PRACTICE: A CASE OF EVELYN HONE COLLEGE

BY

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A dissertation submitted to the University of Zambia in partial fulfilment of the requirements for the award of the degree of Master of Education in Sociology of Education

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DECLARATION

I, MUNJITA MILTON, do hereby declare that this dissertation is the product of my individual effort. However, materials from other scholars have been dully acknowledged. This dissertation has not been submitted previously at this university or any other university for a degree qualification.

Signature _____ Date _____

APPROVAL

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ABSTRACT

The purpose of this study was to analyse mentoring practices experienced by student teachers at Evelyn Hone College within the five factor mentoring model for effective teaching during teaching practice. This study was quantitative in nature and employed a cross-sectional survey design. The study population was 474 third-year student teachers of Evelyn Hone College. A sample of 155 was drawn using stratified random sampling. Data were collected through self-administered questionnaires and were analysed using SPSS version 20. Means and standard deviations were used to determine whether the experiences of student teachers were positive or negative. Manny-Whitney and Kruskal-Wallis tests were used to test the hypotheses as to whether there were differences between student teachers and their background variables (gender and programme of study).

Findings indicated that student teachers had positive experiences in all the five mentoring factors (personal attributes, system requirements, pedagogical knowledge, modelling and feedback). However, student teachers were found not to have been adequately mentored in specific pedagogical knowledge areas such as classroom management, teaching strategies, questioning techniques. The findings further indicated that there were no differences between gender of student teachers and experience of mentoring practices. The study also found significant differences between programme of study and two of the five mentoring practices (personal attributes and modelling).

The study concluded that student teachers were adequately mentored with exceptions in some individual pedagogical and system requirements mentoring practices. The study recommended that mentor teachers should adequately mentor student teachers in the area of pedagogical knowledge especially in classroom management, questioning techniques, and teaching strategies.

Key words: student teacher, mentoring practices, teaching practice, experiences.

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DEDICATION

To my lovely wife,

Laureen Domingo Munjita for her

patience, love and dedication

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ABBREVIATIONS AND ACRONYMS

AETD	Art and English Teachers Diploma
CSSTD	Computer Science Secondary Teachers Diploma
METD	Music and English Teachers Diploma
MOE	Ministry of Education
MPST	Mentee Perception of Student Teaching Survey
NQT	Newly Qualified Teachers
SPSS	Statistical Package for the Social Sciences
STD	Secondary Teachers Diploma
TP	Teaching Practice
UNESCO	United Nations Educational, Scientific and Cultural Organisation

DEFINITIONS OF TERMS

Experience: student teacher's understanding of interactions with mentor teachers and processes that contributed to their development of knowledge.

Student teacher: a student enrolled in a program for the preparation of teachers in English, Computer Science, Art and Music education.

Teaching Practice: a period of guided teaching and learning in which student teachers are exposed to when they work in classrooms and schools in a given period of time.

Mentor: a teacher at a secondary school responsible for helping, supporting and guiding a student teacher who is doing his/her teaching practice.

Mentoring practices: the five factors in the mentoring model which mentor teachers used in order to assist or guide student teachers during teaching practice.

CHAPTER ONE: INTRODUCTION

1.1 Overview

This chapter provides an overview of the study. It begins with the background of study and follows with the statement of the problem, purpose and objectives of the study. The chapter further provides the hypotheses, significance, delimitation and limitations of the study. The theoretical framework has also been explained. The chapter has further spelt out the assumptions and definitions of terms. The chapter concludes with a summary.

1.2 Background to the study

It is widely acknowledged that teaching practice is a very important component in the professional development of student teachers (Muzata and Penda 2013; Moyo 1980; Manchishi and Mwanza 2013; and Masaiti and Manchishi, 2011). It is the most influential aspect of teacher education (Kaross, 2016). Teaching Practice refers to a range of experiences to which student teachers are exposed when they work in classrooms and schools (Marais and Meier, 2004). Teaching practice is a requirement in teacher education programmes in Zambia. A student teacher cannot graduate without having gone through the teaching practice process (Muzata and Penda, 2013). Through teaching practice, quality teachers are produced who are able to teach effectively once they have been employed. The concept of teacher quality starts with student teachers while they are still in

colleges and universities. Teacher quality is one of the major concerns of teacher education in Zambia (UNESCO, 2016).

The Ministry of Education (1996:107) noted that: “The quality and effectiveness of an education system depends heavily on the quality of its teachers. It further states that teachers are key persons in determining the success in meeting the goals of the system. The educational and personal well-being of learners in schools crucially hinges on their commitment, competence and resourcefulness”. The education of teachers in Colleges of Education and Universities is therefore very important as it prepares them to become professional teachers in various schools across the country. UNESCO (2016: 139) further noted that, “in Zambia the majority of teachers have teaching qualifications but challenges still remain in improving teacher content knowledge and pedagogical skills”.

Student teachers in Zambia are prepared at three levels in various Colleges of Education and Universities. There are teachers who are trained at primary level. The lengthy of this programme is three years. These teachers are prepared to teach at primary school level (grade 1 to 7). The second level is where teachers are prepared to teach grades 8 and 9 (Muzata and Penda, 2013). This diploma programme is a three-year programme (MESVTEE, 2013). The last level is the degree programme where teachers are prepared to teach in secondary schools (grades 10 to 12). This is a four-year teacher education programme (Manchinshi,

2004). Despite all these improvements in teacher education, there appears to be a knowledge gap on how these student teachers are mentored during teaching practice.

In order to have quality teachers who will effectively perform their duties in these schools, there is need to prepare student teachers in such a way that they have mastery in subject matter knowledge as well as pedagogy. Quality teachers are those teachers who have deep masterly of subject matter and pedagogy and are capable of helping their students learn (Darling-Hammond, 1997). This explains why mentoring of student teachers should be given more attention as they learn the skills to teach. Learning to teach goes beyond lesson presentation (Muzata and Penda, 2013). Putting into practice knowledge learnt in educational institutions needs the guidance of more experienced teachers in cooperating schools. Left on their own, student teachers will struggle to learn the skills they need to prepare them for their future roles. They need the guidance and support of the mentor teachers. In support of the above, Saha and Dworkin (2009) are of the view that student teachers who receive mentoring support from veteran teachers during teaching practice are able to manage instruction, establish routines and keep pupils engaged in academic tasks. However, student teachers at Evelyn Hone College who were on teaching practice complained of not receiving adequate help from school based mentors (Kangwa, 2017). Hence the need for this study.

The success of teaching practice experience depends on the mentor teacher who guides and supports student teachers (Maphalala, 2013). Mentoring involves experienced teachers who should provide support, encouragement, counselling and guidance to student teachers. Mentor teachers as practicing professionals, are aware of current issues in education, and they are uniquely positioned to help student teachers navigate the demands of the practicum, particularly in matters of curriculum implementation and classroom management. This means that student teachers working with mentors would be able to manage teaching and establish routines (Saha, and Dworkin, 2009). While student teachers are on teaching practice, there learning involves participation in a professional community which also includes expert technical support through mentoring (Maphalala, 2013). This study was therefore carried out to establish whether student teachers were adequately supported during teaching practice in their quest to become professional teachers.

Mentoring of student teachers during teaching practice is a key element in initial teacher education in Zambia and the world at large. Alinezi (2015) asserted that supervision is a major component of the practicum and is highly influential in the preparation and development of teachers. Studies indicate that teaching practice supervision can exert both positive and negative influence on the student teachers (Moyo, 1980). It is therefore important that student teachers are supported during their time in cooperating schools.

At Evelyn Hone College, teaching practice (TP) is a mandatory requirement for all students pursuing a diploma in teaching. During the second term of their second year, all student teachers go for teaching practice in various schools across the country for a period of 13 weeks. In the first TP, student teachers are assessed on attendance, general personality, records of work, implementation of schemes of work, lesson plan, and distribution of questions among others. Student teachers also go for their second and final teaching practice during their first term of their final third year. The purpose of this second teaching practice is to help student teachers to prepare for their first year of teaching. They are assessed in areas such as achievement of lesson objectives, involvement of pupils in oral and written practice, English usage, quality of questions, and summary of the lesson, among others. While in these schools, student teachers are assigned mentors who guide them throughout the term. During this period, student teachers are assessed twice by the head of departments and the visiting lecturer. The grades given by both the heads of departments and visiting lecturers are all taken into account when calculating the final grade.

Mentoring takes place when mentor teachers monitor student teachers by formally and informally visiting classrooms, collecting data about their performance and then meets with the student teachers to discuss their performance and align student teachers needs to professional development. It is important to note here that student teachers are learners. Student teachers need

mentor teachers to work with them in order to help them throughout this professional development process. They need mentors to help them connect the theory learned in the college with the practical classroom experience during teaching practice (Hoben, 2006). Teaching practice is regarded as a quality assurance test because student teachers are assessed in the application of theories they have learnt in class (Muzata and Penda, 2013).

The teaching practice experience is meant to mould professionals who are competent in knowledge, skills, values, personality and positive attitude which enable them to implement the school curriculum effectively (MESVTEE, 2013). This can only be done if mentors do their job very well. Therefore, guaranteeing the quality of such a school based undertaking is pertinent and very powerful in shaping students. Research has shown that teaching practice comes with it problems and challenges that may impact negatively on the quality of students' real life teaching experience during TP (Zengeya, 2013). For example, a study by Kangwa (2017) investigated the effectiveness of teaching practice- a bridge between theory and practice among Evelyn Hone student teachers on teaching practice. Kangwa (2017) revealed that teaching practice was not effective as student teachers did not receive adequate guidance and support from their mentors in the schools they taught. Further, student teachers from Evelyn Hone College were found to have problems with delivery of content especially those who taught English (Simuyuba, Banda, Mweemba Muleya, 2015). Another

study by Muzata and Penda (2013) investigated pedagogical experiences of students on teaching practice in two teacher education institutions in the Copperbelt and Central provinces. The results of the study indicated that student teachers were mainly assisted in lesson preparation. Other areas such as teaching strategies were ignored.

Other studies have revealed that student teachers had challenges with mentor teachers especially in the area of feedback. Student teachers on teaching practice were used as cover teachers as they experienced full teacher work load. Those student teachers who lacked mentors reported an ineffective teaching practice experience as they did not have opportunities to learn from their mentors (Feber and Nillas 2010; and Mitka 2011). Sometimes mentor teachers were unavailable to execute their mentoring duties (Ngara, 2015). In addition, the MoE (1996) outlined problems colleges of education faced and are still facing today. These are shortages of educational resources and promotion of rigid teacher-centred methodologies. To these problems were added constraints in providing adequate supervision to students on teaching practice. These studies have shown that student teachers were not adequately mentored. Student teachers were expected to learn from their mentor teachers as these served as role models, modelling teaching abilities for the student teachers (Johnson, 2015. This shows that student teachers' experiences were negative.

Therefore, this study was prompted by the problems of inadequate mentoring portrayed by the cited studies. This study sought therefore to analyse mentoring practices experienced by student teachers on teaching practice.

1.3. Statement of the problem

Student teachers at Evelyn Hone College go for Teaching Practice (TP) twice during their teacher preparation programme. Their first TP comes in the second term of their second year and the final TP comes in the first term of their third year. During the time they are on TP, student teachers are assigned mentors who help them to acquire teaching skills as well as social skills. However, studies have found that student teachers on teaching practice face a number of challenges which included being cover teachers and working as full time teachers. These student teachers lacked opportunities to learn from their mentor teachers (Kangwa 2017, Mitka, 2011). However, there is no known research that has been done to analyse student teachers' experiences of mentoring practices during teaching practice. This study therefore, sought to analyse student teachers' mentoring experiences from the school based mentors. Further, the study sought to determine whether there were differences in student teachers' experiences of mentoring practices based on gender and programme of study.

1.4 Purpose of the study

The purpose of this study was to analyse the mentoring practices experienced by

student teachers at Evelyn Hone College during teaching practice.

1.5 Research Objectives

The objectives of this study were to:

i) Determine student teachers' experiences of mentoring practices during their teaching practice.

ii) Determine whether there are differences in student teachers' experiences of mentoring practices by background variables (gender and programme of study).

1.6 Hypotheses

This study was guided by the following research hypotheses:

1. H_o There is a significant difference in student teachers' experiences of mentoring practices between male and female student teachers.
2. H_1 There is no significant difference in student teachers' experiences of mentoring practices between male and female student teachers.
3. H_0 There is a significant difference between student teacher's experiences of mentoring practices and their programme of study.
4. H_1 There is no significant difference between student teacher's experiences of mentoring practices and their programme of study.

1.7. Significance of the study

It was expected that findings of this study might be important in a number of ways: Mentor teachers would use the findings of this investigation to enhance their mentoring practices and make teaching practices more effective and useful for student teachers. Further, the teaching practice committee may find the results of this study useful and may help them to design a mentoring practice guidelines. The findings of this study may also be useful to the Ministry of General Education (MoGE) as the results may help them come up with policy guidelines on mentoring of student teachers during teaching practice. The findings of this study may further contribute to refining Hudson's five factor model for effective teaching which shows that mentor teachers need the five factors (personal attributes, system requirement, pedagogical knowledge, modelling and feedback) in order to effectively mentor student teachers during teaching practice.

1.8. Delimitation of the Study

This study was an analysis of the mentoring practices experienced by third-year student teachers from Evelyn Hone College during teaching practice within the context of the five factor model (personal attributes, system requirements, pedagogical knowledge, modelling and feedback).

1.9. Limitations of the study

The study was conducted among student teachers at Evelyn Hone College. This means that results are locally specific and confined to the population studied and may not be generalizable to other colleges other than Evelyn Hone College.

1.10 Theoretical framework

This study was guided by the Five Factor theory of mentoring for effective teaching. The theory was developed by Hudson (2004) when he investigated the mentoring practices among student teachers of science. This theory has key five factors for effective mentoring which are: personal attributes, system requirements, pedagogical knowledge, modelling and feedback. Though this theory is dominant in the field of science teaching, it could also be used to analyse the mentoring practices experienced by student teachers of Art, Music, English and Computer Science Teachers' diploma.

The first of the five factors for effective teaching model is personal attributes. Effective mentors draw upon personal and interpersonal skills to engage with the mentee (Bird and Hudson, 2012). The mentor teacher is expected to have a relationship that is positive and supportive of the student teachers. The mentor is also expected to demonstrate good listening skills and a willingness to pursue a student teachers educational interest within the context of the classroom. Furthermore, the mentor teacher is supposed to help the student teacher to reflect

on his/her teaching experience.

The second factor is system requirement. Student teachers enter schools with little knowledge of organizations and the politics of school life (Bird, 2012). Student teachers are expected to get help from mentors in understanding the culture of the schools. Within schools there are established requirements or standards that must be followed when teaching. This ranges from curriculum to documentation of student learning. For one to be an effective teacher, they are expected to learn not only how to teach in the classroom but also about the rules, regulations and the policies of the school. Therefore, student teachers are expected to understand the aims, curriculum and policies that a particular school has.

The third factor is pedagogical knowledge. The mentor teacher is expected to assist student teachers in acquiring content knowledge, planning, timetabling, teaching strategies, problem solving, classroom management and assessment. The mentor is further expected to have in-depth knowledge in order to facilitate pedagogical learning. The mentor teacher must be willing to work with and help student teachers understand pedagogy. This study tries to establish whether mentor teachers helped student teachers to plan lessons, solve problems, classroom management and assessment.

The fourth factor is modelling. Mentor teachers are expected to model a number of aspects associated with the teaching profession. According to Hudson (2005), "mentors are supposed to develop a practice of rapport with the students, creating hands-on lesson plans and effective classroom management". Many student teachers are expected to learn from more experienced teachers on how to meet the diverse needs of learners.

The fifth factor is feedback. This has been described as a type of communication between mentor and mentee when evaluating the outcome of student learning and setting clear expectations for the mentee (Hudson, 2005). The feedback provided by mentors allows student teachers to grow as professionals based upon objective and real world insight.

The five Factor theory of mentoring for effective teaching suited this study as it allowed the researcher to understand student teachers experiences of the mentoring practices they experienced from the mentor teachers. For student teachers to grow professionally, they needed a supportive and positive relationship with their mentors.

This theory was also significant in the sense that it helped to choose the design of the study. The theoretical framework also guided this study because it provided a means for the researcher to discover the effective mentoring practices mentors

used when mentoring student teachers.

1.11. Assumptions of the study

Much of the literature on mentoring in Zambia is on practicing teachers (Banja, 2016 & Malasha, 2009). The researcher was interested in analysing the experiences of student teachers within the five factor model for effective teaching. The study was therefore guided by the following assumptions:

i) Student teachers were adequately mentored in the entire five factors model for effective teaching (personal attributes, system requirement, pedagogical knowledge, modelling and feedback).

ii) Gender and programme of study of student teachers had no influence in student teachers experience of the mentoring practices.

1.12 Summary

In this chapter, the background to the study, problem statement, purpose of the study, research objectives and hypothesis have been presented. Further, significance of the study, delimitations, limitations, theoretical framework, assumptions, delimitation, limitations and operational definitions of terms have all been described. The next chapter is the review of related literature.

1.13 Organisation of the Dissertation

This chapter presented the introduction of the study. The background to the

study, statement of the problem, purpose of the study, objectives of the study, hypothesis, significance, delimitations, limitations and theoretical framework were all presented. Chapter two was the review of related literature. Chapter three provided the methodology that was used in conducting this study. The research design, target population, sample and sampling techniques, data collection methods and data analysis were discussed. In chapter four, the research results were presented. In chapter five, the research results were discussed. Chapter six provided the conclusion and the recommendations were made based on the results of the study.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1 Overview

This chapter presents studies that have been conducted on mentoring practices of student teachers during teaching practice in Zambia and other parts of the world. The chapter is organised into three parts: mentoring practices (components of mentoring), relationship between gender and student teachers' experience of mentoring practices, and relationship between experience of mentoring practices and student teachers programme of study.

2.2 Mentoring practices

The mentoring practices that are reviewed in this chapter are the components of the five factor model for effective teaching developed by Hudson (2004). The mentoring practices include personal attributes, system requirement, pedagogical knowledge, modelling, and feedback. These are discussed in detail in the following sections.

2.2.1 Personal attributes

During teaching practice, student teachers are expected to plan, teach, reflect, and act through the guidance of a mentor teacher. The mentor teacher greatly affects the progress of the student teacher during this time, as they are expected to provide support, guidance, and inspiration. The school environment, in which

student teachers are doing their teaching practice shapes their understanding of teaching in the professional setting (Saha and Dworkin, 2009). In the school environment, student teachers need assistance from their mentor teachers. It is during this time that they need mentors who will guide and support them throughout the practicum. For example, Smolik (2003) conducted a qualitative study to explore and describe elementary science mentors and mentee teachers based on five factor mentoring model. The findings of Smolik revealed that mentors were perceived to be supportive to the student teachers. Support from mentors was mainly in modelling appropriate pedagogy, provision of feedback, instilling confidence and availability. Further, the findings indicated that the role of mentor teachers was that of expert status. This meant that mentor teachers were knowledgeable, showed mentees how to teach effectively and had passion for teaching science. This study though relevant to the current study it was carried out in a different country and with science students. This study mainly analysed mentoring practices in different fields such as Music, English, Art and Computer science.

A study by Hudson, Usak, and Ayse (2009) analysed mentoring practices of 211 primary science teachers using the five factor model of effecting teaching at a Turkish University. The study revealed that mentor teachers displayed positive personal attributes with mean scores ranging from 2.07 to 4.43 and standard deviations ranging from 0.76 to 1.29. About 90% of the science teachers

surveyed indicated that mentor teachers were supportive of their mentoring in science teaching. About two-thirds of the primary student teachers reported that their mentor teachers instilled confidence and positive attitudes towards science teaching. About 17% of the respondents reported being listened to and aided them to reflect on the science teaching practices.

In another study, Bird (2012) investigated the student teacher perceptions of the impact of mentoring on student teaching in the United States of America at Minnesota State University. The researcher adopted a mixed method concurrent design and the sample consisted of 218 student teachers. The findings on personal attributes indicated that mentor teachers provided support for student teachers. The mean item score range was 4.43 to 4.72 and the standard deviation ranged from 0.66 to 0.81. The findings further revealed that 95% of student teachers reported that mentors were supportive of them in student teaching while 93% felt comfortable talking to mentors. About 92% of the student teachers reported that their mentors instilled confidence and positive attitudes. Further, scholars such as Gulamhussein (2013) argued that student teachers needed support, encouragement, reassurance, comfort and guidance from mentor teachers and that mentor teachers were supposed to be ready to provide the necessary assistance.

The studies by Smolik (2003), Hudson et al (2009) and Bird (2012) though very

good have only used the five factor model of mentoring with science teachers and not in Music, Art, English and Computer Science student teachers in a diploma course. The other gap is that this study was not done in Zambia. It was therefore important to find out how student teachers at Evelyn Hone College were mentored using the five factor model of mentoring during teaching practice.

2.2.2 System requirement

Student teachers who become good and effective teachers do not only learn how to teach but they also learn the system in which they are found. Teaching is not only about learning how to teach but also learning the environment in which one is found. System requirement requires student teachers to learn about the aims of teaching their subjects, the curriculum and the schools policies regarding the teaching of their subjects. In support of the above, Bird (2012) showed that student teachers enter schools with little knowledge of the organisation and politics of school life. It is the duty of mentors to help them navigate the new context in which they work by learning to understand the complexities of the school's cultural context. Ballantyne (2005) also said that "student teachers need to be socialised into the school organisation in which they will be teaching. They need to be provided with basic understanding of the organisational life of the schools. They need to develop the political skills to deal with the problems and challenges associated with the organisational pressures of the schools".

In Zambia, every school is expected to have a school plan which outlines its practices and operations (MoE, 1996). The school plan clearly outlines, among other things, the following: the school's aims and objectives, clear specifications of learning goals and targets, the pedagogical approaches favoured by the school and school policies on assessment and homework (MoE, 1996). This is very much in line with the system requirements which Hudson (2005) developed as one of the factors in which student teachers need in order to effectively develop as professional teachers. The Ministry further stated that it would develop procedures that will enable teachers to standardize their assessment methods and would develop tests for use as an integral part of school-based assessments. This is essential to this study as it would mean mentor teachers outlining school policies, district policies and curriculum requirements when helping student teachers develop lessons (Smolik, 2003).

In line with the system requirement, a study by Hudson et al (2009) with 211 primary science student teachers in three Turkish universities indicated that student teachers received support from their mentor teachers. About 92% of the surveyed student teachers reported that they discussed the curriculum documents of science teaching; 72% reported that their mentor teachers discussed with them the aims of teaching science. Regarding school policies, 26% of the student teachers reported that their mentor teachers discussed policies related to science teaching. Similarly, the findings of Bird (2012) revealed that 85% of the students

reported that their mentor teachers discussed school policies and the goals for teaching. The other 82% of the student teachers indicated that their mentor teachers outlined the curriculum. However, a study by Shumba, Shumba and Maphosa (2012) on 120 mentors in Zimbabwe revealed that 65% of the mentors did not talk about school policies and regulations. The researchers further revealed that 69.2% of the mentors were not acquainted with college policies on teaching practice. These findings were mainly with primary science teachers and may not be generalised to other teaching subjects. This study mainly focused on Music, Art, English and Computer Science Teachers.

2.2.3 Pedagogical knowledge

Abbitt (2011: 282), defined pedagogical knowledge as "the nature of teaching and learning, including teaching methods, classroom management, instructional planning, and assessment of student learning". This means that student teachers are required to develop pedagogical knowledge which is necessary for them to become effective teachers. It must be stated here that student teachers acquire this knowledge in colleges and universities where they learn content. Similarly, if teachers are not provided with adequate teaching skills during their teacher education course, they are less likely to provide varied and relevant learning experiences for their students (Ballantyne, 2005). It is imperative therefore that mentor teachers provide would - be teachers with pedagogical knowledge in which they will be able to teach effectively.

However, this knowledge is not enough as what they also acquire is theoretical knowledge which they need to apply in a real classroom context. Therefore, the assistance given by the mentor teachers is very vital for their professional growth. In support of the above explanation, Hudson (2005) explained that specific knowledge is needed for student teachers such as content knowledge, preparation for teaching, classroom management, student assessment and evaluation.

In a qualitative study, Kangwa (2017) examined the effectiveness of teaching practice in bridging the gap between theory and practice among Evelyn Hone College student teacher on teaching practice. The study sought to find out whether student teachers effectively acquired pedagogical competencies during TP. The findings revealed that student teachers acquired teaching skills, developed problem solving skills, used different teaching-learning methods and material, and improved classroom management skills. However, the study also found that school teaching experience was not effective as they did not receive adequate guidance and support from the school based mentors. It was further revealed that the comments made by school based mentors on the lesson observation form were not substantial to help them learn. The gap identified in the study is that it only focused on pedagogical knowledge using very few student teachers who were not representative of the entire population of student teachers. This study, however, is quantitative and analysed mentoring practices

on five factors: personal attributes, system requirement, pedagogical knowledge, modelling and feedback.

Hudson's study (2009) of pre-primary science teachers in three Turkish Universities revealed that 96% of student teachers surveyed reported that mentor teachers guided them in preparation of teaching primary science, assisted in assessments, articulated viewpoints about science teaching and discussed questioning techniques. The study further reported that the majority of the mentor teachers did not mentor student teachers in science content knowledge and timetabling of science lessons. The major gap identified with this study is that it was carried out in another country and only explored student teachers of science. In a similar study, Bird (2012) revealed that 94% of the student teachers reported that their mentors assisted them with classroom management, 92% got different perspective about pedagogical knowledge. The findings of this study are important to the current study in that they would help to compare whether student teachers of Art, Music, Computer Science and Secondary Teachers Diploma had positive experiences or not on this mentoring practice. Furthermore, Hudson et al (2009) and Bird (2012) studies were mainly conducted with science student teachers only. This is not the case in this study.

A study by Shumba, Shumba and Maphosa (2012) investigated the student teachers perception of mentorship of student teaching during teaching practice in

Zimbabwe. One of the objectives was to determine the mentors' views on the assistance they rendered to mentees. The researchers adopted the descriptive design and data were collected by use of both questionnaires and interviews. The results revealed that 97.5% of the mentors assisted student teachers in lesson preparation, 90% discussed teaching, 34.5% offered skills in marking, and 18.3% offered skills in chalkboard use. The findings of the study showed that student teachers were not so much assisted in areas of assessment and use of the blackboard. However, this study was carried out in Zimbabwe and on mentor teachers. This study was carried out with student teachers at Evelyn Hone College.

In another study by Muzata and Penda (2013) on the pedagogical experiences of student teachers in Zambia found that student teachers needed guidance beyond lesson presentation. Pedagogical experiences go beyond lesson presentation. Muzata and Penda (2013) further showed that more concentration was on guiding student teachers on lesson presentation. The key aspects of pre-and post-lesson pedagogical aspect that required comments were always neglected. This study was carried out on two Teacher Education Colleges in Central Province and not Evelyn Hone College. It was important that mentoring practices be analysed with regard to student teachers experiences.

Mkhasibe (2014) conducted a study at University of Zululand to examine student

teachers perceptions of teaching practice. A descriptive survey design was used with a sample size of 184 student teachers. The findings revealed that most of the surveyed student teachers reported finding difficulties in choosing and using teaching techniques and strategies that were suitable for the learners they taught. Mkhasibe, further stated that student teachers needed to be exposed to different strategies in order to apply them depending on the lesson and the learners they were teaching. The findings of Mkhasibe (2014) were supported by Makamure (2017) who found that student teachers of mathematics were less positive about the assistance they received from their mentors. The student teachers reported that mentor teachers did not assist them to plan their lessons, select appropriate teaching strategies and getting feedback on their classroom practices. The major gap identified in these studies was that they were carried out in South Africa and Zimbabwe. The focus of these studies were mainly on teaching practice as a whole and feedback respectively. This study, however, focused on the mentoring practices within the five factor model for effective teaching.

A study by Simuyuba et al (2015) on teachers and head teachers' perceptions on the performance of University of Zambia student teachers on teaching practice found that 96% of the respondents had deficiency in teaching techniques. Most of the student teachers had problems with lesson planning and following learner centred methods. Simuyuba et al (2015) further reported that class teachers had to re-teach examination classes due to student teachers inadequacy in teaching

techniques. The researchers also indicated that the class teachers had to share the blame because if they were well trained they would have done cooperative teaching with the student teachers or prepare the lesson plans together or co-teach rather than teaching the same content again. The study by Simuyuba was conducted with teachers and head teachers' perceptions on the performance of University of Zambia student teachers on teaching practice. The focus of this study however, is on mentoring practices of student teachers at Evelyn Hone College. Hence the need to conduct the study.

Heeralal, (2014) conducted a study on mentoring needs of pre-service during teaching practice at a South African University. The sample consisted of 39 student teachers. The study was quantitative and descriptive in nature. The researcher found that the greatest need of student teachers was in the areas of lesson preparation (84%), lesson presentation (79%), assessment (82.2%) and classroom management (79.5%). Heeralal (2014) further reported the other areas where student teachers needed help. These included time management, extra and co-curricular activities. The least areas reported where student teachers needed help were dealing with diversity, dealing with change, relationships, and adaptation to a school. Heeralal further concluded that there is need for mentors to be trained and provide assistance to student teachers as they need this help. This study is important in that it highlighted the problems student teachers went through at that university. However, the experiences of student teachers at

Evelyn Hone College are not known as regard to pedagogical knowledge. It was therefore worth to find out their experiences with regard to pedagogical knowledge.

Chituta, Nkata, Banda, Jumbe and Choobe (2016), investigated the perception of mathematics and science teachers at the Copperbelt University in Zambia. They used a mixed method design. The findings revealed that 74% of the student teachers received guidance from mentors on teaching strategies. Chituta et.al (2016) concluded that most of the student teachers reported that they received support from their mentors in many areas. However, in this study it is not known how the student teachers at Evelyn Hone College were mentored on pedagogical knowledge especially that the fields are different. The study for Chituta et al was also done at a university while this study analysed mentoring practices with student teachers at a diploma level.

A study by Maphalala (2013) investigated how mentor teachers understood and perceived their roles as they prepared University of South Africa (UNISA) student teachers for their teaching careers during teaching practice session in cooperating schools. Maphalala used a mixed methods research design. A total of 46 mentor teachers filled in the questionnaire and 15 of them were also interviewed to gather more qualitative data to enrich the study. Findings revealed that mentor teachers understood their roles to be that of socializing student

teachers into the teaching profession, helping them to gain competence in the various areas of the school functioning, including lesson planning and presentation; classroom management and appropriate use of teaching strategies and resources. The findings of Maphalala were confined to UNISA only and were not generalizable to other settings such as Evelyn Hone College. It was therefore important to conduct a study in this area in order to find out how the student teachers at Evelyn Hone College were mentored.

2.2.4 Modelling

In order to succeed in becoming professional teachers, student teachers need to observe their mentor teachers teach or practice some activities. Mentor teachers are simply role models. Student teachers view the mentor as a model to develop a greater understanding of their own strengths and weaknesses (Maphalala, 2013). Modelling effective instructional strategies is one way a mentor teacher can help a student teacher. Through modelling student teachers are able to learn good classroom management techniques, instructional language and pacing of a lesson (Maphalala, 2013).

A study by Hudson (2009) analysed the mentoring practices of teaching primary science among student teachers using the five factor mentoring instrument at three Turkish Universities. The sample was 211 student teachers. The findings show that the majority of the student teachers perceived their mentors to model

science teaching practices. From the sample of 211, 88% reported that mentors were able to model classroom management, and 82% modelled enthusiasm in teaching science. These two were perceived to be the most representative practices of the mentor teachers. Similarly, Chituta et.al (2016), indicated that 76.5% of the student teachers observed their mentor teach.

However, modelling effective teaching and well-designed science lessons rated very low with 54% and 25% respectively. Bird (2012) in his study found that more than 90% of the student teachers reported agreement on all quantifiable items. The student teachers reported more often that mentors modelled effective teaching. The findings further revealed that the lowest score within the modelling factor was the use of curriculum language (90%). A student teacher is expected to learn from his or her mentor teacher, as the mentor teacher serves as a role model, modelling teaching abilities for the student teacher. Fayne (2007) found that many student teachers saw their mentor teacher as someone to collaborate with, someone who would provide materials and give suggestions, and someone willing to discuss teaching practices. The studies by Hudson (2009), Bird (2012) and Chitutal et al (2016) were all carried out with science students. However, this study involved student teachers in Music, Art, Computer science and English.

2.2.5 Feedback

Provision of feedback to student teachers is very important as it reveals the

strengths and weaknesses of the student teachers. Evans, Williams, King and Metcalf (2010) observed that the process of providing feedback to an individual learning how to effectively complete a task is essential to professional growth. Student teachers are just new in the school and lack considerable experience for self-reflection. They therefore needed someone to point at what they have done well and what they have not done well. This will help them improve.

Maphalala (2013) noted that the purpose of feedback was to provide suggestions on how to improve instruction, increase student learning, and encourage the classroom teacher. Maphalala (2013) further observed that student teachers needed continual support, and feedback that should measure their successes as well as address their challenges. When mentor teachers visits classrooms, observe student teachers teach and provide them with feedback, they will help them grow professionally. For example, Kushwala (2014) studied the perceptions of four student teachers on feedback in teacher education at University of Delhi. Kushwala found that the four student teachers were satisfied with some aspect of feedback given to them. They indicated that that their mentors supported their growth as student teachers and adjustment in the school. They also indicated that they liked feedback which enabled them to identify their strengths and weaknesses. However, Kushwala reported that the student teachers did not receive feedback on pedagogy. What student teachers needed was feedback that was more flexible than directive. The study by Kushwala is important for this

study in that he only considered four student teachers and it was also conducted outside Zambia.

Hudson (2004) conducted a study on mentoring practices of primary science teaching. His findings showed that mentees in classrooms where mentors provided in depth verbal and written feedback on lesson plans and lesson instruction showed greater growth than mentees who received little or no feedback. Sullivan (2004:28) further observed the following, “Mentors can foster evaluation in protégés who may be unable to get clear pictures of their own abilities”. Similarly, Martinez (2016) in his study of what type of feedback do study student teachers expect from their mentors during practicum experience on Spanish EFL student teachers observed that student teachers revealed a high degree of satisfaction concerning the quality of mentor feedback. Martinez (2016) concluded that the quality of feedback which was provided to student teachers was positively valued as it met their expectations. The study further revealed that student teachers complained of lack of detailed feedback from their mentor teachers.

In another study by Hudson et.al (2009) where they analysed the mentoring practices of primary science student teachers, they found that the majority of student teachers received feedback from their mentor teachers. The majority (84%) of the student teachers surveyed reported that their mentor gave oral

feedback while 68% received written feedback. In a study by Fantu (2014) at Jamme University in Ethiopia, he found that written feedback received low rating from the majority of mentors and student teachers. The study further indicated that 81% reported an absence of written feedback while 94.59% reported a total absence of written feedback.

The findings of Bird (2012) showed that feedback scored the lowest when compared with the other four factors of the five mentoring model. 71% of the student teachers reported that mentor teachers reviewed their lessons with a mean score of 3.84 and standard deviation of 1.03. The findings of this study further revealed that 92% of the student teachers reported that mentors observed their teaching and 79% indicated that they received feedback from their mentors with mean score of 4.14 and standard deviation. About 92% further reported that they received oral feedback with mean score of 4.47 and standard deviation of 0.83.

A study conducted by Ferber and Nillas (2010) examined the challenges and successes of student teachers during teaching practice experiences. The study revealed that student teachers had problems with their mentor teachers. These problems were mainly in feedback. In that study student teachers pointed out that they desired more specific and constructive feedback that could help them improve their teaching. Frequent feedback is a very important action when

mentor teachers work with student teachers. Student teachers feel its impact when it is not there (Rudney and Guillaume, 2003). Provision of constructive feedback is very important when mentoring student teachers as it helps to address issues of classroom management, discipline and behaviour issues, lesson planning, resource acquisition, and other needs of student teachers (Martinez 2016; Rudney and Guillaume, 2003). Studies which were reviewed showed that feedback can either be in form of written and oral comments or both. This feedback could be more effective if it was presented with honesty (Martinez, 2016 and Glenn, 2006). Most helpful is feedback that is descriptive, specific, and focused on teaching behaviours (Bartell, 2005). These findings are important to this study as it is not known how student teachers at Evelyn Hone College experienced this mentoring practice.

2.3 Studies on the relationship between gender and experiences of mentoring practices

There appears to be no studies that have been conducted in Zambia on the relationship between gender and experience of mentoring practices. Gender of the respondent may have significant impact on the student teachers experience of mentoring practices. This section of the literature reviewed a number of studies which have been conducted on the relationship between gender and mentoring practices.

One study by Khumalo (2014) investigated mentors' perception of their role in mentoring student teachers at the University of Zululand in South Africa. The study was quantitative in nature and used a descriptive design. Data were collected using a structured questionnaire and the study sample was 200 senior teachers (mentors). One of the objectives of the study was to establish whether certain mentor characteristics influenced their perceptions when mentoring student teachers. The results of the study revealed that the variables gender, qualification and area of specialization had no influence on mentors' perceptions towards mentoring student teachers.

Another study by Mkhasibe (2014) investigated student teachers perception of teaching practice at the University of Zululand in South Africa. One of the objectives of the study was to establish whether student teachers perceptions of teaching practice were influenced by their biological particulars of age and gender. The study was quantitative in nature and used a descriptive survey design. Data was collected through use of questionnaires. The findings of the study revealed that the perceptions of student teachers of teaching practice components of the lesson presentation were positive irrespective of age and gender. The gap identified in Mkhasibe study is that it only looked at perception of student teachers' age and gender on some components of lesson presentation. This study, however, analysed the components of the five factor model in relation to the personal attributes, system requirement, pedagogical knowledge,

modelling and feedback and student experiences.

Wambungu, Barmano, and Ng'eno (2013) carried out a study in Kenya at Egerton University in order to assess student teachers perceptions of teaching practice assessments. A descriptive survey design was used and stratified random sampling was used to select participants for the study. Student teachers were categorised into gender and area of specialisation. Data were collected through use of the questionnaires. The findings of the study revealed that student teacher had favourable perceptions of teaching practice assessments. The findings further indicated that there were statistically differences between male and female student teachers but there were no significant differences in their area of specialisation. The gap identified in this study was that it was mainly conducted on teaching practice assessments. This study however, is on the differences between student teachers experiences in mentoring practices. Therefore, the need for this study.

2.4 Relationship between experience of mentoring practices and programme of study

Studies on the relationship between area of specialisation and student teachers' experience of mentoring practices were scanty and difficult to find. However, only one study was reviewed. A study by Khumalo (2014) examined whether mentor teachers area of specialisation had any influence on student teachers mentoring. The study was quantitative in nature. Results showed that there was no significant relationship between mentor teacher's area of specialisation and

their mentoring perceptions. Different area of specialisation did not influence perceptions of mentor teachers differently. Irrespective of the area of specialisation they teach, mentor teachers were positive towards mentoring. The reason given was that student teachers were paired or matched with mentors who are in the same area of specialisation as they are. This made mentors to enjoy the mentoring of student teachers. The study by Khumalo (2014) was relevant to this study in that it was carried out in a different country and it was therefore important to find out if student teachers experiences of mentoring practices were influenced by their field of specialisation.

2.5 Summary of reviewed studies

It has been pointed out that newly qualified teachers lack mentorship when they begin to teach (Banja, 2016). Mentoring of student teachers is important as it prepares them for their professional roles as future teachers. Further, the literature has established that student teachers have different experiences with mentoring practices during teaching practice. The researchers in the studies reviewed have focused on mentoring practices with science and mathematics student teachers. None of them had examined the experiences of English, Music, Art and Computer Science pre –service teachers. This is knowledge that is lacking from this group in mentoring practices.

Further, the majority of studies reviewed were conducted in other countries.

However, similar or related studies in Zambia appear to be very limited. In addition, despite the availability of the reviewed studies, very little attention has been given to student teachers' experiences with mentoring practices from the Zambian perspective. This research attempted to fill this gap.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Overview

This chapter presents the research methodology and research methods that were used in this study. In this chapter the following have been described and explained: research design, target population, sample size, procedure and sampling techniques used in selecting the sample have been described. Data collection techniques, instrument validity and reliability and data analysis have also been discussed in detail.

3.2 Research paradigm

This study adopted a quantitative approach. Quantitative approach was used because the experiences of student teachers on mentoring practices was sought through structured questionnaires and quantified in order to reach meaningful and credible decisions. Further, the quantitative research approach allowed for the generation of quantitative data which was used for statistical analysis. This paradigm had the ability to reduce the number of variables and improve the reliability of the data (Wyse, 2011).

3.3 Research design

Research design as defined by Best and Kahn (2006) is the plan and structure of investigation so conceived as to obtain answers to research questions. In

this study, a survey research design was used. Cresswell (2012) defined survey research designs as “research in which investigators administer a survey to a sample or to the entire population of people to describe the attitudes, behaviours, or characteristics of the population”. Specifically, a cross-sectional survey design was used because it had the ability to gather data at once and from a large sample (Creswell, 2012). Further, a cross-sectional survey had the advantage of measuring the current practices. It also has the ability to make comparisons (Baumgartner, Strong, and Hensley 2002; Cohen, Mannion and Morrison, 2007). This provided the basis for making comparisons as well as providing information for making decisions (Baumgartner, et al, 2002). It was for these reasons that a cross-sectional survey design was used in order to analyse the mentoring practices experienced by student teachers at Evelyn Hone College during teaching practice.

3.4 Study population

A population refers to an entire group or aggregate of people or elements having one or more common characteristics (Baumgartner, Strong and Hensley, 2002). The category of the population that provided the sample for this study were final third-year student teachers. These student teachers completed their final teaching practice from various secondary schools within the country. Their first teaching practice (TP) was from May to August 2016 and the second TP was from January to April 2017. The study population was

composed of 179 Art student teachers, 111 Music student teachers, 39 Computer Science teachers and 145 Secondary Teachers Diploma of English. These student teachers were 474 in total.

3.5. Sample size

A sample has been defined by Schaefer (2010:30) as "a selection from a larger population which is statistically representative of the population". In order to determine sample size, the researcher used Yamane's (1973) sampling formula described below:

$$n = \frac{N}{1 + N(e)^2}$$

Where: n is the desired sample size; N is the total population and e is the precision set at 0.05. The level of precision is also known as the margin of error or sampling error. This refers to the range in which the true value of the population is estimated to be. The sampling error is usually expressed in percentage form. This study used a 0.05 margin of error. This means that 95% confidence level was selected, 95 out of 100 had a true population value within the precision earlier set. Given the total population of student teachers to be 474 and the margin of error (e) 0.05 and substituting in the formula, the yielded sample size was 216 respondents for analysis. However, only 155 successfully participated in the study.

3.6. Sampling techniques

Sampling involved the use of probability sampling. According to Maree (2007:79), sampling refers to "the process used to select a portion of the population for the study". The study aimed at collecting quantitative data from the sample of 216 respondents. Stratified random sampling was used to sample respondents into the study. Stratified random sampling was used because Computer Science student teachers had low representation in the population (Green and Brown, 2011). Stratified random sampling involved dividing student teachers into their programmes of study. In this case, the researcher identified the relevant strata (programme of study) and their actual representation in the population. There were 179 (38%) Art student teacher, 111(23%) Music student teachers, 39 (8.2%) Computer Science student teachers, and 145 (31%) Secondary Teachers Diploma of English. This is shown in Table 1.

Table 1: Sample Size Selection

Programme of study	Sample Size
AETD (38%) 179	0.38 x 216 = 82
METD (23%) 111	0.23 x 216 = 50
CSSTD (8%) 39	0.08 x 216 = 17
STD (31%) 145	0.31 x 216 = 67
Total Sample Size	**216**

From each programme of study, a list of student teachers was generated in order to select the sample. Simple random sampling was then used to select subjects from each programme until the number of subjects in each programme was proportionate to the frequency in the population. The results are tabulated in Table 1. Simple random sampling gave each and every student teacher an equal and independent chance of being included in the sample. However, of the intended sample size, only 155 participants successfully took part in the study. Some questionnaires were never returned due to non-availability of some respondents.

3.7. Description of the sample

The study targeted third-year student teachers who had completed their second teaching practice. The first and second year student teachers were not included in the study because they had not done their teaching practice. This study was based on the sample of 155 student teachers who completed their two teaching practices in various schools in the ten provinces of Zambia. The 155 student teachers represented 72% return rate of the questionnaires that were distributed. Just over half of the sample were males at 56.1 % n = 87 and 43.9% n = 68 were females.

The average age of all the respondents was 22.7 years old. The oldest was 32 years and the youngest was 20 years. The age of the students was just used to

know the ages of the student. It was not used in the analysis of the data. The sample of student teachers came from four programmes – Art Teachers Diploma, Music Teachers Diploma, Computer Science Secondary Teachers Diploma, and Secondary Teachers Diploma. Student teachers from Art Teachers Diploma were represented by 29%, n=45; Music Teachers Diploma 21.9%, n=34; Computer Science 16%, n=17; and Secondary Teachers Diploma were represented by 37.4%, n=58. Only 0.6%, n=1 of the respondents did not state their category of teaching.

Table 2: Demographic characteristics of respondents

Variable	Category	Frequency	Percent
Sex	Male	87	56.1
	Female	68	43.9
	Total	**155**	**100**
Age	20 – 24	98	63.2
	25 – 29	53	34.2
	30 – 34	4	2.4
	Total	**155**	**100**
Programme	AETD	45	29
	METD	34	21.9
	STD	58	37.4
	CS-STD	17	11
	Missing	1	0.6
	Total	**155**	**100**

AETD – Art and English Teachers Diploma; **METD** – Music and English Teachers Diploma; **STD** – Secondary Teachers Diploma; and **CSSTD** – Secondary Teachers Diploma in Computer Science.

3.8. Data collection instruments

A questionnaire was used to collect data. Data were collected from the sample of 155 respondents using a closed ended questionnaire. Baumgartner et al, (2002) defined a questionnaire as "a series of questions or statements on

paper". Baumgartner et al (2002) further pointed out that each participant is given a copy of the questionnaire. The questionnaire was used because it had the ability to collect large amount of information within a short time. The questionnaire was a survey which was adopted from Hudson, a former educationist at Queensland University of Technology in Brisbane, Australia. He developed the Mentee Perception of Student Teaching Survey, MPST (Hudson, 2005). Consent to use the MPST was given by Hudson himself (*see appendices B and C*). The survey had Likert types of questions ranging from agree to strongly disagree.

The questionnaire consisted of six sections. The first section addressed the biographical characteristics of the respondents. The second section consisted of statements on the personal attributes of the mentor teacher. The third section consisted of the system requirements. The fourth part had questions regarding pedagogical knowledge. The fifth part of the questionnaire was asking respondents to provide information on whether the mentors modelled the teaching activities or not. The sixth section asked respondents on the feedback activities they received from their mentors.

3.9 Data Collection Procedure

The researcher obtained an introductory letter from the School of Education, Assistant Dean Post-Graduate Studies at the University of Zambia. The

introductory letter was presented to Evelyn Hone College vice Principal where permission was given to conduct research. The researcher made contact with the sampled respondents and administered the questionnaires and waited for three days before getting back the questionnaires.

3.10 Data validity and reliability

3.10.1 Pilot study

A pilot study was carried out with student teachers for teaching methodology at Evelyn Hone College. These were students who were already qualified in their professional fields and wanted to become teachers. They had done their teaching practice in term one of 2017. These student teachers were not included in the final study to avoid influencing the findings. The pilot study was carried out in order to ensure validity and reliability of the instrument. After pilot study corrections were made. Some items were changed. For example, the neutral item was removed from the questionnaire because most of the respondents were putting it as their response. It was also important to carry out the pilot study to ensure that the items in the questionnaire were clearly stated and could be understood by student teachers. The researcher further reviewed the instrument together with the supervisor and other two educational experts from Evelyn Hone College.

3.10.2 Instrument validity

Validity is concerned with whether the instrument constructed measure what it is supposed to measure or gather information it is intended to gather (Maree 2007; Moyo 1980). Content validity of the instrument was achieved by ensuring that the items covered all variables and objectives of the study. The researcher analysed the items one at time against the objectives. To further improve content validity of the instrument, a pilot study was conducted with 19 Teaching Methodology students at Evelyn Hone College. The questionnaire was scrutinized in order to identify items that were unclear to the respondents. Such items were reviewed and changed. For example, items such as timetabling under pedagogical knowledge and discussed aims under system requirement were changed to scheming/weekly planning and discussed goals. This improved the content validity of the instrument.

3.10.3. Instrument reliability

Though the Mentee Perception of Student Teaching (MEPST) questionnaire was reliable (Hudson, et al, 2005), it was necessary to test the instrument for reliability since it was being used for the first time in a different field. For this study, internal reliability was determined by the use of Cronbach alpha for the different parts (scales) of the questionnaire. Reliability test was done for each of the component. Results of reliability test shows that all the components

have a Cronbach alpha value greater than 0.6. The higher the score, the more reliable the instrument is. The alpha values for the items in the questionnaire for the study ranged from 0.609 to 0.881. This means that the questionnaire data were reliable to be analysed as indicated in Table 3.

Table 3: Cronbach alpha for the different parts of the questionnaire

Category	Alpha Value
Personal Attributes	.609
System Requirement	.694
Pedagogical knowledge	.713
Modelling	.765
Feedback	.881

3.11 Data analysis

Data collected were organised and coded and then entered into the computer software. It was analysed using Statistical Package for the Social Sciences (SPSS) version 20. Descriptive statistics (means, standard deviations,) were computed to determine the student teachers' experiences of the mentoring practices. Data was analysed using a common statistical tool known as the mean. The mean is the most useful of the measures of central tendency.

Each item (mentoring practice) was analysed on the basis of the rating given.

For each item, the mean was calculated. The items were categorised as negative or positive experience depending on the mean. Items having means of equal to or greater than the scale mean (2.70) were categorised as positive experience. On the other hand, items having means of lower than the scale mean (2.70) were categorised as negative. The negative items indicated areas where student teachers were not adequately mentored or prepared. On the other hand, the positive items showed those areas in which student teachers were adequately prepared. The results were reported descriptively according to the five mentoring factors. In order to determine whether the differences in student teachers' experiences with the mentoring practices between male and female student teachers and programme of study were significant, nonparametric test (Mann-Whitney U test and Kruskal-Wallis tests) were conducted.

3.12 Ethical Considerations

The researcher sought permission to use the survey instrument (MEPST) from Dr. P. Hudson (*see appendices B and C*). Ethical clearance was obtained from the University of Zambia ethical committee. The researcher's ethical clearance number is HSSREC: 2018-AUG-011. Further, permission to conduct a study at Evelyn Hone College was sought from the office of the Vice Principal (*See Appendix E*). The researcher observed confidentiality by obtaining consent from the respondents before administering the questionnaires. The respondents

were not allowed to write their names on the questionnaires. Furthermore, the respondents were assured that the information they gave would be used for academic purposes only.

3.13 Summary

In this chapter, the researcher described in detail the methodology of the study with emphasis on the research design, target population, sampling techniques, sample size, data collection instruments. The reasons for choosing the approaches for which data were collected and analysed have been given. The researcher also described how the data collected was analysed and interpreted. Finally, it provided details of ethical issues. The next chapter presents the analysis of the data collected in order to understand the experiences of student teachers regarding the mentoring practices.

CHAPTER FOUR: RESULTS

4.1 Overview

This chapter presents the results in relation to the objectives of the study. The objectives to be achieved were to: (i) determine student teachers experiences of mentoring practices during teaching practice, and (ii) determine whether there were differences in student teachers' experiences of mentoring practices by demographic variables (gender and programme of study).

4.2. Student teachers' experiences of mentoring practices

To achieve the first objective, a questionnaire with items based on mentoring practices was employed. These mentoring practices were 34 grouped into five categories which were: personal attributes, system requirement, pedagogical knowledge, modelling and feedback. For data analysis, means and standard deviations were used to summarize student teachers' experiences of mentoring practices. Student teachers' experiences were divided into two levels, (1) negative experience with mean range of 1.0 to 2.69 and positive experience with mean range of 2.70 to 4.00. The greater the mean score, the more adequately prepared the student teacher was.

4.2.1 Student Teachers' experience with personal attributes

This section reports the results relating to the personal attributes of mentor teachers based on questionnaire data as experienced by student teachers. It set

to find out whether student teachers had positive or negative experiences with this mentoring practice. The results are shown in Table 4.

Table 4: Means and standard deviations of student teachers' experiences of personal attributes

Item	Mentoring Practices	Class Interval	Mean	SD	Decision Level
1	Instilled confidence	2.70 – 4.00	3.25	0.75	PE
2	Supportive	2.70 – 4.00	3.20	0.74	PE
3	Communicated effectively	2.70 – 4.00	3.19	0.77	PE
4	Assisted to reflect	2.70 – 4.00	3.10	0.74	PE
5	Felt comfortable	2.70 – 4.00	3.07	0.93	PE
6	Listened attentively	2.70 – 4.00	3.00	0.77	PE
7	Instilled positive attitudes	2.70 – 4.00	2.98	0.81	PE
	Overall mean		**3.11**	**0.789**	**PE**

Note: PE means positive experience

Table 4 shows the experiences of student teachers with personal attributes. The mean item score range for the 7 items was from 2.98 (SD = 0.809) to 3.25 (SD = 0.753) as shown in Table 4. The individual mentoring practices (instilled confidence, supportive, communicated effectively, assisted to reflect, felt comfortable, listened attentively and instilled positive attitudes) have mean scores above 2.70. This shows that students had positive experiences with the mentoring practices. The overall mean score of student teachers' experiences with personal attributes was 3.11 (SD = 0.789). This implied that mentor

teachers had positive and supportive relationships with their student teachers.

4.2.2. Student teachers' experience with system requirement

Table 5 summarizes the mean scores and standard deviations of student teachers' experiences pertaining to system requirement.

Table 5: Means and standard deviations of student teachers' experiences of system requirements

Item	Mentoring Practice	Class Interval	Mean	SD	Decision Level
1	Discussed goals	2.70 – 4.00	2.88	0.800	PE
2	Discussed curriculum	2.70 – 4.00	2.70	0.934	NE
3	Discussed school policies	1.00 – 2.69	2.65	0.919	NE
	Overall mean		**2.74**	**0.884**	PE

Note: PE = Positive; NE = negative experience

In Table 5, the average mean score of system requirement was 2.74 (SD= 0.884). This means that student teachers were adequately prepared (positive experience) in the area of system requirement. However, item 3 shows a mean of 2.65 (falling between 1.00 and 2.69) and a standard deviation of 0.92. The decision level shows that mentor teachers did not adequately discuss school policies with student teachers. This implied that student teachers had a negative experience of this particular mentoring practice.

4.2.3. Student teachers' experience with pedagogical knowledge

This sub-part of the study sought to analyse student teachers' experiences with pedagogical knowledge from mentor teachers. The respondents' responses are tabulated in Table 6.

Table 6: Means and standard deviations of student teachers' experiences with pedagogical knowledge

Item	Mentoring practices	Class Interval	Mean	SD	Decision Level
1	Discussed use of teaching aids	2.70 – 4.00	2.94	0.926	PE
2	Discussed knowledge of my subject	2.70 – 4.00	2.91	0.843	PE
3	Discussed assessment	2.70 – 4.00	2.75	0.971	PE
4	Assisted in preparation of lesson plans	2.70 – 4.00	2.72	1.013	PE
5	Provided viewpoints	1.00 – 2.69	2.69	0.958	NE
6	Discussed problem solving	1.00 – 2.69	2.68	0.936	NE
7	Assisted in teaching strategies	1.00 – 2.69	2.67	0.973	NE
8	Assisted with scheming/weekly planning	1.00 – 2.69	2.66	0.910	NE
9	Assisted in classroom management	1.00 – 2.69	2.54	0.952	NE
10	Discussed questioning techniques	1.00 – 2.69	2.53	0.973	NE
Overall mean			**2.91**	**0.946**	PE

Note: P E = positive experience; NE = negative experience

In Table 6 above, results indicates that student teachers had positive experiences with pedagogical knowledge with the overall mean score of 2.91

(SD = 0.946). The results further indicated that student teachers had positive experiences with four of the ten individual mentoring practices. These individual mentoring practices were: discussed use of teaching aids, discussed knowledge of my subject, discussed assessment, and assisted in preparation of lesson plans. All these individual mentoring practices had mean scores falling above 2.70.

However, some individual mentoring practices showed that student teachers were not adequately mentored as indicated in Table 6. The mean scores for these mentoring practices were below the accepted mean of 2.70. These mentoring practices were: provision of viewpoints, discussed problem solving, assisted in teaching strategies, assisted in scheming, assisted in classroom management and discussed question techniques. The decision level showed that student teachers had a negative experience of these mentoring practices.

4.2.4 Student teachers' experience with modelling

Another sub-part of the problem was to analyse student teachers' experiences with modelling. The results are tabulated in Table 7. The results revealed positive experiences. The mean item scores ranged from 2.94 (SD = 0.753) to 3.09 (SD = 0.856). The overall mean for modelling was found to be 3.04 (SD = 0.816). The implication is that mentor teachers were able to model teaching activities to student teachers. The conclusion is that student teachers had

positive experiences.

Table 7: Means and standard deviations of student teachers' experiences with modelling

Item	Mentoring Practice	Class Interval	Mean	SD	Decision Level
1	Demonstrated enthusiasm	2.70 – 4.0	3.09	0.86	PE
2	Demonstrated well designed lessons	2.70 – 4.0	3.09	0.88	PE
3	Used syllabus language	2.70 – 4.0	3.08	0.78	PE
4	Demonstrated classroom management	2.70 – 4.0	3.05	0.85	PE
5	Demonstrated effective teaching	2.70 – 4.0	3.02	0.74	PE
6	Demonstrated content teaching	2.70 – 4.0	2.98	0.85	PE
7	Modelled rapport	2.70 – 4.0	2.94	0.75	PE
	Overall mean		**3.04**	**0.82**	PE

Note: PE = positive experience

4.2.5. Student teachers' experience with feedback

In this section of the study, student teachers experiences with mentor teachers regard feedback were analysed. This information is shown in Table 8. It is evident that the top three mentoring practices had mean scores above 3 indicating that student teachers were received feedback from their mentors. Student teachers were observed before being given feedback (mean 3.15, SD = 0.76), mentors reviewed lesson plans (mean 3.15, SD = 0.83) and provided oral feedback (mean 3.11, SD = 0.79).

Looking further at Table 8, it is also evident that mentor teachers provided evaluation on teaching (mean 2.96, SD = 0.86), articulated expectations (mean 2.92, SD = 0.85), and provided written feedback (mean 2.74, SD = 0.92). Table 8 shows the overall mean score of 3.01 (SD = 0.84) indicating that student teachers had positive experiences of this mentoring practice.

Table 8: Means and standard deviations of student teachers' experiences with feedback

Item	Mentoring Practices	CI	Mean	SD	Decision Level
1	Observed me before giving feedback	2.70 – 4.00	3.15	0.76	PE
2	Reviewed lesson plans	2.70 – 4.00	3.15	0.83	PE
3	Provided oral feedback	2.70 – 4.00	3.11	0.79	PE
4	Provided evaluation on teaching	2.70 – 4.00	2.96	0.86	PE
5	Articulated expectations	2.70 – 4.00	2.92	0.85	PE
6	Provided written feedback	2.70 – 4.00	2.74	0.92	PE
	Overall mean		**3.01**	**0.84**	**PE**

Note: PE = positive experience; CI = class interval

4.3 Student teachers' experiences of mentoring practices by gender

The final part of this study sought to determine whether there were differences in student teachers' experiences of mentoring practices between male and female student teachers, and programme of study. Statistical techniques relies on the assumption that the data is normally distributed. If the assumption does

not hold, nonparametric statistical tests are used (Pelosi, Sandifer and Sekaran, 2001). Test of normality was conducted using Kolmogorov-Smirnov (KS) test to establish whether the samples were normally distributed across the various dependent variables in relation to gender.

Table 9 shows the test of normality on the dependent variables – personal attributes, pedagogical knowledge, modelling and mentoring practices. The test for normality as regards personal attributes shows that the samples for male student teachers were normally distributed ($KS_{[0.125]} = 74$, p. value = 0.006) while the sample for female student teachers was not normally distributed ($KS_{[0.111]} = 55$, p. value = 0.87). The test of normality further indicates that the samples for both male and female student teachers were not normally distributed ($KS_{[0.097]} = 74$, p. value = 0.084; $KS_{[0.081]} = 55$, p. value = 0.200). However, the samples for male and female student teachers as regards modelling were found to be normally distributed ($KS_{[0.113]} = 74$, p. value = 0.020; and $KS_{[0.128]} = 55$, p. value = 0.24). Finally, the test of normality for mentoring practices shows that the samples for both male and female student teachers were not normally distributed ($KS_{[0.097]} = 74$, p. value = 0.078; $KS_{[0.097]} = 55$, p. value = 0.200). Since the samples were not normally distributed, nonparametric tests were used to determine whether there were significant differences between male and female student teachers as regards mentoring experiences.

Table 9: Test of normality to establish whether the samples were normally distributed across the various dependent variables in relation to gender.

Tests of Normality							
		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Gender of Respondent	Statistic	Df	Sig.	Statistic	df	Sig.
Personal attributes	Male	.125	74	.006	.944	74	.003
	Female	.111	55	.087	.963	55	.089
Pedagogical knowledge	Male	.097	74	.084	.978	74	.238
	Female	.081	55	.200*	.976	55	.332
Modelling	Male	.113	74	.020	.955	74	.011
	Female	.128	55	.024	.925	55	.002
Mentoring practices	Male	.097	74	.078	.927	74	.000
	Female	.097	55	.200*	.959	55	.061

In order to determine whether there were any significant differences in mentoring experiences between male and female student teachers as regards personal attributes, the following null hypothesis was stated and tested:

H_O The distribution of personal attributes is the same across categories of gender of respondents.

H_1 The distribution of personal attributes is not the same across categories of gender of respondents.

Mann-Whitney U test was performed in order to test the above hypotheses. Results are shown below:

i) There was no significant differences ($MWU_{[2457.00]} = 2457.00$, p. value 0.280) in experience of personal attributes between male and female student teachers. Therefore, the null hypothesis was retained.

ii) There were no significant differences (MWU $_{[2718.000]}$ = 2718.00, p. value = 0.590) in pedagogical knowledge across categories of gender of respondents. Therefore, the null hypothesis was retained.

iii) No significant differences were found across categories of gender of respondents as regards modelling (MWU $_{[2567.000]}$ = 2567.000, p. value = 0.919). The null hypothesis was therefore not rejected.

iv) Further, no significant differences were found among male and female student teachers as regard mentoring practices (MWU $_{[1925.500]}$ = 1925.500, p. value = 0.518). The null hypothesis was therefore retained.

The conclusion regarding differences in student teachers' experiences of mentoring practices by gender did not exist. The null hypothesis was therefore retained and the alternative hypothesis which suggested that differences existed was rejected.

Table 10: Student teachers' differences of mentoring practices by gender

Null hypothesis (H_0)	Mann Whitney U test	P Value	Comment
The distribution of personality attributes is the same across categories of sex of respondents.	2457.000	.280	Retain H_o
The distribution of pedagogical knowledge is the same across categories of gender of respondent.	2718.000	.590	Retain H_o
The distribution of modelling is the same across categories of gender of respondent.	2567.000	.919	Retain H_o
The distribution of mentoring practices is the same across categories of gender of respondent.	1925.500	.518	Retain H_o

4.4 Differences in student teachers experiences of mentoring practices by programme of study

In order to determine whether there were any significant differences in student teachers' experiences of mentoring practices by programme of study. Kruskal Wallis test was used to test the hypothesis. The confidence level was set at 0.05. The following hypotheses were stated and tested.

1. H_O The distribution of mentoring practices is the same across categories of programme of study.
2. H_1 The distribution of mentoring practices is not the same across categories of programme of study.

Kruskal Wallis test was performed in order to test the above hypothesis. Results are shown below:

i) The hypothesis that the distribution of personal attributes is the same across categories of programme of study was rejected ($KW_{[12.048]} = 3$, p. value = 0.007) and the alternative hypothesis was accepted.

Post hoc tests were conducted to establish where the differences existed in the categories. Differences were mainly found with personal attributes and modelling between pre-service Art Teachers and Secondary teachers.

In the personal attributes, the mean rank of Art teachers was 73.91 (N = 43) and that of Secondary teachers was 52.43 (N= 54). Further tests for personal attributes shows that the $X^2_{[11.980]} = 2$, p. value = 0.003. The difference is significant at p = 0.003. As regards to modelling between Art and Secondary

teachers, the mean rank for Art teachers was 61.51 (N = 39) while for secondary teachers was 50.64 (N = 28). This difference was significant ($X^2_{[7.493]} = 2$, p. value = 0.024).

Differences were also found between Music student teachers and secondary teachers with regard to personal attributes and modelling. For Music student teachers the mean rank was 54.75 (N = 34) and that for Secondary student teachers was 38.05 (N = 54). Test statistics further shows that the differences were significant for personal attributes ($X^2_{[8.260]} = 1$, p. value 0.003). Similarly, the differences for modelling was found to be significant ($X^2_{[7.598]} = 1$, p. value 0.006).

Differences were further found between Music and Computer Science student teachers in the categories of personal attributes and modelling. For Music student teachers the mean rank for personal attributes was 64.99 (N = 34) while for Computer Science student teachers it was 54.56 (N = 17). These differences were significant ($X^2_{[9.111]} = 2$, p. value = 0.011). Similarly, differences were found in the mean rank for modelling between Music and Computer Science pre-service. The mean rank for Music student teachers was 61.61 (N = 31) while for Computer Science pre-service it was 48.49 (N= 15). These differences were found to be significant with $X^2_{[7.751]} = 2$, p. value = 0.021.

ii) However, the hypothesis that the distribution of pedagogical knowledge is the same across programme of study was retained ($KW_{[1.206]} = 3$, p. value 0.752) and the alternative hypothesis was rejected.

iii) Similarly, the hypothesis which stated that the distribution of modelling is the same across categories of programme of study was rejected ($KW_{[7.606]} = 3$, p. value = 0.055) and the alternative hypothesis was therefore accepted.

iv) Further, the hypothesis which stated that, "the distribution of mentoring practices is the same across categories of mentoring practices" was retained ($KW_{[4.466]} = 3$, p. value = 0.215) and the alternative hypothesis was rejected.

4.5. Summary

The findings of this study have established that student teachers had positive and supportive relationships with their mentors. Mentor teachers possessed personal attributes which were very important in the mentoring of student teachers. Student teachers of Art, Music, Computer Science and Secondary Teachers diploma were well supported during teaching practice. Further, the study has also established that student teachers were adequately mentored in system requirement especially in discussion goals of teaching particular subjects. However, in the area of school policies and curriculum, student teachers were not adequately mentored.

With regard to pedagogical knowledge, the study has established that student teachers were adequately mentored in use of teaching aids, subject knowledge, assessment and lesson plan preparation. On the other hand, student teachers received inadequate mentoring in provision of viewpoints, problem solving, teaching strategies, scheming, classroom management and questioning techniques.

Further, the findings indicated that mentor teachers adequately demonstrated (modelled) teaching methods. In addition, student teachers reported that adequate feedback was given to them after they were observed by mentor teachers.

The findings further indicated that there were no differences in student teachers' of mentoring practices between male and female student teachers. Further, there were no differences with regard to pedagogical knowledge, and mentoring practices and programme of study. However, significant differences were found with personal attributes and modelling across categories of programme of study.

CHAPTER FIVE: DISCUSSION OF RESULTS

5.1. Overview

This chapter provides a discussion of results presented in the previous chapter. The results are discussed in relation to the research objectives and other studies that were reviewed and the theoretical framework.

5.2. Student teachers experiences of mentoring practices

This part of this study is a discussion of the research results in light of the other studies that were reviewed in the literature with regard to mentoring practices experienced by student teachers during teaching practice.

5.2.1 Personal attributes

Being a student teacher on teaching practice can be a very frightening experience. This is the time when a student teachers need mentors who are friendly and supportive throughout the period of teaching practice. They need mentors who can help them in many situations.

Student teachers were asked to indicate the degree to which they agreed or disagreed on the personal attributes of their mentor teachers. Results from the analysis of data in Table 4 suggested that student teachers had positive and supportive relationships with their mentor teachers. This was shown by the overall mean of 3.11 (SD = 079) which was way above the threshold of 2.70.

Student teachers confirmed that mentor teachers were supportive, communicated effectively, helped them to reflect on their teaching, made them feel comfortable, listened attentively and instilled confidence. Results showed that the mean scores of all the individual mentoring practices were above 2.70, implying that student teachers had positive experiences. It can be concluded that mentoring had improved their competence to face the challenges when they become full professionals. This can only be achieved when the mentors possessed this attribute (personal attribute). Without possessing personal attributes it is difficult for student teachers to be adequately prepared for their future roles. Adequate mentoring largely depends, to a great extent, on mentor teachers possessing this attribute. This is supported by Gulamhussein (2013) who argued that student teachers needed support, encouragement, reassurance, comfort and guidance from mentor teachers. This positive experience of student teachers brought about the development of individual potentials as a result of mentoring. It is important to note that the school environment where student teachers were practicing shaped their understanding of teaching (Saha and Dworkin, 2009).

For student teachers to go through teaching practice successfully, they needed mentor teachers who were friendly and supportive (Smolik, 2006). This brings to light the importance of personal attributes in helping student teachers to become better teachers. The success or failure of the student teaching

experience largely depends on the relationship they have with their mentors. The possible reason for positive experience could be that mentor teachers understood the essence of mentoring and that student teachers needed guidance and support during this time. This also indicated that mentor teachers were available for their student teachers for support and guidance. The results of this study agree with those of Smolik (2003) who found that mentor teachers were able to build confidence in their mentees and that they were available for them. Other studies by Hudson 2007, Hudson et al (2009), and Bird, (2012) also found that mentor teachers possessed this personal attribute of mentoring. They contended that personal attributes is a factor in student teacher education during teaching practice. This enabled student teachers to develop their potentials.

The results of this study supports the first factor (personal attributes) of the five factor theory for effective teaching. The theory says that mentor teachers are supposed to possess this attribute in order to help student teachers to develop professionally. The results have established that mentor teachers possessed this factor which is significant in the education of teachers. Therefore, this theory is essential for mentors in teacher education.

5.2.2 System requirement

Student teachers enter schools with little knowledge of what exactly happens

in these organisations (Bird, 2012). Student teachers were expected to understand the school environment in which they were working.

Student teachers who participated in this study where therefore asked to indicate the degree to which they agreed or disagreed that they were adequately helped to understand the school environment. The results from the analysis of the data revealed that they were adequately prepared to understand the school environment. The results in Table 5 showed the overall mean score of 2.74 (SD = 0.88). The results of this study in respect to system requirement implied that mentor teachers did see the importance of helping student teachers to understand the school environment. Further analysis of the data revealed that student teachers were adequately mentored in two of the three mentoring practices. These were discussing goals and curriculum.

Mentor teachers exposed student teachers to discussing the goals of teaching and the curriculum. This revelation is important in that student teachers were helped to understand the goals for teaching. Each school has aims and objectives, clear specifications of learning goals and targets which were to be achieved (MoE, 1996). This shows that student teachers were helped to understand the teaching and learning environment of each school. With regard to "discussing curriculum" to student teachers, mentor teachers well understood the importance of curriculum to teaching. Student teachers needed

this knowledge in order to improve their teaching. It is important to note that student teachers enter schools during teaching practice with little knowledge of the school environment. It is therefore important that they were guided in this area. Understanding the curriculum meant that student teachers also understood the pedagogical approaches favoured by the school.

The results of this study are in agreement with those of Ballantyne (2005) who found that student teachers needed to be socialised into the school organisation. This means that student teachers were mentored in the various activities of the schools. The results of this study are consistent with other studies which reported that mentors discussed curriculum documents of science teaching. In these studies, student teachers also reported that mentor teachers discussed the goals of teaching science (Hudson, 2009 and Bird, 2012). This indicated that student teachers in this study were adequately helped to understand the goals of teaching and the curriculum of teaching different subjects.

Although the analysis showed that student teachers were adequately mentored in the goals and curriculum of teaching their respective subjects, they reported receiving inadequate mentorship in the area of school polices. The results showed that the mean for school policies was 2.65 (SD=0.92) falling below 2.70. This means that they did not wholly understand the school organisation.

Understanding assessment and homework policies in schools is very vital to the professional growth of student teachers (MoE, 1996). It is possible that student teachers were able to give homework to their pupils but they did not just understand that it was a school policy to do so. Whatever the case this is worrisome as it showed that mentor teachers did not adequately discuss school policies with student teachers.

The results of this study are in agreement with the findings of other scholars who found that few student teachers discussed school polices with their mentor teachers (Hudson 2009). This implied that student teachers were not adequately socialised into the school organisation (Ballantyne, 2005). They lacked the political skills to deal with the problems and challenges which are found in the school environment.

However, the findings of this study are in sharp contrast with those of Bird (2012) and Hudson et al. (2009) who found that the majority of the surveyed student teachers were highly assisted in this regard. For example, Bird found that the majority of the students discussed school policies. The difference in the findings could be that there were no laid down guidelines to guide mentor teachers on exactly what to look for when they mentored these student teachers.

The findings of this study bring to light the student teachers' lack of

knowledge regarding the school environment. It is difficult to be a complete professional teacher if the student teacher is not conversant with school polices. This does not occur well with the second factor of mentoring practice – system requirement. Hudson (2004) reasons that the professional development of student teachers is incomplete if they do not understand the school environment (culture) in which they are teaching. This study has clearly shown that student teachers had difficulties to comprehend the entire school environment and were likely to be incomplete in their profession development. The results of this study also concur with those of Shumba et al (2012) who reported that 65% of the surveyed mentor teachers did not adequately mentor student teachers in school policies. It was further revealed that 69.2% of the mentors were not acquainted with college policies on teaching practice. This could be a problem of the absence of college policies on teaching practice at Evelyn Hone College.

The implication of the results indicated that student teachers of music, art, computer science and English were denied the chance of becoming effective teachers. Knowing that school policies are likely to help student teachers to become better teachers, they needed mentor teachers to discuss those school policies in order for them to understand the school environment in which teaching and learning activities took place.

Linked to the theoretical framework of the five factor theory of mentoring, this study has established that mentor teachers did not adequately mentor student teachers in the area of school policies. There is need therefore to help mentor teachers know the importance of this mentoring attribute as it also contributed to their professional development.

5.2.3 Pedagogical knowledge

Student teachers who participated in this study confirmed that they were adequately mentored in pedagogical knowledge. The results of this study indicated the overall mean score of 2.91 which was above 2.70. This implied that student teachers had positive experiences regarding this mentoring practice. However, further analysis of pedagogical knowledge showed that student teachers were adequately mentored in four of the ten individual mentoring practices which were teaching aids, knowledge of subject, assessment and preparation of lesson plans.

With regards to teaching aids, student teachers were adequately mentored. This implied that they were shown how to use teaching aids in particular topics and this prepared them for their first year of teaching. Knowing which teaching aid to use for a particular lesson can be quite challenging for student teachers. The mentorship they received in this area was enough to help them during their first year of teaching.

Further analysis showed that student teachers were adequately mentored in the area of assessment. This is a very good development in that student teachers will enter into their first year of teaching with adequate knowledge of how to assess their pupils. Knowing when and how to conduct assessment is vital for these student teachers. Concerning lesson preparation, student teachers reported that they were adequately mentored. Preparing a lesson needs much effort and understanding because it is from here that the student teacher can make mistakes and fail to deliver the lesson. This is where the guidance of the mentor teacher was also very much needed at this time. The outcome of this study is similar to the findings of other scholars who found that student teachers were adequately mentored in lesson preparation (Muzata and Penda, 2013). However, the results of this study contradicted those of Simuyuba et al (2015) who found that University of Zambia student teachers did not receive help in lesson planning, making teaching practice ineffective in teacher preparation.

Despite having positive experiences in teaching aids, knowledge of subject, assessment and preparation of lesson plans, the results of this study has shown that student teachers had negative experiences in the following mentoring practices – provision of viewpoints, problem solving, teaching strategies, scheming/weekly planning, classroom management, and questioning techniques. This is implied that student teachers were not adequately helped in

these areas. These results are supported by Muzata and Penda (2013) who reported that teaching goes beyond lesson planning. Teaching truly involves these mentoring practices where student teachers did not receive adequate help. These mentoring practices are very important in preparing student teachers to teach, so mentors in these schools should have adequately mentored these student teachers in their pedagogical aspects. The results of this study corroborates with those of Simuyuba et al (2015) who found that student teachers from the university of Zambia had problems in applying learner centred methods of teaching. In that study, Simuyuba et al suggested that class teachers (mentors) if they were well trained should have used cooperative teaching with students or co-teach instead of teaching the same topics again when student teachers had gone back to the university. According to literature, for example, Mkhasibe 92014); Maphalala (2013); Heeralal (2014); Shumba et al (2012); and Hudson (2009), student teachers needed to be adequately mentored in the teaching methods appropriate for teaching their subjects. The use of appropriate teaching strategies are important in order to make learning and teaching interesting.

The results of this study concur with those of Bird (2012 and Hudson (2007) whose findings indicated that student teachers did not receive much assistance in classroom management, questioning techniques, and problem solving. These scored the lowest. This study also agrees with the study by Shumba et

al (2012) who found that the majority (65.8%) of mentor teachers did not offer skills in marking and chalkboard use (81.7%). Similarly Heeralal (2014) also found that the greatest needs of student teachers were in lesson presentation, and classroom management. The results of Muzata and Penda (2013) also indicated that most student teachers who were surveyed in Zambia needed guidance beyond lesson presentation. In addition, the study by Mkhasibe (2014), at the University of Zululand in South Africa, indicated that most of the student teachers found it difficult in choosing and using teaching techniques and strategies. These studies are in agreement of with the results of this study in that pedagogical knowledge is what student teachers needed the most in order for them to become good teachers once they enter as newly qualified teachers (NQTs).

Concerning teaching strategies, the results of this study differ with those of Chituta et al (2016) and Kangwa (2016) in Zambia who found that the majority of student teachers received guidance in teaching strategies. Such differences might be in the nature of the studies. The studies of Chituta et al (2016) and Kangwa (2016) involved both quantitative and qualitative research, which meant that they were able to probe further. This study was purely quantitative as a result posed difficulties to understand in detail the teaching strategies.

The results of this study have brought to light the importance of pedagogical knowledge in the professional development of student teachers and the role of mentor teachers. This questioned the role of mentor teachers as regards mentoring during teaching practice. It can be deduced from these results that mentor teachers did not adequately help student teachers on learning how to teach.

The Five Factor theory on pedagogical knowledge clearly showed that student teachers could only develop into effective teachers if only mentor teachers were able to assist them in this area. However, this study has shown that mentor teachers did not do their job is this area. As a result, student teachers had negative experience in provision of viewpoints, problem solving, teaching strategies, scheming/weekly planning, classroom management and questioning teachings. Mentor teachers were supposed to have facilitated the socialisation of student teachers into the teaching profession by assisting them to gain competence in various areas of school functioning (Maphalala (2013). Pedagogical knowledge is one of the core areas of teaching practice.

3.2.4. Modelling

With reference to modelling as a fourth factor, student teachers overwhelmingly agreed that mentor teachers adequately modelled teaching practices. This was shown by the overall mean score of 3.04 (SD=0.82).

Student teachers agreed that mentor teachers demonstrated enthusiasm, demonstrated well designed lesson, used syllabus language, demonstrated classroom management and effective teaching. Further, the analysis showed that mentor teachers were also able to adequately demonstrate content teaching and rapport. The results have established that mentor teachers were able to model all the items in this mentoring practice. This revelation is welcome as this indicated that mentor teachers were able to understand the needs of student teachers. Student teachers were in these practising schools because they are students and they, thus needed someone to show them how certain things are done. This is important for the professional development of student teachers. When student teachers watched their mentors demonstrate teaching practices, they were able to gain courage and this helped them to see how well they could improve their teaching.

The results of this study are in agreement with those of Chituta et al (2011) who found that majority of the student teachers observed their mentors teach. The findings of this study also agreed with those of Bird (2012) who found that more than 90% of student teachers reported that mentor teachers modelled teaching practices. Further, the findings of this study also support those by Hudson (2009) who found that the majority of the student teachers reported that their mentors modelled science teaching lessons. Classroom management and enthusiasm were perceived to be the most representative practices of the

mentor teachers. The results on content teaching and modelled report also showed that student teachers were adequately mentored. Demonstrating content with student teachers is significant as it allows them to understand what they teach.

5.2.5 Feedback

With feedback, the study has established that student teachers were adequately given feedback after being observed. This implied that they were adequately mentored. Mentor teachers did the following: observed student teachers before giving feedback; reviewed lesson plans and provided oral feedback after a lesson. This was a good development in that student teachers needed someone to guide them and show them where they had done well and where they did not. Student teachers who received feedback from their mentors showed greater growth than mentees who received little or no feedback (Hudson, 2004). This is good in that student teachers needed to be observed before they were given feedback. Provision of feedback meant that student teachers were able to grow professionally (Maphalala, 2013). Further, reviewing lesson plans was a good practice for mentors as they helped student teachers to write good lesson plans. It is a form of quality assurance. However, the results of Kangwa (2017) differ with this study in that the mentor teachers did not pre-check what the student teachers were going to teach. The difference in the results is that this study solely depended on quantitative data

and there was no room to allow student teachers to explain how the lesson plans were reviewed.

The results of this study concur with those of Hudson et al (2009) who found that majority of student teachers received feedback from the mentors. Provision of feedback can help student teachers to improve tremendously in their teaching as they are told their strengths and weaknesses. The results are also in agreement with those of Martinez (2016) who found that student teachers were highly satisfied with the quality of feedback that they received from their mentor teachers. This means that mentor teachers were able to provide adequate feedback which helped them to improve on their teaching.

Further, student teachers reported that they were adequately mentored in the following items within feedback; provision of evaluation on teaching, articulated expectations and provision of written feedback. This implied that mentor teachers did take time to adequately mentor these students. Provision of evaluation on teaching is very important for anyone who is preparing to be a teacher. Mentors who observed student teachers teach were able to provide evaluation of the lesson taught. This was very important in that student teachers were professional helped to teach the next lesson in a very good way. Further, the five factor theory for effective teaching requires that mentor teachers articulate expectations for the next lessons. This suggested that

mentors were expected to tell the students what they were expected to do in the following lesson based on the lesson they observed. Provision of feedback was closely linked to the mentor's articulation of expectations. Going by the results, mentor teachers did help the student teachers in their improvement of teaching.

In this study, written feedback scored the lowest among the six mentoring practices within feedback. The findings of both Bird (2012) and Hudson et al (2009) also indicated that written feedback scored the lowest. This could be attributed to the format of the teaching practice observation sheet that was used. At Evelyn Hone College, some observation sheets do not have space in which one can write on. The results of this study agree with those of Kangwa (2016) who found that student teachers did not benefit from the written feedback they received from their mentors. For example, comments such as "good try" were given as written feedback. Such comments meant nothing to student teachers. However, the findings of this study differ with those of Fantu (2014) who found that 81% of student teachers and mentors reported an absence of written feedback. The difference could be that at Evelyn Hone College student teachers went for teaching practice twice while those which Fantu investigated only went once. Written feedback is very important as it can be better than oral feedback which student teachers can easily forget. There was need therefore, for mentor teachers to provide written feedback as

student teachers can refer to it even after many years.

5.3. Differences in student teachers' experiences of mentoring practices by gender

This sub-part of the study discussed the differences in student teachers' experiences of mentoring practices between male and female student teachers. The results of this study did not find significant differences between male and female student teachers' experience of mentoring practices. The results of this this study concur with those of Khumalo (2014) who found that variables such as gender had no influence in mentor teachers' perceptions towards mentoring of student teachers. Similarly, the findings of Mkhasibe (2014) found that gender was not a factor in determining perceptions of student teachers toward teaching practice.

However, the findings of this study differ remarkably with those of Wambungu (2014) who found significant differences between male and female student teachers as regard assessments. This difference can be as a result of the marks which are awarded during the supervision of student teachers. The current study however, looked at the mentoring experiences which had nothing to do with marks but how student teachers were assisted in the five factors model for effective teaching.

5.4. Differences in student teachers' experiences of mentoring practices by programme of study

This study did not find significant differences between student teachers' experiences of mentoring practices (system requirements, pedagogical knowledge and feedback) and their programme of study. However, major differences were found between student teachers' experience of personal attributes and programme of study. Major differences were mainly found between Art and Secondary student teachers, Music and Secondary student teachers, Art and Computer Science student teachers and Music and Computer Science student teachers. The differences were mainly found within personal attributes and modelling. In the area of modelling, mentor teachers were perceived to have modelled teaching practices in music and art subject than English and computer science where there is too much theory. This implies that the modelling student teachers received were mainly in art and music.

The results of this study are contrary to the findings of Khumalo (2014) who did not find differences between student teachers and mentors as regard mentoring practices. His finding clearly indicated that area of specialisation did not influence the mentoring of student teachers during teaching practice.

6.4 Summary

In this chapter, the results of this study have been discussed in three major

sections, the first one looked at the experiences of student teachers with mentoring practices during teaching practice, the second one looked at differences between experiences of mentoring practices and gender, and the third one looked at differences of experience of mentoring practices and programme of study. The results of this study confirmed that the factors considered in the theoretical framework are important in student teacher mentoring. It can further be stated as shown in the chapter that the results of this study are consistent with findings in similar studies, which showed that student teachers needed mentorship throughout the period of their teaching practice. Hence, a number of recommendations were made after the conclusion of the study in the next chapter.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Overview

The previous chapter presented a discussion on the mentoring experiences of student teachers. Overall, the study has revealed some inadequacies especially in the area of pedagogical knowledge and system requirement. Based on this, a conclusion is made and a number of recommendations to improve and strengthen the mentoring of student teachers during teaching practice have also been made.

6.2 Conclusions

In this study, the researcher sought to analyse student teachers' experiences of mentoring practices from the mentor teachers during teaching practice. The researcher also sought to determine whether differences existed between gender and student teachers' experience of mentoring practices. Further, the researcher sought to determine whether there were differences between programme of study and training teachers' experience of mentoring practices.

The results have established that student teachers had positive experiences with all the mentoring practices in Hudson's five factor model for effective mentoring. These factors are personal attributes, system requirements, pedagogical knowledge, modelling and feedback. The mentor teachers were

able to prepare student teachers in their future roles as professional trained teachers.

The study has further unveiled vital information as regards to system requirement and pedagogical knowledge. The overall means for both system requirements and pedagogical knowledge showed that student teachers were adequately mentored. However, some mentoring practices within these two mentoring factors showed that student teachers were not adequately mentored. In system requirement, mentor teachers did not help student teachers in discussing school policies. Within, pedagogical knowledge, student teachers were not adequately mentored in provision of viewpoints, problem solving, teaching strategies, scheming, classroom management, and questioning techniques. These inadequacies in these two mentoring factors implied that student teachers lacked some critical information in their preparation as future teachers.

The study was significantly important as it brought out the inadequacies in pedagogical knowledge in the education of student teachers. This showed that student teachers are likely to enter their first year of teaching without much knowledge in this area. This, if left an unattended to may impact negatively on student teachers professional development.

Student teachers' gender did not influence their experiences with mentoring practices. Therefore, the researcher concluded that gender was not a significant determinant of student teachers' experiences of mentoring practices during teaching practice. The study further established that there were significant differences between programme of study and student teachers' experience of two of the five mentoring practices (modelling and personal attributes). These differences were mainly found between art and computer science teachers; music and computer science teachers, music and English teachers; and art and secondary teachers. This implied that student teachers with practical subjects such as music and art were more likely to have positive experiences with modelling and personal attributes as factors of the five mentoring model. It can be concluded that practical subjects received more attention when it came to modelling of teaching practices than theoretic subjects.

Further, the study has brought out vital information needed by the college teaching practice committee and management to address issues pertaining to mentoring of student teachers. In this vain, this study may serve as a baseline resource whose findings may be used to improve teaching practice supervision as well as relations between the college and practicing schools.

The results from this study have supported the five factor mentoring model for

effective teaching as a valid and significant model for mentoring of student teachers during teaching practice. The model also helped to identify the specific mentoring responsibilities of mentor teachers as they mentored student teachers during teaching practice. Therefore, the model is a very useful framework for analysing the mentoring practices of student teachers during their school teaching experience regardless of the programme one is studying

6.3 Recommendations

Based on the results of this study, the following recommendations were made for stakeholders and for further research.

6.3.1 Recommendations to Stakeholders

i. There is need for Evelyn Hone College to develop expectations of mentor teachers during teaching practice. The expectations should specifically address student teachers' needs in system requirement, and pedagogical knowledge where inadequacies where found.

ii. Lecturers who prepare student teachers in teaching methodologies should continue to ensuring that student teachers are adequately prepared in this area so that they do not lack when they go for teaching practice and when they enter their first year of teaching.

iii. The results also lead to the recommendation that specific educational institutions where student teachers can do their teaching practice can be identified. This may help in training mentor teachers in the specific skills needed in student teachers.

iv. It is also recommended that the Directorate of Teacher Education in the Ministry of General Education develop mentoring manuals for mentors in primary and secondary schools. It would also be important to conduct seminars and workshops so that mentors know exactly what to look for when mentoring student teachers.

6.3.2 Suggestions for further research

i. This study was limited to Evelyn Hone College, it is thus recommended that a similar study covering many teacher education institutions could be conducted so as to provide a broader picture of student teachers experiences of mentoring practices during teaching practice.

ii. This study has analysed student teachers' mentoring experiences within Hudson's five factor model for effective teaching during teaching practice. There is need also to conduct a study on mentor teacher's

experiences of the mentoring practices using the five factor model for effective teaching.

iii. This study has established that student teachers were not adequately mentored in some mentoring practices (provision of viewpoints, problem solving, teaching strategies, scheming, classroom management and questioning techniques) within pedagogical knowledge. More research is needed to document the factors that brought about the inadequacy in this area of mentoring.

iv. There is also need to conduct a qualitative study in order to fully understand the lived mentoring experiences of student teachers. This will provide in-depth information regarding how the mentors provided mentorship on the five factor mentoring model for effective teaching.

REFERENCES

Abbit, J.T. (2011). Measuring Technological Pedagogical Content Knowledge in Student teacher Education: A review of current Methods and Instruments. *Journal of Research and Technology in Education*, 43(4), 281-300.

Alenizi, M.A, (2012). Investigation into the Adopted Supervisory Practices in the Teaching Practice of Special Educatioin Needs Student Teachers in Saudi Arabia: Different Perspective. PhD Dissertation, University of Exeter. https://core.ac.uk/download/pdf12826543.pdf.

Ballantyne, J. (2005). Effectiveness of Pre-service Music Teacher Programme: Perceptions of Early Career Music Teachers. Doctoral Thesis, Centre for Innovation in Education.

Banja, K.M. (2016). Mentoring of Newly Qualified Teachers in Zambian Secondary Schools: An Introspection of teachers and head teachers' perspectives in selected districts of Zambia. Doctoral Thesis. The University of Zambia.

Bartell, C.A. (2005). *Cultivating High Quality Teachers through Induction and Mentoring*. Thousand Oaks, CA: Corwin Press

Baumgartner, T.D, Strong, C.H, and Hensley, L.D., (2002). *Conducting and Reading Research in Health and Human Performance.* (3rd Ed.). New York: McGraw-Hill.

Best, J.W. and Khan, J.V. (2006). *Research in Education* (2nd Ed.). Boston. Allyn and Bacon Publishers.

Bird, L. K. (2012) Student Teacher Perceptions of the Impact of Mentoring on Student Teaching. Theses, Dissertations, and Other Capstone Projects. Paper 82. Available on: http://cornerstonelib.mnsuedu/etds.

Chituta, D, Nkata, L., Banda, A., Jumbe, J., and Choobe, B. (2016). Mathematics and Science Student Teachers' Perception of their Teaching Practice: A case of Copperbelt University Students. *International Journal of Education and Social Science*. Retrieved from: www.ijessnet.com on 24th February, 2017.

Cohen, L., Mannion, L., and Morrison, K. (2007). *Research Methods in Education*. London: Routledge.

Creswell, J. W., (2012). *Education Research: Planning, Conduction and Evaluating Quantitative and Qualitative Research* (4th Ed). Boston: Pearson Education, Inc.

Darling-Hammond, L. (1997). Doing What Matters Most. Investing in Quality Teaching. New York: National Commission on Teaching and America's Future.

Evans, C., Williams, J.B., King, L., and Matcalf, D. (2010). Modeling, Guided Instructions and Application of UDL in a Rural Special Education Teacher Preparation Programme. *Rural Special Education Quarterly*, 29(4), 41-48.

Ferber, T. and Nillas, L.A (2010). Through the Eyes of Student Teachers: Success and Challenges in Field Teaching experiences. *National Teacher Educational Journal*, 3(2), 61-86.

Fayne, H. R. (2007). Supervision from the student teacher's perspective: An institutional case study. *Studying Teacher Education*, 3(1), 53-66.

Fantu, M. (2014). Practice and Challenges of Practicum at Shambu College of Teacher Education. M.A Thesis. Jimme University, Ethopia.

Glenn, W. (2006). "Model versus Mentor: Defining the Necessary Qualities of the Effective Cooperating Teacher. *The Teacher Education Quarterly* (33) (1). Retrieved from: http://find.galegroup.comgtx/starts.

Green, J. and Brown, J. (2011). *Principles of Social Resaerch: Understanding Public Health*. Hampshire, Ashford Colour Press Ltd

Gulamhussein, A. (2014). Teaching the Teachers: Effective Professional Development in the era of high stake accountability. Alexandria, VA: Center for Public Education.

Heeralal, P.J. (2014). Mentoring Needs of Student teachers during Teaching Practice. A case study at a South African University. *Journal of Education and Social Research*. Doi:10.5901/jesr.2014.V4n1p511.

Hoben, N. (2006). Real Teachers, Real Classrooms and Real Experiences: The Work of Associates with Student teachers on Practicum. Doctoral Thesis, University of Auckland.

Hudson, P. (2004). Specific Mentoring: A Theory and Model for developing Primary Science Teaching Practices. *European Journal of Teacher Education*, 27(2), 139-146. Doic10.130/0261976042000223015.

Hudson, P. (2005). "Identifying Mentoring Practices for developing Effective Effective Primary Science Teaching". *International Journal of Science Education*, 27(2), 27(14), 1723-1739. doic.10.1030/09500690500206457.

Hudson, P., Usak, M., and Savran, A. (2009). Employing the five factor Mentoring instrument: Analysing mentoring Practices for Teaching Primary Science. *European Journal of Teacher Education*, 32(1), 63 74. . Available on http://oprints.gut.edu.au/.

Johnson, K.R. (2015). Fourth Year Teacher Perceptions of the Student Teaching Practicum in Abu

Koross, R. (2016). The Student Teachers' Experiences during Teaching Practice and its impact on their perception of the Teaching Profession. *International Journal of Education and Multidisciplinary Studies*. ISSN 2455 – 2526, S (2), 76 – 85. Doi: http://dx.org/10.21013/jems.vs.n2.p3.

Kangwa, D. (2017). Effective Teaching Practice: A Bridge between Theory and Practice in Teacher Education. A Case Study of Evelyn Hone College. MEd dissertation, Zhejing Normal University.

Khumalo, P. N. (2014). "Mentors Perceptions of their role in Mentoring Student Teachers". M.A, University of Zululand, Kwadlanyezwa.

Kushwaha, A. (2014). Feedback in Teacher Education: Interns perceptions. *Journal of Research & Method in Education.* 4(3). 1-5. Available on: www.iosrjournals.org.

Makamure, C., and Loyiso, J. (2017). Supervision Practices as Quality Assurance for Mathematics Pre-service Teachers in Zimbabwe.

Malasha, E.C. (2009). New Teacher Induction Programmes and Practices in Selected High Schools of Lusaka District. Med dissertation, University of Zambia.

Manchinshi, P.C. (2004). The Growth of Teacher Education in Zambia since Independence. *The African Symposium,* 4(4), 2-22. Available on: www.itdl.org/journal/non_08/article06.htm.

Manchinshi, P.C.,and Mwanza, D.S. (2013). "The University of Zambia School Teaching Practice Experience: Is it effective?" *Excellence in Higher Education*. Available: http://ehe.pitt.edu. Retrieved on 09/09/16.

Maphalala, M.C. (2013). Understanding the Role of Mentor Teachers during Teaching Practice Sessions. *International Journal of Educational Science* 5(2): 123-130. Krepublishers.com/02-journals/IJES/IJES-05-0-000-13.

Maree, K. (2007). *First Steps in Research*. Pretoria, Van Schaik Publishers.

Martinez, A.J. (2016). What Type of Feedback do Student Teachers expect from their School Mentors during Practicum Experience? The Case of Spanish EFL Student Teachers. Australian Journal of Teacher Education, 41(5).http://dx.doi.org/10.14221/ajte.2016v41n5.3

Masaiti, G., Machinshi, P.C. (2011). The University of Zambia Pre-Service Teacher Education Programme: Is it responsive to schools and communities aspirations? *European Journal of Educational Studies*. Retrieved on 17th March, 2016.

Merais, P. and Meier, C. (2004). Hear Our Voices: Student Teachers' Experiences during Teaching Practice. *Africa Education Review*, 1(2), 220-233

MESVTEE (2013). Zambia Education Curriculum Framework, CDC, Lusaka

Ministry of Education (1996). *Educating Our Future: National Policy on Education*. Lusaka: Zambia Educational Publishing House.

Mitka, P. (2011). Trainee Teachers Experiences of Teaching Practicum: Issuess, Challenges and New possibilities. *African Education Review*, 8(3), 551-567. Doi:10.1080/18146627.2011.618715.

Mkhasibe, R. G. N. (2014). Student Teachers Perceptions of Teaching Practice. At the Univeristy of Zululand. Unpublished MEd Dissertation, University of Zululand.

Moyo, J.A. (1980). An Investigation into the Teaching Practice Component of Pre-service Primary Teacher Education in Zambia. Med Dissertation. The University of Zambia.

Muzata, K. & Penda, A. (2013) Pedagogical Experiences of Students on Teaching Practice- a study of two teacher education institutions on the Copperbelt and Central Provinces of Zambia. *International Journal of Social Sciences: Basic and Applied Research*. Available: http://gsrr.org/index.php. Retrieved on 9th September, 2016.

Ngara, R.C. (2015). Challenges to the Centrality of Teaching Practice in the Student Teachers' Professional Growth and Competent Classroom Management in the Midlands Province of Zimbabwe. Phd Thesis. Zimbabwe Open University.

Rudney, G.L, and Guillanme, A.M. (2003). *Maximum Mentoring: An Action guide for teacher trainers and cooperationg teachers*. Thousand Oaks, CA: Corwin Press.

Pelosi, M., Sandifer, T.M, and Sekaran, U. (2001). *Research Evaluation for Business*. New York. John Wiley & Sons, Inc.

Saha, L. and Dworkin, A.G (2009) (ed). *International Handbook of Research on Teachers and Teaching*, 171-181. Springer Science+Business Media LLC.

Shumba, A., Shumba, J., & Maphosa, C. (2012). Mentorship of Student Teachers on Teaching Practice: Perceptions Teacher Mentors in Zimbabwean Schools. *Journal for New Generations Sciences*: 10 (1), 148 – 169.

Simuyuba, E., Banda, D., Mweemba, L., and Muleya, G., (2015). Theory against Practice: Teaching of Teachers in a Vacuum. Journal Education and Social Policy, 2(5), 88-96.

Smolik, J.M. (2003). Exploring a Five Factor Mentoring Model with Elementary Science. PhD dissertation. University of Central Florida.

Sullivan, C.G. (2004). How to Mentor in the midst of Change. Alexandria, VA, USA: Association for Supervision and Curriculum Development.

UNESCO. (2016). Zambia Education Policy Review: Paving the Way for SDG 4 – Education 2030.

Wambugu, P., Barmano, A., and Ng'eno, J. (2013). Student Teachers' Perceptions of Teaching Practice Assessment in Egerton University, Kenya. Educational Journal. 2,(4),169-175 Doi:10.11648/j.edu.20130204.20.Available:http://www.sciencepublishinggroup.com/j/edu.

Wyse, S.E. (2011. What is the differences between Qualitative and Quantitative Research. Retrieved from: http://www.snapsurvey. Blog/what-is-thedifference-between-qualitative-and-quantitative-research/.

Yamane, T. (1967). *Statistics: An Introductory Analysis (2nd).* New York: Harper and Row.

Zengeya-Makuku V., et al. (2013). The Quality of Teaching Practice Supervision and Assessment of Science Student Teachers at the Bindural University of Science Education (BUSE). *Journal of Education*, 3, 1, p. 48-53.

APPENDICES

APPENDIX A: QUESTIONNAIRE FOR STUDENT TEACHERS

THE UNIVERSITY OF ZAMBIA

DIRACTORATE OF RESEARCH AND GRADUATE STUDIES

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, SOCIOLOGY & SPECIAL EDUCATION

Questionnaire to be filled by student teachers

Dear Student Teacher,

My name is Milton Munjita, a master student in the School of Education pursuing a Master of Education in Sociology of Education at the University of Zambia. I am conducting a study on: **An Analysis of the Mentoring Practices experienced by Student teachers during Teaching Practice: A Case of Evelyn Hone College Student teachers**. The main purpose of this questionnaire is to gather relevant data on mentoring practices. The response you provide will have a constructive and paramount importance for the successful accomplishment of this study. So, you are kindly requested to give your genuine response. Your response will be used only for academic purposes and will remain confidential.

Thank you in advance for your cooperation!

Instruction:

1. Don’t write your name on the questionnaire.
2. Read all the instructions before attempting the questionnaire.
3. Specific instructions on how to fill the questionnaire are given in each section of the questionnaire.

4. Please, give appropriate response based on your school experience.

SECTION A: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

This section of the questionnaire requires you to provide personal information. Please indicate by marking (√) the appropriate response that appeals to you

1. What is your sex?

   Male ( ) Female ( )
2. Age in years_____

3. Programme of study _____

   Art Teachers Diploma (ATD) ( ) Music Teachers Diploma ( ) English Teachers Diploma ( )

SECTION B	**The following statements are concerned with personal attributes of your mentor teacher during teaching practice. Please indicate the degree to which you agree or disagree with each statement below by marking (√) only one response to the right of each statement. 'strongly agree (SA), agree (A), disagree (D), or strongly agree (SD)'**

Mentoring Practices	SA	A	D	SD
My Mentor teacher				
Was Supportive in my teaching of lesson				
Assisted me to reflect on my teaching of my subject				
Instilled confidence in me in teaching my subject				
Instilled positive attitudes in me in teaching my subject				
Listened very attentively to me				
Communicated effectively with me				
Enabled me to feel more comfortable in teaching my subject				

SECTION C	The following statements are concerned with system requirement. Please indicate the degree to which you agree or disagree with each statement below by marking (√) only one response to the right of each statement. 'Strongly agree (SA), agree (A), disagree (D), or strongly agree (SD)'.

Mentoring Practice	SA	A	D	SD
Discussed the goals of teaching your subject				
Discussed the curriculum of your teaching subject				
Discussed the school policies				

SECTION D	The following statements are concerned with Pedagogical Knowledge. Please indicate the degree to which you agree or disagree with each statement below by marking (√) only one response to the right of each statement. 'Strongly agree (SA), agree (A), disagree (D), or strongly agree (SD)'.

Mentoring Practices	SA	A	D	SD
My mentor Teacher				
Discussed my knowledge of the subject				
Assisted me in the preparation of lesson plans				
Discussed use of teaching aids				
Assisted me in classroom management				
Assisted me with scheming				
Assisted me with teaching strategies				
Discussed questioning techniques				
Discussed assessments				
Discussed problem solving				
Provided viewpoints of teaching a particular lesson				

SECTION E	**The following are the modelling practices you mentor teacher might have used during teaching practice. Please indicate the degree to which you agree or disagree to each statement below by marking (√) only one response to the right of each statement whether your cooperating teacher (supervisor) used any of the approaches.** **SA = Strongly agree; A = Agree; D = Disagree; SD = Strongly Disagree.**

Mentoring Practice	**SA**	**A**	**D**	**SD**
Modelled rapport				
Demonstrated enthusiasm				
Demonstrated a well-designed lesson				
Demonstrated classroom management				
Used syllabus language/vocabulary				
Demonstrated effective teaching strategies				
Demonstrated content teaching				

SECTION F	**The following statements are concerned with the feedback you received from your mentor teachers during teaching practice. Please indicate the degree to which you agree or disagree with each statement below by marking (√) only one response to the right of each statement. SA = Strongly agree; A = Agree; D = Disagree; SD = Strongly disagree.2**

		SA	A	D	SD
	Mentoring Practices				
	observed me before giving feedback				
	Provided oral feedback				
	Reviewed lesson plans				
	Provided evaluation on teaching				
	Provided written feedback				
	Articulated expectations				

Thank you for your time

APPENDIX B: PERMISSION TO USE MSPT

From: **Milton Munjita** <milton.munjita@gmail.com>
Date: Thu, Jul 27, 2017 at 9:11 PM
Subject: PERMISSION TO USE MEPST IN MY STUDY - AN ANALYSIS OF THE MENTORING PRACTICES BY STUDENT TEACHER DURING TEACHING PRACTICE: A CASE OF EVELYN HONE COLLEGE STUDENT TEACHERS
To: pb.hudson@qut.edu.au

My name is Milton Munjita, pursuing a master of education in Sociology of Education at the University of Zambia. I am in my second year and currently doing my proposal. I am kindly requesting to use the MEPST in my study in order to analyse the mentoring practices of student teachers at Evelyn Hone College in the Zambian context.

Your consideration will be highly appreciated.

Yours faithfully

Milton Munjita

APPENDIX C: CONSENT TO USE MEPST

On Thu, Jul 27, 2017 at 9:51 PM, Peter Hudson <Peter.Hudson@scu.edu.au> wrote:

You have consent to use the MEPST instrument.

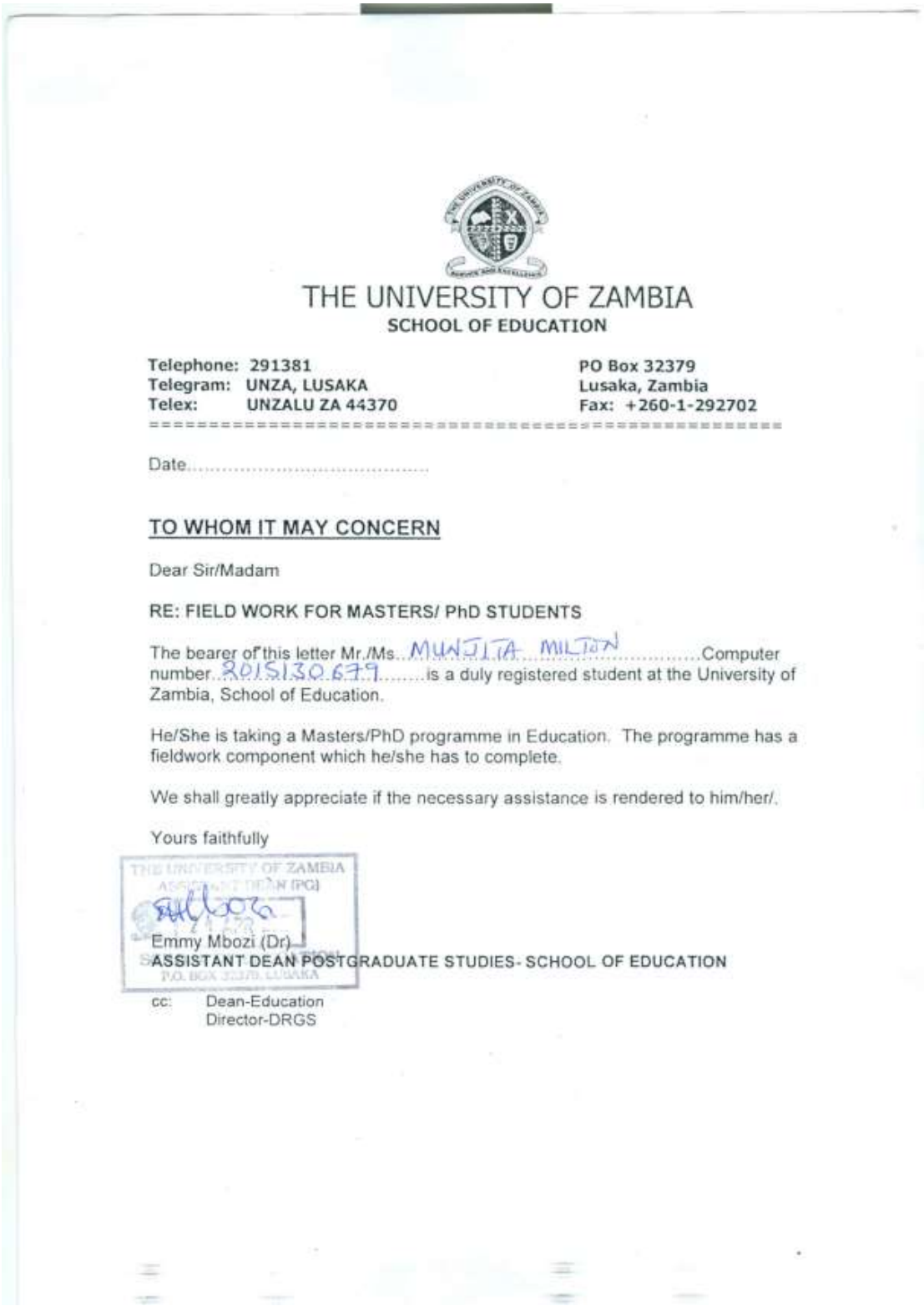
All the best with your studies.

Regards,

Peter

Sent from my iPhone

APPENDIX D: FIELD INTRODUCTORY LETTER



THE UNIVERSITY OF ZAMBIA
SCHOOL OF EDUCATION

Telephone: 291381
Telegram: UNZA, LUSAKA
Telex: UNZALU ZA 44370

PO Box 32379
Lusaka, Zambia
Fax: +260-1-292702

Date.....

TO WHOM IT MAY CONCERN

Dear Sir/Madam

RE: FIELD WORK FOR MASTERS/ PhD STUDENTS

The bearer of this letter Mr./Ms. MUNJITA MILTON .....Computer number 201S130679.....is a duly registered student at the University of Zambia, School of Education.

He/She is taking a Masters/PhD programme in Education. The programme has a fieldwork component which he/she has to complete.

We shall greatly appreciate if the necessary assistance is rendered to him/her/.

Yours faithfully

THE UNIVERSITY OF ZAMBIA
ASSISTANT DEAN (PG)
P.O. BOX 32379, LUSAKA

Emmy Mbozi (Dr)
ASSISTANT DEAN POSTGRADUATE STUDIES- SCHOOL OF EDUCATION

cc: Dean-Education
Director-DRGS

APPENDIX E: PERMISSION TO CONDUCT RESEARCH

School of Education,
The University of Zambia,
PO Box 32379,
EPSS,
15TH June, 2016.

Approved
Kindly proceed with the research.

The Vice Principal,
Evelyn Hone College,
P.O Box 30029,
Lusaka.

Dear Sir,

RE: PERMISSION TO CONDUCT RESEARCH WITH 3RD YEAR STUDENT TEACHERS

The above captioned refers.

I am a registered student at the University of Zambia pursuing a Masters of Education degree in Sociology of Education, currently conducting a research, in partial fulfilment of the requirements for the award of the aforementioned degree.

REPUBLIC OF ZAMBIA
MINISTRY OF EDUCATION, SCIENCE,
16 JUN 2017
VICE PRINCIPAL
EVELYN HONE COLLEGE MGT. BOARD

In view of this academic exercise, I am hereby requesting for permission to collect data at Evelyn Hone College. My research is entitled: An Analysis of the mentoring Practices experienced by pre- service Teachers during Teaching practice:A case of Evelyn Hone College Student Teachers.

Please find attached a letter from the school of education to this effect. Your permission to conduct research in this college will be highly appreciated.

Yours faithfully,

Munjita Milton