International Journal of Learning, Teaching and Educational Research
Vol. 21, No. 3, pp. 88-105, March 2022
https://doi.org/10.26803/ijlter.21.3.6
Received Oct 29, 2021; Revised Feb 22, 2022; Accepted Mar 9, 2022

The Impact of Mentoring in the Development of Pre-Service Teachers from a University in South Africa

Clever Ndebele and Dagogo William Legg-Jack*
Walter Sisulu University, Nelson Mandela Drive, Mthatha,
Eastern Cape, South Africa

Abstract. Limited conceptual knowledge, and the lack of competencies and skills in the discharge of duties have been part of the challenges faced by some teachers within the South African school system**.** One of the reasons attributed to this is poor teacher development programmes in some of the training institutions. **T**his study explored the impact of mentorship development on pre-service teachers from a university in South Africa. The five-factor model of mentoring namely, personal attributes, system requirements, pedagogical knowledge, modelling, and feedback was employed as a theoretical lens. The purpose was to understand the attributes and practices mentors transfer to their mentees (student teachers) during their teaching practice. Located in the interpretive paradigm, the research employed a qualitative case study design to generate data through semi-structured interviews from 26 B.Ed Honours pre-service teachers, purposively selected as the study sample. A thematic approach was used to analyse the data generated. Findings from the analyses revealed that pre-service teachers were positively impacted mostly in the development of pedagogical knowledge, followed by system requirements, personal attributes, modelling and feedback. The findings support the Five-Factor mentoring Model as a valid and useful framework for measuring the impact of the mentoring received by pre-service teachers on teaching practicum. The study concludes that mentoring activity in pre-service teacher education is an important component of professional development for effective teachers. Based on this conclusion, the study recommends that mentors support student teachers in the development of the necessary skills and competencies required of a professional teacher.

Keywords: Five-Factor; mentoring; model; pre-service; teachers

* Corresponding author: *Dagogo William Legg-Jack, dlegg-jack@wsu.ac.za*

©Authors
This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC BY-NC-ND 4.0).

1. Introduction

Teachers play fundamental roles in nation building and are thus described as agents of transformation in the society (Manzar-Abbass et al., 2017). Many improvement initiatives have focused on the teacher as the key to improving learner performance over the years (Desimone et al., 2006; Knight & Wiseman, 2005) because teacher quality and abilities are the most significant school-based factors that contribute to student achievement and educational improvement (Kutsyuruba & Walker, 2020). Also, as stated by King and Newman(2001, p. 86), it is believed that:

> "*Teachers have the most direct, sustained contact with students, as well as considerable control over what is taught and the climate of learning. It is reasonably assumed that improving teachers' knowledge, skills and dispositions is one of the most critical steps to improving student achievement.*"

Steyn (2008) argues that this explains why teachers are pressurized to be competent in their classrooms. In South Africa, "the quest is for quality teachers who are appropriately trained and developed to meet the evolving challenges and needs of the developing country" (Republic of South Africa, 2007, p. 4). However, one major challenge identified as impeding the South African school system is the issue of teacher development (De Clercq & Phiri, 2013), most aspects of which are related to competencies and skills in the discharge of their duties. Limited conceptual knowledge of many teachers has been confirmed as the "most critical challenge for teacher education in South Africa" (President's Education Initiative Research Project; RSA, 2007, p. 4). The South African education system is plagued by relentless inequality, unacceptable high learner dropout rates and problematic teaching quality (SACE, 2018). Some of the challenges associated with the poor quality of teachers are linked to their pre-service training.

From the foregoing, it is evident that the competencies and quality of teachers produced in the South African education system is problematic. It is argued that some teachers are not able to translate what they have learnt in the university to address the needs of the present-day classroom (Botha & Rens, 2018). The implication is that a gap exists between theory and practice; thus, the need for proper grooming of pre-service teachers through mentorship. Issues related to pedagogical knowledge, classroom and time management, as well as administrative tasks have been highlighted in different studies as challenges confronting beginner teachers (Botha & Rens, 2018; Modise, 2016; Condy & Blease, 2014). For instance, the study conducted by Botha and Rens (2018) highlighted that beginner teachers experience reality shock when they encounter their lack of readiness on how to handle learners in the classroom without becoming negative about teaching. The issues revealed in the study are linked to pedagogical application, lack of motivation, classroom management and basic knowledge of psychology as major challenges to their ability to create and sustain meaningful relationships with their students (Botha & Rens, 2018). Another study (Modise, 2016) found that some beginner teachers are not qualified to teach because they lack the necessary pedagogical content knowledge; this has far-reaching effects on learners' success. Similarly, Jiyane and Gravett (2019) found difficulties related to

pedagogical knowledge and classroom management were issues for new teachers.

The implication of these findings is that beginner teachers lack the necessary competence to handle the reality of a school classroom. According to The Alberta Teachers' Association (ATA) (2003), teachers are faced with different tasks, ranging from learning new curricula, handling classroom management and discipline, integrating students with special needs, using technology, individualizing student programmes, coordinating extracurricular activities and being accountable to the various stakeholders of education. Mentoring is therefore essential.

Mentoring as an integral aspect of work-based placement creates room for pre-service teachers to be groomed effectively by serving teachers in an authentic classroom situation. According to Lederman and Lederman (2015), teaching practice is an essential component of pre-service teacher education. Corroborating this, Abongdia et al. (2015) argued that this approach affords pre-service teachers the opportunity to put theory into practice to develop the necessary skills and competencies required of an educator.

Evidence from the studies reviewed shows that little has been done on pre-service teacher development via mentoring, and a knowledge gap exists. The focus of the studies reviewed centres on beginner teachers (Botha & Rens, 2018), foundation-phase teachers (Condy & Blease, 2014), serving Grade 9 teachers (Mondise, 2016), and final-year student teachers (Jiyane & Gravett (2019). None of these studies focused on student teachers at B.Ed Honours levels, which gap this present research intends to address by exploring the impact of mentoring in the development of pre-service teachers at a university in South Africa. Specifically, the study explored one objective, namely, the impact of mentoring in the development of B.Ed Honours pre-service teachers. To achieve this, the study employed a qualitative case study design. The Five-Factor Model (FFM) of mentoring was employed in framing the study. Data were generated through semi-structured interviews with 26 B.Ed Honours pre-service teachers. The interview questions were organised according to the five factors for ease of data analysis and the subsequent discussion of findings was also presented according to the five factors. The outcome of this study will enhance the body of knowledge within and outside higher education in different areas, namely, the impact of mentoring in the development of B.Ed Honours pre-service teachers as well as scholars in the fields of pre-service teacher education and work integrated learning (WIL).

The next two sections discuss the theoretical framework of the study: FFM, and insights from the literature on pre-service teachers with regard to WIL, teaching practice, and mentoring in pre-service education.

2. Theoretical Framework

Informed by construct theory (Cherry, 2020) which argues that "people develop personal constructs about how the world works and then use these constructs to make sense of their observations and experiences", this study is premised on the

FFM for effective teaching popularised by Hudson (2004), and further elaborated by Hudson et al. (2005). According to these scholars, the model consists of five constructs, namely, personal attributes, system requirements, pedagogical knowledge, modelling and feedback. These constructs are employed in determining what transpires between the mentor and mentee in a professional environment. The composition of each is as follows:

2.1 Personal attributes: These cover the mentor's personal qualities that enable the mentee's professional growth and support the relationship that exists between the mentor and mentee in which the former is supportive of the latter. According to Hudson (2007), it is a situation in which the practices of teaching and attentive listening are comfortably discussed by the mentor and mentee. Significantly, the mentor's personal attributes, such as emotional support, guidance and encouragement depend upon the reassurance of the mentee's reflection on practices, as well as instilling confidence and positive attributes in the mentee (Moir et al. 2009; Albakri et al., 2021).

2.2 System requirements: These incorporate the school's aim, the curriculum and the policies that cater for the specific objectives of teaching and learning. These components are articulated and passed on from mentors to mentees (student teachers) in specific subject areas, thereby advancing the pre-service teachers' understanding of system requirements, especially when linked with the other four factors (Hudson, 2004). A study on system requirements reported that mentors "discussed policies, goals of [the] school, as well as [the] outline of the curriculum with mentees, and they benefitted by understanding the various relationships occasioned in the classroom and the educational context at large (Bird, 2012)".

2.3 Pedagogical knowledge: This factor focuses on the level of a teacher's teaching competencies. Pre-service teachers (mentees) learn how to plan for their teaching through the organisation of their timetable or schedule lessons from impactful and effective mentors (Hudson, 2004). Mentors discuss the requirements for lesson preparation in relation to location and use of resources. Effective lesson delivery is a function of well-structured teaching strategies, and experienced mentors are chief custodians of this, which they make available to their mentees. Content knowledge and classroom management strategies are all captured in this factor. The mentor ascertains the mentee's content knowledge to see if it aligns with system requirements, and assists pre-service teachers in solving certain problems that emanate from the classroom during lesson delivery (Hudson, 2007).

2.4 Modelling: An enthusiastic teacher can present desirable teaching qualities (Hudson, 2004). Mentors are considered instructional coaches and are models of the best instructional practices themselves, according to Moir (2009). Trubowitz (2004) described mentors as experienced professionals who are mostly regarded as master teachers by their colleagues. Accordingly, mentees are modelled on what is expected of them and what is not, that is, the right language usage ideal for students' teaching and learning, classroom management, practical activities, as well as lesson planning (Hudson, 2004).

2.5 Feedback: An effective mentor conveys expectations and provides necessary advice to the mentee (pre-service teacher) (Hudson, 2004). Mentees are provided with oral and written feedback based on their teaching practices as observed by the mentor, revision of their lesson plans and an assessment of their practical training setting. According to Evans-Andris et al. (2006, p. 299), "well defined feedback solves problems related to classroom management, discipline and behaviour, grading, paperwork, interactions with parents, lesson planning, resource acquisition, and other unique needs of student teachers".

Evidence from research conducted by several different scholars has justified each of the factors reviewed above, as popularised by Hudson (Hyde, 2019; Bird, 2012; Duah, 2010, Smolik, 2010). The decision to choose this model for the current study is based on the objective of the research which hinges on how mentors influence the development of student teachers from a university in South Africa during their teaching practice exercise.

3. Work Integrated Learning (WIL)

The concept of WIL as defined by Groenewald (2004, p. 17) is "an educational strategy in which students undergo academic learning at a university and combine this with time spent in a workplace relevant to their programme of study and career aims". Consequently, WIL has a dual learning focus aimed at equipping students with the necessary knowledge, skills and attitudes that will be required for their future professional work (Du Plessis, 2019). "The rationale that underpins WIL focuses on a collaborative approach between partner schools and universities as service providers of teacher education qualifications to ensure career-specific and full-rounded learning through the application of theory and academic learning with real-life practice of teaching and learning in selected schools (Van Niekerk, 2018, pp. 66–67)". Drawing from Initial Teacher Education (ITE), WIL creates room for pre-service teachers in a real-life workplace (specific school context) to apply theoretical and practical knowledge (Gillett-Swan & Grant-Smith, 2017). The benefit of this approach covers personal development and experience from exposure to real-world situations in a variety of school contexts (Mentz, De Beer, Petersen, Van Vuuren, …. & White, 2020)

3.1. Teaching practicum

Teaching practice, as encapsulated in WIL, is a pragmatic approach where pre-service teachers are engaged in field experience to showcase the practical aspects of the theoretical knowledge attained in the classroom. According to Clarke et al. (2014), this exercise is regarded as a crucial aspect of teacher preparation programmes. However, Grossman (2010) argues that the value accruable from the teaching practice experience rests on the quality of support pre-service teachers receive; hence the need for a mentor-teacher whose influence bears on the student-teacher in terms of interacting with other individuals and in providing feedback. Research has been conducted on how to improve the professional experience of pre-service teachers on teaching practicum (Danyluk, 2013; Hamaidi et al., 2014). More recently, the works of Grant-Smith and De Zwaan (2019), Grant-Smith et al., (2018) as well as Grant-Smith and Gillett-Swan, (2017) have focused on students' wellbeing and avenues that better support pre-service teachers in teaching practice. Attention is directed towards the influence of mentoring in positively

shaping pre-service teacher commitment, classroom practice and student achievement (Ingersoll & Strong, 2011).

3.2. Mentoring in pre-service teachers' education

Different constructs and concepts apply in describing the professional experience support received by pre-service teachers. This support is received from an in-school supervisor, who is sometimes referred to as a cooperating teacher (Clarke et al, 2014) or school mentor/teacher-mentor (Ambrosetti & Dekkers, 2010). Mentoring, according to Pennanen et al. (2020), is a global and widely applied method of professional development. This view is corroborated by Liaqat et al. (2020) who aver that, in recent times, mentoring has been acknowledged in numerous organisations as an approved process and an inseparable part of professionalisation in diverse areas of study, such as medical sciences, social sciences, education, law, and architecture, among others. Further, Delaney (2012) argues that one way to ensure teacher job retention for a longer period is through mentoring; it is also a cost-effective approach to improve the skills and the value of a teacher whilst ensuring that the students get high quality service. In schools, mentoring has a long history of being used to impart skills and knowledge (Simonsen et al., 2009; Van & Waghid, 2008).

Diverse studies have confirmed the impact of mentoring as being influential in pre-service teachers' developing the necessary skills required for the profession. These skills include the development of attributes and practices such as pedagogical knowledge (Sempowi & Hudson, 2011), time management skills (Mulyasa, 2004), classroom management strategies (Hudson & Hudson, 2013; Mukeredzi & Manwa, 2019), acceptance and motivation for career growth (Hudson, 2010), awareness of school routine (Chan, 2020), use of appropriate classroom language (Hudson, 2004; Macario, 2018) and advice for professional development (Munjita, 2019).

The reviewed literature shows the significance of mentoring pre-service teachers in translating theoretical knowledge from initial training into the real classroom situation. Evidence from studies reveals that mentoring contributes to the achievement of positive results (Garvey, 2009; Lai, 2005). Guided by this literature, this study sought to investigate the impact of mentorship development on pre-service teachers; to examine the attributes and practices mentors transfer to their mentees (pre-service teachers during teaching practice exercise), and to solicit mentee views on the extent to which they gained from the mentor's personal attributes and practices during the teaching and learning process.

4. Methodology

4.1 Research design and participants

The study adopted a qualitative case study design located in the interpretive paradigm and informed by construct theory (Cherry, 2020) which argues that people develop personal constructs about how the world works and then use these constructs to make sense of their observations and experiences. According to Henning et al. (2004), qualitative research design allows for unrestricted and natural emergence of themes which the researcher wishes to identify in the study because the ability to control variables is not usually presented. In qualitative research, the researcher is positioned to see through the eyes of the participant

and to understand the world as others experience it (Austin & Sutton, 2014); that is, the researcher is intimately involved in the process. Case study research seeks a profound understanding of a situation with the aim of capturing the real-life context of an event (Cohen et al., 2011; Kumar, 2011). On the other hand, the interpretive paradigm aims to understand the subjective world of human experiences (Cohen et al, 2011).

The study aims to understand and interpret the impact of mentors on the development of student teachers (the case in this study) from the participants' perspectives. The sample for the study comprised 26 B.Ed. Honours pre-service teachers who were purposively selected from a group of B.Ed. Honours pre-service teachers who were on teaching practice. A purposive sample provides the researcher with study-ready participants who possess the potential information that addresses the objective of the research (Kumar, 2011). The sample of 26 students were those who had been observed delivering lessons by one of the researchers who had also been able to listen to the oral feedback from mentors during visits to schools.

4.2. Instruments

Data generation in the study was executed using semi-structured interviews which were administered to the 26 pre-service teachers after their teaching practice exercise. This method was preferred because it enabled the researcher to "gather information from key informants who have personal experiences, attitudes and perceptions and beliefs related to the topic of interest" (DeJonckheere & Vaughn, 2019, p. 2). To ensure the credibility and trustworthiness of the data, the triangulation of data from different participants was followed, and by coding the transcriptions of a few informants to ensure the soundness and relevance of themes. In addition, as already indicated in the preceding section, observational data by the researchers during teaching practice and oral feedback from mentors during visits to schools was used as a form of triangulation.

4.3. Data analysis

The thematic approach was used to analyse the data generated from the semi-structured interviews (Clarke & Braun, 2013). This approach to data analysis involves familiarisation with the data, generating initial codes, searching for themes, reviewing the themes, defining and naming the themes, and producing the report (Nowell et al., 2017). Data generated from pre-service teachers through semi-structured interviews were analysed according to the stages outlined above.

5. Presentation of Findings

The Five-Factor Model of mentoring was used to categorise the various themes that emerged from the data. Prominent among the five factors is pedagogical knowledge, followed by system requirements, personal attributes, modelling, and feedback.

5.1 Pedagogical knowledge and feedback

This factor focuses on a teacher's teaching competencies. Participants responded to a question which sought to find out the extent to which mentors assisted mentees to translate into practice the pedagogical knowledge gained during

teacher training. Participants in the study articulated how pedagogical knowledge was grounded at various points during their teaching practice. They described how their mentors impacted them in diverse ways in navigating the different strategies of teaching. These they expressed in the comments below:

> *"My physical science mentor was very good at her job, so she taught me very important methods of teaching: how to teach learners, how to assess them and when to assess them. She told me additional information like how to prepare a QLM portfolio and what I should and should not do to make my work less stressful".* **P21**

The comment by Participant 21 indicates that the mentor was helpful in teaching methods and assessment. Similarly, the following two participants explain that they were introduced to different pedagogical practices:

> *"How to use a variety of teaching approaches in a single classroom to accommodate all learners."* **P5**

> *"I benefited a lot from my mentor. I have learned many things from her. I have learned how to introduce the lesson topic, how to formulate lesson outcomes, how to engage learners in the lesson and how to explain the content."* **P14**

> *"I learned a lot from him that a foundation phase teacher can indeed teach young learners in a fun way."* **P8**

The excerpts above reveal different pedagogical practices participants learnt from their mentors. According to Participant 5, it was the use of multiple teaching approaches in a single classroom; for Participant 14, the impact was on how to introduce a lesson, formulate lesson objectives, engage learners in a lesson as well as explain content, whilst that of Participant 8 focused on the ability of a foundation phase teacher to teach young learners in a lively way.

Two participants described that their mentor taught them how to get the attention of learners. This they expressed in their various comments:

> *"She was even helping me about some strategies to grab the attention of the learners and even she was supportive."* **P7**

> *"As a student teacher I was not sure how to start the lesson to get the attention of learners. My mentor helped me with the methods I can use."* **P15**

Other participants commented that:

> *"He was always teaching me on how to conduct a lesson since from first year and now I can do my things without being guided."* **P16**

> *"The mentor was there to guide me and tell me more about the learners in terms of their mental abilities. New teaching strategies."* **P11**

Findings from both participants' excerpts above highlight the availability of mentors to guide mentees on how to conduct their lessons. Both comments speak of feedback as well. From Participant 16's perspective, constant guidance by way of advice led to an improvement in practice, and this is one of the essentials of

feedback. According to Participant 11, the mentor's guidance provided insight into new teaching strategies to handle learners with respect to their mental abilities, a typical approach to inclusivity.

5.1.1 Provision of support

The provision of support to pre-service teachers on teaching practice is one way to promote the quality of teaching offered by students. Participants in the study were asked to respond to a question which asked them to comment on the extent of support provided by their mentors in facilitating their lessons.

> *"The mentor was a great adviser; he was always supporting me with everything, including teaching materials. He would show me where [sic] I need to work on and always facilitating me."* **P23**

Similarly, another participant said:

> *"My mentor provided me with textbooks, notes and the work schedule that I needed to follow for the time I was doing my practice teaching."* **P6**

Analysis of both excerpts above reveals, from both participants' perspectives, that their mentors provided them with diverse support in the discharge of their duties. According to Participant 23, the support enjoyed was the provision of teaching materials as well as what to work on, while that of Participant 6 covers provision of resources such as textbooks, notes and the work schedule. However, a participant who did not enjoy any form of support lamented the mentor's inattention and lack of any support. The comment below reinforces that:

> *"I did not benefit from most of the teaching practice. Once I arrived the mentor relaxed, they would let me teach on my own. They were not assisting me."* **P17**

The excerpt in the comment above indicates that the participant was completely unsupported during the teaching practice exercise.

5.1.2 Time management

Participants responded to a question which sought their views on how they learnt time management skills from mentors. Some participants indicated that their mentors taught them how to manage their time, as revealed in the comments below.

> *"He taught me to prepare my things before time e.g., lesson plans. He showed me how to manage my time so that at the end of the day I must not have load of work."* **P18**

> *"I benefited on how you should always prepare your lesson ahead so that you can identify problem areas.* **P10**

Analysis of both comments above indicates that both participants benefited from their mentors on how to manage their time. According to Participant 18, the lesson learnt was the necessity of preparing the lesson ahead of time so as to maximise time and avoid a heavy workload. Participant 10 was taught that preparing for the lesson on time enabled one to anticipate and identify likely problem areas.

It is worth noting that this factor impacts pre-service teachers the most, as eight mentees indicated that their pedagogical content knowledge was impacted by their mentors.

5.1.3 Classroom management

Pedagogical knowledge was also captured in classroom management. Some participants were forthright about the impact of their mentors in the development of classroom management strategies, as expressed in the comments below:

> *"I benefited [from] the techniques of maintaining classroom discipline.…"* **P26**

> *"I benefited a lot from what I feared, it is now what in master [sic], discipline and involving learners in my lesson is what I am good at and from all that I got it from my mentor."* **P25**

> *"The mentor was there to guide…how to handle bad behaviours [sic], as well as how to punish learners."* **P11**

> *"Honestly speaking, there is very little that I can say which was mainly what not to do in a classroom, especially regarding the classroom management, treatment of learners, etc."* **P4**

> *"My mentor helped me a lot by maintaining order and discipline in [the] classroom. My mentor taught me how to make the atmosphere in class to be conducive for every other learner."* **P2**

> *"Oh! My last teaching practice I had a wonderful mentor …. showing me and helping me with teaching methods of the discipline."* **P9**

Findings from the analysis of participants' excerpts above reveal the impact of mentors on mentees in the development of classroom management strategies in the area of discipline. According to Participant 25, classroom management was a dreaded area, but through the help of a mentor, it is no longer an issue. For Participant 11, the mentor was helpful in showing how to handle bad behaviour and how to manage learner discipline, whilst Participant 4 was influenced in the treatment of learners. According to Participant 2, the mentor's impact on the mentee helped to create a calm and conducive learning atmosphere.

5.2 System requirements

System requirements, as one of the five-factors of the mentor model, focuses on information about the daily school routine. The interview schedule posed a question which sought to discover from mentees the extent to which they were guided by mentors in understanding the general school system requirements. Some participants reported the guidance provided by their mentors on how to participate and integrate into certain norms of the school activities. Evidence in the comments reveals the following:

> *"I also benefited when it comes to day-to-day planning of learner's activities."* **P26**

> *"My mentor assisted me how to complete house tasks, dress code, punctuality and teacher conduct."* **P19**

> *"My mentor taught me the ins and outs of teaching. All the things university will never teach you. Things like moderation, completing [the] learner register …."* **P22**….

> *"She also took her time to show me about the administration work of the teacher."* **P9**

Analysis of the above comments from the three participants reveals the impacts of mentors on mentees' compliance with system requirements. The benefits of mentors as voiced by Participant 26 is on how to plan daily learner activities, whilst for Participant 19, it is on how to complete house tasks, dress code, punctuality, and teacher conduct. Participant 22 enjoyed the impact on how moderation and completing the learners' register is done, whilst Participant 9 learnt about the administrative duties of a teacher.

5.3 Personal attributes

The mentor's personal features enhance the mentee's professional growth as well as make the mentee feel successful in their career. Mentees were asked to comment on the extent to which they gained from the mentor's personal attributes during the teaching and learning process and from which the mentee drew inspiration in developing their own practice. Some participants commented on being encouraged in diverse ways, as expressed in the comments below:

> *"He gave me the sense of belonging and made me realise the best part of being an educator and also gave me a room for suggestion[s] on how to improve in teaching and learning especially in language of English."* **P13**

> *"Oh! I like[d] my mentor. She was welcoming in a way that she motivates me even about my career."* **P7**

Analysis of these comments indicates the impact of mentors' personal attributes and modelling on mentees. The excerpts from Participants 13 and 7 reveal that they both enjoyed the acceptance of their mentors. The acceptance created room for improvement in the teaching of English Language for Participant 13, whilst Participant 7 reflected on the motivation in career development. The comments from the two participants are a typical reflection of a mentor's personal attribute, because both are aimed at instilling confidence and a positive attitude in the mentees.

5.4 Modelling

This factor entails the use of appropriate classroom language that is suitable for students' learning. Mentees responded to a question which asked about the extent to which they gained from the modelling attributes of the mentor in the actual teaching and learning situation. One of the participants commented on the impact of the mentor's right use of language during the teaching and learning process.

> *"I benefited [from learning] how to talk to learners without yelling at them or threatening them."* **P2**

According to Participant 2, the benefit derived from the mentor's modelling was in how to approach learners in an controlled manner without aggression, which implies the use of right language.

The major themes that emerged from the findings in this section reflect the characteristics of the Five-Factor Model of mentoring, namely, pedagogical knowledge, system requirements, personal attributes, modelling and feedback. These are discussed in the next section.

6. Discussion

In this section, we discuss the findings on the impact of mentors on the development of student teachers from a university in South Africa during their teaching practice exercise. The findings from the study support the major factors advocated for by Hudson (2004) and Hudson et al. (2005), as mentioned above. These factors and their respective components are discussed below in relation to this study, beginning with the most prominent.

6.1 Pedagogical knowledge: Findings in the research highlighted the impact of mentors in developing their mentees (students on teaching practice) in different areas of pedagogical content knowledge. According to Hudson (2004; Hudson et al, 2005), pedagogical knowledge entails instructional approaches and competencies, provision of resources, time management, and classroom management strategies. The study revealed mentors' impact on participants (pre-service teachers) in the development of pedagogical knowledge. The findings showed that pedagogical knowledge was revealed at different stages of the exercise, namely, planning, preparation and implementation of lessons. This finding supports that of Sempowicz and Hudson (2011) whose study highlighted how mentors shaped mentees' teaching experiences through the transfer of diverse pedagogical skills. The pedagogical approaches revealed include how to introduce and formulate lesson objectives, strategies to attract learners' attention, and teaching learners with different mental abilities. These findings corroborate those of Bird (2012) whose study revealed similar pedagogical strategies as part of the mentors' impact on student teachers. The study also found that mentors assisted with the knowledge of how to assess learners, echoing the finding of Prasetyo (2019) whose study showed that mentoring has the ability to improve prospective teachers' pedagogical knowledge of assessment. As reported, mentors provided mentees (pre-service teachers) with time management skills (Bird, 2012) as well as effective teaching and assessment practices in relation to classroom management (Sempowicz & Hudson, 2011).

A component of pedagogical knowledge is the ***provision of resources*** required to implement teaching and learning. The study revealed that participants were provided the resources needed for the implementation of their teaching exercise. Corroborating this finding is that of Smolik (2010), whose research revealed that mentors provided novice teachers with resources such as lesson plans which helped novice teachers in preparing their own lesson plans. One of the participants was critical of their mentorship because of the lack of support received. This finding is in line with Abongdia et al. (2015) who reported that some mentors fail to support their mentees on teaching practice. Thus Abongdia et al. (2015, p. 55) recommended that "school-based mentors should ensure that pre-service teachers are supported during their work integrated learning since they require [the] opportunity for personal growth".

The study also revealed improvement of ***time management*** skills as part of the beneficial impact of mentors on mentees (pre-service teachers). Similarly, the study conducted by Bird (2012) found that mentors helped their mentees with time management. They were taught how to prepare their lessons on time to avoid a heavy workload as well as to identify problem areas in the lesson. Poor time management has been confirmed as one of the seven indicators of poor teacher performance (Mulyasa, 2004) and, therefore, mentoring services for pre-service teachers is one major way to mitigate such a challenge.

Part of pedagogical knowledge, according to the five-factor mentor model, is ***classroom management strategies*** (Hudson, 2004). Participants in the study were outspoken on the development of diverse classroom management strategies resulting from their respective mentors' input. This agrees with the finding of Hudson and Hudson (2013) which revealed that student teachers developed classroom management strategies while they observed how their mentor teachers related to learners. The different classroom management strategies developed by mentees (pre-service teachers) in this study include maintaining discipline in the classroom, handling learners' bad behaviour, and the treatment of learners. These findings agree with those of Mukeredzi and Manwa (2019) who maintain that classroom management and control are essential for student learning and for sustaining academic achievement. Often important aspects of establishing control include creating an effective discipline policy, building rapport, and determining the needs of the problem students. Consequently, Bloomfield (2010) and Johnson (2010) describe teaching practice as a highly valued component of teacher preparation that equips pre-service teachers with the art of teaching in a classroom setting, enables them to develop knowledge and competencies as well as the attributes for effective teaching in the actual classroom.

6.2 System requirements: Mentors provide mentees with the important, necessary information they need to understand the different, various regulations and programmes of the school community (Hudson, 2007). The study revealed that participants were impacted by their mentors in the area of executing other school programmes outside the normal teaching and learning exercise. This finding is in line with that of Chan (2020) whose study found that mentors provided support for mentees in negotiating school policies. Participants in the study were taught by their mentors how to plan day-to-day learner activities, to complete house tasks, what the dress code was, and about expected teacher conduct. Other system requirements learnt included moderation, completing the learner register, and the administrative work of the teacher.

6.3 Personal attributes: According to Hudson (2004), the mentor's personal features impact the mentee's professional growth; these are the conditions and situations that make mentees feel successful in their own career. Participants in the study shared their experience on how they were impacted by their mentors' personal attributes. One of the participants reported the level of acceptance received which provided room for suggestions on improvement in teaching and learning the English language, whilst another revelation was how the mentor boosted the motivation of a pre-service teacher for a teaching career. These findings are in agreement with the study by Hudson (2010), whose study revealed

that mentors' personal attributes and practices as associated with the Five-Factor Model make the mentee (pre-service teachers) feel successful in their teaching.

6.4 Modelling: As articulated, this factor relates to the enthusiasm which a teacher shows that can evidence desirable teaching qualities (Hudson, 2004). This includes appropriate classroom language for students' learning, teaching, effective teaching, classroom management, hands-on lessons, and well-designed lessons (Hudson, 2004). The study revealed the impact of mentors on mentees in the use of right language when communicating with learners. This aligns with the study of Macario (2018) who also employed the Five-Factor Model in their study. According to Macario (2018), modelling provides a reference point and immersion of practice. Corroborating the results of this study, McElroy (2012) reported that educators are not well equipped when they are not given time to prepare, and when that happens, system requirements suffer. Modelling creates room for pre-service teachers to learn good classroom management strategies, instructional language and the pacing of a lesson (Maphalala, 2013).

6.5 Feedback: An effective mentor conveys expectations and provides the necessary advice to the mentee (pre-service teacher) to aid professional development (Hudson, 2004). Although revealed as part of pedagogical knowledge, one of the participants (pre-service teacher) became competent in the conduct of lessons because of the mentor's regular support, implying that the mentoring of the pre-service teacher led to improvement. The result of this study agrees with the findings of Munjita (2019) who found that student teachers who were provided with feedback indicated they had been adequately mentored. According to Maphalala (2013), the ability of student teachers to grow depends on the level of feedback provided.

7. Conclusion and Recommendations

This study explored the impact of mentorship development of pre-service teachers at a South African university. An overview of related literature on Work Integrated Learning, teaching practicum, and mentoring in pre-service teacher education was undertaken. The study employed Hudson's (2004) Five-Factor Mentoring Model as a theoretical lens, whilst a qualitative case study design was used for data generation and analysis. Findings from the study support the attributes and practices of the Five-Factor Mentoring Model popularized and improved by Hudson (2004) and Hudson et al, (2005). Prominent among these findings is pedagogical knowledge, system requirements, personal attributes, modelling, and feedback. The pedagogical knowledge factor was identified as the most dominant as different mentees recorded the greatest benefit under the factor. Clearly, mentoring activity in pre-service teacher education is an important component in the professional development of effective teachers. Furthermore, mentoring of pre-service teachers helps to develop diverse arrays of pedagogical knowledge, provide them with the resources needed for the implementation of teaching, time and classroom management strategies for effective teaching and learning, and the encouragement for successful career development. The study recommends that mentees (student teachers) be supported by mentors in their serving schools to enable them to fulfil the mandate of their teaching practice exercise.

8. References

Abongdia, J. A., Adu, E. O., & Foncha, J. W. (2015). Pre-service teachers' challenges during teaching practice in one university in the Eastern Cape, South Africa. *International Journal of Educational Sciences*, *11*(1), 50–56. https://doi.org/10.1080/09751122.2015.11890374

Albakri, I. S. M. A., Ismail, N., Hartono, R., Tahir, M. H. M., Abdullah, M. S. H. B., Sarudin, A., & Zulkepli, N. (2021). Mentoring practise during practicum: The perspectives of Malaysian pre-service English language teachers. *Studies in English Language and Education*, *8*(2), 642–655. https://doi.org/10.24815/siele.v8i2.19282

Alberta Teachers' Association. (2003). Mentoring Beginning Teachers: Program handbook. http://www.teachers.ab.ca/SiteCollectionDocuments/ATA/Publications/Professional-Development/Mentoring_Beginning_Teachers.pdf

Ambrosetti, A., & Dekkers, J. (2010). The interconnectedness of the roles of mentors and mentees in pre-service teacher education mentoring relationships. *Australian Journal of Teacher Education (Online)*, *35*(6), 42–55. https://search.informit.org/doi/10.3316/ielapa.862492789739766

Austin, Z., & Sutton, J. (2014). Qualitative research: Getting started. *The Canadian Journal of Hospital Pharmacy*, *67*(6), 436. https://doi.org/10.4212/cjhp.v67i6.1406

Bird, L. K. (2012). *Student teacher perceptions of the impact of mentoring on student teaching* (Doctoral dissertation). Minnesota State University, Mankato.

Bloomfield, D. (2010). Emotions and 'getting by': A pre-service teacher navigating professional experience. *Asia-Pacific Journal of Teacher Education*, *38*(3), 221–234. https://doi.org/10.1080/1359866X.2010.494005

Botha, C. S., & Rens, J. (2018). Are they really 'ready, willing and able'? Exploring reality shock in beginner teachers in South Africa. *South African Journal of Education*, *38*(3). https://doi.org/10.15700/saje.v38n3a1546

Chan, C. (2020). I know how it feels: how online mentors help pre-service teachers negotiate practicum tensions in the third space. *Mentoring & Tutoring: Partnership in Learning*, *28*(2), 189–210. https://doi.org/10.1080/13611267.2020.1749348

Cherry, K. (2020). Personal Construct Theory Overview. https://www.verywellmind.com/what-is-personal-construct-theory-2795957

Clarke, A., Triggs, V., & Nielsen, W. (2014). Cooperating teacher participation in teacher education: A review of the literature. *Review of educational Research*, *84*(2), 163–202. https://doi.org/10.3102/0034654313499618

Clarke, V., & Braun, V. (2013). *Successful qualitative research: A practical guide for beginners*: London: Sage.

Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education* (7th ed.). London: Routledge.

Condy, J., & Blease, B. (2014). What challenges do foundation phase teachers experience when teaching writing in rural multigrade classes? *South African Journal of Childhood Education*, *4*(2), 36–56. https://doi.org/10.4102/sajce.v4i2.203

Danyluk, P. (2013). The role of the pre-practicum in lessening student teacher stress: Student teachers' perceptions of stress during practicum. *Action in Teacher Education*, *35*(5–6), 323–334. https://doi.org/10.1080/01626620.2013.846148

De Clercq, F., & Phiri, R. (2013). The challenges of school-based teacher development initiatives in South Africa and the potential of cluster teaching. *Perspectives in Education*, *31*(1), 77–86 http://hdl.handle.net/11660/3648

DeJonckheere, M., & Vaughn, L. M. (2019). Semi-structured interviewing in primary care research: a balance of relationship and rigour. *Family Medicine and Community Health*, *7*(2), 1–8. https://doi.org/10.1136/fmch-2018-000057

Delaney, A. Y. (2012). Research on mentoring language teachers: Its role in language education. *Foreign Language Annals, 45*(s1), s184-s202. https://doi.org/10.1111/j.1944-9720.2011.01185.x

Desimone, L. M., Smith, T. M., & Ueno, K. (2006). Are teachers who need sustained, content-focused professional development getting it? An administrator's dilemma. *Educational Administration Quarterly*, *42*(2), 179–215 https://doi.org/10.1177/0013161x04273848

Du Plessis, J. (2019). Stakeholders' viewpoints on work-integrated learning practices in radiography training in South Africa: Towards improvement of practice. *Radiography*, *25*(1), 16–23 https://doi.org/10.1016/j.radi.2018.06.011

Duah, F. (2010). Benchmarking mentoring practices for effective teaching of mathematics and science. *Proceedings of the British Society for Research into Learning Mathematics*, *30*(3), 31–36 https://doi.org/10.1016/j.radi.2018.06.011

Evans-Andris, M., Kyle, D. W., & Carini, R. M. (2006). Is mentoring enough? An examination of the mentoring relationship in the pilot two-year Kentucky teacher internship program. *The New Educator*, *2*(4), 289–309 https://doi.org/10.1080/15476880600974867

Garvey, R. (2009). Coaching and mentoring: Theory and practice. The coaching toolkit. *British Journal of Education Technology, 40*(6), 1144–1145. https://doi.org/10.1111/j.1467-8535.2009.01026_4.x

Gillett-Swan, J., & Grant-Smith, D. (2017). Complex, compound and critical: Recognising and responding to the factors influencing diverse pre-service teacher experiences of practicum. *Asia-Pacific Journal of Teacher Education*, *45*(4), 323–326 https://doi.org/10.1080/1359866x.2017.1343590

Gillett-Swan, J., & Grant-Smith, D. (2018). A framework for managing the impacts of work-integrated learning on student quality of life. *International Journal of Work - Integrated Learning, 19*(2), 129–140.

Grant-Smith, D., & de Zwaan, L. (2019). Don't spend, eat less, save more: Responses to the financial stress experienced by nursing students during unpaid clinical placements. *Nurse Education in Practice*, *35*(1), 1–6. https://doi.org/10.1016/j.nepr.2018.12.005

Groenewald, T. (2004). Towards a definition for cooperative education. *International Handbook for Cooperative Education: An international perspective of the theory, research and practice of work-integrated learning*, 17–25. http://hdl.voced.edu.au/10707/21310

Grossman, P. (2010). Learning to practice: The design of clinical experience in teacher preparation.

Hamaidi, D., Al-Shara, I., Arouri, Y., & Awwad, F. A. (2014). Student teachers' perspectives of practicum practices and challenges. *European Scientific Journal*, *10*(13), 191–194.

Henning, E., Van Rensburg, W., & Smit, B. (2004). *Finding your way in qualitative research*. Pretoria, Van Schaik Publishers.

Hudson, P. (2004). Toward identifying pedagogical knowledge for mentoring in primary science teaching. *Journal of Science Education and Technology*, *13*(2), 215–225.

Hudson, P. (2007). Examining mentors' "practices for pre-service teachers" pedagogical development in mathematics and science. *Mentoring & Tutoring*, 15(2), 201–217. https://doi.org/10.1080/13611260601086394

Hudson, P. (2010). Mentors report on their own mentoring practices. *Australian Journal of Teacher Education (Online)*, *35*(7), 30–42. https://doi.org/10.14221/ajte.2010v35n7.3

Hudson, S., & Hudson, P. (2013). Re-Structuring Pre-service Teacher Education: Introducing the School-Community Integrated Learning (SCIL) Pathway. *Journal of Education and Learning*, *2*(1), 9–19. http://dx.doi.org/10.5539/jel.v2n1p9

Hudson, P., Skamp, K., & Brooks, L. (2005). Development of an instrument: Mentoring for effective primary science teaching. *Science Teacher Education*, 89(4), 657–674. https://doi.org/10.1002/sce.20025

Hyde, B. (2019). *Exploring the Practice of Mentoring Student Teachers in an Internship Programme*. (Master's thesis). University of KwaZulu-Natal.

Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research*, *81*(2), 201–233. https://doi.org/10.3102/0034654311403323

Jiyane, L., & Gravett, S. J. (2019). The practice learning experiences of student teachers at a rural campus of a South African university. *South African Journal of Childhood Education*, *9*(1), 1–9. https://doi.org/10.4102/sajce.v9i1.702

Knight, S. L., & Wiseman, D. L. (2005). Professional development for teachers of diverse students: A summary of the research. *Journal of Education for Students Placed at Risk*, *10*(4), 387–405. https://doi.org/10.1207/s15327671espr1004_3

Kumar, R. (2011). *Research Methodology: A step-by-step guide for beginners* (3rd ed.): Los Angeles: Sage.

Kutsyuruba, B., & Walker, K. D. (2020). The role of school administrators in the induction and mentoring of early career teachers. In *Oxford Research Encyclopedia of Education*.

Lai, E. (2005). In-service teachers' perceptions of teaching practice mentoring. *International Journal of Learning, 12*(6), 107--113.

Lederman, N. G., & Lederman, J. S. (2015). The Status of Pre-service Science Teacher Education: A Global Perspective. *Journal of Science Teacher Education, 26*(1), 1–6. https://doi.org/10.1007/s10972-015- 9422-7

Liaqat, S., Naz, A., & Nasreen, A. (2020). Role of Mentoring in Secondary School Education: Mentees' Experiences and Challenges. *Pakistan Social Sciences Review 4*(2), 862–870. https://doi.org/10.35484/pssr.2020(4-II)70

Macario, C. J. M. (2018). Analysis of nurse educators' experiences using the Hudson five-factor model: Basis for a proposed mentoring resource material. *International Journal of Biosciences, Psychiatry and Technology, 5*(1), 1–11. Retrieved from https://www.proquest.com/scholarly-journals/analysis-nurse-educators-experiences-using-hudson/docview/2240049334/se-2?accountid=36534

Manzar-Abbass, S. S., Malik, N. A., Khurshid, M. A., & Ahmad, S. (2017). Impact of mentoring on teachers' professional development: Mentees' perceptions. *New Horizons*, *11*(1), 85–102. https://doi.org/10.1177/1534508412457873

Maphalala, M. C. (2013). Understanding the role of mentor teachers during teaching practice session. *International Journal of Educational Sciences*, *5*(2), 123–130. https://doi.org/10.1080/09751122.2013.11890069

McElroy, G. F. (2012). *Novice teachers' perceptions of prior mentoring experiences* (Doctoral dissertation). East Tennessee State University.

Mentz, E., De Beer, J., Petersen, N., Van Vuuren, H. J., Botha, C., Botha, L., ... & White, L. (2020). *Becoming a teacher: Research on the work-integrated learning of student teachers* (p. 470). AOSIS. https://doi.org/10.4102/aosis.2020.BK215

Modise, A. M. (2016). Pedagogical content knowledge challenges of accounting teachers. *International Journal of Educational Sciences*, *13*(3), 291–297 https://doi.org/10.31901/24566322.2016/13.03.06

Moir, E. (2009). Accelerating teacher effectiveness: Lessons learned from two decades of new teacher induction. *Phi Delta Kappan*, *91*(2), 14–21 https://doi.org/10.1177/003172170909100204

Moir, E., Barlin, D., Gless, J., & Miles, J. (2009). *New Teacher Mentoring: Hopes and Promise for Improving Teacher Effectiveness*. 8 Story Street First Floor, Cambridge, MA 02138, Harvard Education Press.

Mukeredzi, T. G., & Manwa, L. (2019). Inside Mentor-Mentee Meetings in Pre-Service Teacher School based Teaching Practice in Zimbabwe. *Australian Journal of Teacher Education*, *44*(7), 31–52. http://dx.doi.org/10.14221/ajte.2019v44n7.3

Mulyasa, E. (2004). Kurikulum berbasis kompetensi. Bandung: PT. Remaja Rosdakarya. Notoatmodjo., 2010. *Metodologi penelitian kesehatan*.

Munjita, M. (2019). *An analysis of mentoring practices experienced by student teachers during teaching practice: a case of Evelyn Hone College* (Doctoral dissertation). University of Zambia.

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1), 1–13. https://doi.org/10.1177/1609406917733847

Pennanen, M., Heikkinen, H. L., & Tynjälä, P. (2020). Virtues of mentors and mentees in the Finnish model of teachers' peer-group mentoring. *Scandinavian Journal of Educational Research*, *64*(3), 355–371. https://doi.org/10.1080/00313831.2018.1554601

Prasetyo, Z. K. (2019). The Implementation of Mentoring Based Learning to Improve Pedagogical Knowledge of Prospective Teachers. *International Journal of Instruction*, *12*(3), 529-540. https://doi.org/10.29333/iji.2019.12332a

Republic of South Africa (RSA). (2007). *National policy framework for teacher education and development in South Africa* 503(29868). Pretoria: Government Printer.

Sempowicz, T., & Hudson, P. (2011). How can a mentor's personal attributes and pedagogical knowledge develop a pre-service teacher's behaviour management? *International Journal of Learning*, *18*(1), 303–314. https://doi.org/10.18848/1447-9494/CGP/v18i01/47438

Simonsen, L., Luebeck, J., & Bice, L. (2009). The effectiveness of online paired mentoring for beginning science and mathematics teachers. *International Journal of E-Learning & Distance Education,* *23*(2), 51–68. http://www.ijede.ca/index.php/jde/article/view/592

Smolik, J. M. (2010). *Exploring a five-factor mentoring model within elementary science*. (Doctoral Dissertation). University of Central Florida Orlando, Florida

South African Council of Educators (SACE), (2018). SACE professional teaching standards (PTSs). https://www.sace.org.za/ assets/documents/uploads/sace_36738-2019-03-06 SACE%20Draft%20 PTS%20for%20Gazette% 2028082018%20(00000003)

Steyn, G. M. (2008). Continuing professional development for teachers in South Africa and social learning systems: conflicting conceptual frameworks of learning. *Koers*, *73*(1), 15–31 https://doi.org/10.4102/koers.v73i1.151

Trubowitz, S. (2004). The why, how, and what of mentoring. *Phi Delta Kappan*, *86*(1), 59–62. https://doi.org/10.1177/003172170408600110

Van, L. T., & Waghid, Y. (2008). A deliberative democratic view of mentorship. *South African Journal of Higher Education,* *22*(1), 207–221. https://doi.org/10.4314/sajhe.v22i1.25782

Van Niekerk, T. R. Y. N. A. (2018). Chapter Three: The Rationale, Value, Benefits and Challenges of Work Integrated Learning Towards Employability of Graduates. *Critical perspectives on work-integrated learning in higher education institutions*, 55.