Analysis of Mentoring Practices Experienced by Student Teachers during Teaching Practice: A Case of Evelyn Hone College

Milton Munjita[1], Akakandelwa Akakandelwa[2] and Oswell Chakulimba[3]

[13] Department of Education Psychology, Sociology and Special Education, University of Zambia, Lusaka
[2]Department of Library and Information Science, University of Zambia, Lusaka

Corresponding author: milton.munjita@gmail.com

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. The first objective was to analyse student teachers' experiences of mentoring practices during teaching practice. The other objective was to determine the differences in student teachers' experiences of mentoring practices by background variables (gender and programme of study). 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 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. The study revealed 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, and 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 had more positive experiences in personal attributes, modelling and feedback than in pedagogical knowledge and system requirement. The study also concluded that Programme of study is a major factor in student teacher mentoring. It was recommended that there was need to develop expectations of mentor teachers during teaching practice. The expectations should specifically address student teachers' needs in system requirement and pedagogical knowledge.

Key words: Experience, mentoring practices, student teacher, teaching practice

Introduction

It is widely acknowledged that teaching practice or school experience (as is commonly termed in Zambia's 2013 Curriculum Framework) is a very important component in the professional development of student teachers (Muzata & Penda, 2014; Masaiti & Machinshi, 2011). Teaching Practice refers to a range of experiences to which student teachers are exposed when they work in classrooms and schools (Marais & Meier, 2004). The National Territory Department of Education (2017) described mentoring as "where a knowledgeable, experienced and highly proficient teacher who works with and alongside a new teacher or less experienced colleague-quite closely at first but this gradually diminishes as the new teacher becomes more capable and confident". It is important to mention at this stage that different understandings of mentoring exist. In his review of literature on mentoring Banja (2017) concluded that there is no universally acceptable definition of mentoring. Among the many definitions is that which includes guidance and help rendered to student teachers as opposed to newly qualified teachers in schools. This paper has adopted mentoring in reference to the former. In this study, less experienced person is a student teacher who is working under the experienced and knowledgeable individual (mentor). A student teacher works with the mentor during teaching practice. 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 & Penda, 2014). 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).

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 (Zengeya *et al.,* 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. Muzata and Penda (2014) investigated pedagogical experiences of students on teaching practice in two teacher education institutions on the Copperbelt and in 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 (Muzata, 2018). Those student teachers who lacked mentors reported an ineffective teaching practice experience as they did not have opportunities to learn from their mentors (Mitka, 2011; Feber & Nillas, 2010). 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. The studies showed that student teachers were not adequately mentored. Student teachers were expected to learn from their mentor teachers as these serve as role models, modelling teaching abilities for the student teachers (Johnson, 2015). Therefore, this study was prompted by the problems of inadequate mentoring portrayed by the cited studies. There was need to conduct a study in order to analyse

mentoring practices experienced by student teachers on teaching practice.

Problem Statement

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. Student teachers lacked opportunities to learn from their mentor teachers (Kangwa, 2017; Mitka, 2011). This study therefore, was carried out to analyse student teachers mentoring experiences from the school based mentors. Further, the study determined whether there were differences in student teachers' experiences of mentoring practices based on gender and programme of study.

Research objectives
The objectives of this study were to:
i) Determine student teachers' experiences of mentoring practices during their teaching practice at Evelyn Hone College.
ii) Determine whether there are differences in student teachers' experiences of mentoring practices by background variables (gender and programme of study).

Hypothesis
This study was guided by the following research hypothesis:
H_o There is a significant difference in student teachers' experiences of mentoring practices between male and female student teachers.
H_1 There is no significant difference in student teachers' experiences of mentoring practices between male and female student teachers.
H_o There is a significant difference between student teacher's experiences of mentoring practices and their programme of study.
H_1 There is no significant difference between student teacher's experiences of mentoring practices and their programme of study.

Theoretical framework

This study was guided by the Five Factor Theory for effective modelling developed by Hudson (2004). The five factors are: personal attributes, system requirement, pedagogical knowledge, modelling and feedback. 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 (Kram, 1985). The mentor teacher is expected to have a relationship that is positive and supportive of the student teachers.

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. 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 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". 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 need a supportive and positive relationship with their mentors. The theoretical framework also guided this study because it provided a means for the researcher to discover the effective mentoring practices mentors use when mentoring student teachers.

Methodology

A cross-sectional design was used as it had the ability to measure the current practices. The category of the population that provided the sample for this study were final third-year student teachers. The student teachers completed their final teaching practice in April 2017. The study population was composed of 474 student teachers.

In this study, the sample size was 155 student teachers. Student teachers from Art Teachers Diploma were 45 (29%); Music Teachers Diploma were 34 (21.9%); Computer Science were 17 (16%); and Secondary Teachers Diploma were 58 (37.4%). Only 1 (0.6%), respondent did not state their category of teaching. Stratified random sampling was used to select the sample size from each programme. Simple random sampling was then used to select respondents into the study.

A questionnaire was used to collect data. The questionnaire was a survey instrument which was adopted from Hudson (2004). Consent to use the questionnaire was given by Hudson himself. The survey had Likert types of questions ranging from agree to strongly disagree. Means and standard deviations were used were used to measure the mentoring experiences of student teachers. The experiences were categorised as negative or positive experience depending on the mean. Items having means of equal to or greater than the scale mean 2.7 were categorised as positive experience. To determine the significant differences between student teachers and background variables (gender and programme) Mann-Whitney U test and Kruskal-Wallis tests were conducted.

Results

Student Teachers' experience of mentoring practices Personal Attributes

Student teachers need the support of mentor teachers in order for them to grow professionally. The personal attributes of the mentor are significant in the professional development of student teachers. In this study, student teachers had positive relationships with their mentors (mean 3.11 and standard deviation 0.789). The results show clearly that mentors were supportive (mean = 3.20, SD = 0.74), instilled confidence (mean 3.15, SD = 0.75), communicated effectively (mean =3.19, SD = 0.77). Table 1 below shows the mentoring practices (personal attributes of mentor teachers) in which student teachers had

positive experiences with.

Table 1: Means and Standard deviations of student teachers' experiences with 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 = *Positive Experience*; SD = *Standard deviation*

System Requirement

The results further show that student teachers were adequately mentored on system requirement. In order for student teachers to grow professionally, they need to understand the system (school environment) in which they are working from. The results in table 2 show that student teachers the school system with their mentors (mean = 2.74, SD = 0.88) with their mentors. This means that student teachers were conversant with the school environment.

Table 2: Means and standard deviations of student teachers' experiences of system requirement

Item	Mentoring Practice	Class Interval	Mean	SD	Decision Level
1	Discussed the goals	2.70 – 4.00	2.88	0.800	PE
2	Discussed the curriculum	2.70 – 4.00	2.70	0.934	NE
3	Discussed school policies	1.0 – 2.69	2.65	0.919	NE
	Overall mean		2.74	0.884	**PE**

Note: PE = *Positive Experience;* SD =*Standard deviation*

However, student teachers were not adequately mentored in school policies as well as the curriculum. This implied that they had negative experiences. The results clearly show that student teachers had problems with the school policies and curriculum.

Pedagogical Knowledge

On pedagogical knowledge, student teachers were asked if they received any help. Results in table 3indicate that student teachers had positive experiences with pedagogical knowledge with the overall mean of 2.91 (SD = 0.946). However, some individual mentoring practices showed that student teachers were not adequately mentored. 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. Student teachers were not adequately mentored on these six mentoring practices.

Table 3: 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 – 2.70	2.69	0.958	NE
6	Discussed problem solving	1.00 – 2.70	2.68	0.936	NE
7	Assisted in teaching strategies	1.00 – 2.70	2.67	0.973	NE
8	Assisted with scheming/weekly planning	1.00 – 2.70	2.66	0.910	NE
9	Assisted in classroom management	1.00 – 2.70	2.54	0.952	NE
10	Discussed questioning techniques	1.00 – 2.70	2.53	0.973	NE
	Overall mean		2.91	0.946	PE

Note: PE = *Positive Experience* and NE = *Negative Experience*; SD = *Standard deviation*

Modelling

With regard to modelling, student teachers were asked if their mentors demonstrated teaching. The results are shown in table 4.

Table 4: Means and standard deviation 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

PE = *Positive experience*

Table 4 shows the responses of student teachers regarding modelling. The overall mean of 3.04 indicates that student teachers were adequately mentored in the area of

modelling. They had positive experiences of modelling. Student teachers reported that mentored teachers demonstrated enthusiasm (Mean = 3.09) and demonstrated well designed lessons.

Feedback

On feedback, which includes feedback after observation, oral and written feedback, expectations, review of lesson plans and evaluation on teaching, student teachers reported that they were given adequate feedback. The results in table 5 clearly show that student teachers were mentored in all the five areas with overall mean of 3.01 and standard deviation of 0.84.

Table 5: 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; SD = Standard deviation

Concerning feedback, the results in table 5 indicates that mentor teachers were able to provide feedback to student teachers. The overall mean score of 3.01 (SD = 0.84) indicated that student teachers had positive experiences of this mentoring practice. Student teachers believed that mentor teachers reviewed lesson plans (Mean = 3.15) and provided both oral and written feedback (Means 3.11 and 2.74 respectively).

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 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.

i) There were 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.

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.

H_0 The distribution of mentoring practices is the same across categories of programme of study.

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

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 student teachers of 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).

Student teachers' experiences of mentoring practices by gender

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.

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

Discussion

The discussion of results is based on the objectives of the study. The first objective of the study was to analyse mentoring practices experienced by student teachers during teaching practice. The second objective was to determine whether there were differences in student teachers experience of mentoring practices.

Student teachers' experiences of mentoring practices

The results of this study revealed that student teachers had positive experiences with personal attributes. This was confirmed by the average mean score of 3.11. The individual mentoring practices within personal attributes (instilled confidence, supportive, communicated effectively, assisted to reflect, felt comfortable, listened attentively and instilled confidence) all had means of above 2.70. This implied that student teachers had positive and supportive relationships from their mentors. 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. Positive experiences can impact directly on student teachers' professional development. Therefore, student teachers had a clear understanding of teaching. However, the findings by Muzata (2018) shows that some student teachers had challenges relating with mentor teachers. Some student teachers reported that some mentor teachers were not social and friendly, lacked respect and were not willing to help.

Regarding system requirements, the results revealed that student teachers had positive experiences. The average mean score of 2.74 clearly showed that mentor teachers were able to discuss the school environment with their student teachers. However, a close analysis of the individual mentoring practices revealed that students were adequately mentored in only two of the mentoring practices. These were discussing goals and curriculum. This implied that student teachers understood the goals of teaching their subjects in the schools they taught as well as the curriculum. It is important to note that student teachers enter schools during teaching practice with little knowledge of the school environment. It was therefore important that they were guided in this area so that they were adequately prepared for their future roles. The results of this study are in agreement with those of Ballantine (2005) who said that student teachers needed to be socialised into the school organisation. 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 (Bird, 2012; Hudson, 2009). This indicated that student teachers in this study were adequately helped to understand the goals of teaching and the curriculum of teaching different subjects. However, this study further revealed that student teachers did not receive adequate mentoring in discussing school policies. This was confirmed by the mean score of 2.65 which fell below 2.70. This meant that student teachers did not understand the school environment in totality. This is implied that student teachers were not socialised into the school organisation (Ballantine, 2005). They lacked the political skills to deal with the problems and challenges which were found in the schools.

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 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.

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 implied that student teachers were not adequately helped in these areas. Pedagogical knowledge goes beyond lesson planning as the student teacher needs to learn how to solve classroom problems Muzata and Penda (2014). Questioning techniques also are important in teaching a lesson. Different ways of questioning techniques make the learner to understand what they are being taught. Teaching truly involves these mentoring practices where student teachers did not receive much assistance. 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. Studies by various researchers (Mkhasibe, 2014; Heeralal, 2014; Maphalala, 2013; Shumba *et al.*, 2012; Hudson, 2009), revealed that student teachers needed to be adequately mentored in the teaching methods appropriate for teaching their subjects. The uses of appropriate teaching strategies are important in order to make learning and teaching interesting.

Concerning modelling, student teachers overwhelmingly agreed that mentor teachers adequately modelled teaching practices. This was shown by an overall mean score of 3.04. This revelation is welcome as this indicated that mentor teachers were able to understand the needs of student teachers. By demonstrating content, classroom management and well-designed lessons, the professional development of teachers was enhanced. Modelling also helped student teachers to greatly understand their strengths and weaknesses (Bird, 2012; Hudson, *et al.,* 2009). Student teachers were in these practising schools because they were students and they, thus needed someone to show them how certain things are done. 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 (Smolik, 2003).

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 had not. Student teachers who received feedback from their mentors showed greater growth than mentees who received little or no feedback (Hudson, 2004). 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. 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 student teachers to improve on their teaching.

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 indicated that the differences that existed in student teachers' experience of mentoring practices between male and female student teachers were not significant. The findings of this finding of 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 *et al.* (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 were 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 factor model for effective teaching.

Student teachers' experiences of mentoring practices by programme of study

The 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. 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.

Conclusion and recommendations

This paper analysed the mentoring practices experienced by student teachers during teaching practice. The mentoring practices analysed include personal attributes, system requirements, pedagogical knowledge, modelling and feedback. From the analysis above, it was observed that student teachers had more positive experiences in personal attributes, modelling and feedback than in pedagogical knowledge and system requirement. The study concludes that students had negative experiences in pedagogical knowledge (that is questioning techniques, classroom management, scheming, problem solving and teaching strategies) and system requirement (discussing curriculum and school policies). Student teachers need more mentoring in these two mentoring practices (pedagogical knowledge and system requirement. The study also concludes that gender is not an important factor in student teacher mentoring during teaching practice. Mentor teachers were able to student teacher regardless of their gender. Finally, the study concludes that student teachers with practical subjects had more positive experiences in personal attributes and modelling than in pedagogical knowledge, feedback, and system requirement. Programme of study seems to be a major factor in student teacher mentoring.

Based on the results of this study, the following recommendation has been made:

(a) 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 were mainly found.

(b) There is need for the Training institution to create strong links with cooperative schools and provide mentor teachers with necessary skills in order to provide effective mentoring for effective teaching.

(c) The positive mentoring

(d) Mentor teachers should effectively mentor student teachers regardless of student teachers programme of study. This will help student teachers to develop professionally in their respective professions.

References

Ballantine, J. (2005). *Effectiveness of Pre-service Music Teacher Programme: Perceptions of Early Career Music Teachers.* Doctoral Thesis, Centre for Innovation in Education. Available at: http://eprints.qut.edu.au/16074/1/Julie_Ballantyne_Thesis.pdf.

Banja, M.K. (2017). *Mentoring of Newly Qualified Teachers in Zambian secondary schools: An Introspection of Teachers' and Head Teacher's Perspectives in Selected Districts of Zambia.* PhD Thesis, University of Zambia, Lusaka.

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

Ferber, T. & 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.

Heeralal, P. J. H. (2014). Mentoring Needs of Pre – Service Teachers during Teaching Practice. A Case Study at a South African University. *Journal of Educational and Social Research*. *4* (1), 511-515.

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 Primary Science Teaching. *International Journal of Science Education*, *27*(14), 1723-1739. doic.10.1030/09500690500206457.

Hudson, P., Usak, M., & 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.

Johnson, K.R. (2015). *Fourth Year Teacher Perceptions of the Student Teaching Practicum in Abu.* Walden Dissertations and Doctoral Studies. 1797. https://scholarworks.waldenu.edu/dissertations /1787.

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

Khumalo, P. N. (2014). *Mentors Perceptions of their role in Mentoring Student Teachers.* Master of Education Dissertation, University of Zululand, Kwadlanyezwa.

Kram, K. E. (1985). *Mentoring at work.* Boston: Scott, Foresman and Company.

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.

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. & Manchinshi, 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.

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

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 University of Zululand.* Master of Education Dissertation, University of Zululand. uzspace.unizulu.ac.za.

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

Muzata, K.K. & Penda, A. (2014). Pedagogical Experiences of Students on School Teaching Practice – A Study of Two Teacher Training Institutions on the Copper belt and Central Provinces of Zambia". *The International Journal of Sciences: Basic and Applied Research, 14* (1)187-204.

Muzata, K.K. (2018). Collaborative Responsibility in Teacher Preparation: Student Teachers' Perceptions of the Role of Schools in Their Professional Development in Zambia. *Open Access Library Journal*, *5* (10) 1-17.

Shumba, A., Shumba, J., & Maphosa, C. (2012). Mentorship of Student Teachers on Teaching Practice: Perceptions of Teacher Mentors in Zimbabwean Schools. *Journal for*

New Generation Sciences. *10* (1). https://handle.net/10520/EJC126829.

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

The Northern Territory Department of Education (2017). The Teacher's Guide to Effective Mentoring. Available at: https://education.nt.gov.au>assets>pdf_file.

UNESCO. (2016). Zambia Education Policy Review: Paving the Way for SDG 4 – Education 2030. Available at: https://www.loc.gov/item/2019352350.

Wambugu, P., Barmano, A., & Ng'eno, J. (2013). Student Teachers' Perceptions of Teaching Practice Assessment in Egerton University. *Educational Journal*. *2* (4), 169-175. Doi:10.648/j.edu.20130204.20.

Zengeya-Makuku V., Sunzuma, G., & Bhukhuvhani, C.E. (2013). The Quality of Teaching Practice Supervision andAssessment of Science Student Teachers at the Bindural University of Science Education (BUSE). *Journal of Education*, *3* (1), 48-53.