



Cape Peninsula
University of Technology

**E-MENTORING AS A PLATFORM FOR THE DEVELOPMENT OF NOVICE
TEACHER COMPETENCIES AT A RURAL SCHOOL IN THE WESTERN CAPE**

by

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ABSTRACT

The focus of this study was to investigate the potential of an e-platform to mentor novice teachers in a rural school in the Western Cape. The premise of this study was that the Western Cape Education Department had no formal e-mentoring programmes in its basket of CPD programmes that specifically addresses the professional isolation of rural-based novice teachers. The problem was investigated by means of a literature review and empirical investigation, using a mixed method approach. The study had an explicit qualitative slant with a minor quantitative input.

The findings of the study reveal that novice teachers' initial competencies and skills can be improved through e-platform support. Novice teachers operate in an era of social media immersion and are willing to embrace virtually based support through social media. The study recommends that social media has the potential to build rural based novice teachers' competencies and skills, as a standalone exercise or part of a blended learning experience. Furthermore, in time, e-mentoring could make a meaningful contribution to the development of rural based teachers, whether novice or experienced.

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LIST OF ABBREVIATIONS

CPD:	Continuous Professional Development
CPTD:	Continuous Professional Teacher Development
EDO:	Education District Office
ICT:	Information and Communication Technologies
MS WORD:	Microsoft Word
SACE:	South African Council of Educators
PDF:	Portable Document Format
UNESCO:	United Nations Educational, Scientific and Cultural Organization
WCED:	Western Cape Education Department

CHAPTER ONE:

INTRODUCTION TO THE STUDY

1.1 Introduction

This chapter discusses the background of the study. The chapter also focuses on the objectives of the research, defines the aims of the study and research question (with sub-questions), the significance of the study, and provides an outline of the chapters to follow.

1.2 Background

The Western Cape Education Department employs an estimated 28 800 teachers to service close on one million learners across 1500 schools (WCED: 2013). The geographic area serviced by the WCED spans eight districts; four rural and four urban. Given that close to 750 schools (50%) are located in rural locations, with a significant number of Western Cape teachers work in rural environments. As such, the two fundamental challenges that confront such schools are how to attract teachers to rural areas and keep them there, and how best to assist and develop teachers in such settings in pursuit of good quality education.

With regard to the above, a UNESCO report on improving the conditions of teachers and teaching in rural schools across the African countries noted in 2011 that key challenges in improving the conditions of teachers and teaching in rural schools were: (1) the problem of attracting and keeping qualified teachers in rural schools; (2) poor funding in rural schools; (3) poor quality of education in rural schools; (4) poor teachers' status; (5) lack of career opportunities; (6) poor infrastructural facilities; (7) poor monitoring of teachers' attitude, behaviour and (8) performance in rural schools and administrative bottlenecks which make the teachers in rural schools feel neglected (UNESCO. 2011).

Furthermore, coupled to the highlighted difficulties above of conditions in rural schools, novice teachers entering the profession in rural environments need substantially more support to cope with their attached challenges. In the above regard, Normore and Loughry (2006: 25) state that "without support and supervision, novice teachers often feel overwhelmed, disoriented, and frustrated when they find themselves totally on their own in their classrooms".

Anecdotal observations from visits to schools and discussions with teachers highlight that novice teachers are invariably "thrown-in-at-the-deep-end" when appointed in schools – a situation which inevitably overwhelms, disorients, and frustrates them as they seek to develop and grow their individual practices (David. 2000).

While at the provincial level the WCED runs a Centre for Teacher Development that assists with the continuous professional development of teachers in public schools, focusing predominantly on classroom and curriculum management as well as leadership development, the WCED does not however have any formal mentoring programme to support novice teachers.

There is also no formal requirement for schools in the Western Cape to provide mentoring to their novice teachers, with some schools running mentoring programmes while schools not even providing a shadowing programme. This presents a serious challenge to the profession. Le Maistre and Paré (2009) note that no profession takes on new recruits, places them in the same situation as seasoned staff, and provides them with little or no support.

Whether provided or not, the importance of mentoring in the schooling context is indisputable, and thus it is important to understand and reflect on mentoring as a programme and how it is understood and has been used to support teachers in different contexts.

A number of studies talk to the tension for novice teachers to develop particular professional competencies needed to fulfil their role. Olsen (2010) states that developing these professional competencies are critical to them becoming successful teachers. McLean (1999) observes that the teaching profession is in constant flux and therefore learning to teach is not only a very complex matter but is also a very personal process. Carter and Doyle (1996) underline that becoming an educator means, among other things, learning how to express oneself in the classroom and how to adapt personal understanding and goals to institutional stresses. Lipka and Brinthaupt (1999) suggest that developing particular professional competencies involve finding a balance between the personal and professional side of becoming and being an educator. According to Alsup (2006: 27), teachers should consequently develop a sense of professional identity so that they will be able to combine their personal biases into the professional expectancies of what it means to be an educator.

In a study on challenges facing novice teachers, Pillen, Beijaard & den Brok (2013) identified at least thirteen tensions, some of which were:

- a) Feeling like a student versus being expected to act like an adult teacher.
- b) Wanting to care for students versus being expected to be tough.
- c) Feeling incompetent in terms of knowledge versus being expected to be knowledgeable.
- d) Experiencing a discrepancy between one's own, usually implicit, lay theories and theories that are relevant to the teaching profession.
- e) Experiencing conflicts between one's own and others' orientations regarding learning to teach.
- f) Being exposed to opposing institutional attitudes

One of the conclusions of the study was that novice teachers felt strengthened by sharing their experiences, especially when they noticed that others also experience the same tensions. They argued that the role of the mentor in such a situation is to monitor how the novice teachers that they are mentoring deal with the above tensions (Pillen et al 2013: 256). Similarly, in a study on the Effects of Teacher Induction and Mentoring on Teacher Turnover, Ingersoll & Smith (2004) suggested that novice teachers provided with mentors, and who participate in collective activity, were less likely to fail than those who did not have this support.

Teaching has customarily been a profession where the professional work has been done individually and where teachers have been alone with their classes. Lortie (1975) has argued that this 'defining individualism' was often a major obstacle to novice teachers' coping with their work, in that it encouraged them to rely on their own "indicators of effectiveness" and to align their goals to their "own capacities and interests" (Lortie 1975: 210- cited in Hargreaves 2010). This isolated teachers within their own classrooms and practices, insulated them from collegial feedback, and made them less likely to engage in substantial, collective change. (Hargreaves 2010:147).

Hudson (2008) defines mentoring as a tool for professional transformation and something that provides structure to the relationship between the mentee (preservice teacher) and mentor (in-service teacher). A mentor is "one who is more knowledgeable on teaching practices and through explicit mentoring processes develops pedagogical self-efficacy in the mentee towards autonomous teaching practices" (Hudson, 2004b: 216). In turn, Donaldson, Ensher, & Grant-Vallone (2000) define mentoring as a term generally used to describe a relationship between an inexperienced individual, called a mentee, and an experienced individual known as a mentor. Bowen (1985) indicates that mentorship occurs when a senior person (the mentor) in terms of age and experience undertakes to provide information, advice and emotional support for a junior person (the protégé) in a relationship lasting over an extended period of time, and marked by substantial emotional commitment by both parties. Burke and McKeen (1989) note that mentorships are relationships that provide guidance and support for junior members of an organization until they reach maturity. Nasser (1987) indicates that mentoring is the process of transmitting knowledge, skills and life experience of a selected, successful manager to another employee in the organization with the purpose of improving that employee for greater efficiency and effectiveness.

Various studies of novice teachers have shown that many new teachers intentionally network with other teachers inside and outside of their school in an effort to build mentoring networks (Fox & Wilson, 2009; Fox et al., 2011). These connections are often informal and loose in nature (Carter & Francis, 2001). Oberski, Ford, Higgins & Fisher (1999) contend that relationships with informal mentors are often quite successful. There is consequently growing interest in how and why teachers form networks of their own mentors to support their

development. Baker (1990: 619) suggests that novice teachers are drawn to this as a way of developing forms of social capital, and the needed connections, that then serve as “resources within specific social structures”. Informal mentoring relationships often give novice teachers the access to information on the practice of teaching, curriculum, or content which they would not previously have had.

One such informal mentoring relationship has been the proliferation of popular online tools that seek to support novice teachers. A number of recent studies show that teachers regularly use social media to empathize and collaborate with other teachers, to keep up-to date on education issues (Brown, 2012; Ferriter, 2010), to offer emotional support to fellow teachers (Deryakulu & Oklun 2007), and to share resources with other teachers (Lalonde 2012; Hew & Hara 2007; McLoughlin et al. 2007).

This points to many novice teachers teaching in the 21st century (the Millennial generation) starting to use technology, according to Baker-Doyle (2011: 31) to “maintain long-term relationships outside their workplace” and to seek out teacher support development (Lieberman & Mace, 2010).

To support novice teachers, the implication of this development is how best to develop and monitor online support networks that provide insight of the needed competencies. Online mentoring programs are proliferating across the globe to support novice educator development (Clift, Hebert, Cheng, Moore, & Clouse, 2010; Lee & McLoughlin, 2010), which has led to the establishment of a number of tele-mentoring or e-mentoring programs (Heider, 2005). These are quite different to previous teacher platform interactions that focused mainly “on behaviour management, general questions about aspects of the curriculum, and questions about resources” (Schuck 2003: 57).

These studies offer important guides on how to understand, monitor, and build confidence through e-mentoring in South Africa, and how to nurture novice teachers in different settings that help them develop as teachers.

1.3 Significance of the study

With regard to the above, there are few studies that have explored mentoring programmes in public schools in South Africa, let alone in rural schools. A few studies have specifically focused on the mentoring of science teachers, but it is evident that there are limited studies on or system-wide mentoring within public schools. As a way of engaging with this absence, the current research contribution will zoom in on an e-mentoring programme for a group of novice teachers in a rural Western Cape school.

Recently, ICTs have been used for multiple purposes in education, including improving teacher practice, teacher education, and learner engagement. However, there has been very little research about the role of ICTs in supporting novice teachers, particularly in rural contexts within South Africa. An innovation of the study, is that it provides e-mentoring as the main platform by which to develop and support novice teachers.

1.4 Aims of the study

The aims of the study are to:

- 1.4.1 Explore the value and contribution of an e-mentoring programme situated in social media, in developing and supporting teachers at a school in a rural setting,
- 1.4.2 Analyse the nature of the interaction of this support to novice teachers and the potential for developing a systemic approach to support novice teachers via social media.

1.5 The research question

How can a professional development support programme based on an e-platform build the initial teaching competencies of novice teachers in a rural school setting?

Research sub – questions

- a) What were the experiences of rural based, novice teachers, to receiving support via an e-mentoring programme situated in WhatsApp?
- b) How can support via WhatsApp improve the skills and knowledge levels and initial teaching competence of novice teachers?
- c) How can the findings and recommendations of this study on e-mentoring inform the development of mentoring programmes for novice teachers offered by the Education Department situated on an e-platform?

1.6 Exposition of chapters

This thesis consists of six chapters. An overview of each chapter is summarized below:

Chapter One discusses the background of the study. The chapter also focuses on the objectives of the research, defines the aims of the study and research question (with sub-questions) and significance of the study.

Chapter Two provides the conceptual framework and outlines the key theorists in the conceptual framework for the research. It examines professional development and the nature and forms of mentoring, the mentoring process and traditional mentoring vs e-mentoring.

Chapter Three provides the literature review. It focuses on social media and continuous professional development, at the traction of social media and the dilemma of the novice teacher and social media.

Chapter Four discusses the research design, describes the features of the various research methods and the methodology settled on to inform the research process for this study. The process, methods and instruments of data collection are outlined. It describes the participants selected for the study and issues of credibility, validity, trustworthiness and the positionality of the researcher.

Chapter Five presents the findings from the data collection according to the research questions, drawing out particular issues that will be reflected in Chapter Six. The ten-week e-mentoring journey is described in detail, including the tools (video links) and techniques provided on the e-platform, that informed the social media interactions between the researcher and the participants, the nature of the interactions and the extent to which the e-mentoring platform was embraced, concluding with the exit interview exposition.

Chapter Six presents the analysis of findings. The analysis is provided under the headings of the sub-questions of the research question, comments on the study limitations and concludes with a reflection of a summary of the key findings, the implications for policy and practice, the implication of the study for further research, the significance of the study and closing remarks.

1.7 Conclusion

Chapter One sought to set-the-scene for the study. Chapter Two is focused on a more detailed outlay of the conceptual framework that underpins the study.

CHAPTER 2: CONCEPTUAL FRAMEWORK

2.1 Introduction:

The preceding chapter focused on the rationale for the study and sketched the context for the study within the current South African public schooling system. This chapter situates the study within an appropriate conceptual framework and the current thinking around the role of social media and its usefulness in developing the professional competencies of teachers, specifically in the case of this study, the novice teacher within a rural environment.

2.2 Conceptual framework

2.2.1 Defining reflective practice

In the context of the South African public education system, reflective practice or the idea of reflecting on ones' practice, has become a familiar reference over the last five years when defining strategies of support for classroom practitioners and as a platform to build competencies in the educator workforce. The notion of reflective practice is not new though. The term 'reflective practice' carries numerous and a variety of meanings. These span from the idea of teachers engaging in self-reflection to that of engaging in conversation with others. Finlay (2008) posited that for some, reflective practice simply referred to embracing a thinking approach to practice, whilst for others it may simply be self-indulgent navel gazing. On a third level, it involved carefully structured and crafted approaches towards being reflective about one's experiences in practice. With reference to teacher education, Larrivee argued that:

“Unless teachers developed the practice of critical reflection, they stayed trapped in unexamined judgments, interpretations, assumptions, and expectations. Approaching teaching as a reflective practitioner involved fusing personal beliefs and values into a professional identity”
(Larrivee, 2000: 293)

The roots of modern thought on reflective practice can be located in the writing of John Dewey and Donald Schön. What were Dewey's and Schön's theories of reflection?

2.2.2 John Dewey:

Dewey distinguished reflective thought from a random 'stream of consciousness' that is thought we experienced on an on-going basis. He described reflection in

broad terms as 'active, persistent, and careful consideration of any belief or form of knowledge in the light of the grounds that supported it and the further conclusions to which it tends' (Dewey, 1933: 9). For Dewey, reflective thought was prompted when we are confronted by perplexity or surprise which interrupts the normal flow of our regular activity and follows in a series of thinking phases during which one searches to find material that would resolve a pre-existing doubt. Dewey (1933: 199-209) captured this reflective cycle in five steps, namely,

- a) Experiencing a feeling of discrepancy, in thought or in feeling as a result of mismatches between the ends we seek and the means we have available, or between our beliefs and incidents occurring in practice;
- b) Deliberately observing and intellectualising the perplexity that has been experienced in order to resolve it. In order to determine the nature of the problem, suspending judgment is essential in this phase.
- c) Cultivating alternative suggestions to solve the difficulty at hand;
- d) Elaborating on the implications of the various suggestions and selecting the most appropriate one that would resolve the original difficulty;
- e) Testing the theory in order to confirm it, and eventually adopting it as personal knowledge (Dewey: 1933).

Dewey (1933: 100-101) noted that the function of reflective thought was "to transform a situation in which there is experienced obscurity, doubt, conflict, disturbance of some sort, into a situation that is clear, coherent, settled and harmonious".

2.2.3 Donald Schön

Schön (1987) extended Dewey's definition of reflection by observing how practitioners think-in-action and promoted the notion that learning is dependent upon the integration of experience with reflection. Schön (1983, 1987) identified ways in which practitioners could become aware of their implicit knowledge and learnt from their experience. His key concern was to facilitate the development of reflective practitioners rather than simply describe the process of reflection. His most important and enduring contributions were to identify two types of reflection: reflection-on-action (post-event thinking) and reflection-in-action (in-the-event thinking).

In the case of reflection-on-action, practitioners are understood to consciously review, describe, analyse and evaluate past practices to gain an understanding needed to improve future practice. With reflection-in-action, practitioners are seen as examining their experiences and responses as they occur. In other words, practitioners could use reflection as a tool to discover and interrogate implicit understandings that have been internalised and accumulated over time. Through reflection they can articulate and describe the knowing of actions and feelings that they spontaneously employ in practice.

Both 'reflection-in-action' and 'reflection-on-action' formed the core of Schön's study of reflective practice. Schön's argument was that professional practice is complex, unpredictable and messy. In order to cope, practitioners have to be able to do more than follow set procedures. They drew on both practical experience and theory as they think on their feet and improvise. They acted both intuitively and creatively. And both reflection-in and on-action allowed them to revise, modify and refine their expertise.

Schön further argued that practitioners needed to step back and, from a distance, take time to think through situations. Whether expert or novice, all practitioners needed to reflect on practice – both in general and with regard to specific situations.

Schön's work has been hugely influential in shaping practice and professional training and education. Whilst generally acknowledged as inspiring the practice of reflective practice, Schön has also drawn criticism. Eraut (2004) faults the work for its lack of precision and clarity. Boud and Walker (1998) posited that Schön's analysis ignored important features of the context of reflection. Usher et al (1997) found Schon's account and methodology unreflexive, while Greenwood (1993), critiqued Schön for minimising the importance of reflection-before-action. Moon (1999) regarded Schon's pivotal concept of reflection-in-action as unachievable.

In terms of this study, participants will start a professional journey to become reflexive practitioners by reflecting-on-action and reflecting-in-action as they engage their peers through an e-platform, discuss their views and behaviours in the classroom, based on the stimuli provided via audio-visual clips and the conversation threads generated on the e-platform. This process should inform whether the research question and sub-questions are attainable or viable.

2.2.4 The potential harmful effects of reflective practice

Although no one doubted the enhancing characteristics of reflective practice, Loughran (2002: 42) observed that since "the use of reflection is eminently sensible and reasonable in

developing one's understanding of the practice setting, it is inevitably bandied about, misunderstood and reinterpreted as it is used by different people in different ways to highlight particular aspects of practice. In part, it is as a result of this diversity of views and understandings that has led me to preface reflective practice with a qualifier – *effective* – in order to begin to focus attention on the action as well as the outcome of reflection”.

In that regard, there are three key cautions around reflexive practice, namely (1) there are cultural and personal risks involved and not everyone ends up feeling empowered (Brookfield, 1994, 1995), (2) new teachers could “choose *not* to reflect on their practice constructively and critically, preferring to fall back on pre-conceived understandings of how they and their pupils should conduct themselves in the classroom” (Ash 2002, cited in Hobbs, 2007: 406), and (3) reflection can easily be turned into recipe-following “checklists which students work through in a mechanical fashion without regard to their own uncertainties, questions and meanings” (Boud & Walker, 1998: 193). As such, Finlay (2008) identified four areas of concern: (a) Ethical, (b) Professional, (c) Pedagogic and (d) Conceptual.

2.2.4.1 Ethical concerns

Finlay (2008) suggested reflective practice has generated concern related to confidentiality, rights to privacy, informed consent and professional relationships. Practitioners who are engaged in reflective practice needed to be aware of the risks and also of the potential for conflicts of interest and that it needed to be remembered that reflection can have a profound emotional impact on the person reflecting and therefore has the potential to be harmful. Quinn (2000) noted that practitioners appeared to have little choice about having to do reflections, as it is often a significant component demanded by those in authority. Ethical issues also arise where inappropriately high levels of disclosure are coerced from practitioners. Quinn (2000) also suggested that if an individual understands the word ‘critical’ to mean ‘negative’, they can end up in an unduly negative frame of mind.

2.2.4.2 Professional concerns

Professional concerns come to the fore when reflective practice is done badly, ineffectively or inappropriately. In such cases, the point of the undertaking is missed and its value goes unrecognised. Loughran (2000) suggested that too often the process may simply rationalise existing practice whilst Boud and Walker (1998) noted that if applied uncritically, reflections can reinforce prejudices and bad practice.

2.2.4.3 Pedagogic concerns

Finlay (2008) posited that teaching reflective practice raised two main pedagogic concerns: developmental readiness, and the extent to which forcing students to reflect may prove counter-productive. There was evidence that novices, by definition lacking 'practical mastery', are inclined to follow models mechanically, and also that such reliance on models lessens with experience (Gordon, 1984). Roberts (1998) argued that novice teachers have not yet examined their own personal theories of learning/teaching, and that using 'borrowed' routines requiring depths of understanding these new teachers did not possess. As a result, the reflection that does occur would only be less effective.

2.2.4.4 Conceptual concerns

Finlay (2008) argued that a significant problem was posed by the way practitioners appropriate and embrace models of reflective practice in uncritical, piecemeal and reductionist ways. Often ideas were transplanted without sufficient care across philosophical, disciplinary and cultural boundaries, in the process becoming distorted or 'lost in translation'. Finlay (2008) cautioned that care needed to be taken to recognise complexity and problematize what is involved in reflective practice, rather than accept it unquestioningly as 'fact' or 'self-evident'.

Finlay (2008) also provided some suggestions on how to counter-act some of the areas of concerns. Finlay (2008) suggested that reflective practice(s) needed to be presented with some care to motivate practitioners to want to engage the process; for students to hear about the experiences of other learners and practitioners in practice and how reflection helped them; Opportunities for discussion also allowed students to question and be questioned. Importantly, students needed to see (early on) that practice often involved uncertainty and that answers are never clear-cut. Furthermore, once practitioners started engaging in reflective practice, that structured models could be offered, in context, to help them deepen their thinking and it should be emphasised that each is simply one of a range of tools. Models should be used to trigger broader reflection rather than feature as ends in themselves. Hobbs (2007) proposed that practitioners may appreciate being introduced to simpler, more descriptive models initially and being allowed to try them out safely in practical/experiential ways before they learn to embrace models demanding more analysis and critical, reflexive evaluation.

It is apparent from the afore-mentioned concerns, that practitioners should not be left to their

own devices and that they be nurtured until they are sufficiently skilled (professionally developed) to engage in reflective practice on their own or in collaboration with others. There is clearly a role for a mentor/mentee relationship in this journey and led one to look at this aspect in more detail.

2.3 Professional Development

In a 2008 report by a SACE-DoE CPTD Task Team titled “The Design of the Continuing Professional Teacher Development (CPTD) System”, it is noted that teaching is at the heart of the schooling system and that the quality of teachers’ professional practices is at the heart of the quality of schooling, and the development of these practices is a continuing process that lasts for the duration of the career of a committed professional teacher. (RSA, 2008: 4)

2.3.1 Defining Professional Development

Professional development has varied meanings. Showers, Joyce, and Bennett (1987) stated that the purpose of professional development is to increase levels of knowledge to sustain and support new practice until it becomes embedded into the daily practice. Desimone (2009) and McLeskey & Waldron (2002) noted that traditionally, professional development is delivered through the sit-and-get approach, which relies on an expert in the field to model and disseminate various information to the audience.

Jao, & McDougall (2015) argued that once-off professional development opportunities are not an effective means to improve teacher practice. Stein, Smith, & Silver, (1999) contended that these sessions are seen to be fragmented, disconnected from classroom practice, and not providing enough resources that teachers believe can easily be implemented into their teaching. These professional development sessions were usually presented using a transmission model rather than used transformative strategies in which teachers experimented and tried out the new strategies being presented and have the space to consider how the practices might be adapted to their teaching context (Guskey & Yoon, 2009).

Jao & McDougall (2015) highlighted that current literature on professional development describes long-term, inquiry-based models that allow for participants to be active learners in the process. This model involved facilitators firstly modelling exemplary practices to teachers, allowing teachers to then reflect and critique the strategies as learners. This is considered important where new practices that may significantly differ from current teaching practice or what teachers have been taught (Jao & McDougall, 2015: 4). Borko et al. (2010) noted that teachers, as active participants in the process, also feel as though their experience and opinions are valued.

There is a dearth of research on what constitutes effective and meaningful professional development. Bull and Buechler (1997) and Desimone (2009) though have outlined effective professional development qualities. These qualities include: (a) be individualized and school based, (b) utilized coaching and other follow up procedures, (c) engaged in collaboration, and (d) embedded practices into the daily lives of teachers. Desimone (2009) further argued that the most powerful teacher learning and application occur inside individual teacher's classrooms through practice and self-reflection.

2.3.2 Defining mentoring

Hudson (2008) defined mentoring as a tool for professional transformation and something that provides structure to the relationship between the mentee (pre-service teacher) and mentor (in-service teacher). A mentor is "one who is more knowledgeable on teaching practices and through explicit mentoring processes develops pedagogical self-efficacy in the mentee towards autonomous teaching practices" (Hudson, 2004b: 216). In turn, Donaldson, Ensher, & Grant-Vallone (2000) defined mentoring as a term generally used to describe a relationship between an inexperienced individual, called a mentee, and an experienced individual known as a mentor. Bowen (1985) indicated that mentorship occurs when a senior person (the mentor) in terms of age and experience undertakes to provide information, advice and emotional support for a junior person (the protégé) in a relationship lasting over an extended period of time, and marked by substantial emotional commitment by both parties. Burke and McKeen (1989) noted that mentorships are relationships that provide guidance and support for junior members of an organization until they reach maturity. Nasser (1987) indicated that mentoring is the process of transmitting knowledge, skills and life experience of a selected, successful manager to another employee in the organization with the purpose of improving that employee for greater efficiency and effectiveness.

2.4 Types of Mentoring Relationships

2.4.1 Informal Mentoring

Informal mentoring occurred when a senior employee chose to establish a relationship with a young employee who has particular talents and skills (Ehrich & Hansford, 1999; Ehrich, 2008) or when two individuals who are working in the same field decided to establish a mentoring relationship (Ehrich, 2008). With informal mentoring, the mentor and mentee make a consensual decision to work together instead of being matched by a third party (Eby & Lockwood, 2005; Ehrich, 2008). One form of informal mentoring is called "peer mentoring" where two or more parties agree to have a collaborative relationship with one another to provide emotional and professional support through ad hoc or regular meetings, phone calls,

and/or exchanges of information via the internet (Amelink, 2008; Bryant, 2005).

2.4.2 Formal Mentoring

Formal mentoring programs usually have specific objectives, e.g. enhancing staff members' knowledge and/or aptitudes, or building specific abilities required by the organization (Eby & Lockwood, 2005; Eddy et al., 2001). Moreover, formal mentoring programs emphasize the frequency and the nature of the relationship and frequently offer training opportunities to help mentors and mentees to comprehend their respective roles and the goals of the relationship (Allen, Eby & Lentz, 2006; Eby & Lockwood, 2005). Formal mentoring programs normally contain more structure when compared to informal programs which are usually more fluid and driven by the participants rather than processes (Ehrich, 2008; Ragins & Cotton, 1999). However, given the fact that the pairing between both the mentor and the mentee in formal mentoring is determined by the organization rather than by the individuals themselves, a poor match between both can occur and the mentee can be left feeling less satisfied with the mentoring relationship (Eby, Butts & Lockwood, 2004; Eby & Lockwood, 2005).

2.5 The Mentoring Process

Kram's (1983) research into the mentoring process identified four important and distinct stages of mentoring:



Figure 2:1: Kram's stages of mentoring

2.6 The value-add and challenges of traditional mentoring

Mentoring had been underlined as being one of the most valuable practices to help employees navigate the workplace and advance their career in education (Hopkins & Grigoriu, 2005). Organizations have also realized the benefits of mentoring and launched mentoring programs into their developmental training plans (Daloz, 1999; Hopkins & Grigoriu, 2005). Not only did mentees benefit from their mentors but mentors and organizations also benefitted from these relationships. Mentoring has been found to,

- a) help to improve mentors' skills in providing constructive feedback to others; to develop their coaching skills and learning of up-to-date technical skills (Forret, 1996; Gilles & Wilson, 2004);
- b) to develop innovative approaches to their work (Ganser, 1997)
- c) and to promote reflection on, and improvement in, their own practice (Lopez- Real & Kwan, 2005).

Although there are a number of benefits to mentoring, there are also some challenges specific to traditional mentoring:

- a) organizations may have a limited number of mentors constrained to the geographical location making it difficult to find suitable mentors (An & Lipscomb, 2010).
- b) Lack of interpersonal skills and talents can also restrict the initiation of traditional mentoring as these elements play an essential role in face-to-face meeting between the mentor and the mentee (An & Lipscomb, 2010; Hamilton & Scandura, 2003).
- c) Scheduling meetings between the mentor and the mentee can also be challenging due to the ongoing evolution in the character of work (An & Lipscomb, 2010; Hamilton & Scandura, 2003).
- d) An & Lipscomb (2010) stated some other challenges, such as impromptu conversation needed in face-to-face meeting as well as the organization's time and money required by traditional mentoring programs.
- e) Finally, even if the aforementioned challenges are overcome, mentors and mentees may be unwilling to enter a relationship for a variety of reasons; for instance, male mentors may be reluctant to mentor female mentees in case the relationship is misconstrued by others (Leck, Orser & Riding, 2009; Ragins & Cotton, 1996).

Many of the challenges related to traditional mentoring can be solved by establishing e-mentoring programs (An & Lipscomb, 2010; Hamilton & Scandura, 2003). Furthermore, Leppisaari & Tenhunen (2009) noted that face-to-face coaching and mentoring was not always practical in a knowledge society where communication is frequently instantaneous, computer-mediated and global. Bierema and Hill's (2005) asserted that e-mentoring and e-coaching has the potential to build, capture, and share knowledge in a knowledge society.

2.7 What is E-Mentoring?

There are numerous terms used to describe e-mentoring relationships, such as tele-mentoring, virtual mentoring, computer-mediated mentoring, internet mentoring, online mentoring and email mentoring (Bierema & Hill , 2005; Ensher & Murphy , 2007; Petidou, 2009). Another definition is that e-mentoring is mentoring carried out through the use of the Internet as a communication channel and is otherwise referred to as 'online mentoring' or 'virtual' or 'cyber mentoring' Stewart & McLoughlin (2007). A further descriptor is that e-mentoring is the use of technology such as email, chat rooms and websites to establish and sustain e-mentoring relationships (Bierema & Hill , 2005; Ehrich, 2008; Haggard, Dougherty, Turban, & Wilbanks, 2011; Petidou, 2009). Ensher and Murphy (2007: 300) posited that e-mentoring is "a mutually beneficial relationship between a mentor and a protégé, which provided new learning opportunities as well as career and emotional support, primarily through e-mail and other electronic means (e.g., instant messaging, chat rooms, social networking spaces, etc.)". Similarly, e-mentoring was defined by Bierema & Merriam (2002: 214) "as a computer-mediated, mutually beneficial relationship between a mentor and a protégé which provides learning, advising, encouraging, promoting, and modelling, that is often boundary-less, egalitarian, and qualitatively different than traditional face-to-face mentoring".

Bierema & Merriam (2002) noted that e-mentoring can occur between peers, between individuals, or in a group environment where one e-mentor works with a group of e-mentees and can be a supplement to traditional face-to-face mentoring (Petidou, 2009).

2.7.1 The possibilities of e-mentoring

Briones, Janoske and Paquette, (2013) in a report entitled "New media, new mentoring: An exploration of social media's role in public relations mentorships", emphasized that a number of research studies on e-mentoring have found benefits for both the mentor and the mentee. These were identified as:

- a) the power relationship is not as easily visible in an online mentorship,
- b) mentees may not feel as intimidated or uncomfortable because they are able to interact with their mentor on the same level (Harasim, Starr, Teles, & Turoff, 1998; Palloff & Pratt, 1999),
- c) The status or position of the mentor and mentee is not as salient as would be in a face-to-face interaction allowing for the relationship to consist of a professional and a student, a group of students, or even a student and a student (Ensher, Heun, & Blanchard, 2003),

- d) The interaction is not necessarily immediate, both parties can have time to think of appropriate responses, allowing both the mentor and mentee to be more reflective in the relationship (Muller,2009),
- e) Electronic platforms also provided a record of the e-mentoring exchange, so that protégés can look back and review advise given by their mentor (Muller, 2009).
- f) E-mentoring also allowed for extended geographical and temporal boundaries, allowing for more flexibility by reaching those who otherwise would not have been able to be mentored (Shrestha, May, Edirisingha, Burke, & Linsey, 2009).
- g) E-mentors can either be internal mentors, who work within the organization and can provide insight on the politics, policies and procedures, or they can be external mentors, who do not know about the specific organization per se, but can offer advice on the profession in general (Muller, 2009; Muller & Chou-Green, 2005).

2.7.2 Challenges of e-mentoring

- a) Bierema and Merriam (2002) suggested challenges specific to the e-mentoring relationship, i.e. the digital divide, or the inequalities of access to and use of the Internet as a medium, including education, race, income, gender, and area of residence may cause some individuals to not have easy access to a computer,
- b) The potential lack of online literacy necessary to conduct a fulfilling online relationship,
- c) Mentors and mentees may find it difficult to gain trust and intimacy through the Internet, especially if the parties have never formally met in person,
- d) The nature of the online relationship can also cause individuals to decrease or lose their enthusiasm toward the relationship and easily end their commitment to making progress, and
- e) Finally, miscommunication can occur with considerably more ease in an online mentorship, as electronic communication can easily be misunderstood and misconstrued, as opposed to reading body language and tone in a face-to-face interaction.

2.8 The Novice Teacher

Davies (2008:3) wrote that good teachers and good teaching have been shown by numerous research studies to be critical elements which make the difference in effective early-years education programmes. Kaufman and Ring (2011: 52) warned that the “spark-plug-go-getter” who enthusiastically enters the profession can be at risk of burnout without a plethora of supports to guide and reinforce confidence. Romano (2008) noted that there are myriad of problems and challenges which face beginning teachers in the early stage of their career and one of them is facing inadequacies in their own knowledge, skills and attributes as a teacher.

With lack of support from other teachers, these experiences will erode the confidence of beginning teachers over time, leading to higher attrition rate (Ailwood et al., 2006; Ewing, 2006; Spaulding, 2007; Harrington, 2010). Beginning teachers often face reality shock as the theories learned during their training do not fit neatly into real-world practice even for those who have undergone practicum (Veenman, 1984; Schon, 1987). The first year of teaching is described as critical (Spaulding, 2007; Veenman, 1984) and yet, a study in Malaysia showed that beginning teachers are given more responsibilities in and out of classrooms compared to senior teachers in which they need to accept their situation quietly (Noraini & Chang, 1991). Typically, beginning teachers begin their career enthusiastically but experience frustrations as they are assigned the most challenging responsibilities such as problem and least achieving students and larger classes (Thompson, 2007).

Dicke, Elling, Schmeck, et al (2015) in a research paper entitled “Reducing reality shock: The effects of classroom management skills training on beginning teachers, comment that a challenging part of the process that beginning teachers undergo, from learning how to teach to actually starting to teach in a real classroom, had been called many names, such as “praxis shock” (Veenman, 1984), reality shock, “the survival phase” (Huberman, 1989), “transition shock” (Corcoran, 1981), and even “shattered dreams” (Friedman, 2000). What these various labels have in common is that they refer to the collapse of ideals or expectations developed during teacher education, following a teacher's first confrontation with classroom reality (Friedman, 2000). Thus, giving teachers special training in how to manage their classroom should allow them to deal with disturbances more efficiently (Emmer & Evertson, 2008).

Dicke, Elling, Schmeck, et al (2015) noted that to overcome the problems faced by newly appointed teachers, it is necessary to establish the particular needs of newly appointed teachers, and methods of assistance available to assist them with the transition process into the new school

2.9 Concluding remarks

This chapter sought to highlight the various modalities available in the mentoring space, the potential challenges and suggested ways of addressing the needs of novice teachers as they enter the teaching profession. It is clear that support to novice teachers can have an impact on their development, and with the evolving nature of the environment they are required to operate in, providing them with access to an e-mentoring programme would go some way to addressing the insecurities they may have as they enter teaching practice as new teachers.

CHAPTER 3: LITERATURE REVIEW

3.1 Introduction

Chapter Three is focused on the literature review of social media as a tool for continuous professional development. The chapter sets out to define social media, explores social media penetration rates and literature relating to the use of the platform for continuous professional development.

3.2 Social Media and Continuous Professional development

3.2.1 Background

Social media as a tool for communicating and interaction, has expanded phenomenally across the globe over the last ten years. According to brandwatch.com, since July 2015, the Internet had 3.17 billion users, with 2.3 billion active social media users. Year-on-year, social media users climbed by 176 million users, with one million new active mobile users added per day. There are 1.65 billion active social media accounts globally. To gain insight into this phenomenon, the analytics site, statista.com, recently published the following statistics on social media usage rates for the Middle East and the African continent.

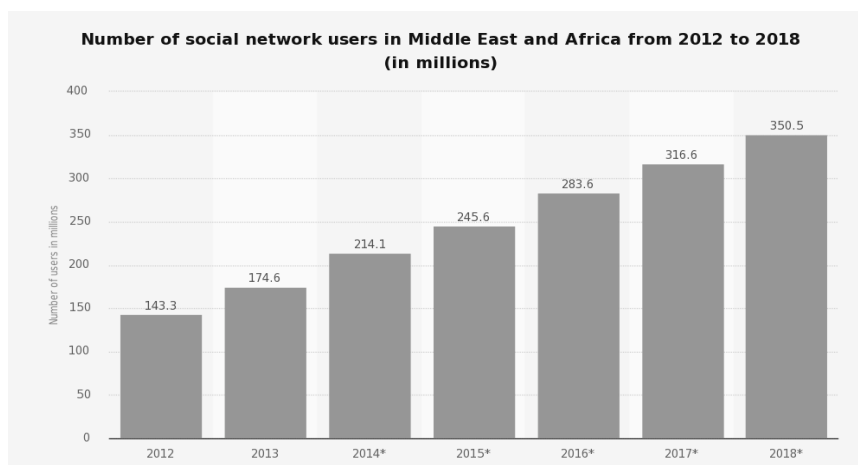


Figure 3.1: Social network users in Middle East and Africa

It is evident from the above graphic, that social network usage grew from 2012 to 2013 by 31.3 million users across the Middle East and Africa and was projected to rise to 283,6 million users in 2016. This amounts to an additional usage projection of 109 million users since 2013. Further analysis provided by statista.com indicated the following mobile messenger user patterns in selected emerging markets since February 2014.

The graphic (Figure 3.2) provides greater detail into the nature of mobile messenger app usage across selected countries. If we hone in on South Africa, it is evident that group chat, photo and video sharing are hugely popular elements of mobile platform usage.

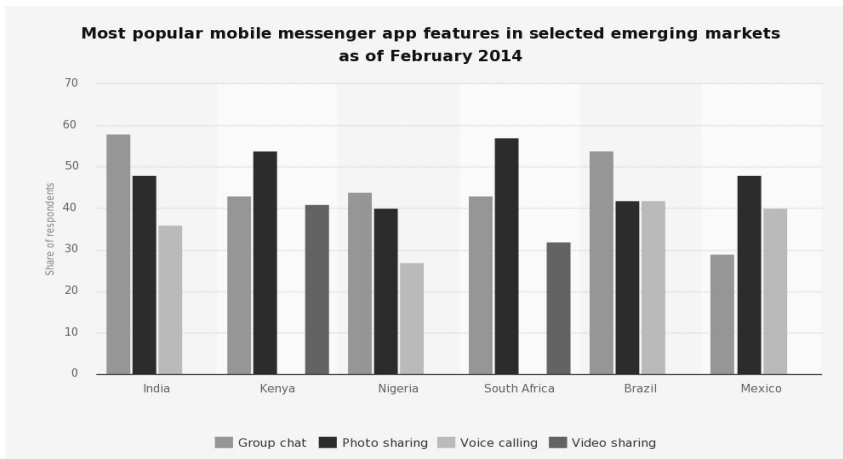


Figure 3.2: Mobile Messenger APP usage across selected emerging market countries

Looking at the leading social network platforms in South Africa, the graphic below details the percentage penetration such platforms enjoy since the 4th quarter of 2015. The Facebook Company's applications, i.e. Facebook, WhatsApp and Facebook Messenger, collectively have a penetration rate of 83% of the population on social media in South Africa.

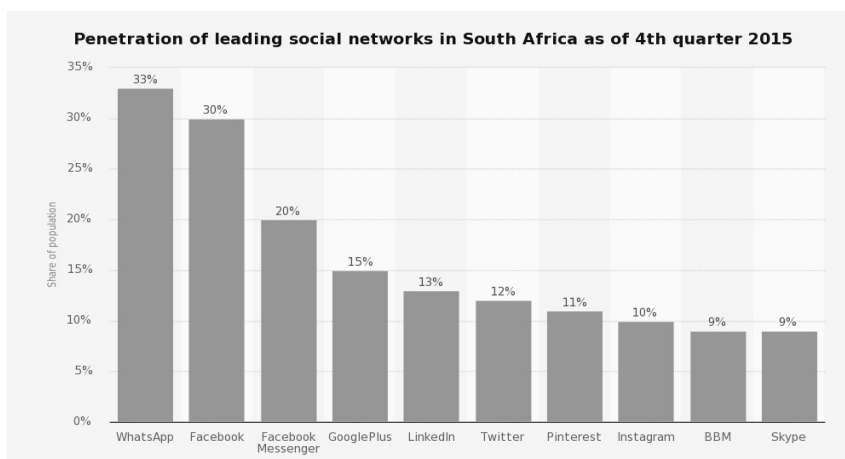


Figure 3.3: Leading social network users South Africa

It is therefore not surprising, given usage rates, that social media has permeated many sectors of society, whether business or service driven. Social media has also encroached the

educational arena, with students, teachers and universities realizing its potential impacts on its traditional way of operations.

A number of research studies have highlighted that social media has become a universal platform for social interaction in our daily lives (Siemens & Weller, 2011; Chin & Zhang, 2014). Various studies focused on the use of social media learning through mobile devices, have further revealed that although learners are constantly on the move, social media allowed them to stay in touch with their peers in digital social interaction spaces via mobile devices (Chen & Bryer, 2012; Dabbagh & Kitsantas, 2012; Chin & Zhang, 2014).

3.3 What is social media?

Social media has been defined in different ways. According to Walter & Riviera (2004), social media is described as the interactions that exist between a network of people. O'Reilly (2007) defined social media as web services where an exchange of communication takes place amongst participants, resulting in a networked community. Kaplan and Haenlein (2010) indicated that social media is a group of internet-based applications that allow the creation and exchange of user-generated content whilst Safko and Brake (2010) defined it as activities, practices and behaviour among communities of people who gather online to share information, knowledge and opinions using conversational media. Mayfield (2008) categorized social media into social networks, blogs, wikis, podcasts, content communities and micro-blogging. Bryer and Zavatarro (2011, p. 327) advanced that social media are technologies that facilitate social interaction, making collaboration possible and enables deliberation across stakeholders. They further stated that these technologies included blogs, wikis, media (audio, photo, video, text) sharing tools, networking platforms (including Facebook).

Whilst it is clear there is no standard definition for social media, it is evident that researchers agree social media has certain features: namely,

- a) it is digital media,
- b) it is internet based,
- c) it allows sharing of information between multiple users and
- d) facilitates dialogue or conversation between users.

3.4 Social media as a tool for continuous professional development

Mostaghimi & Crotty (2011) suggested that the increased use of social media combined with ease of finding information online, can cause personal and work identities to blur. Kerkhof (2011) enhanced this view by stating that one in five tweets is about work, product or service and is an indication of the shift from personal use of social media to professional use. Kaplan & Haenlein (2010) noted that social network sites and (micro) blogs provide a high platform for

self-presentation and self-disclosure.

Numerous studies have looked into the value of social media in the sphere of professional development. Garrison, Cleveland-Innes and Fung (2010) and Ravenscroft (2011) argued that Digital technologies and social media, offer a multitude of opportunities for continuing professional development premised on constructivism as pedagogy. Chen and Bryer (2012) stated that open social media sites provide students, and by extension teachers, with access to more information and experiences than they would get in a closed environment alone. Research conducted by Junco, et al (2011) and Blaschke, et al (2010), indicate that the active use of social media can increase participant engagement levels and promote the development of cognitive and meta-cognitive learning skills, such as reflection, critical thinking, construction of knowledge and understanding of one's individual learning process. In a report on the pedagogical benefits of social media, McLoughlin and Lee (2007, 2008, 2010) identified explicit possibilities of social media to enhance;

- a) Connections and social rapport,
- b) Collaboration (information finding and sharing),
- c) Participant-generated content and
- d) Accumulation of knowledge and information that contribute to the cognitive development of the participants.

Coleman (2013) and Minocha (2009) posited that social media brings with it the freedom for participants to connect and collaborate outside of institutional boundaries, as well as to gain practical experience. Recognizing the increasing assimilation and influence of social media tools in the education arena, Sockman and Sharma (2008) pointed out that teachers could identify the obstacles and discover how their teaching beliefs need to change in order to implement transformative teaching strategies by using reflective journal writing and reading, whilst Yang (2009) suggested that reflective teaching and reflective practices play important roles in teacher education.

In a paper, published in the *Journal of Research on Technology in Education*, Visser, et al (2014), argued that It is worth remembering that traditional forms of professional development are usually, (1) institution-driven workshops which occurs within the school building (Kabilan, 2005), (2) once-off engagements with no or irregular follow-up (Jaquith, Mindich, et al, 2011), (3) are costly in an era where schools have limited financial resources (Masters, de Kramer, O'Dwyer, et al, 2010), (4) focused on material and skills that are frequently disconnected from practice (Schlager & Fusco, 2003: 95), and (5) do not necessarily contribute to the teacher's repertoire of skills (Joyce & Showers, 2002).

The introduction of social media services has created space for the formation of collaborative and reflective activity between users. Martin et al. (2010) noted that through the use of networked platforms on social media, users are able to publish brief entries that facilitate real-time interactions. This form of communication can help develop professional and personal growth of teachers in cooperative online communities through these applications, e.g. Facebook and WhatsApp (Mills & Chandra, 2011). People who have common interests, e.g., novice teachers, can use social media services, like WhatsApp, to discuss topics and issues relating to classroom management, teaching practice or seek advice in a virtual arena that extends beyond the current environment the person may find him or herself. Chandra & Lloyd (2008) note that individuals can become socially connected within a participatory culture where knowledge building and sharing takes place.

Alternatively, Visser, et al (2014) also advanced that online learning communities, using social media tools, are both appealing and valuable to teachers for a variety of reasons since (1) it is classroom needs based and specifically connected to the individual's needs (Lom & Sullenger, 2011; Richter, et al, 2011), and (2) is nearly always accessible and therefore tends to become embedded in the teacher's daily routine, which can lead to transformation of practice (Beach, 2012; Bickmore, 2012). Additionally, Visser, et al (2014), quoting (Kabilan, et al, 2011; Richter, et al. 2011), stated that whilst members of online learning communities may not necessarily know each other in the traditional sense, interpersonal relationships do arise, resulting in organic collaborations in which teachers share knowledge, strategies, and experiences, work together on projects, improve their competencies, and transform their classroom practice. Davis (2015), in an article on Teachers' perceptions of Twitter for professional development, noted that communities of practice forums may emerge in online venues and that participants may exchange information and develop a sense of belonging with others who share common interests. Furthermore, Davis (2015) suggested online forums may mirror the process of writing daily professional experiences, a tool often recommended to novice teachers as a method to reflect upon their own teaching.

In a paper, entitled *Integrative Review of Blogging: Implications for Nursing Education*, Garrity et al. (2014) highlighted that numerous studies focused on the use of social media (blogging and twitter) and its potential impact as a pedagogical tool. The paper underlined that blogging as a pedagogical tool has been noticed in nursing education to increase critical thinking and reflection (Grassley & Bartoletti, 2009; Mistry, 2011; Roland, Johnson, & Shain, 2011) and as a means of sharing information in nursing courses (Reed, 2012). It noted that Twitter can be used in nursing education to receive updated information, post information to staff and clients, and develop a sense of community (Bristol, 2010) and further logged that Twitter was a tool that enhanced student learning and a tool that could meet the needs of the millennial student

(Trueman and Miles, 2011). Roland et al. (2011) suggested Blogs could be used to document and share knowledge about education and study habits toward the improvement of analytical thinking and communication skills.

Since microblogging can take place in real-time and is interactive rather than a single authored story, introductory posts can evolve into multi-layered exchanges among many participants within the group. Group members can read, comprehend, and draw conclusions from the various reflection posted and then reply with questions, explanations, or similar experiences (Mills & Chandra, 2011). In a study on the History of Social Media and its impact on business, (Edosomwan S, Prakasan S, Kouame D et.al, 2011) noted that the use of social media web sites has increased the channels of communication and its potential effectiveness in organizations as it has become easy for a person to send messages through an instant messenger or a tweet and get the response really quickly. Social Media also has the potential to improve collaboration between team members in an organization, since Social Media instruments act as an avenue to allow people to generate and share their ideas. Killeavy & Moloney (2010) too posited that the interactive component of social media is a key lever and that specific social networking tools have emerged as avenues for both collaboration and reflection.

Domizi (2013), in a study in an advanced graduate class, found that social media, in this instance Twitter, could enhance content learning and foster a community of participants. Twitter permitted the students to extend conversations beyond the class by discussing ways to implement learning strategies or ask pedagogical questions not examined in class. Twitter use was even credited with blurring traditional educational lines so that students' concerns became an important part of class discussion and reflection (Krutka, 2014). Mills and Chandra (2011), in a study on reflective microblogging through Edmodo involving pre-service teachers, found that this collaborative approach resulted in the emergence of a community of support and showed participants repeatedly returned to read and respond to posts beyond the requirements for the course. This finding showed the type of genuine and intrinsic engagement that potentially will spill into the careers of these pre-service teachers.

A number of studies focused on Web 2.0 tools to support nurses' education, highlighted the benefits of these instruments. Clay (2011), in a study on the use of multimedia podcasts on I-Pods to support midwives with the physical examination of new infants, revealed that the tool was well received, and the participants specifically appreciated the "just-in-time" learning facilitated by these devices. In another study, on the use of digital technology to support learning in isolated clinical placements and to address professional isolation using a range of Web 2.0 tools, Morley (2013) found that one of the most popular tools was a Facebook group

with high levels of learning interactions. In a study on the use of smartphones by Taiwanese nursing students as clinical examination tools in simulations proved to result in higher learning outcomes compared to a control group, who used pen and paper to record and evaluate patient symptoms (Wu et al., 2011). Pimmer et al. (2014), in a study focused on whether South African nurses in disadvantaged and remote areas can use mobile phones as effective educational tools, found/observed that (a) mobile phones provide flexibility in arranging and realizing learning situations, (b) nearly all of the participants used their phones on a daily basis and that all of them regularly accessed internet-based applications on their phones, mostly to search for information and for social purposes using text messages, chat or social media, (c) the intensity and scope of mobile phone use was linked to age; the participants often reported that younger midwives used mobile phones more broadly and frequently for private, work or learning purposes and (d) the use of these phone functions empowered nurses in a sense that they were provided with more, and more diverse options to participate and engage in social spaces (e.g. social networking sites) and to access opportunities for learning not previously possible.

Pimmer et al. (2014), concluded that mobile phones and the convergence of mobile phones and social media, in particular, change learning environments. In addition, these tools are suitable to connect learners and learning distributed in marginalized areas.

Similarly, a number of studies in the field of Education assert that social networks contain information and resources that can be used by teachers to develop their professional practice through personal learning networks (Brown, Vissa, & Mossgrove, 2012; Hanraets, Hulsebosch, & de Laat, 2011). Visser, Evering, and Barrett, (2014), suggested many teachers are creating and participating in expansive social networks called personal learning networks (PLNs) and that PLNs are created predominantly within online environments such as education-focused blogs, wikis, and podcasts, as well as through social media sites like Edmodo, Facebook, and Twitter. Trust (2012) described a personal learning network (PLN) as a system of social connections and resources that can be used for informal learning, collaboration, and exchanging knowledge and ideas. Kabilan, et al. (2011) argued that PLNs have emerged as a popular alternative to conventional models of professional development, which they suggest have failed in delivering significant development exposures for teachers. Keswani & Chaturvedi (2013) pitch that the primary objective in many online communities is to allow for knowledge sharing and learning. Ebner, Lienhardt, Rohs & Meyer (2010) reported that social media (twitter) provide great potential for informal learning through a high volume, unrestricted communication tool, where teachers are able to communicate and socialize in a non-synchronized format, whilst Wright (2010) referenced the use of social media in teacher education as tool for encouraging self-reflection. Twitter Inc., itself, markets that its mission is

to give everyone the power to create and share ideas and information instantly, without barriers. Keswani & Chaturvedi (2013) pitched that the primary objective in many online communities is to allow for knowledge sharing and learning. Jackson (2011) as well as Liu et al. (2011) reasoned that participation in social media creates a more collaborative and communicative learning environment for participants by providing opportunities for discussions and interaction with their peers. Hurt et al. (2012) contended that by collaborating with peers on a given topic, social media offers opportunities to develop a stronger sense of community among participants. In a study on student perceptions of and preferences for Web 2.0 technologies in reflective journals, Gray et al. (2010) professed that these technologies provide students with a number of benefits, including;

- a) Enhanced levels of engagement,
- b) Amplified collaboration with peers,
- c) Increased creative expression,
- d) Improved technological literacy and
- e) Improved critical thinking and reflective skills.

Ching and Hsu (2011) added their voice to the benefits of using these technologies by remarking that students can develop essential skills such as communication, critical thinking and problem solving, with Mair (2011) adding that technology allows for access to resources, synchronous and asynchronous communications with others, and provides a 'safe space' for interactions with others. Sennett (2012), noted that the use of social media has exploded worldwide given millions of people have access to these platforms via computers, held-hand tablets and smartphones. This has led Victoria, et al. (2014) to advocate that social media, as a medium for professional learning, could act as a virtual location external to the school site to support teachers changing their practice.

3.5 The dilemma of the novice teacher and CPD

In US based studies, Kruger and Dunning (1999) and Roehrig et al. (2008), recognized that novice teachers may lack self-confidence in their teaching and the ability to accurately evaluate their skills. Novice teachers may also desire more feedback than other teachers regarding their classroom performance, seek out mentors with whom they can collaborate to improve their teaching strategies (Nolan and Hoover, 2008). Similarly, African-based studies found a lack of systemic support and mentoring between novice teachers and seasoned colleagues in Kenya, (On'gondo and Borg, 2011), in Malawi (Kunje and Stuart, 1999), Swaziland (Mazibuko, 1999) and Zimbabwe (Maphosa et al., 2007). Studies among South African teachers reveal similar concerns, who desired a more collaborative school culture (Steyn, 2010). Furthermore, in

studies on the challenges facing novice teachers in Malaysia, Senom, Razak Zakaria and Sharatol Ahmad Shah (2013), observed that novice teachers experienced a difficult transition from the teacher education institutions to life in real classroom. In spite of this, novice teachers in Malaysia did not receive adequate support, as there was no specific new teacher induction programmes to prepare them for the move to the classroom. An earlier study by Lim, Tina Swee Kim and Zoraini Wati, Abas (2010), appeared to support this view by remarking that many teacher professional development activities in Malaysia, which should be supporting novice teachers for the transition from theory to practice, have often found to be fragmented, episodic and lacking-in-follow through. They also do not cater for teachers' needs, are time consuming and do not promote collaborative activities or provide supplementary support after the programmes. Normore and Loughry (2006), posited that novice teachers, without support and supervision, often felt overwhelmed, disoriented and frustrated when they found themselves alone in their classrooms. Fletcher (2012) suggested teacher mentoring is essential for (a) guiding and supporting novice practitioners through difficult transitions and (b) as a means of unblocking impediments to change by building self-confidence and self-esteem.

Other studies have highlighted the dilemma new entrants face when they enter the education profession within a South African context. Marais (2016) stated that overcrowded classrooms are part of the South African education landscape and will remain so for the immediate future and longer term and that teacher training should offer appropriate teacher training programmes to enable teachers to deal with the critical problems of teaching in overcrowded classrooms. Opoku-Asare, Agbenatoo & DeGraft-Johnson (2014:123) noted that large class sizes can be an overwhelming experience for newly appointed teachers if they lacked exposure to teaching in overcrowded classrooms during their training years.

Keeping the focus on the South African public education system, a further complication is the attrition rate of novice teachers and the complexities they have to deal with as new teachers. More than a decade ago, Chisholm et al. (2005), reported on the low morale, increased frustration and anger and a growing desire to leave the profession amongst teachers. Other studies on teacher supply and demand reported on a high attrition rate among younger teachers who "first join the system, test it and leave for something preferable after a few years" (Crouch 2003; Human Science Research Council [HSRC] 2008, 6).

3.6 Concluding remarks:

With the aforementioned in mind, it is possible that Web 2.0 tools can assist novice teachers to deal with issues of social isolation, areas of classroom management and administration, teaching that can be overwhelming, learner discipline, peer-to-peer support and professional

collaboration. My research study looked to investigate the extent to which novice teachers could be supported using social media as an instrument to build their initial teacher competencies, confidence, a spirit of collaboration and resilience within a school located in a rural education district. The following chapter looks at the research design and method, issues of ethics, informed consent and the data collection instruments used to validate the research study.

CHAPTER 4: RESEARCH DESIGN

4.1 Introduction:

This chapter outlines the design and method of the study. This includes defining the three primary methods available to the researcher, the design process, the participant list and context, ethical considerations, data collection sources, as well as study approval.

4.2 Research Design and Methods

Crotty defined research 'methods' as "the techniques or procedures used to gather or analyse data related to some research question or hypothesis" (Crotty, 1998:3)

Traditionally, there are three research methodologies, i.e., quantitative (numeric data), qualitative (observational or interview data), and mixed methods (using both types of data). Mixed Methods ideally include the benefits of both methods (Johnson, Onwuegbuzie, & Turner, 2007). Creswell (2013) notes that quantitative analyses employ descriptive and inferential statistics, whereas qualitative analyses produce expressive data that provide descriptive details (often in narrative form) to examine the study's research objectives. Whereas quantitative data may be collected via measures such as self-reports and physiological tests, qualitative data are collected via focus groups, structured or semi-structured interviews, and other forms.

4.2.1 Qualitative research methods

Saldana (2011), in attempting to define qualitative research, posited it is an umbrella term for a wide variety of approaches to and methods for the study of natural social life. The information or data collected and analysed is primarily (but not exclusively) non-quantitative in character, consisting of textual materials such as interview transcripts, field notes, and documents, and/or visual materials such as artefacts, photographs, video recordings, and Internet sites, that document human experiences about others and/or one's self in social action and reflexive states.

Snape and Spencer (2003, 5), in defining qualitative research methods, stated that qualitative methods is a broad term that can be applied to a range of research approaches that have their theoretical origins in a range of disciplines including anthropology, sociology, philosophy, social psychology and linguistics. Furthermore, although significant diversity exists in the type of studies that can be described as 'qualitative', it is possible to define a set of core characteristics. These include:

1. Aims which are directed at providing an in-depth and interpreted understanding of the social world of research participants by learning about their social and material circumstances, their experiences, perspectives, and histories;
2. Samples that are small in scale and purposively based on salient criteria;
3. Data collection methods which usually involve close contact between the researcher and the research participants, which are interactive and developmental and allow for emergent issues to be explored;
4. Data which are very detailed, information rich and extensive;
5. Analysis which is open to emergent concepts and ideas and which may produce detailed description and classification, identify patterns of association or develop typologies and explanations;
6. Outputs which tend to focus on the interpretations of social meaning through mapping and 're-presenting' the social world of participants.

Lincoln (2003) noted that an Interpretive perspective to research has as its central aim the desire to understand the subjective world of human experience. Interpretivism, as an approach, emphasis a search for meaning, understanding and social interaction as the basis of knowledge. Cantrel (1993, 84) noted that the aims of interpretivist research is to understand phenomena, to interpret its meaning within particular social and cultural contexts, and to uncover beliefs and elicit meaning from action and intention through dialogical interaction between the researcher and the participants. The exploration of meaning occurs within a specific context through which an understanding of the phenomenon emerges. Henning, van Rensburg, and Smit (2004) posited that the key words pertaining to this methodology are participation, collaboration and engagement. In the interpretive approach the researcher does not stand above or outside, but is a participant observer (Carr and Kemmis, 1986, p. 88) who engages in the activities and discerns the meanings of actions as they are expressed within specific social contexts. Wilson (2013) posited that research that is based on a view that all knowledge is based on interpretation is interpretive. Burton, Brundett & Jones (2014) indicated that interpretative approaches concentrate on the interpretation of evidence and bring new meaning and that overall, research evidence only becomes useful when findings are explained, interpreted and contextualized.

4.2.2 Quantitative research methods

Babbie (2010) notes that quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques. Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon.

4.2.2.1 Features of Quantitative Research

Babbie (2010) further emphasized that conducting quantitative research study is to determine the relationship between one thing [an independent variable] and another [a dependent or outcome variable] within a population. Quantitative research designs are either descriptive [subjects usually measured once] or experimental [subjects measured before and after a treatment]. A descriptive study establishes only associations between variables; an experimental study establishes causality.

Quantitative research deals in numbers, logic, and an objective stance and focuses on numeric and unchanging data and detailed, convergent reasoning rather than divergent reasoning [i.e., the generation of a variety of ideas about a research problem in a spontaneous, free-flowing manner].

Babbie (2010) also highlighted the following primary features:

- The data is usually gathered using structured research instruments.
- The results are based on larger sample sizes that are representative of the population.
- The research study can usually be replicated or repeated, given its high reliability.
- Researcher has a clearly defined research question to which objective answers are sought.
- All aspects of the study are carefully designed before data is collected.
- Data are in the form of numbers and statistics, often arranged in tables, charts, figures, or other non-textual forms.
- Project can be used to generalize concepts more widely, predict future results, or investigate causal relationships.
- Researcher uses tools, such as questionnaires or computer software, to collect numerical data.

He noted that the overarching aim of a quantitative research study is to classify features, count them, and construct statistical models in an attempt to explain what is observed.

4.2.3 Mixed Methods

Cresswell and Plano Clark (2007) and Tashakkori and Teddie (2003) observed that over the last decade there has been a surge in the popularity of mixed methods research which combine both qualitative and quantitative techniques and are intended to achieve a greater comprehensiveness than could be obtained by using either one on its own.

A mixed methods study is research intentionally combining or integrating quantitative and qualitative approaches as components of the research. The use of these approaches can occur at different points in the research process. (Caruth, 2013; Creswell, 2011; Ponce, 2011; Teddlie & Tashakkori, 2009; Greene, 2007).

- a) In the planning phase where the research plan is developed, it becomes clear what is investigated and how quantitative and qualitative approaches are used.
- b) Combining or integrating research questions from quantitative and qualitative approaches to guide the researcher into the complexity of the problem studied.
- c) Using quantitative measurement instruments with qualitative research techniques to generate quantitative and qualitative data for the research problem.
- d) Combining or integrating quantitative and qualitative data in the analysis of study data.
- e) Combining or integrating quantitative and qualitative data in the presentation of the study findings.

Mixed methods research approaches “in which the researcher gathers both quantitative (closed-ended) and qualitative (open-ended) data, integrated the two and then draws interpretations based on the combined strengths of both sets of data to understand research problems” (Creswell, 2014: 2) also have potential value in social media research. For example, Morgan, Snelson, and Elison-Bowers (2010) used qualitative analysis of social media content together with a survey to uncover patterns of behavior and attitudes regarding depictions of alcohol and marijuana use by young adults on social media websites. As another example, Vyas, Landry, Schnider, Rojas, and Wood (2012) combined a survey with follow-up interviews to examine short message services and social media use among Latino youth and the potential role of these services as methods of communication in public health programs.

Bazeley and Kemp (2012) have also taken a broader approach talking about mixed methods research, defining it to include research in which more than one paradigmatic or methodological approach, method of data collection, and/or type of analysis strategy is integrated during the course of undertaking the research, regardless of how those approaches or methods might individually be classified, and with a common purpose that goes beyond that which could be achieved with either method alone.

Mixed methods strategies are less well known than either the quantitative or qualitative approaches. Recognizing that all methods have limitations, researchers felt that biases inherent in any single method could neutralize or cancel the biases of other methods. Sequential mixed methods procedures, largely employed in this study, are those in which the researcher seeks to elaborate on or expand on the findings of one method with another method. This may involve beginning with a qualitative interview for exploratory purposes and

following up with a quantitative, survey method with a large sample so that the researcher can generalize results to a population. Alternatively, a study may begin with a quantitative method in which a theory or concept is tested, followed by a qualitative method involving detailed exploration with a few cases or individuals. In this study, the researcher started with an (1) exploratory interview, (2) followed up with a survey and an analysis of the results, (3) branched into the qualitative data collection from follow-up interviews and the conversation threads on the e-platform, (4) used the conversation activations or “pings” on the e-platform to create quantitative data to determine engagement rates and interaction levels over the ten week period of engagement, that informed (5) the interpretation of the entire analysis.

Integration of these data is often complex, even when there is a strong theoretical rationale for doing so. Data integration occurs when quantitative and qualitative are combined in a data set. There are multiple ways for this to occur, including triangulation, following a thread, and the mixed methods matrix (O’Cathain, Murphy, & Nicholl, 2010).

This study relied on both qualitative and quantitative methods and is underpinned by an interpretivist perspective that recognizes the varied nature of learning settings and the exploratory nature of educational research.

4.3 The Research design process

The research design process covered four phases. The first phase comprised semi structured interviews with each of the ten (10) novice teachers chosen for the study. They were thoroughly briefed on the nature of the study, its aims and the envisaged expectations of participants with a view to obtaining informed consent.

The second phase focused on the respondents completing a baseline assessment (via a questionnaire using an e-interface).

The baseline questionnaire broadly focused on:

1. Induction practices within the school
2. Classroom management support
3. Curriculum management support
4. Subject teacher group support
5. Administration management support

The questionnaire, as used by the New York State Mentor Teacher-Internship Program, was an augmented one that consists of forty-two (42) questions and covers each of the five broad indications noted above. Respondents were asked to use a grouped, Likert-type, six-point scale, to classify their answers against each item, with a descriptive note attached to each

band. Each respondent was given the space to provide additional comments.

The goal of the baseline questionnaire was to collect data that shed light on which focus areas needed support or stimulation and intended to help formulate or shape the ongoing engagement via online collaboration and mentoring. The outcome of the survey was discussed with the respondents before a decision was made on which aspect/s, given the survey outcomes, should be focused on. Consensus guided the eventual focus area (given the data) and was aligned with any existing Education District Office support programme, where possible.

The third phase included the creation of an online community group on WhatsApp as a tool for online collaboration. The aim was to get identified teachers to engage with each other and document their commentary via a dedicated link, using their smartphones. The microblogging site allowed for comments that allowed interaction (chat) between the researcher and the respondents. In so doing, respondents were also able to engage their fellow participants' views and their entries.

Responses were fed into a shared, closed group which did not allow anyone outside of the study, access. I was the primary mentorship support and input on the focus area and questions and concerns raised by teachers. Additional stimuli—informed by the questionnaire data—was also used to trigger educator responses over the three-month period. These included the use of video input where possible. The feedback and conversation on the WhatsApp group microblog was analysed over time and served as the primary research data.

In research by Wang & Hsua (2008) around the value of using a blog to provide an e-mentoring programme, they noted that blogs were initially considered mainly as personal journaling tools, but that over time this socially interactive, collaborative web-tool has come to be used in other innovative ways.

Zanid et al (2013) for example, argued that blogs can provide an important forum for teacher development in three ways, namely (1) blogs are easily accessible to readers, (2) blogs have not only personal uses but can also be utilised for interactive and collaborative purposes, and (3) blogs provide functions that allow for immediate publishing and editing. Yang (2009) further suggested that blogging can be an effective way of creating an online community of teachers reflecting on their professional practice.

Wilson, Kenny and Swift (2015) suggested that there are several aspects of blogging that could be beneficial for use in research, such as accessibility of mobile technology (smartphones, smart watches, tablets, and laptops) that enable persons otherwise geographically or socially removed from the researcher to be accessible anywhere, and at any time. Denzin & Lincoln (2011) also noted that most blogs are characterized by reflective, descriptive, interpretive and exploratory content and therefore align with common qualitative methodologies.

The fourth and last phase comprised a semi-structured interview with the educator group to gain insight and their views on their experiences of the e-mentoring programme after each two-week period of input. After the 10 week period, teachers were given a “cooling off” period to see if the platform created led to the expansion thereof or stimulated similar e-platform engagements via the participants’ own initiatives. The WhatsApp group was kept open without the researcher maintaining an active presence to gauge whether the platform created any traction to extend itself. The various “pin rates” were tabulated and analysed to develop an overall trend indication. This trend analysis was used to highlight lessons of how to stimulate or augment mentoring practices in schools within rural settings, with specific reference to the value of an e-mentoring tool.

4.4 Participants and context

Ten (10) novice teachers, based at a rural primary school, participated in the study. All the teachers were in the 1st year of teaching. As is common for the gender profile in our primary schools, the teachers are female.

The participant profile is tabulated below:

Name*	Gender	Professional Education qualification	Which Grade/s are you teaching?	Experience in years
Hayley	F	B. ED	Grade 4	1
Tammy	F	B. ED	Grade 5	1
Kylie	F	B. ED	Grade 3	1
Lynette	F	B. ED (FP)	Grade 3	1
Stacey	F	B. ED	Grade 1	1
Nadine	F	B.Sc. PGCE	Grade 5	1
Leah	F	B. ED	Grade 1	1
Isabel	F	B. ED	Grade 2	1
Delia	F	B. ED	Grade 4	1
Miche	F	B. ED	Grade 2	1

Table 4.1: Profile of participants

Nine of the novice teachers have a B. ED degree, one a PGCE qualification and one a B. ED specialising in Foundation Phase teaching. The participants were selected because they were new entrants, based at a new, rural school and their proximity to the researcher (also rural based).

The targeted school was a newly opened one and consists of 400 learners across the primary school grades. Besides the novice teachers, several seasoned teachers were transferred to the school. The principal was a retiree, deployed by the District to start the school and to ensure business processes are put in place, including the establishment of the school governance body. Learners were enrolled from various surrounding schools to alleviate the enrolment pressure in these schools. Consequently, the learners are a diverse group, with a mixture of home languages. 40% of the learners' home language differ from the language of Learning and Teaching.

4.5 Ethical considerations

A classic definition of ethics is that ethics pertains to doing good and avoiding harm (Beauchamp & Childress, 1989). Shaw (2003), stated that qualitative research generates conflicting ethical and methodological dilemmas related to informed consent, confidentiality, privacy, social justice, and practitioner research, as well as questions about power, reciprocity, and contextual relevance during its various stages.

Karnieli-Miller, Strier and Pessach, (2009) in an attempt to define power relations in qualitative research, noted that the developmental nature of the research process leads to changes in power relations, which pose specific ethical issues to the researcher. They identified at least four stages:

- i. Initial stage of subject/participant recruitment: The researcher, who is in possession of the information about the study, and the participants, who own the knowledge and experience needed to perform the study and can use their respective powers to negotiate the level of information provided about the study.
- ii. Data collection: the researcher seems to be entirely dependent on the participants' willingness to take part in the research and to share their knowledge of the research subject with the researcher. At this stage, control and ownership of the data seem to be in the hands of the participants. The quantity and quality of the data shared with the researcher depend in part on the relationship that develops between the researcher and

various participants. The researcher must try to elicit the participants' stories as much as possible, their experiences, and their wealth of knowledge of the research topic.

- iii. Data analysis and production of the report: With termination of the data collection stage, formal control and power over the data returns to the researcher. From now on, the story shared with the interviewer is "separated" from the participant, and the researcher becomes the "storyteller" who recasts the story into a "new" historical, political, and cultural context.
- iv. Validation: After data collection and analysis are completed, some researchers choose to reengage participants, with the objective of strengthening the trustworthiness, accuracy, and validity of the findings, and to empower the interviewees. The re-engagement is implemented through follow-up interviews meant to check the authenticity of emerging insights identified by researchers and verification of participants' intended meanings (Cutcliffe, 2000)

Validity, reliability, and generalizability are essential aspects of the qualitative research process (Brundrett et al. 2008). The latter two are normally difficult to uphold in small-scale qualitative research linked to a local context. However, while qualitative research has its limits (Basseby 1999), there are ways of ensuring "internal validity", trustworthiness and transferability by using different methods to triangulate the findings. In the case of this study, the ongoing dialogue on the e-platform were juxtaposed with the contact sessions and questionnaire feedback to measure the reliability and authenticity of the blog entries.

Williamson (2007) advised that researchers must ensure participants are fully aware of what they are getting into so that they can give an informed consent prior to participating.

"Informed consent is a mechanism for ensuring that people understand what it means to participate in a particular research study so they can decide in a conscious, deliberate way whether they want to participate" (Mack, Woodsong, McQueen & Guest, 2005:9).

They further emphasised that from the beginning of the research process, researchers must be honest with themselves and with participants about the nature of the partnership at each step. The researcher must clarify and explain to participants that the analysis of the data relies on several dimensions and aspects: what has been said, how it was said, and when. It is important to emphasize the contribution of each partner. Interviewees contribute their stories, experiences, and the way in which they choose to present these; researchers contribute their theoretical and professional experience and the intention to understand the stories presented

by the participants. The representation of the data includes both the participants' experience and the researcher's understanding and interpretation of it.

Before commencement of the study, the novice teachers received an introduction to nature of the research, that their participation was voluntary, and they could withdraw at any point. Participants were also informed that all information shared would be treated confidentially and within the confines of the closed social media group. They would each be assigned a pseudonym, to further protect their identity. The data gathering instruments were fully explained. Participants were also given the option of verifying the information collected from them, and accessing the final report if they so desired.

The benefits of WhatsApp were explored, and a check was done on their familiarity with the platform. The novice teachers were informed that they were free to post answers of any given length based on their needs to articulate their requests or comments. They were also encouraged to explore the researcher prompts within their classroom practice, share experience on-and-offline with their fellow participants and provide feedback on the impact of the two-weekly prompts. In addition to this briefing, formal written consent to take part in the research study was received from all the participants.

Good ethical research practice also includes securing prior consent by relevant authorities. In the study, such consent was obtained from the Western Cape Education Department, the Faculty of Education Ethics Committee of the Cape Peninsula University of Technology, as well as from each of the respondents.

Lastly, all data collected and received in the study were kept in a locked and safe place, and where stored on a computer, was password-protected.

4.6 Data collection sources

A mixed method study allows for a variety of data collection sources. The initial survey consisted of a questionnaire based on the one used by the Alabama Education Department to survey the initial competencies of its novice teachers.

The questionnaire consisted of 42, six-point Likert-type scale items whose values ranged from:

- 1-2 (I am just looking at this matter) to
- 3-4 (I have made substantial progress on this matter) to
- 5-6 (I have developed this matter into one of my strengths).

The 42 sample items for rating included:

“I have established a good rapport with my student as individuals”, “I understand the general procedures (e.g., attendance taking; accessing materials and supplies; filling out forms) used in the school in which I teach” to “I feel comfortable in approaching and working with other teachers, the school administrators, and other staff.” The full list of sample items is marked as “ANNEXURE A”.

Once the questionnaire was submitted, the responses were tabulated in Excel. The mode score was calculated for each of the sample items and the frequency used to identify the areas for development and support. Agreement via consensus informed the final identification of the focus areas and the alignment with any developmental initiatives running in the education district.

4.6.1 Semi structured interviews

The aim of a qualitative research interview is to see the research topic from the perspective of the interviewees, and to understand why they have a particular perspective (King, 1994). To meet this goal, King (1994) listed the following general characteristics of a qualitative research interview:

1. a low degree of structure imposed by the interviewer;
2. a preponderance of open questions;
3. a focus on specific situations and action sequences in the world of the interviewee as opposed to mere abstractions and general opinions.

Research normally highlight three types of interviews used in educational research: standardised open - ended, semi structured and structured (Scott & Usher, 2011: 116,117), depending on the nature of the event as determined by the researcher who initiates the interview (Greeff, 2011: 347).

In this study, I used four, face-to-face, semi-structured group interviews to facilitate a more focused exploration of the topic. The participants were interviewed across the 10-week period. The first interview served as an ice-breaker and trust-building process. It enabled the participants to get some insight into the nature and tone the interviews would have and what it might feel like for them.

The follow-up interview deepened the trust between the participants and researcher. In addition, the second interview was also used to follow-up on specific issues that materialised during the first interview. The space between the first and second interviews enabled participants to reflect on what they had said, and in the second interview, there was the

opportunity to revisit answers and to expand or offer a different response. This interview also enabled participants to ask more specific content-related questions about the consent and confidentiality process.

In the second interview, the participants felt more at ease and they spoke about their concerns and how they wished not to be publicly exposed.

The third and fourth interviews were used to reflect on the ongoing engagements and the relevance and impact of the interactions on the areas of focus as determined after the initial survey responses were shared with the participants.

During all the interviews, I remained mindful that any question might act as a spur for an emotional response. Where an emotional response was elicited, no tape recorder was used so that the participants could continue a more natural discussion of the subject on their roles. To ensure trust was built throughout the study, the professional relationship was fortified through the selection of the location for interviewing that suited the participants and allowed them to feel comfortable.

The semi-structured interviews in this study were held in in the staffroom of the school after teaching hours and on days that suited the participants. As the researcher, I worked around their schedule in this regard. The duration of each semi-structured interview was 60 min. The interviews were audio tape recorded and, in order to ensure confidentiality, only I had access to the audio tapes. The audio recordings were securely stored and disposed of after the completion of the study.

4.7 Trustworthiness

Anderson, Steinerte, & Russell (2010) posits that in virtual organizations that lack face-to-face interaction, trust is essential for establishing communities. Mesch & Talmud (2006:137) noted that relationships developed online are often perceived as “less close and supportive”. Although this may be true, Collins & Pinch (1979) stated that there are many topics people feel hesitant to discuss face-to-face, but they may feel more comfortable doing so via a virtual medium, such as Twitter. Trust is made up of both cognitive and affective components (McAllister, 1995). Cognitive-based trust is rooted in the rational decision to either trust or not trust another individual— a decision that is based on perceived levels of responsibility, dependence, and reliability in another (Costigan, Iter, & Berman, 2006). Affect-based trust is rooted in the emotional relationships between people, such as the degree to which individuals demonstrate care and concern for one another (McAllister, 1995).

Given the afore-mentioned risks, attention was given to the responses of participants during the virtual chats and the interactions during the semi-structured interviews held, to strengthen the trustworthiness of the data, accuracy and validity of the findings. Open ended questions were used to test the understanding of both the participants' and researcher's view of answers provided, and deductions made. Cutcliffe (2000) noted that re-engagement is implemented as a way of checking the authenticity of emerging insights identified by researchers and verification of participants' intended meanings or member checking, carried out individually or in a group, in which participants have the opportunity to discuss the findings and conclusions of the study. This process is meant to decrease the risk of misinterpretation of the participants' stories by providing inaccurate generalizations (Hewitt, 2007).

4.8 Positionality of the researcher

The researcher must decide whether to position themselves as insiders or outsiders, as both insiders and outsiders, or as insiders first and then outsiders. Wilkinson and Kitzinger (2013, 259) suggested that we "cannot escape being both insiders and outsiders," so it important for us to make good use of these positions. Burns, Fenwick, Schmied, & Sheehan, (2012, 59) notes that the researcher can make use of their experiences to achieve the desired level of familiarity with, and distance from, participants. Wilkinson and Kitzinger (2013) identified four strategies for managing the insider experience. For the purposes of this study, the second strategy is to utilize the insider experience, which allows the researcher take advantage of the insider status to gain access to the studied group, to build trust and rapport with the participants, and to display empathy to them.

In terms of the mentoring relationship, the researcher is a crucial participant in the study, namely as 'mentor' and blog master. In that respect, the researcher has over 25 years' experience as an education specialist, ranging from class teaching to serving in a management capacity within the Western Cape Education Department. This expertise allowed the researcher to play an important part in the mentoring relationship. The researcher is an active blogger in the sphere of education and has run a personal blog (focused on education) for more than three years, attracting up to 5000 page views per month. From this experience, the researcher had developed the necessary skills to be able to stimulate peer-to-peer-discussion, the sharing of teaching experiences, and the discussion of what constitutes good or promising practice, within the sphere of social media.

To ensure that my senior role as an education official and my researcher role did not disturb both the management of the school or the novice teachers, I endeavoured to create a caring, empathetic environment when engaging the participants and always sought the approval of the management to engage the novices at the school. The participants were allowed to

express themselves freely and all conversations were openly debated for purposes of clarity, validity and authenticity, by allowing them to freely reflect on the various interfaces they were engaged in, albeit our face-to-face sessions of the e-platform.

4.9 Analysis of the data

The data collected via the initial questionnaire / survey instrument was tabulated based on the scale used. The mode score was calculated to determine the most often occurring score of the answers to each question. During the follow-up semi-structured interviews, the mode per question was validated by engaging with the participants through a series of open-ended questions to authenticate the score allocated. In the exit interview, the survey scores based on the participant responses, were tabulated and graphically depicted to establish the overall leaning of the participants in respect of the questions posed. These informed the interpretation of the analysis of the findings in this study. During the research engagement phase, the ping rates on WhatsApp were calculated through tabulation in Microsoft Excel. This allowed the researcher to establish the sum of each participants' pings as well as the weekly and monthly activity of the group. This quantitative data augmented the qualitative data themes extracted from the semi-structured interviews and the conversation threads.

The data of the intermittent, semi-structured interviews and WhatsApp during the research phase, was recorded, manually transcribed, labelled and coded to establish patterns. All transcriptions were corroborated in the follow-up, semi-structured interview sessions. This allowed for themes to be established that accentuated the professional growth of the participants over the 10 week research period.

4.10 Study approval

Ethics clearance was obtained from the Cape Peninsula University of Technology as well as from the Western Cape Education Department.

4.11 Conclusion

Chapter Four focused on the research design, the research methodology and the ethical considerations prior to the engagement with the novice teachers. The next chapter presents the findings of the engagement period as discussed in the research design. These findings are arranged in response to the aims of the study and furthermore, detail the interactions of the participant teachers as they journey through the ten weeks.

CHAPTER 5: RESEARCH FINDINGS AND ANALYSIS

“Without the learning energy of those who take initiative, the community of practice becomes stagnant, without strong relationships of belonging, it is torn apart. And without the ability to reflect, it becomes hostage to its own history” (Wegner, 2000: 230)

5.1 Introduction:

The previous chapter focused on the research design. In this chapter, the focus is on highlighting and discussing the findings of the process engaged in with the ten novice teachers over the period of ten weeks.

5.2 Findings of the study

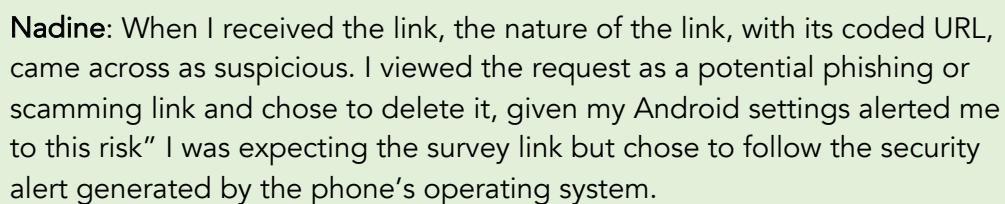
Borg (2012) submitted that in order to develop a community of practice, teachers need to be given the support to ‘get off the ground.’ At our first meeting prior to circulating the link to the survey, I reiterated the rules for engagement within the social media group. Group members were made to understand that this was a closed group and that all interactions were confidential, and commentary was not to be shared outside of this space with individuals not who did not form part of the group. I emphasized that no history of social media platform engagement exists within the Education District Office (EDO) and that it was going to be a new experience for everyone involved. The lessons learnt would inform e-interactions with teachers within the EDO going forward. Participants were encouraged to stay engaged with each issue (once determined), to freely express themselves and even engage offline with each other if deemed necessary. It was to be expected that not all participants would engage in the same way but that this should not inhibit the interactions as the process unfolded. McConnell et al., (2013) and Linder Post & Calabrese (2012) noted that establishing a sense of community is necessary to promote meaningful discussions and critical to the success of the group. Furthermore, Cravens (2001) noted that the ability to develop an authentic relationship could be considered one of the most important aspects of any coaching and mentoring programme.

Many of the participants expressed nervousness at the process about to unfold. I had to deal with a number of questions related to confidentiality, provide reassurances that the SMT at school level and Subject Advisers, who provide support to the teachers in specialist subjects, would not become antagonistic towards them and the e-support platform. Clutterbuck & Hussain (2010) intermated that ensuring an online presence and varied interactions, e.g. voice, text and audio-visual media, would counteract the potential a lack of trust forming and a virtual relationship not being established. I assured them that the SMT was briefed on the nature of the project as well as district staff, and that the platform was not one for discussing challenges

with other members of staff or district staff, but to build the individual and collective levels of confidence of participants to teach more effectively in the classroom. The opportunity existed to collaborate and co-create as well as build a repository of resources. Furthermore, they were assured that they were free to engage me should any tensions arise so that the necessary intervention could take place to erase any concerns.

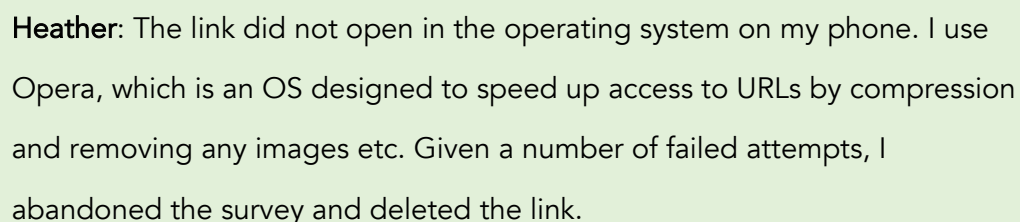
5.2.1 The initial interactions with the survey link

After the initial setting-the-scene meeting, the link for the survey was sent to participants within 24 hours after the meeting. The nature of establishing WhatsApp groups is such that the software automatically assigns the chosen contacts to the group once the group name is established. Establishing the group took less than a minute. The survey form was designed via Google Forms and a secure link was sent to each of the participants to complete the survey. 48 hours after the link was served, no responses were forthcoming. “N” equaled “0” and on further enquiry, the participants asked me to resend the link, given the following reasons:



Nadine: When I received the link, the nature of the link, with its coded URL, came across as suspicious. I viewed the request as a potential phishing or scamming link and chose to delete it, given my Android settings alerted me to this risk” I was expecting the survey link but chose to follow the security alert generated by the phone’s operating system.

Four of the other participants provided similar feedback.



Heather: The link did not open in the operating system on my phone. I use Opera, which is an OS designed to speed up access to URLs by compression and removing any images etc. Given a number of failed attempts, I abandoned the survey and deleted the link.

Two of other participants related a similar experience.

Leah: As a new smartphone user, I read the short message accompanying the link but given I rarely engage the features outside of the normal messaging and call functions, I deleted the WhatsApp group. Sorry.

Kylie: I noticed the “novice group” being established but did not recognize the admin’s cellphone number. Given that I didn’t establish the group, and not knowing the administrator’s number, I exited the group and deleted the group reference.

Outside of Leah, eight of the participants also aligned themselves with this action.

Given the feedback, I asked the participants to save my cell number on their contacts list. The novice teacher group was re-established under the name of the school. The secure link was resent with a short note. On this occasion, the responses were all submitted within 24 hours. (“N” equaled 10). Challenges relayed related specifically to confirmation of receipt, browser used and similar technical matters. Examples of an interplay around the submission is highlighted below, with respondents already giving advice around the completion of the survey.

Lynette: Ok, so I completed the link but not sure if it submitted ... will you please let me know if my feedback was received?

Researcher: Hi Lynette. Nothing on my side. Did you get a confirmation message after pressing submit? If not, I’m sending the link again.
<http://goo.gl/forms/mB2FTc8QtM>

Nadine: Same thing has happened to me...twice. I am going to do it again now. Hopefully third time lucky

Researcher: I am worried ... two managed to get it through on the same link. I will watch my side. If you still can't get it done on your phone, I will have to come and set up a hotspot at the school.

Nadine: Are you using Opera Mini? It won't work with normal internet.

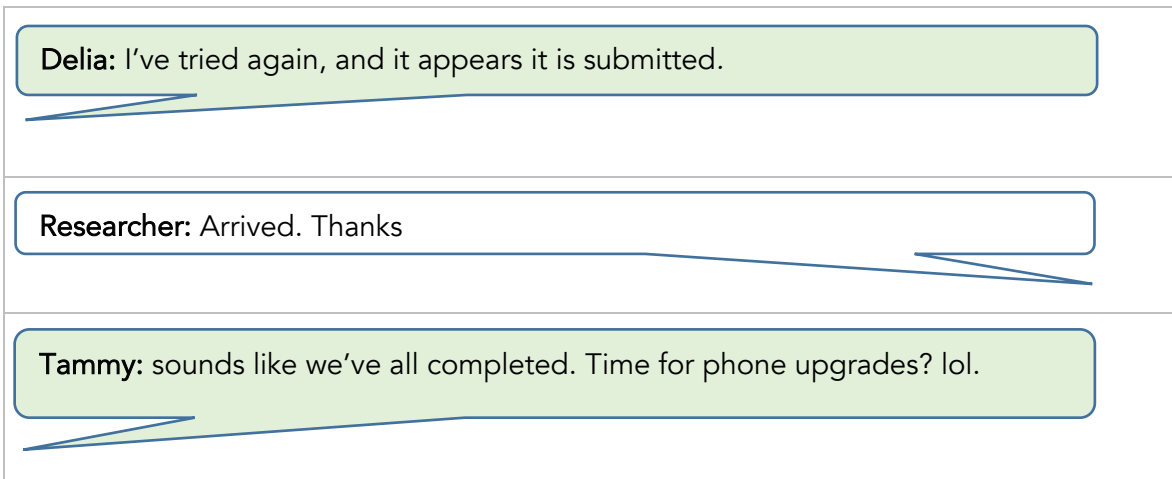
Kylie: This is the message that came up after I've submitted it...
"Your responses has been recorded as confidential. Thank you for your inputs".

Researcher: Nadine, you have identified the problem. Opera won't work. Must be Chrome or Mozilla.

Researcher: Hi Miche. Did you get feedback when you submitted? I'm not picking you up but will check later again.

Miche: "Yes, I received confirmation message".

Researcher: "Hi Lynette. I've received your input. Thanks



5.2.2 The survey results

The questionnaire consisted of 42, six-point Likert-type scale items whose values ranged from:

- 1-2 (I am just looking at this matter) to
- 3-4 (I have made substantial progress on this matter) to
- 5-6 (I have developed this matter into one of my strengths).

A “general comments” section was also included to accommodate any need to add their voice to an issue they may wanted to alert me to.

Each respondent measured their respective “competency” or “progress” in terms of the intervals of the scale provided. The nature of Likert-type scale allows for an attitudinal expression as opposed to a definite measurement to capture their actual competency rating, since the intervals between points on the scale do not present equal changes in attitude for all respondents.

Once captured, I determined the “Mode” per question, i.e. returns the most frequently occurring, or repetitive, value in an array or range of data, to get a sense of the collective “attitudinal tendency per question” of the 10 respondents.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Name	I have established a good rapport with my student as individuals	I use a variety of instructional methods appropriate to the content I teach.	I understand the general procedures (e.g., attendance taking; assessing materials and supplies; filling out forms) used in the school in	I identify individual differences among my students and adjust for those differences in my planning and teaching.	I turn to those in the school (management) who can help when I need to resolve problems	I pace my lessons so that students are neither overwhelmed nor bored.	I regularly reflect on my own teaching performance	I use various technologies to help student learn.	I feel that through my efforts, I can enhance the quality of the school and district in which I teach.	I feel comfortable in approaching and working with other teachers, the school administrators, and other staff.	I work productively with support staff and helping students learn.	I teach in such a way that students are engaged and perform as I would like them to.	I differentiate instruction for individual students and maintain high expectations for all students.	I connect the content to prior student learning and to real world contexts.	I feel I am a participant in the profession (through organizations and associations), which enhances my sense-of-self.	I am well organized for carrying out my work efficiently and effectively	I take time to self-assess my teaching	I plan daily, consistently resulting in lessons which turn out the way I intend them to.	I collaborate regularly with my colleagues regarding planning and delivery of instruction.	I use the curriculum guides for my content areas(s) that are available in my school.	I can see that my students learn and use that knowledge in planning and teaching.	I assess how my students learn and use that knowledge in planning and teaching.
MODE	4	3	3	3	4	4	3	2	4	3	3	4	3	5	5	3	3	3	4	6	5	4

Figure 5.1: Mode of questions 1 to 22

	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Name	I use several different approaches to monitor the effectiveness of my teaching.	I regularly discuss student performance with my colleagues	I take responsibility for student learning	I use instructional technologies as a regular part of my teaching.	I have caring relationships with my students.	I feel that through teaching I have developed a sense of who I am	I sequence activities such that students follow along and learn as planned.	I manage classes to make good use of time and resources, to minimize interruptions, and to keep students engaged.	I work in partnership with one or more colleagues to think about my teaching	I establish expectations for students' behavior that they understand and meet	I adjust a lesson in the midst of teaching if it is appropriate to do so	I have relationships with students that are respectful and friendly	I feel I am part of the district as well as my school.	I feel comfortable in exchanging ideas with the people with whom I work.	I establish class routines that students understand and follow.	I have a good working relationship with my classes).	I engage in collaborative teaching or co-teaching as needed to support student learning.	I participate in professional development activities to improve my knowledge and skills as a teacher.	I support students as they use technologies in their learning processes	I discipline students in ways that are appropriate and effective.
MODE	3	5	5	2	6	5	4	3	2	4	4	4	5	5	5	5	4	4	2	2

Figure 5.2: Mode of questions 23 to 42

The mode (most frequently occurring value) per question is graphically depicted below on the scatter graph:

The mode indications,

- 1-2 (I am just looking at this matter) to
- 3-4 (I have made substantial progress on this matter) to
- 5-6 (I have developed this matter into one of my strengths)

allowed me to gauge the attitudinal tendency of the respondents and formed the basis for the post-baseline questionnaire discussion with the group around the indications and whether this was consistent with their held views when the surveys were completed.

An analysis of the scatter graph indicates that the mode for the majority of questions, i.e. (30) fell in the scoring ranges “two” to “four”, categorised as “I am just looking at this matter” (1-2) to “I have made substantial progress on this matter” (3-4). The answers to a few questions found resonance on the upper scoring range, categorised as “I have developed this matter into one of my strengths” (5-6).

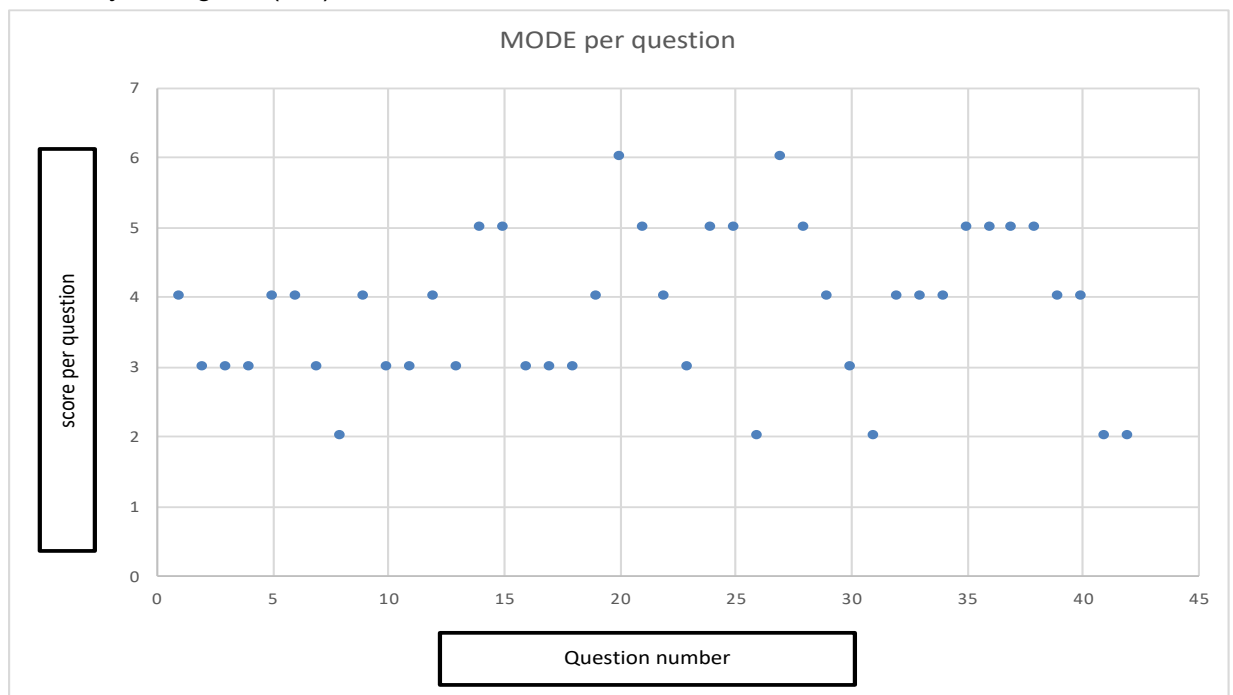


Figure 5.3: Mode distribution per question

Four respondents chose to augment their feedback with additional comments:

Kylie: I do believe that I can grow in this profession, but it requires work with the rest of my colleagues and more available resources. There is a long way ahead, but I am looking forward to the learning opportunity.

Tammy: I would appreciate technology such as Smart Boards and projectors in my classroom since I don't know how to use chalk.

Heather: Concerning the working relationship with my colleagues, I do not feel comfortable with them at all especially not exchanging ideas or co-teaching. My fellow Grade teachers are not novice teachers and they are not helpful, therefore I go to others who can give my useful advice and whom I can actually speak to about the work that has to be done. Work is less stressful when you have the right people to guide you. I definitely had absolutely no idea teaching requires so much admin! I would also like to learn more about how I could help learners with barriers. I can only hope that in 5 or 10 years, I will be able to help novice teachers as I am longing for now, to take them by the hand and guide them to also be a great teacher as I wish to be!

Nadine: As a new school approaching the end of Term One, it is very difficult to maintain a disciplined atmosphere in the class as there is no code of conduct in place that dictate the course of action to be taken when rules are broken. A good talking to from the principal is not as effective as it was in the beginning. I would love to discuss my lessons and concerns with my more senior colleagues. this is more difficult to do so because they are overloaded with administrative duties. They are often late for class resulting in disturbed patterns and this also contributes to disciplinary issues in the classroom. I often also feel as though my opinion regarding discipline and time management is often not valued because I am a novice teacher. Integrating media into my lessons is a bit complicated as we do not always have electricity at my school. Furthermore, we barely have enough books for all of our learners at the school and our textbooks arrived late. I have asked learners to bring resources from home to practically enhance lessons. I have found that it immediately helps learners to concentrate more and therefore grasp concepts more readily.

It is also evident that the majority of answers in the scoring ranges “two” to “four”, fell within the categories of curriculum management and classroom management.

At the post baseline discussion, I showed the group of novice teachers the mode indications for each of the 42 questions. In the ensuing discussion, the following became evident:

The respondents had great difficulty scoring themselves since they were not sure of the distance between a “one” or a “two” or a “three” etc. Some of the direct responses were:

Heather: I didn't believe I'm a code "one, yet I wasn't sure that a code "two" represented my challenges well enough" I know it I was not expected to give an accurate score, yet I didn't want to project myself as a struggling teacher by scoring myself low. I am more codes "ones" and "twos" than codes "threes", "fours" or "fives".

Lynette: I am really struggling to cope with the management of the classroom environment with the added pressure of covering the curriculum. The learners are struggling, and I don't have sufficient knowledge around strategies to deal with the level of attention the children want I wasn't sure how to code this. I'm not sure if this makes me a code "one" or not.

Nadine: The learners I teach in the Intermediate Phase are aware of the gender differences and I feel awkward at times with the way some of the boys stare at me or "brush" past me or want to touch me as I monitor the class". This is an issue for me in managing my classroom. I wasn't sure if I should code this as a discipline related issue.

Leah: My pre-training focused on using the smartboard and a data projector/laptop. Now I'm expected to write on a chalkboard and use chalk. There are no lines on the board, and I needed to draw these myself. I've never used a T-Square before. Learners often laugh at my handwriting, yet I'm supposed to teach them how to write" I couldn't code this frustration".

Isabel: I find myself having to explain all the time. It's as if the learners don't know what I'm saying. I often feel like I'm shouting my way through a lesson and the learners appear to make more noise as I move along. I don't feel that I'm in control in the classroom. I don't think I'm a code "four" despite giving the indication at times.

Kylie: I don't have sufficient textbooks and I don't have CAPS documents, yet I'm expected to cover the work despite this. I'm stressed out most times. My scoring on the questionnaire doesn't really capture my daily frustration.

When I asked how we should focus the interactions on the WhatsApp group going forward, consensus was reached that the bulk of the challenges they faced were classroom based and that managing the classroom environment was central to their concerns. Given this, the respondents were further requested to consider an interaction aligned to the Education District's current focus on the classroom environment, which was centred on the 49 strategies in the book "Teach Like a Champion" by Doug Lemov. Also, considering the 10-week period set aside to conduct the research, the focus was refined to look at specific techniques that would help them manage the classroom environment in a way that addresses learner discipline too. The techniques identified for interaction were techniques 36 to 41, as contained in the book by Lemov. The techniques formed the basis of the chapter in the book focused on "setting and maintaining high behavioral expectations".

The WhatsApp group would be used to disseminate the "instructions for each technique as well as relevant video links as published on YouTube. Each participant would introduce the technique over a two-week period, capture the usefulness thereof on the group and engage around any challenges. As the researcher, I would prompt the interaction where necessary or provide appropriate guidance for follow-up or further input via the District staff or district workshop environment. I would record the number of engagements via WhatsApp over the ten-week period. Agreement was also reached that prompts would not take place during teaching time but after school. No one would engage after 21h00 or if this happened, responses would not be required immediately. During the term examination periods, very little teaching would take place and recognition was given that this may slow down interactions. This also applied to school holidays and public holiday periods.

5.2.3 Social Media interaction:

The first session for engagement commenced in the 2nd week of March. As agreed, Technique 36 was distributed to each teacher for assimilation during the teaching week. The essentials of the technique are:

1. Use the least form of intervention
2. Rely on firm, calm finesse
3. Emphasize compliance you can see

The technique is premised on the need to set high behavioural expectations in the classroom and introduces way to respond to learners who do not follow those instructions. The elements of the technique (as shown below) were provided to the respondents via social media.

Technique 36: 100 PERCENT* – When giving a direction, you need to require that 100 PERCENT of your students comply. While that may sound draconian, if you accept anything less, you are sending the message that it’s optional to follow the direction. Furthermore, champion teachers get 100 PERCENT compliance with warmth and a positive tone. In the long run, discipline that is positive and invisible (a matter of habit) is the only kind that is sustainable. In a typical class, a teacher asks for silence and about three-quarters of the class follows through. When the teacher moves on anyway, she sends the message that any direction is optional. Three principles are important in getting 100 PERCENT compliance so you can teach.

Principle 1 of Technique 36: Use the least invasive form of intervention – You want everyone to follow your directions in the quickest and least disruptive way, so choose an intervention that is as close to the top of the list below as possible.

1	Nonverbal intervention – Use eye contact with off-task students without interrupting instruction
2	Positive group correction – Quick verbal reminder to all, “We’re following along in our books.”
3	Anonymous individual correction – Sends the message that there are individuals not following, “We need two people.”
4	Private individual correction – Correct individuals privately and quietly by leaning down next to the student and in a quiet voice telling the student what he should do, “Quentin, I need you to track me so you can learn.”
5	Lightning-quick public correction – When you need to correct an individual publicly, make sure to minimize her time “onstage.” Something like, “Quentin, I need your eyes,” tells the student what to do and is efficient and effective.
6	Consequence – It’s best to solve non-compliance quickly and save consequences for occasional use. Some people mistakenly believe that ignoring misbehaviour is the least invasive response, but unchecked behaviour will only persist and intensify.

Principle 2 of Technique 36: Rely on firm, calm finesse – Remember that gaining 100 PERCENT compliance is not about power but about achieving an important purpose – that students will succeed. Take yourself out of the equation and focus on the goal. Rather than

saying, “I asked for your eyes on me because when I ask you for something, I expect you to do it,” try “I need your eyes on me so you can learn.”

Principle 3 of Technique 36. Emphasize compliance you can see – Asking for pencils down is better than asking for attention because you can see if it has been done. Make sure students know you are looking, “Thank you, Peter. Thank you, Marissa.”

As a further reference, video clips were shared (obtained from YouTube) with the novice teachers so that they had an audio-visual reference for the implementation of technique.



Teach Like a Champion Technique 36 - 100 Percent (Part 1 of 4)

Figure 5.4: Technique 36 video link

An example can be viewed at by clicking on the image above. Additionally, examples were available in the book of Lemov on pages 167 to 177.

The novice teachers were given 5 days to familiarize themselves and attempt implementation.

Within the first week of sharing the technique, I prompted the teachers around implementation and their responses are captured below:

Researcher: Good evening colleagues. Have any of you tried to test any of the 3 principles today? And how did it go?

Kylie: Good evening. I have tried the 3rd principles and I found that it works. There is still more to be done, two or three children didn't work along the first time around.

Researcher: That's great Kylie. I'm glad to hear you didn't necessarily follow it in sequence because life doesn't work that way. Do play around with it and remember that you are contesting for attention in your classroom. The more you practice keeping your class your domain the more they get the pattern and stick to it. I'm also glad to hear some didn't listen...that is not bad. It simply shows that not all learners respond in the same way and the same time. Do keep going, even if just with the 3rd one ... and don't be surprised if they've forgotten it all tomorrow.

Leah: Evening all. I have tried the second principle and it works. I could see some improvement. Still getting there, will try again tomorrow.

Researcher: Just keep biting your teeth on this issue Leah. Remember they are kids, they have an abundance of energy and they going to test you every minute they sense a gap. Keep setting the tone...when we were young, our parents did the same...we called it nagging.

Heather: Good evening everyone. I have noticed that I normally use principle 2 in my everyday speech in class. And it works with my kids. Principles 1 was also not difficult at all. I am using those terms a lot and the learners are understanding what to do. I am experiencing less of them asking me again what to do after I have explained and me having to repeat myself because I think they paid more attention especially with "I need your eyes" or "..following in the books..." ..With Principle 3, I think my voice frightened them when I said loudly in class to put pencils down to pay attention, yet some, as usual, lost focus".

Researcher: Thanks Heather. I'm glad to hear you've assimilated the techniques into your practice. Keep at it and don't worry about the pitch of your voice...over time you will get the pitch right and they will get use to your manner.

Isabel: I tried not shouting their names for attention, instead just saying that there are two students who are not paying attention... I feel it works better in the mornings; afternoons are a challenge.

Researcher: Hi Isabel. Shouting is not the way to go so it's right that you not doing so...remember using their names makes it personal and direct, especially with children who take a while to settle. Keep record of what type of activity keep them focused in the afternoon and what doesn't...them adjust the offering in the afternoons and see what happens".

Stacey: "I tried not using their names, but there are two children who are constantly not paying attention, so I had to start using their names".

Researcher: And how did they respond? There is nothing wrong with focusing them by naming them...as long as they are not being humiliated...have you tried figuring out why they get distracted?

Stacey: I did not humiliate them at all; they were calm and listened for a small while.

Researcher: I didn't think you would Stacey. Remember they have short attention spans...and are easily distracted ... Just keep your rhythm and over a few weeks they will get the picture. I will share some more strategies by the weekend and over time, you will have a basket of ideas.

Lynette: Principle 1 I don't normally use but I tried 2 & 3. It worked better today than yesterday but I must mention that it might have worked better because two difficult learners were absent.

Researcher: Okay Lynette. Why are the two learners getting under your skin...what are they doing? And have you looked into their home

Lynette: The problem is I have about 5 challenging learners (disruptive and aggressive behaviour). Two of them being absent means I only need to have three pairs of eyes /ears etc to watch. Yes, have looked into home situation of four and understand why they're acting out; mostly language issues leading to not understanding instructions, getting impatient/ frustrated/ bored etc. 99% of my learners have isiXhosa as their home language and some were taught in isiXhosa before they came to our school. One learner is living with his divorced and family dealing with maintenance issues involving social workers and court etc. whilst another learner is not subjected to any form of discipline at home.

Researcher: Okay. I suggest you ask the principal if the ILST of the school can discuss this. An Institutional Learner Support Team (ILST) should be set up at the school to look into learners who show aggressive behavior and learner barriers. Keep record of what triggers them and get the ILST to give you advice on the issue. If there is a learner support teacher servicing the school, ask her for some advice. Also, if you suggest keeping them during an interval, how do they respond? Have you tried it or even taking some of their privileges away? Do you have a celebration wall chart? Do keep record of excellent progress or great behavior or good behavior? And then get them charted on a ladder (an example). With regard to the language issue, have you picked this up with a subject adviser for languages?

Lynette: The ILST team is in place and the ILST leader and principal aware of discipline problems. I am working with learning support educator.

Researcher: Okay. Then don't stress too much. If the Learning Support teacher is working with them, focus on the rest who are not giving you issues. They deserve your energy whilst the others get a different menu of services/support.

Lynette: Thanks. I am considering a reward chart; will start one and see if it works.

Researcher: Cool. See what happens and even consider work incentives, e.g. learner of the week, or week class monitor, etc.

Isabel: Evening. I've tried 2 and 3, yes it works but there are usually two learners for which these must be repeated.

Researcher: Good evening Isabel. If you only repeating yourself with two or three learners, then you are doing great! Keep going ... they will eventually fall into line.

After the first technique was shared, the interaction over the two weeks before the second technique was placed on WhatsApp, picked up. It is evident from the interaction record, that the respondents started embracing the platform as a tool to engage and were starting to reach out for advice and share their thinking. Interactions over the two-week period are shown below. Interactions in Week 1 totaled 36 pings, with a rise of 17% in Week 2, totaling 42 pings.

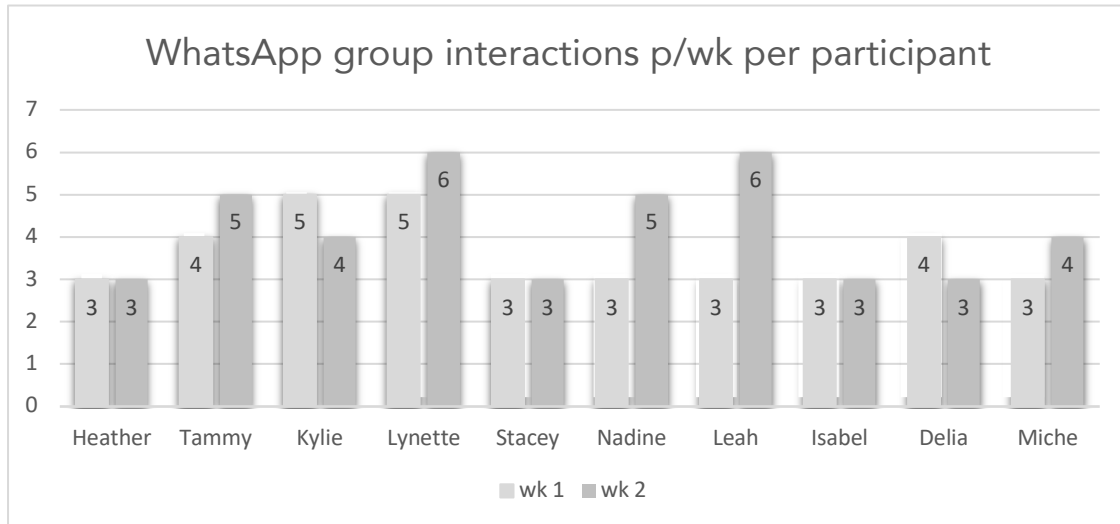


Figure 5.5: Group interactions per week

In Week 3, the next Technique was communicated to the novice teachers. Given Technique 37 was fairly simple to apply, Technique 38 was also communicated to allow for sufficient application during the next two-week cycle. The techniques, explained, are:

Technique 37: WHAT TO DO – Sometimes non-compliance is not due to defiance, but because students do not understand or know how to follow a direction. To remedy this, teachers must give clear and useful directions. It is not helpful to tell students, “Don’t get distracted” or “Pay attention.” Has anyone ever taught them what the specific expectations are (eyes on the speaker, pencil down, for example)? Directions are most useful if they are specific, give students something to do (“Put your feet under the desk”), are sequential (“John, put your feet under your desk, put your pencil down, and put your eyes on me”), and observable (to assess it).

Technique 38: STRONG VOICE* – Some teachers have “it” – the ability to walk into a classroom and be in command. They know how to earn respect and credibility and exude confidence and poise. While this may seem impossible to replicate, there are five basic principles that STRONG VOICE teachers do when interacting with students to establish control that you can use.

1	Economy of Language – It’s stronger to use fewer words. When teachers become chatty this signals nervousness. Focus on what is important and make just one point.
2	Do Not Talk Over – When you need students to listen, your words are the most important and should not compete for attention. Wait until there is no talking or rustling. One technique is to cut off your instructions and wait completely still, “Sixth grade, I need your...” Nothing continues until you have everyone’s attention.

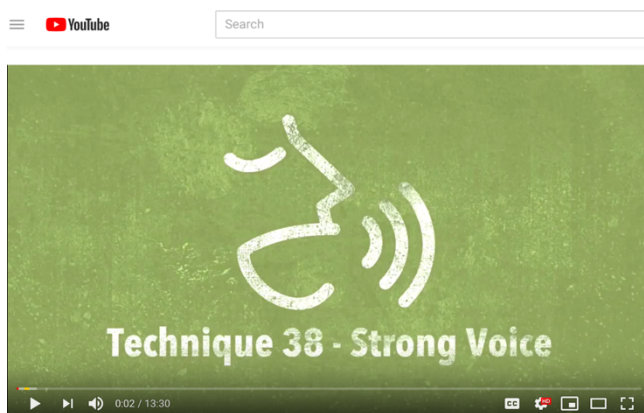
3	Do Not Engage – Do not let students distract you from the topic at hand. For example, if you say, “Please take your foot off Margaret’s chair.” David might say, “But she’s pushing me!” Don’t fall into the trap of engaging David by saying, “Margaret, is that true?” or “I’m not concerned with what Margaret was doing.” Instead say, “I asked you to take your foot off Margaret’s chair.”
4	Square Up/Stand Still – When giving directions, stop moving and doing other tasks. To convey the seriousness of your directions, turn with two feet and two shoulders to face the object of your directions directly.
5	Quiet Power – When you feel you are losing control; your instincts may be to speak louder and faster. Fight those instincts and get slower and quieter to maintain control. Exude calm and drop your voice so students strain to listen.

As provided previously, as a further reference, video clips were shared (obtained from YouTube) with the novice teachers so that they had an audio-visual reference for the implementation of technique.



Teach Like a Champion Technique 37 - What to Do (Part 1)

Figure 5.6: Technique 37 video link



Teach Like a Champion Technique 38 - Strong Voice

Figure 5.7: Technique 38 video link

Researcher: Good evening colleagues. Hope you all had a good weekend. Please receive the next two tips- for-the-week. They build on last week's three principles. I hope you all have a good week trying the new ones out. I will set up to meet you on Friday at 1pm later in the week. Find attached."

Some of the immediate responses to the alert are shown below:

Stacey: This looks like smart techniques

Researcher: "Hi Stacey. Do try them and do feedback

Kylie: Good evening. I will surely give these a try

Researcher: Hi Kylie. Do try them and do feedback

Heather: will do

Nadine: This is interesting

Delia: Ditto

Leah: I will be testing these approaches

By the Friday of this particular week, feedback and engagement pings had picked up. Examples of the nature of the interactions are shown below:

Lynette: Colleagues, I Have to keep reminding myself not to shout; other than that, it's working most of the time"

Researcher: That's good to hear Lynette. Is it making your classroom management easier and does it help you get through more work?"

Lynette: They still can't work independently so getting through everything especially one on one assessment still a challenge"

Researcher: "Okay. You must share with us on Friday. Keen to listen to the challenges...remember it takes time for both you and the learners to get used to the culture"

Delia: same for me - also need to remind myself to speak calmly rather than raising my voice. Have also found the other techniques to work well. Have one class that is a challenge – I am focusing on taking privileges away (intervals or keeping them after school) - sometimes a challenge as we have certain duties which interferes with the punishment

Researcher: Nice feedback. Remember to not see it as punishment but removal of privileges...they must understand that your expectation is not to be compromised and that they deserve your best and when they don't deliver, they lose privileges

Kylie: Good day. 2, 3 and 4 seems to go down well👍. This morning I waited on them to calm down even before I started with our bible story. Thank you for the useful tips. I think I speak on behalf of everyone when I say "Thank you"

Researcher: Glad its settling into a rhythm Kylie. Keep at it. We will keep adding to your toolbox. I look forward to seeing you Friday for an interactive session.

Kylie: And I think I can relate to what Delia is saying. Late today I did find myself raising my voice but then I immediately lowered my voice and gave an instruction to form a line outside.

Researcher: Okay Kylie. Do you guys compare /chat during the week around your challenges with the techniques? Or are you all simply trying them out per individual?

Kylie: "Yes, I've spoken to a few members of the group to compare notes."

Stacey: "Hello. Sorry, it's been a hectic week so far especially writing FAT's. But technique 37 definitely works"

Researcher: "Okay Stacey. Outside of FATs, is the teaching environment improving?"

Stacey: "Yes, definitely, I can also relate to Kylie and the others. I'm trying not to raise my voice. Although it's not always working"

Researcher: "Stacey, you're human...nothing wrong that you cannot always keep your composure"

Nadine: I've noticed the most miraculous in our little courtyard during my administrative periods: I don't hear the intersen ladies uhm "singing" anymore. I was on leave last week and could therefore only really try out the new strategies this week. My learners respond really well to direct commands such as pencils down, all eyes on me. To be honest, it's been one of the most wonderful weeks back in terms of discipline. I struggled with using least invasive method of intervention initially as my learners are all little tattlers. They often point out if someone is doing something wrong. I decided to use this to my advantage and made an apology of action for the most common types of misbehaviour. The chart lists both the transgression and the correcting behaviour. The two columns are called: how do we hurt break people's feelings and how do we fix people's feelings. When someone misbehaves, i.e. calling someone a name, the disciplinary intervention is already listed (in this case writing 3 nice things about the person) and I only refer them to the chart. This results in me not going on and on and on about how wrong it is to call someone a name for example. The whole calm, composure thing is influenced by the way I see them responding to my instruction to just look at me and listen while I am talking. I think the fact that most of them has slightly changed for the better makes me feel more hopeful for the future.

Kylie: Wow Nadine, I also have the children in my class calling each other names or saying nasty things about each other. Would u mind if I use your idea/strategy on them?

Researcher: Nadine and Kaylie, this is fantastic ...the sharing of ideas through classroom visits is fertile ground on which to build peer sharing

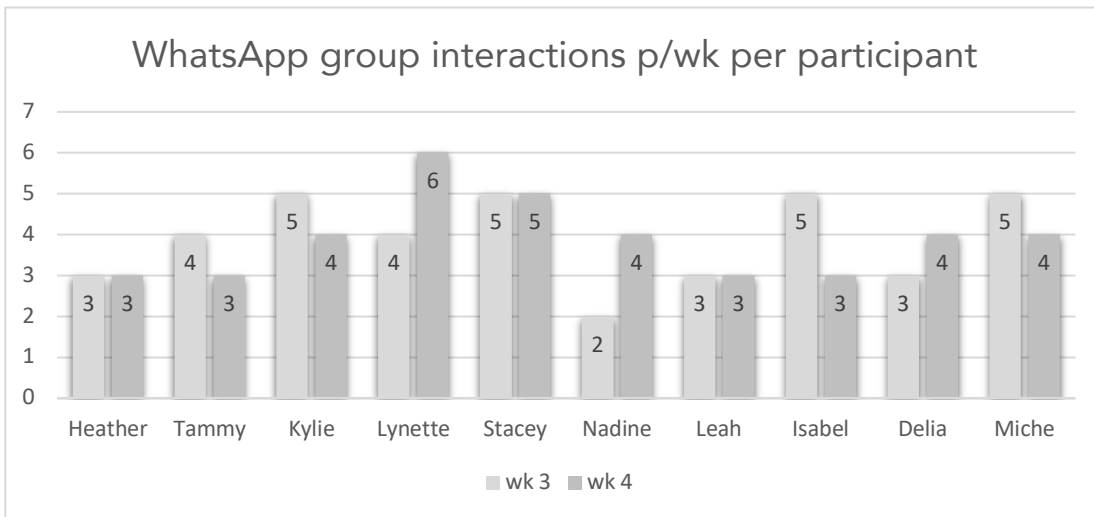


Figure 5.8: Group interactions p/wk per participant

Interactions in Week 3 totaled 39 pings and was maintained at 39 pings in Week 4. Both rates were slightly below the ping rate in Week 2.

At the start of week 5, the following techniques were posted to the group chat:

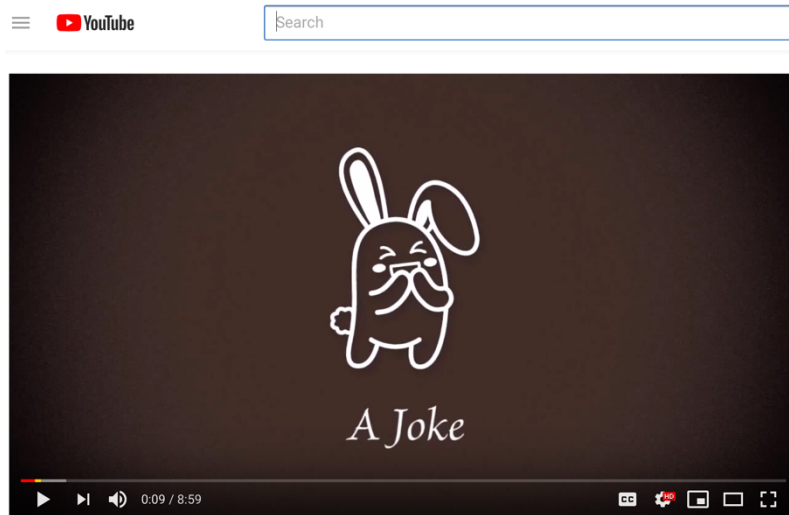
Technique 39: DO IT AGAIN* – When students fail to successfully complete a task, often the best consequence is asking them to DO IT AGAIN, this time correctly. This is particularly useful for transitions between activities. This technique is effective because it gives students immediate and logical feedback, sets a standard of excellence, ends with showing the students what success looks like, does not give the teacher administrative work, and holds the whole class accountable. Plus, you can use this technique repeatedly.

Technique 40: SWEAT THE DETAILS – In the famous “broken windows” theory, if we erase the graffiti, fix broken windows, etc. then people will perceive their environment as orderly and safe and will work to preserve that. Even the smallest of details can signal the expectations for behaviour. In the classroom, if we create order, students will receive the message that disruptions are not permitted here. Clean up clutter, keep desk rows tidy and hats off and you will decrease the likelihood that students see disruption as an option.

Technique 41: THRESHOLD – The most important moment for setting expectations is when students enter your class or begin a lesson. THRESHOLD helps you get it right from the start. By greeting students at the physical threshold of your classroom you can accomplish two things: (1) establish a personal connection and (2) reinforce your classroom expectations. Students shake your hand, look you in the eye, and offer a civil greeting and you respond in a way to build relationships, “Loved your homework, David!” or “Nice game last night, Shayna.” It is important to correct weak handshakes or lack of eye contact in order to maintain high

expectations. Simply send students to the back of the line to enter and greet you again. The tone is warm, but also industrious.

Additionally, the YouTube video links below, were provided to augment the narrative supplied.



Teach Like a Champion Technique 39 - Do It Again

Figure 5.9: Technique 39 video link



Teach Like a Champion Technique #40 - Sweat the Details

Figure 5.10: Technique 40 video link



Teach Like a Champion Technique #41 - Threshold

Figure 5.11: Technique 41 video link

The ping rate for both week 5 and week 6 was 32 pings, inconsistent with the rates in previous weeks. The total ping rate was 64 pings, broken down as listed below:

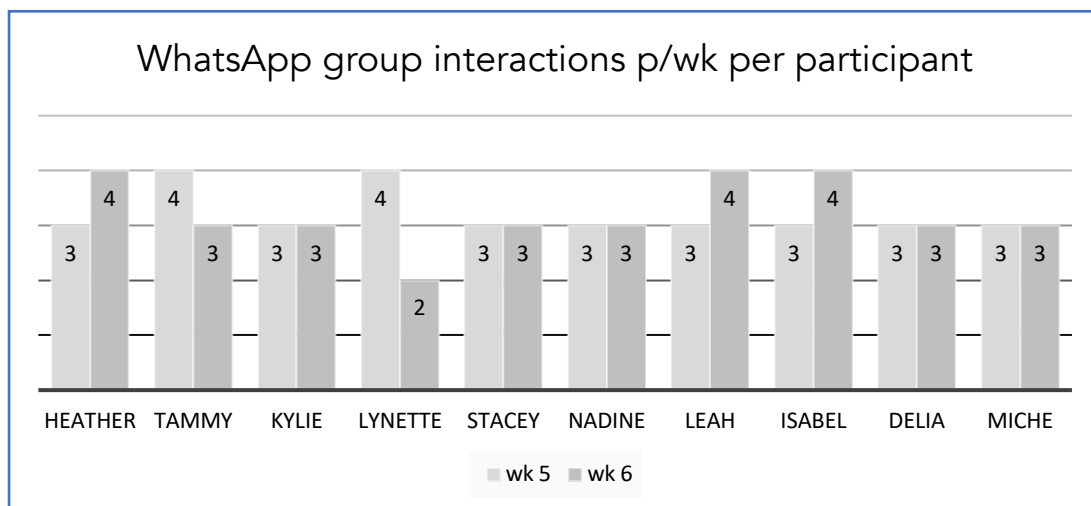


Figure 5.12: Group interactions p/wk per participant

The drop in the ping rate can be directly attributed to the roll-out of the Formal Assessment Tasks (FATs) during week 6 of the school term. The novice teachers felt the pressure of completing the curriculum content required to prepare learners for the FATs. Interaction on the platform became focused on the curriculum coverage aspects, with the classroom management techniques becoming a secondary focus for the engagements.

Some of the comments on the tension in preparing for the FATs are highlighted below:

Kylie: Morning everyone. I can assure it is going well. Just busy... haven't tried the last five yet. Will let you know in due time. Thanx for your input and care.

Heather: I literally don't have time for them to do things over and I cannot rely on them to do it by themselves at home for example. Sometimes I feel like I'm rushing through work just because it has to be done and no time do re-do anything which I think is a bit unfair towards them

Nadine: Our mark schedules are due. Hang in there

Notwithstanding the need to complete FATs, some of the novice teacher still found time to apply the techniques provided and share their experiences:

Leah: The videos are really helpful. They serve as a reminder around implementation of the principles when I forget how to apply them.

Heather: I must tell u that I tried no warnings and I'm getting quite use to it. I think they can sense when I stop whatever I was saying, and it becomes quiet. I will write their names in for detention. This has helped a lot as they think detention is really unpleasant. Lately I have bought small rewards as well to make my lessons more exciting, they feel so good when I have something nice to say and they are proud of even the sticker in front of their heads. Eager to answer and eager to finish their work.

Researcher: Thanks for all the detail Heather. I appreciate you telling it as it happens. It great to hear learners are responding positively.

With the end of the first school term in sight (week 7 of our interactions but week 10 of the term), the novice teachers provided a reflection piece on their experiences interacting with their learners and the techniques provided, including their challenges and successes.

Nadine: I Struggled with this technique 36 the most. I realised that I go off on a tangent when trying to eliminate unacceptable behaviour- especially when the learners bully each other. I made a system where I can calmly refer them to the behaviour and intervention chart without disrupting my lesson.

Isabel: During the past few weeks I have used the 3 principles of technique 36 together with other techniques to improve my classroom management. I realized that learners respond better to indirect forms of correction and that their attention is back quicker on teaching and learning. By this I mean that the learners have responded faster if I gave them commands e.g. pens, books and eyes (as well as the other 2 techniques) to me as those on whose actions I have stood and addressed. The result was that work can be completed faster, because less teaching time was spend-correction (it did, however, improve with time only when learners understand the consequences) To move on after the technique 100% was applied, pupils realized the importance of the assignment. Discipline in the class did not change overnight and is a process. It improves every day with consistency behaviour. Learners also have the why they needed to respect the instruction and that their actions had consequences, e.g., suspension of privileges.

Delia: I tried these methods and feel that these are not really new to me but reminders. I usually use these techniques but during these few weeks i kept reminding myself of them. When i ask for all the eyes it helps. I had to make it more interesting by saying things like: "I want to see your beautiful, cute, shiny eyes". The next week that got boring and I transformed onto an eye magnet! (Tech 36) I tried not calling their names and just saying someone is not sitting properly...this worked when they were calm... when they are hyper it doesn't really help much. It always helps to be firm with kids, but there are still kids who take chances. I walked around in class and yes, it helps a lot.

Lynette: I've used the techniques and it works. The learners give me their full attention and their concentration span has also improved. Great.

Miche: My learners can be very talkative. I've had to alleviate my voice to get their attention. This didn't always work. I usually end up shouting at them towards the end of the day. Since using the techniques, the behaviour of the learners changed. To be firm and not monotonous keeps their attention. They are also more productive when I get their immediate attention, e.g. by asking them to not pick up their pencils, or to put them down, BEFORE I start to explain a new concept. They have a clearer understanding on my expectations and the need to repeat myself has dramatically changed. There is also less disruption of the class since employing the techniques.

Tammy:

Principle 1- Worked pretty well. The learners learned that there is a consequence to big or small situations.

Principle 2- I started using a more firm tone and they responded quite well.

Principle 3- the learners responded quite well. There is still one or two very stubborn learners that just can't/ won't give their attention. I have isolated my learners that don't work well in groups.

Leah:

1. The positive group correction did wonders because at some point I could ask any learner to continue or ask them what we just read about.

Following along "forced" each learner to participate.

Learners were used on a somewhat frequent bases to assist with demonstrations in class. This promoted interest and willingness to want to understand better.

Leaders are constantly addressed by name in order to gain attention and understand why they are wrong.

I try to remain consistent regarding certain punishments for transgressions.

2. My learners knows and understand my classroom rules from the beginning. We work and play together but we both know there's a time and place for everything. I set the example essentially. Up until this point attention and progression are done on "my" terms because for every wrong doing, privileges are removed or lessons lengthened.

3. I always implement all these tips. This always control and the learners know I am confident and in charge. This also doesn't allow anyone to slack because anyone can be asked anything. I do have their attention.it is so important to maintain therefore I too need to concentrate and return the individual attention during presenting.

With the end of the first school term in sight [Week Seven (7) of our interactions but Week Ten (10) of the 1st Term], the novice teachers provided a reflection piece on their experiences interacting with their learners and the techniques provided, including their challenges and successes.

I agreed with the novice teachers that Week 11 of the 1st Term and Week One (1) of the 2nd Term would be interaction free to allow them to concentrate on rounding off the administrative processes attached to the submission of progress reports for each learner in their respective classes. The 1st week of the new term would be required to engage with parents during Parent-teacher meetings at the school.

When we reconnected in the 2nd week of Term Two (Week 8 of our interactions, the focus was on reorientation of the group to remain committed to the interactions on the WhatsApp group. The last four weeks looked to implement techniques 40 and 41. The descriptors for both techniques we re-shared as well as the links to the videos.

The ping rate for weeks 7 to 10 peaked at 38, 42, 37 and 38 respectively, representing a spike when compared to the ping rates in previous weeks leading up to the end of Term One. The total ping rate was 165 pings, broken down as below:

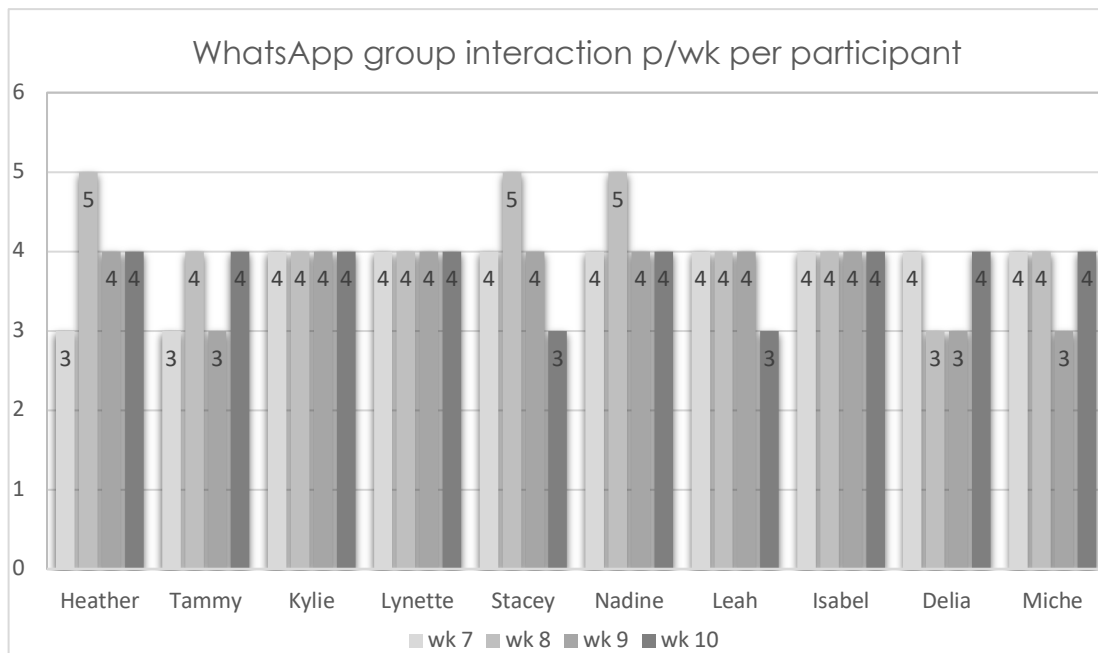


Figure 5.13: Group interactions p/wk per participant

I believe the heightened activity related to the start of the new term, the desire to get stuck into the remaining techniques and gauge whether the learners would still be tuned into the previous techniques. The group was also eager to feedback over the two week period. Given the feedback around Weeks 8/9, it was evident that the novice teacher group had grown in the confidence to manage the classroom environment and their resilience levels were also improving. Some of the interactions are shown below.

Kylie: Refreshed the techniques. Works with most learners. I have a few who constantly challenge my authority. *Do not talk over* is a technique I always use. *Do not engage* works but not without mini tantrums (from learners not me). *Quiet Power* still a challenge for me.

Miche: Just spend the day refreshing the techniques with the learners. I found that this caught their interest and some learners also assisted in managing the class by asking disruptive learners to participate. I also made use of a scoring system wherein each group in class (sometimes boys against girls) will receive a mark for good behaviour and answering questions correctly- I found that this helps them pay attention during lessons and also sets a platform where all learners take responsibility for their behaviour. My aim was and still is to build a trustworthy relationship with all my learners where they are encouraged to excel. I found that putting faith in your learners abilities not only encouraged them but also created a love for that specific subject as they begin to feel that they can now do this. I found that specifically in a Afrikaans oral that this has delivered great results.

Stacey: I too consolidated techniques before moving on. The techniques have a number of principles which has been very helpful with quick results. The techniques help reduce time wasted and allows for more teaching time. Playing with the tone of my voice, I've noticed the learners are more responsive. I found that when I stood still and faced the specific learner whom I corrected, reaction to my instructions were obeyed quicker.

Nadine: These techniques help to direct the learners more clearly in what I expect from them. I added a few things to the mix... e.g. I told them to put their hands on their thighs and that i expected one shoulder to point in my direction (they sit in groups). I figured that when I tell them to orientate their body in my direction, they are more likely to absorb what I am about to say. Now when I start talking in class I don't even have to say "eyes on me, shoulders and hands". They do so naturally. This was an unexpected development as I've had to repeat "quiet please" , "please listen" a million times BEFORE without much success.

Heather: The learners are clear about my expectations of them; dare I say it's now second nature? Very little chaos as before. I feel in control and find I no longer shout or raise my voice. The techniques are simple. Now that I'm consistently applying the techniques, the learners are more responsive and the class atmosphere so much better. They also remind each other of the new "rules".

Tammy: When using these techniques, my learners respond very well. Instead of also concentrating on my learners that don't co-operate I praised the learners that do. And with that the other learners started to concentrate more and also actively seek affirmation.

In Week 10 of our interaction [Week Four (4) of the 2nd Term], arrangements were made for a reflection session to gauge the impact of the e-mentoring approach. To ensure that the reflection meeting would have a minimal impact on the teaching programme or extra mural programme of the institution, I sought permission from the principal for a suitable date. Due to a change in the principalship, i.e. the curator had been relieved of his responsibilities and replaced by a permanent appointment, this proved to be a challenge. I was confronted by feedback from the novice group that the school manager was hostile to such an engagement, questioning why the group were meeting with the most senior official in the district. As the researcher, I also stood as the Head of the District in my professional capacity. Acutely aware of my positionality and the power dynamics as a researcher who was also senior education official, I endeavoured at all times to be transparent, empathetic, understanding and accommodative. I was always consultative throughout and allowed the participants to guide the timing of contact sessions. Any concerns were addressed without delay and the trust relationship established was enhanced through open channels of communication and respect for the confidential nature of the WhatsApp group interactions with the participants. The school management was always made aware of the interactive sessions although the content was not discussed in any specific way. This also placed the novice teachers at ease, knowing the management was aware of the face-to-face contact.

5.2.4 The exit interview

I arranged a meeting with the new principal to explain the reason for my contact with the novice teachers and the ethical clearance and consent received. Despite unpacking the nature of my research, the request was viewed as compromising the position as headmaster since the

person did not understand why novice teachers had direct access to such a senior district official. It was a dynamic the individual never experienced as a teacher and believed would have a destabilizing effect on the desire to set a new management tone in the institution. I reassured the school manager that there was no need to fear this interaction, that it had been happening over nine (9) weeks prior to arrival, and that this was simply the wrap up consultation of the research. The meeting was allowed to proceed. This dynamic, unexpected, fortunately did not derail the concluding week of the study.

Despite the tension at the end, the general feedback of the ten week interaction was extremely positive. The participant group were asked to reflect on the listed questions. They were further asked to rate their responses to questions One and Three on a five-point scale.

1. Do you believe the WhatsApp interaction was a worthwhile tool to address your professional development requirements as novice teachers?
2. Do share your thoughts on why you chose your rating in Q1, based on your interactions on the group.
3. Do you believe the WhatsApp interaction is a tool the WCED should introduce to address your professional development requirements as novice teachers?
4. Do share your thoughts on why you chose your rating in Q3, based on your interactions on the group.

The tabulated responses for Question 1 are shown below:

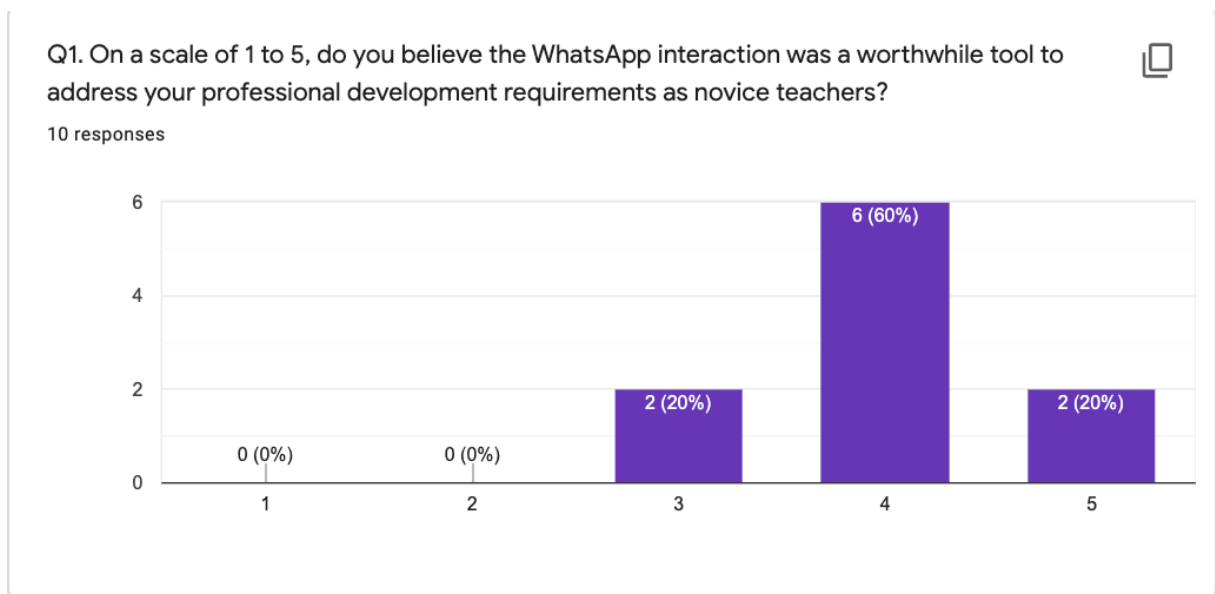


Figure 5.14: Graphic of Q1 responses

Some of the commentary of the 10 novice educators for Question 2 are shown below:

Isabel: With the tool, we could ask for assistance when needed. Where we were coping fine, we could share ideas. It helped with ideas but wasn't always helpful for my grade and situation at the time. It was inspirational at times and helped us to talk about what they were going through at the time.

Nadine: the safety of a closed group was great. I liked the archiving built into WhatsApp, which allows me to go back and look at the audio-visual aids and comments in my own time.

Stacey: The principles discussed really helped me into starting my career. The WhatsApp platform made addressing certain things much easier and quicker as it became a tool that everyone is using. Feedback on developing and growth was available much easier and it was age friendlier.

Miche: the confidentiality of the conversations were uplifting. I didn't fear that my concerns and shortcomings would be on public display. I also loved the sharing of ideas and the way we reached out to each other in school based on our interactions on the group.

Heather:

- 1.the "take-my-hand" experience albeit a virtual one
- 2.the open exchanges and safety of a closed group communication platform,
- 3.it allowed us to share our insecurities and successes
- 4.there was a reduced feeling of isolation and increased levels of collaboration between us at school
5. a bond developed through the virtual chatroom spilled over into the school environment in a positive way, opening real-time interaction without fear or ridicule

The tabulated responses for Question 3 are shown below:

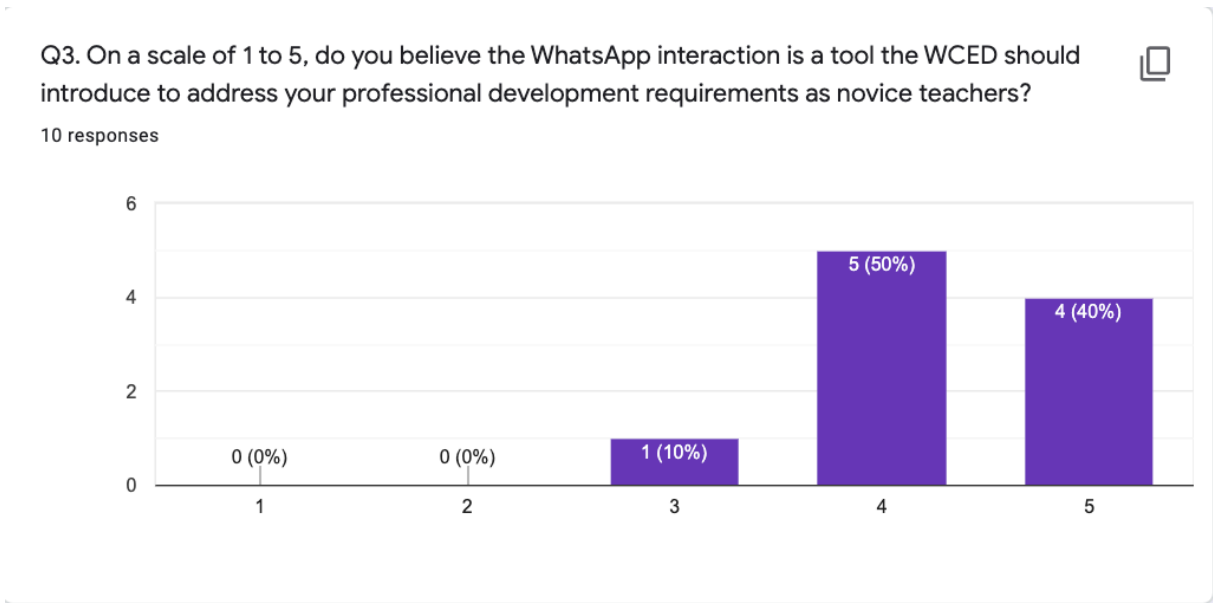


Figure 5.15: Graphic of Q3 responses

A sample of responses for question 4 are shown below:

Isabel: As a novice teacher you are very scared at the same time excited to be a teacher, but you are not always sure how things work in the real class you now have. This group definitely gave me the best ideas and advice on how to get you and your classroom on a good track, while enjoying it. You also meet new people on the group.

Nadine: Definitely, instead of too many workshops

Delia: Social media is being used most of the time especially by teachers. We communicate using groups and to give through certain important information. It is more convenient than mailing and you get responses much faster.

Miche: the face-to-face and the chatroom combination worked very well. a mixed approach can work. I can't stand the novice workshops which is death-by-pptx.

Kylie: WhatsApp had become a tool or platform that everyone is using so whenever a teacher needs to be informed about developing, it is the quickest way to get the information across. So it will certainly be useful to address more than just professional developing.

Stacey: With the tool novice teachers can ask for assistance when needed. If they are coping fine, they can share ideas. Sometimes it is assumed that they know what they're doing which is not always accurate.

During the conversation, all the novice teachers were also highly appreciated of,

- a) A toolkit of actions that could shape the behaviours of the learners positively and gave them a more secure feeling of 'being-in-control' and not overwhelmed and drowning in the classroom,
- b) The more secure feeling around the content given the improved classroom atmosphere,
- c) Learners that embraced the techniques and class monitors could be used to augment the implementation of the techniques,
- d) The ability to reflect honestly and go back to the videos and technique definitions within the chatroom,
- e) The value in having a senior educator 'accompanying' them in a virtual way on their first few months,
- f) The ability to reflect on a personal and group level via the WhatsApp group
- g) Encouraged them to be brave and expose their concerns without the fear of retribution,
- h) Reflect on the techniques shared both within the school environment and also outside of it,
- i) The materials were always available, and
- j) The ability to share their own material and "snapshots-of-success" on the group.

Some of the direct responses, shared on the group afterwards, are shown below:

Delia: I no longer feel overwhelmed. I use to cry at home. I was miserable and questioned why I became a teacher. This group has help me regain my composure. The techniques are so simple yet I wasn't aware of them. It has made a huge difference. I have my smile back.

Isabel: Sir, I can assure it is going well. I feel I can cope. I feel supported. I can ask my colleagues for help without feeling embarrassed. Thanks for the help.

Kylie: Coming to school was extremely stressful, but I'm coping so far with the help of my colleagues and the WhatsApp group. I use to feel like a headless chicken, trapped in a never ending cycle of stress!

Nadine: Sir, Thank you for the guidance this year. I feel empowered. I feel supported. Thank you. I know I've got a long way to go still, but my foundations feel more secure.

Leah: Sir, some of my varsity friends can't believe they are simply thrown-to-the-wolves. I shared this experience with them. They feel left out. I've been asked why this is not available to all novice teachers? I've even shared the techniques with them..

5.3 Conclusion

This chapter represented and captured the findings of the research construct as highlighted in chapter three. It sought to provide a window into the ten (10) weeks of interaction and offer insight into the possibility of mentoring novice teachers, in a rural setting, via an e-platform (WhatsApp). The next chapter will offer a reflection on the process with a view to highlighting the potential for a systemic roll-out.

Chapter 6: ANALYSIS OF FINDINGS AND CONCLUSIONS

6.1 Introduction:

Chapter five focused on unpacking the findings of my study. It detailed the “journey” the novice teachers undertook via the narrative captured through their WhatsApp interaction and graphically highlighted the rate on interactions via the data collected from the semi-structured interviews and engagements on the platform. This chapter is set out to highlight the analysis of my findings, by focusing on the research question and sub-questions. Chapter Six is structured to respond to each of the sub-questions and conclude with a look at the systemic potential of WhatsApp as a tool for e-mentoring novice teachers.

As a prelude to the analysis of my findings and my conclusion, I wish to restate the research question and sub-questions, as a reminder of the platform put in place for the engagement over ten (10) weeks with ten (10) novice teachers.

The stated research question is *“How can a professional development support programme based on an e-platform build the initial teaching competencies of novice teachers in a rural school setting?”*

The research sub – questions are:

- a) What were the experiences of rural based, novice teachers, to receiving support via an e-mentoring programme situated in WhatsApp?
- b) How can support via WhatsApp improve the skills and knowledge levels and initial teaching competence of novice teachers?
- c) How can the findings and recommendations of this study on e-mentoring inform the development of mentoring programmes for novice teachers offered by the Western Cape Education Department situated on an e-platform?

6.2 Analysis of the findings

Schön (1983: 54) stated, in referencing reflection-in-action, *“that if common sense recognizes knowing-in-action, it also recognizes that we sometimes think about what we are doing. He further suggested that we not only think about doing but that we can think about doing something while we doing it”*. He goes on to say that *“if reflection-in-action hinges on intuitive, spontaneous performance yielding the experience of surprise, we may respond by reflecting-in-action”* (Schön 1983: 56). He further stated that reflection-in-action can *“stretch over minutes, days or even weeks and months, depending on the pace and durations of the*

situations in practice". He believed that reflection-in-action is "central to the art through which practitioners at time cope with the divergent situations of practice" (Schön 1983: 62).

6.2.1 Mobile technology adoption: underpinning e-platforms

My first observation, given the interactions with the novice teachers, is that the sustainability of any e-platform would need to be underpinned by hardware architecture and services of telephony companies. As depicted in Figures 3.1 to 3.3 in Chapter 3, the use of mobile technology and the subsequent adoption of messenger service applications, has shown phenomenal growth in Africa and Sub-Saharan Africa. South Africa, has a mobile telephony penetration rate exceeding 80% of the population. A report published by a leading Financial Services firm noted that the rise of the smartphone continues to accelerate and South Africa now finds itself among the leading global adopters with 93% of the general population having ready access to smartphones. They further state that consumers have embraced the 'data exclusive' world and while 63% do use text messages, South African mobile phone users prefer to communicate via instant messaging (82%) and social networks (74%) than through text messaging and voice calls (Abraham, 2019).

Most of the major mobile networks have cover for virtually the entire country in terms of footprint and signal strength. According to MyBroadband.com, the three major mobile operators in South Africa have data coverage at 99.9% and 3G coverage between 96% to 99%. There can therefore be little doubt that access to mobile technology is close to saturation point and that the hardware infrastructure needed to buttress the use of an e-mentoring platform situated within a social media application, could be sustained if actioned correctly.

The actual infrastructure to roll-out an e-mentoring system for novice teachers is in place and it is clear that there is large scale familiarity of instant messaging and social media. The "ping" rate of the participants over the 10 weeks of interaction also demonstrated that the potential exists to engage teachers within a social media space to support and underpin their continuous professional development as well as a willingness, from them, to explore this platform.

Whilst the physical infrastructure is one dynamic, the usage of the technology and interaction on the platform, is another. Given the aforementioned, *the first question this study attempted to answer*, related to how the novice teachers experienced WhatsApp as a CPD platform.

6.2.2 What were the experiences of rural based, novice teachers, to receiving support via an e-mentoring programme situated in WhatsApp?

The experiences of the novice teachers are analysed below. The analysis is “ordered” to capture their initial responses and subsequent journey as they became more familiar with the platform interface.

6.2.2.1 Initial privacy concerns: trepidation to participation

At the time of initiating the fieldwork, participants were briefed on the *modus operandi* and the engagement process that would commence with a link sent via WhatsApp to their respective mobile numbers. Whilst they understood this, their behaviour to the initial contact link showed a distinct distrust of the link, fuelled by not having my mobile number as part of their contact list. The suspicious link, from an unknown number, had many of them ignoring or deleting the link, suspecting malware. At the follow-up engagement, where the lack of responses to the link was discussed, distrust of the “ping” received was confirmed. Two of the participants, succinctly captured the behaviour of the group, Nadine, noted that when she received the link, the nature of the link, with its coded URL, came across as suspicious. She viewed the request as a potential phishing or scamming link and chose to delete it, given her Android smartphone settings alerted her to this risk. Although she was expecting the survey link, she chose to follow the security alert generated by the phone’s operating system. Another participant, Kylie, highlighted that she noticed the “novice group” being established but did not recognize the admin’s cellphone number. Given that he didn’t establish the group, and not knowing the administrator’s number, he exited the group and deleted the group reference.

This initial reaction to the link provided at the start of the engagement, placed emphasis on a requirement to ensure that appropriate security measures are in place to reduce the risk of suspicion or unsolicited feedback. Phishing is defined as the fraudulent attempt to obtain sensitive information such as usernames, passwords and credit card details by disguising oneself as a trustworthy entity in an electronic communication. Closed groups, like the one created in WhatsApp for this study, reduce this risk and ensure a closed and secure environment exist for the interactions between the participants and the e-mentor. The privacy settings within WhatsApp also provide for those with Admin rights to have control over who is allowed to join the group, or not.

This dynamic is one that would need to be addressed through a well-structured orientation programme should WhatsApp be used as a tool to implement an e-mentoring programme. The security risks are real and ever-changing, and to ensure proper buy-in by teachers, these elements must be engaged prior to the use of a social media platform as a mentoring tool.

Once this hurdle was overcome, and the participants were comfortable, engagement levels picked up and conversation pings accelerated.

6.2.2.2 Heightened engagement after initial concerns

In a study focused on a *Framework for Designing Collaborative Learning Environments Using Mobile AR*, Cochrane and Rhodes (2013) noted that learning can be enhanced by using information and communications technologies (ICT), in particular, social networking tools that provide a heterogeneous system accessible through a variety of mobile devices. They further stated that mobile technologies are inherently collaborative given the variety of collaborative presentation and interaction tools available through social media applications.

A study on virtual mentoring in New Zealand (Owen, 2015) showed that the process of sharing in the online community of practice resulted in an integrative process where different types of knowledge intersected, and potentially resulting in the creation of new forms of knowledge. Furthermore, the online environment provided the means to ask for advice, discuss theory and practice, share knowledge and resources, offer practical assistance and reflect, think and process. My study showed similar engagement and trends as the 10 week period progressed and the participants became familiar with the platform and comfortable with the exchanges within the platform.

Once past the initial orientation, participants showed a consistent level of engagement and interaction. The graphics (Figures 5.8, 5.12 and 5.13 in chapter 5) highlight the levels of engagement over the contact weeks. The number of engagements, which prior to the study stood at zero (0) between participants, generated 375 interactions over ten weeks, with participants averaging 37,5 “pings” per participant over the period. It was evident, as the weeks went by and conversation stimuli through the video links were provided, the level of engagement settled into a pattern of ongoing interaction and reflection on the technique inputs, experiences as well as sharing and reflecting on its impact. The take-up rate is evident in the graphics (figures 6.1 to 6.2) and demonstrate that the participants were actively engaged throughout the ten weeks.

The slight drop off of engagement “pings” during weeks 5 and 6 (Figure 6.1) was commented on in Chapter Four and relates directly to the pressure to prepare for the Formal Assessment Tasks (FATS) for the term.

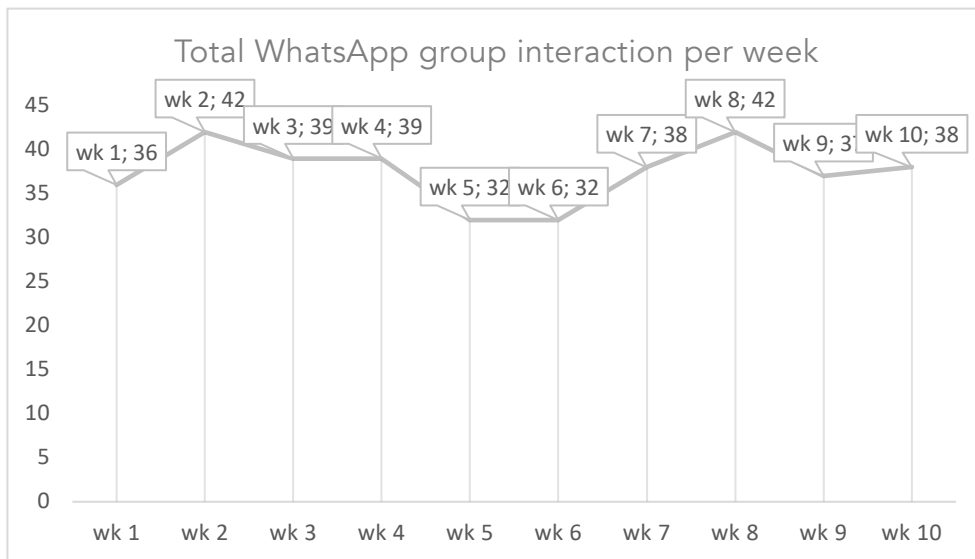


Figure 6.1: No of group interactions per week

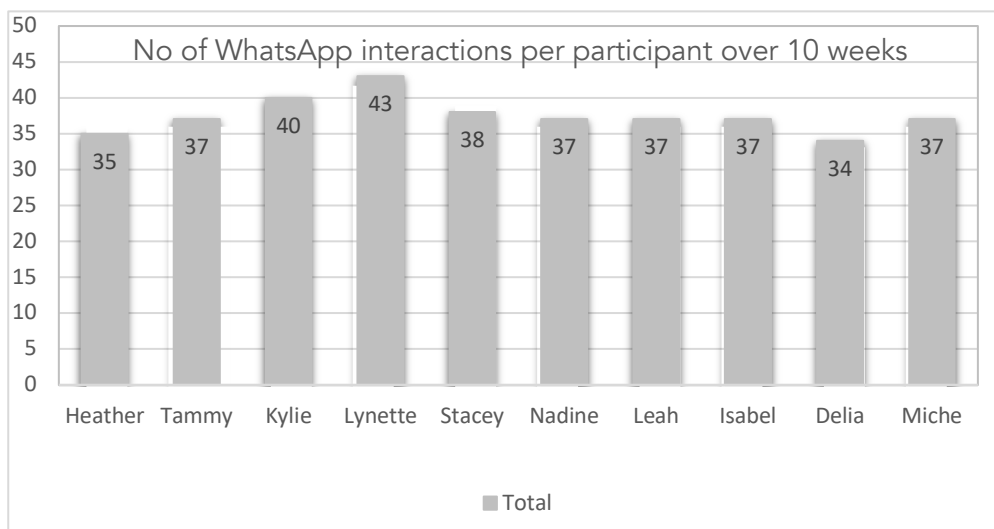


Figure 6.2: No of interactions per participant over 10 weeks

Figure 6.2 captures the engagement “pings” per participant over the ten weeks. It is noteworthy that Heather and Delia were less engaged due to both being newly married and Delia having given birth to a baby. At the other end of this spectrum, Lynette and Kylie enjoyed the use of technology and the opportunities it created to interact. The personal circumstances of teachers, their levels of enthusiasm, and the potential impact on engagement in an e-environment, must be recognised and is commented on in Chapter 6.2.4.

The potential for an e-support platform is underpinned by the data and supported by the feedback sessions held with the participants over the period. Post the contact period, the researcher noted that the ping rate was sustained for a further 4 months, although the platform was shutdown. The post period interaction further augment the position that the potential exists for this type of support to teachers, in particular, those who find themselves in remote or rural settings with South Africa.

6.2.3 How can support via WhatsApp improve the skills and knowledge levels and initial teaching competence of novice teachers?

6.2.3.1 Raising competence through collaboration and reflection

According to Dymoke and Harrison (2008), reflective thinking skills can be supported by different reflective thinking tools such as recording, writing, drawing, photography, learning journal, portfolio, lesson plan, co-teaching and collaborative practitioner enquiry.

Mirzaei et al. (2014) noted that using reflective thinking tools are important way to support teachers' reflective thinking skills. The number of interactions of participants in this study support the notion that reflection skills can be developed via a social media platform. This was supported by their commentary on their journey as it reached its conclusion after ten (10) weeks.

At the exit interview and subsequent completion of the reflection questionnaire, the following detail emerged from the participants. Delia, explained that she no longer feel overwhelmed; that she use to cry at home, was miserable and questioned why she became a teacher. She noted that the group had helped he regain her composure. The techniques were so simple yet she was not aware of them. It had made a huge difference ... *"I have my smile back"*. Isabel noted that she felt she can cope and was supported; that she could ask her colleagues for help without feeling embarrassed and was most thankful for the help. Kyle, related that *"coming to school was extremely stressful, but I'm coping so far with the help of my colleagues and the WhatsApp group support. I use to feel like a headless chicken, trapped in a never ending cycle of stress!"* Nadine, in her reflection on her journey thanked the group for the guidance and she felt empowered and more supported as a consequence, with *"my foundations feeling more secure"*. She further stated that the techniques shared on the platform helped her to direct the learners more clearly in what she expected from them. As her confidence grew, she added a few things to this mix, e.g. *"I told them to put their hands on their thighs and that I expected one shoulder to point in my direction (they sit in groups). I figured that when I tell them to orientate their body in my direction, they are more likely to absorb what I am about to say. Now*

when I start talking in class I don't even have to say 'eyes on me, shoulders and hands'. They do so naturally. This was an unexpected development as I've had to repeat 'quiet please' , 'please listen' a million times before without much success". Leah stated that some of her varsity friends could not believe that they are simply "thrown-to-the-wolves" in their first teaching years. She shared her WhatsApp experiences with them, with her friends questioning why this type of support was not available to all novice teachers. She subsequently shared the techniques with them. In Miche's reflection, she noted: "My learners can be very talkative. I've had to alleviate my voice to get their attention. This didn't always work. I usually end up shouting at them towards the end of the day. Since using the techniques, the behaviour of the learners changed. To be firm and not monotonous keeps their attention. They are also more productive when I get their immediate attention, e.g. by asking them to not pick up their pencils, or to put them down, before I start to explain a new concept. They have a clearer understanding on my expectations and the need to repeat myself has dramatically changed. There is also less disruption of the class since employing the techniques".

As their confidence grew and the level of trust improved, it was noticeable that the engagements became more meaningful and a willingness to "open" themselves to each other, was apparent. The novices enjoyed interacting via the technology and were positive about being part of a collaborative community. All of the novices expressed the belief that mobile technology engagements benefited both themselves and the collective. They found the experience mostly enriching and cited that through the WhatsApp group they could learn a lot by sharing their views with other colleagues on the group. The interactions encouraged collaboration and sharing of knowledge and allowed reflection to take place in a safe space.

In a study conducted in South Africa with rural nurses and the use of social media to improve their competencies and skills, Pimmer et al. (2014) found that mobile phone and social media usage facilitated (1) authentic problem solving; (2) reflective practice; (3) emotional support and belongingness; (4) the realization of unpredictable teaching situations; and (5) life-long learning. In addition, the study found that these tools are suitable to connect learners and learning distributed in marginalized/remote areas.

These findings are not dissimilar to the revelations of the participants in the study I conducted and give credence to the notion that reflection-in-action is "*central to the art through which practitioners at times cope with the divergent situations of practice*" (Schön 1983: 62). Dewey's (1933) narrative of reflection as "*turning a subject over in the mind and giving it serious and consecutive consideration, thereby enabling us to act in a deliberate and intentional fashion... and that reflection involves active, persistent and careful consideration*", held true for this study too.

Krutka et al. (2014), in a study focused on the use of the Twitter App as a reflective tool, found that users who frequently uses the medium to stay in contact, sought advice from the group and identified certain individuals as supportive because their expertise extended into areas where they may have been inexperienced in. The App allowed users to share resources, post discussion points relevant to community topics, and staying in touch with fellow members between events and interactions, fostered collaboration and reflection on practice. Similarly, the study with novice teachers showed comparable outcomes.

6.2.3.2 Reduced professional isolation

Gavish and Friedman (2010) noted that the experiences of novice teachers are considered to be the most difficult time in a teacher's career. Other research talked about and have described as an experience of "sink or swim" (Lawson 1992; Lortie 1975) or a "baptism of fire," or "trial of fire" experiences (Hall 1982; Pataniczek and Isaacson 1981). Terms such as "reality shock" (Veenman, 1984) or "praxis shock" (Kelchtermans & Ballet, 2002) have been used to describe the emotional reactions of new teachers when confronted with the realities and responsibilities of teaching. Green (2014) suggested early career teachers, whether mature or younger beginners, need support and guidance in their first years as teachers. Manuel (2003: 145) stated that this is particularly true in smaller, rural, or remote schools and goes on to point out that in practice, "the distinction between 'novice' and 'accomplished' teacher is virtually irrelevant" as new teachers are expected to perform all the roles and functions of experienced teachers from their first day on the job.

During the ten week engagement with the novice teachers who participated in this study, it is evident that the engagement and interaction on WhatsApp helped to reduce the feeling of professional isolation and loneliness. Isabel noted that It was "*good to interact as a group who could empathise with ones position as a novice teacher and that good information was shared on the group and also help whenever needed, was available*". Leah stated that she enjoyed "*(i) the 'take-my-hand' experience albeit a virtual one, (ii) the open exchanges and safety of a closed group communication platform, which allowed for the sharing of ones insecurities and successes, (iii) that there was a reduced feeling of isolation and increased levels of collaboration between the group at school due to the WhatsApp engagements, and that (iv) a bond, developed through the virtual chatroom, spilled over into the school environment in a positive way, opening real-time interaction without fear or ridicule*".

Prior to the study, the engagement of the novice teachers between themselves, and the rest of the staff at the school, was confined to staff meetings arranged by the management of the

school and the agenda driven by the operational requirements of the institution. As is evident from the graphics on interaction rates shown earlier, the interaction, once activated via social media, lifted significantly from “zero” and was consistently sustained over the ten week period. At the end of the period, and following the formal closure of the research study, the novice teachers kept the group going for a further four months, with interaction tapering off towards the end of the fourth month given my insistence (as the researcher) the channel must be closed down. The novices found it difficult to simply shut-down the channel given the usefulness of the engagements. As a consequence, they established a new channel involving themselves, with an administrator that was school based.

6.2.3.3 Enhanced reflection opportunities through social media

The use of social media has surged globally as highlighted in my literature review. Social media has been defined in different ways. For the purposes of this study, I highlight the definition advanced by Bryer and Zavatarro (2011: 327), that social media are technologies that facilitate social interaction, make possible collaboration, and enable deliberation across stakeholders. Diffley, et al. (2011: 48) stated that the two main reasons humans use social media are to communicate and to maintain relationships. As users create relationships through interaction, they create communities where members share a sense of belonging, have a specific culture, a specific set of norms (‘netiquette’), affective ties that bind them together and a sense of shared history” (Cărtărescu, 2010: 82).

The novice teachers, who participated in this study, underscored the reasons for the nuances ascribed to the usefulness of social media in stimulating conversation, as highlighted above. A number of the participants commented on this dynamic. Miche noted that *“the confidentiality of the conversations were uplifting. I didn't fear that my concerns and shortcomings would be on public display. I also loved the sharing of ideas and the way we reached out to each other in school based on our interactions on the group”*. In her reflection, Nadine stated that *“the safety of a closed group was great. I liked the archiving built into WhatsApp, which allows me to go back and look at the audio-visual aids and comments in my own time too. I could also consolidate my understanding by going back to the videos through replays”*. This view was shared by all the participants, and was especially so when they did not have the time to share their thinking immediately.

6.2.3.4 Improved knowledge levels and initial competencies

The nature of the interactions, coupled with the video links shared and the feedback received during the semi-structured interviews, confirm the potential of the use of social media as a tool to raised knowledge levels and initial competencies of novice teachers. In the exit interview, referenced in Chapter Four, the confidence levels of the novices and their improved practice was evidenced by their feedback commentary. Delia stated that *“the WhatsApp platform made addressing things easier and quicker as it became a tool that allowed for immediate feedback and development. We all use WhatsApp, and this made ‘talking’ easier too”*. Isabel noted that the WhatsApp group allowed *“us to ask for assistance when needed. Where we were coping fine, we could share ideas”*. She further noted that *“as a novice teacher, you are very scared at the same time excited to be a teacher, but you are not always sure how things work in the real class you now have. This group definitely gave me the best ideas and advice on how to get me and my class on a good track, while enjoying it.”*. Stacey stated *“that the principles discussed really helped me into starting my career. The WhatsApp platform made addressing certain things much easier and quicker as it became a tool that all of us embraced. Feedback was immediately available and it was age-friendlier”*. Miche noted that *“the confidentiality of the conversations were uplifting. I didn’t fear that my concerns and shortcomings would be on public display. I also loved the sharing of ideas and the way we reached out to each other in school, based on our interactions on the group. I am definitely more confident in my class”*.

Tur and Marín (2014), in a study focused on the educational experience of students using the social media platform Twitter for debate activities, asked their students to reflect on the experiences. Most noted the following, (1) the activity with Twitter had helped them to better understand the topics in the debate, (2) the online activity had a positive effect on the preparation of the performance for the face-to-face debate activity, and (3) the participants stated that using their mobile device for this learning activity extended their perception of the possibilities of mobile technology in education.

In this study, the Ten (10) participants too championed the view that the WhatsApp group improved their understanding and skills set, promoted peer-to-peer engagement and improved their confidence. Furthermore, they reflected on the “archiving” nature of the platform, allowing them to personally reflect on the ideas shared, even post the initial interaction, finding this a benefit to their professional growth.

6.2.4 How can the findings and recommendations of this study on e-mentoring inform the development of mentoring programmes for novice teachers offered by the Western Cape Education Department situated on an e-platform?

Arends and Phurutse (2009: 32), in a study of beginner teachers in South Africa, found that most participants, including both beginner teachers and school managers, were not aware of any support specifically meant for beginner teachers, neither from education district offices nor from schools or their governing bodies. The study further noted that district officials themselves were not sufficiently equipped to support teachers' development needs.

Luneta (2012) pointed out that in-service teacher education programmes in South Africa predominantly make use of off-site approaches. According to De Clercq and Phiri (2013: 80), however, often off-site teacher development is rarely able to make teachers change paradigm and improve their classroom practice. Furthermore, the inability of the subject advisors to supervise teachers' performance (De Kadt: 2010) added to the improbable ability of most CPD programme to change teachers' practices. There are also claims that many CPD programmes are not geared to '*address the context in which teachers are operating in the classrooms*' (Islam, 2012: 20).

A cursory glance of the WCED's provincial training centre's course offering planned for teachers in 2020 (Wcedctli.co.za, 2019), shows that twenty six (26) courses will be available, excluding management level courses. All of these are residential based and are limited in terms of the number of teachers who may attend. The courses are essentially content based and not specifically directed at addressing the challenges of novice teachers.

Given the aforementioned, it is clear that the education department has no structured, blended model of support for novice teachers, or e-based mentoring system in place.

The current offering still perpetuates the traditional approaches to CPD. Very little evidence exist that e-mentoring is embraced as an option or part of the current offering. There is also no offering for support via social media.

It is in this arena that the current study provides opportunity for reinventing or cementing an alternate approach to CPD, especially focused on meeting up with young teachers where they find themselves operating with technology. The participants, through their peer-to-peer engagement on their devices and the level of interaction on the social media platform, provide evidence that they are more than willing to try a different approach to support the development of their initial teacher competencies. They too, provide distinct direction on the advantages of the engagements, including citing the archive dynamic attached to the social media application, as well as the private, intimate, closed and safe space the application provides.

Furthermore, some of the challenges that the WCED would have to take cognisance of relates to,

- (1) Clearly identifying the nature of support required. In this study, albeit a questionnaire was completed to identify the needs of novice teachers, the semi-structured interviews informed the scope of the support required and narrowed the offering. In the case of this study, the agreed upon mentoring area became classroom management.
- (2) Cyber risks and the potential impact on compromising participants' privacy. Social media platforms encourage the open exchange of information, allowing users a look-into-the-lives of others and vice versa. The space is often also bombarded with advertisements and revenue sweeteners, that may be distracting. The space must be secure and malware risks reduced through appropriate anti-virus software and keeping the platform's software updated.
- (3) A moderator level needs to be in place, to ensure that the conversations remain focused on the topics under discussion and do not meander off into all kinds of directions. Social media is primarily focused on stimulating social engagement, which often sees participants wanting to share more-than-their-professional experiences. There has to be vigilance around the potential risk of workplace gossip filtering into discussions.
- (4) Defining the time for engagement is also an important consideration. The 24-hour, always available, nature of social media applications can result in participants engaging their fellows at all times of the day. This may interfere with the work environment or even infringe on the private space of participants. It will be important to demarcate times-of-engagement before the interactions take place, to help minimise unwanted intrusions, and curb over-enthusiastic engagement by participants who enjoy using technology.
- (5) Training mentors and support staff in the use of the technology. Whilst most users of social media platforms use the tools primarily for social interaction, the software offers huge benefits to organisations when the ability of the platforms are maximised. The WhatsApp platform has evolved over time, and now allow for the sharing of pdf files and MS Word documents, editing of videos before distribution and e-mailing the conversation threads to oneself.

6.3 Limitations of the study

The findings of this study was based on the engagements with ten (10) novice teachers based at a rural primary school in the Western Cape. The interactions took place over a ten week period. All the teachers has one year teaching experience and had access to mobile devices (smartphones). They were active engagers of the WhatsApp platform at the time of the study,

albeit if not as a CPD group on the social media platform. The school at which the novice teachers were based was newly established, and had a mixture of new teachers and seasoned teachers. The experienced teachers were transferred into the school from surrounding schools. A curator principal was in place initially. By the last week of the study, a new principal was appointed which brought tension to the process but did not derail the interactions. This dynamic, i.e. a lack of staff cohesion, added to the feeling of professional isolation amongst the novice teachers and may have contributed to the early and swifter adoption of the WhatsApp group. Should the school have been more settled, this could have influenced the participation rate on the social media platform, albeit that the participants were not unfamiliar with the medium or the use of smartphone technology.

6.4 Summary of main findings

The mentoring journey with the novice teachers through WhatsApp as an e-mentoring tool, highlighted that millennial teachers thrive on social interaction via social media platforms. They were very comfortable to embrace technology and virtual spaces to support their development and appreciated the safe space that WhatsApp created for them to share their experiences, fears, failures and successes, without worrying about being judged or condemned. The study also highlights that an e-mentoring platform is potentially, a viable, alternative platform to the traditional face-to-face CPD sessions offered by the WCED or could, as a tool, form part of a blended model of professional support. The participants also confirmed, that the social media platform allowed for rich multi-media stimulation, real-time conversation, feedback and reflection, and included the value of archiving of experiences shared for later consultation and reflection. The study also showed, that even when formal mentoring on the platform was disengaged, the participants were happy to continue using the platform. They had developed a level of confidence to continue sharing their experiences and seeking advice, highlighting the value of the application for self-enrichment exercises. The platform is also not geographically restricted given the cellular network coverage in South Africa, as the participants' engagement clearly showed.

6.5 Implications/recommendations for policy and practice

The nature of the findings make a case for the review of traditional CPD offerings by policy makers within the education department. Tech savvy novice teachers must be met where they find social stimulation. Tapping into social media to promote CPD is no longer an option to ignore. It has distinct potential to underpin and support CPD and efforts will have to be made to embrace social media formally as an instrument for CPD, whether as a standalone or as part of a blended model. CPD via Social media engagement allows access to deep rural

environments without compromising the quality of CPD material. Distance no longer becomes a factor to deliver access to CPD programmes and the ability to mentor and nurture rural teachers, whether novice or experienced, is only inhibited by the availability of a cell phone or internet signal. Policy makers should look at this platform with the same commitment that they have for traditional support programmes, provided to teachers.

6.6 Significance of the study

The novice teachers who participated in this study have clearly shown, through their engagement rates, reflections and survey commentary, that social media as a tool for e-mentoring and CPD, is a viable option that they would not be averse to experiencing. The study also shows that social media platforms provide for the sharing of rich, diverse multi-media stimuli. This is a distinct advantage over traditional CPD workshops or events, where participants often receive handouts that are one-dimensional and cannot be electronically accessed, stored or archived in the same way as material shared over social media platforms.

6.7 Concluding remarks

It is evident from the feedback provided by the novice teachers in this study, that there is definite potential for the systemic roll-out of social media based CPD platforms within the schooling system, to support the development of the skills and competencies of school-based teachers. Some of their feedback was non-complimentary of traditional pathways, with comments such as *"I can't stand the traditional 'death-by-PowerPoint' workshops"*. Social media applications, together with traditional face-to-face CPD sessions as currently experienced by teachers within the schooling system, can create a blended professional learning space, which will allow remote or rural teachers to engage teachers in urban environments or content from the confines of the geographic location, Furthermore, as emphasised in earlier chapters, the adoption of social media across the globe and in particular, sub-Saharan Africa, is growing in leaps-and-bounds. Together with ever-improving smartphone technology and broadband access, the possibilities to create virtually-based CPD programmes for teachers to access at any given time or place, will provide further impetus for teachers to embrace life-long learning. Given that saturation stats of mobile technology usage in South Africa stands at 80%, it is clear an opportunity also exists to reach teachers who are more experienced, in the same way.

Social media furthermore, creates the opportunity to address the challenges faced by rural teachers, i.e. that of travelling to central locations or urban settings. Mobile technology and broadband coverage across South Africa is expanding continuously, and with a stable internet signal, programmes can be beamed to mobile devices without the need for teachers to travel to a location. They can quite literally, be sitting at home or at work, depending on scheduling. The willing embrace of WhatsApp and the capability of the application to accommodate the streaming of written and audio-visual content, removes any barriers in this regard. The interactive nature of the application, enhances feedback and peer-to-peer engagement, and cuts down on expenditure related to time and travel.

With appropriate and coordinated planning, skilled and tech savvy e-mentors, and the appropriate orientation of participants, social media opens up another avenue to address the demand for our teacher corps to remain current and relevant in an ever-changing world.

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APPENDICES

Appendix A

No	Name						
	Professional Education qualification						
	Which Grade/s are you teaching?						
	Scoring	1	2	3	4	5	6
1	I have established a good rapport with my student as individuals						
2	I use a variety of instructional methods appropriate to the content I teach.						
3	I understand the general procedures (e.g., attendance taking; accessing materials and supplies; filling out forms) used in the school in which I teach.						
4	I identify individual differences among my students and adjust for those differences in my planning and teaching.						
5	I turn to those in the school (management) who can help when I need to resolve problems						
6	I pace my lessons so that students are neither overwhelmed nor bored.						
7	I regularly reflect on my own teaching performance						
8	I use various technologies to help student learn.						
9	I feel that through my efforts, I can enhance the quality of the school and district in which I teach.						
10	I feel comfortable in approaching and working with other teachers, the school administrators, and other staff.						
11	I work productively with support staff and helping students learn.						
12	I teach in such a way that students are engaged and perform as I would like them to.						

13	I differentiate instruction for individual students and maintain high expectations for all students.						
14	I connect the content to prior student learning and to real world contexts.						
15	I feel I am a participant in the profession (through organizations and associations), which enhances my sense-of-self.						
16	I am well organized for carrying out my work efficiently and effectively						
17	I take time to self-assess my teaching						
18	I plan daily, consistently resulting in lessons which turn out the way I intend them to.						
19	I collaborate regularly with my colleagues regarding planning and delivery of instruction.						
20	I use the curriculum guides for my content area(s) that are available in my school.						
21	I can see that teaching is work through which I can express myself.						
22	I assess how my students learn and use that knowledge in planning and teaching.						
23	I use several different approaches to monitor the effectiveness of my teaching.						
24	I regularly discuss student performance with my colleagues						
25	I take responsibility for student learning						
26	I use instructional technologies as a regular part of my teaching.						
27	I have caring relationships with my students.						

28	I feel that through teaching I have developed a sense of who I am						
29	I sequence activities such that students follow along and learn as planned.						
30	I manage classes to make good use of time and resources, to minimize interruptions, and to keep students engaged.						
31	I work in partnership with one or more colleagues to think about my teaching						
32	I establish expectations for students' behavior that they understand and meet						
33	I adjust a lesson in the midst of teaching it if it is appropriate to do so						
34	I have relationships with students that are respectful and friendly						
35	I feel I am part of the district as well as my school.						
36	I feel comfortable in exchanging ideas with the people with whom I work.						
37	I establish class routines that students understand and follow.						
38	I engage in collaborative teaching or co-teaching as needed to support student learning.						
39	I have a good working relationship with my class(es).						
40	I participate in professional development activities to improve my knowledge and skills as a teacher.						
41	I support students as they use technologies in their learning processes						
42	I discipline students in ways that are appropriate and effective.						

Appendix B



Directorate: Research

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Private Bag x9114, Cape Town, 8000

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REFERENCE: 20141204-41125

ENQUIRIES: Dr A T Wyngaard

Mr Juan Benjamin
29 Sandpiper Avenue
Grassy Park
7941

Dear Mr Juan Benjamin

RESEARCH PROPOSAL: E-MENTORING AS A PLATFORM FOR THE DEVELOPMENT OF NOVICE TEACHER COMPETENCIES AT A RURAL SCHOOL IN THE WESTERN CAPE

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from **27 January 2015 till 30 June 2015**
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
10. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:

**The Director: Research Services
Western Cape Education Department
Private Bag X9114
CAPE TOWN
8000**

We wish you success in your research.

Kind regards.

Signed: Dr Audrey T Wyngaard

Directorate: Research

DATE: 05 December 2014

Lower Parliament Street, Cape Town, 8001
tel: +27 21 467 9272 fax: 0865902282
Safe Schools: 0800 45 46 47

Private Bag X9114, Cape Town, 8000
Employment and salary enquiries: 0861 92 33 22
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Cape Peninsula University of Technology
Faculty of Education

Consent form for novice teachers

Research Title: E-mentoring as a platform for the development of novice teacher competencies at a rural school in the Western Cape.

I,..... agree to take part in the above-mentioned study. The researcher has explained the process and steps of the research study to me. I understand that during the baseline questionnaire and the semi-interviews I will be asked to answer several questions regarding my experience as a novice teacher at my school and the kind of assistance I have received. I also understand that I will also be required to participate in a process of posting blog entries on an e-plaform with a view to collaborate with others attached to this study.

I have been informed that participation in this study is voluntary and I can withdraw from the study at any time. I also understand that my involvement will be kept completely private and confidential and will only be used for this study.

Name of Participant:.....

Signature of Participant:

Date:

This is to certify that I have explained the procedures of this study to the above participant.

Researcher:.....

Signature:

Date:

Appendix D

Annexure D

Interview schedule:

Initial interview prior to commencement of the study

The researcher explained the aims of the study and determined whether the identified novice teachers would be willing to participate in the study. All issues related to ethics, study clearance and informed consent were dealt with.

Semi structured questions used at the 1st interview

Q1	How familiar are you with mobile technology?
Q2	How often do you engage in social interaction via your mobile device for professional stimulation?
Q3	How often do you engage in social interaction with your mobile device per day/week?
Q4	How familiar are you with social media apps like WhatsApp?
Q5	Which features do you use most when engaging with social media apps?

Semi-structured questions used in the 2nd interview

Q1	How challenging was it to complete the survey?
Q2	What were the challenges in scoring/rating each question?
Q3	Do you believe the mode represents a fair reflection of your scoring per question?
Q4	How comfortable are you with identifying the area of most need, given the mode indications?
Q5	Do you believe the discussion has helped you understand / inform your own responses?

Semi-structured questions used in the 3rd and 4th interview

Q1	How engaged are you with the videos?
Q2	How did learners react to your usage of the various techniques?
Q3	How are the techniques contributing to the improved management of your classroom?
Q4	What specific challenges do the techniques present? How do you manage this?
Q5	How do the conversation threads on WhatsApp influence your classroom practice?
Q6	To what extent have the videos and conversation threads impacted on your confidence and improved your competence?
Q7	To what extent has the e-platform encouraged collaboration with your peers?