THE ROLE OF TEACHER LEADERS IN DEVELOPING AND LEVERAGING PROFESSIONAL LEARNING COMMUNITIES DURING AND POST THE COVID-19 PANDEMIC

BY

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A dissertation submitted in fulfilment of the requirements for the degree of Master of Education in the discipline of Educational Leadership Management and Policy

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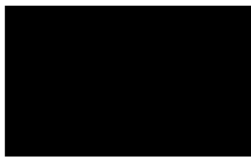
February 2023

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I, Gloria Khululiwe Ngoako declare that:

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This dissertation is submitted with my approval.

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Supervisor: Dr BNCK Mkhize

Date: 9 February 2023

DEDICATION

• I first of all, dedicate this work to the Almighty God, who protected, guided and provided me with a lifetime opportunity, spiritual strength, wisdom, courage and inspiration to complete this study. God gave me the power to triumph all challenges I faced throughout this research journey.

• I also dedicate this dissertation to my African queen, my mother Mrs Duduzile Nzuza (Gog' uNzuza), for being my prayer partner, 'mashonisa wam' and my pillar of strength. Thank you for teaching me the importance of education yet you are uneducated.

• To my older brother, Sipho Godfrey Nzuza , for being the father figure to me; he was, and still is on my side. The love he you has for me, humbles me.

• To my one and only son, Ndumiso Lwazi Mkhize and my only grandson, (for now), Lindokuhle (Okuhle) Kwande Mkhize, who are my reason for living. At times, I left them and stayed at UKZN till late but, still, they were patient with me.

ACKNOWLEDGEMENTS

ABSTRACT

This research is aimed at exploring the role of teacher leaders during and post COVID-19 pandemic in Pinetown District in KwaZulu-Natal Province. The study focuses on teacher leaders' experiences in semi-rural schools during COVID-19 pandemic. This study explores the different experiences of the four teacher leaders from two schools. The objectives of this study are; to explore teacher leaders' role in developing and leveraging professional learning communities, to explore the challenges encountered by teacher leaders in developing and leveraging PLCs and explore appropriate strategies teacher leaders use to mitigate the challenges they encountered when developing and leveraging PLC in their schools during and post COVI-19 pandemic. This is a qualitative study located within the interpretive paradigm. The participants were purposively selected. The study used semi-structured interviews as a method of generating data. Due to COVID-19 regulations, interviews were conducted telephonically to observe COVID-19 protocols that forbid us from meeting face to face. The study employed thematic data analysis to analyse the generated data from the participants. The findings in this study revealed that the participating teacher leaders have a clear understanding of their role as teacher leaders. They however, endured varying experiences of their roles due to COVID-19 pandemic and the different contexts they work in. Some were still able to enact some of their instructional leadership experiences without any hindrances, while other participants experienced major COVID-19 related disturbances when enacting their instructional practices. The strategies used by these teacher leaders to mitigate the impact of COVID-19 pandemic included the following; drawing on teacher collaboration, professional development and workshops with different experts for skills development and traditional teachers to adapt to classes, resources and accomplishments of different version.

It is therefore recommended that teacher leaders should strengthen their efforts in ensuring that teachers work together. The study recommended the following; teacher leaders should attend workshops to equip themselves with technological skills and the latest technological teaching and learning models such as Microsoft Teams and Zoom Meetings; teacher leaders induced collaboration among their educators in order to ensure there was no interruption in the teaching, teacher-learner must be considered by employing the unemployed educators to minimise contact during teaching and learning and learning in their schools.

LIST OF ABBREVIATIONS

PLC(s)   Professional Learning Community(s)

UKZN   University of KwaZulu-Natal

TL   Teacher Leaders

SMT   School Management Team

HoD(s)   Head of Departments

SPTD   Senior Primary Teachers Diploma

MLMMS   Maths Literacy Mathematics Mathematical Sciences

Bed Hons   Honours in Bachelor of Education

EMS   Economics Management Sciences,

ACE   Advanced Certificate in Education

NCTM   National Council of Teachers of Mathematics

HSSREC   The Human and Social sciences Research Ethics Committee

ATP   Annual teaching plan

PPE   Personal Protective Equipment

ICT   Information Communication Technology

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CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

In the first quarter of 2020, South Africa experienced the emergence of COVID-19 pandemic. The pandemic put constrains on schools and the education sector in the country responded by closing schools unprecedentedly. The schools' day-to-day operation was disrupted because of the spread of COVID-19 globally (Cheng, 2020; Mathew & Mahoney, 2020). As the crisis continued, school leaders had to act and act fast to redeem the situation and save the schooling systems. School leaders had to explore short-term and long-term strategies to provide for distance learning and for support to their teams (Bennett, & Bromen, 2019). They had to work hard to develop others' sense of agency, while on the other hand, they had to develop themselves as well (Nguyen, & Hunter, (2018). The teacher agency was also visible in addressing these issues. However, it cannot be said with any sense of confidence that teacher agency was visible in all schools. This study focused on exploring how teacher leaders developed and leveraged professional learning communities during and post the outbreak of COVID-19 pandemic to enhance professional development in their schools and keep the process of teaching and learning running.

This is the first chapter of the study, and it serves as an orientation to understanding the research problem. The chapter begins by providing a background to the problem, followed by a formal declaration of the statement of the problem. Thereafter, the study objectives follow. This is followed by the research questions and the rationale and motivation for the study. Other usual elements of the first chapter such as the significance of the study, the demarcation and limitations of the study follow. Towards the end of the chapter, an outline of the whole study and chapter summary concludes the chapter.

1.2 Background to the problem

When the COVID-19 pandemic came into existence, staff meetings, corridor laughs and talks disappeared amongst teachers. Because of the restrictions brought by the pandemic, teacher leadership roles were embraced by moving beyond traditional implementation techniques (Naidu & Laxman, 2019; Vermeulen et al., 2016; Yuen & Ma, 2008). Some education institutions worldwide embarked on making use of online teaching and learning (Coman, Tîru,

Meses, an-Schmitz, Stanciu, & Bularca, 2020). Many teachers had no past experience in using online teaching (Bozkurt & Sharma, 2020). This posed a challenge to several teachers who were now isolated due to social distancing regulations and a number of other restrictions imposed by the government. School leaders had to think outside the box to keep teachers motivated and to embrace online teaching despite challenges which came with it. For example, many teachers had no past experience in the use of online teaching. As inexperienced as they were, they needed school leaders to provide ongoing professional development, or the space where they could meet and discuss formerly or informally, how to deal with the situation. Teacher leaders are a necessary structure to support educational improvement efforts (Kajee, 2011).

Teacher leaders have the responsibility to initiate things and should be willing to work collaboratively with other teachers (Grant, 2012; Riveros, Newton, & da Costa, 2013); advance professional skills, competence and knowledge of other teachers (Abbott, 2014). Teacher leaders should take chances in initiating new things in order to display their teaching skills and should be creative thinkers in solving problems (Danielson, 2006). The South African Schools Act, No. 84 of 1996, makes provision for teacher leaders to take leadership roles in respect of the subject, learning area or phase if required, collaborate with teachers in organising and conducting extra and co-curricular activities (Republic of South Africa, 1996). Thus, in the unprecedented situations like the one during the pandemic, teacher leaders had mounting leadership responsibilities such as decision- making, mentoring, coordinating and inspiring colleagues to sustain quality in teaching and learning (source). It is therefore, the expectation that even in the crisis brought about by the COVID-19 pandemic, teacher leaders would be at the forefront to restore normality in teaching and learning, take affirmative measures to set instructional culture of the schools, follow COVID-19 regulations and protocols to create conducive environment for teaching and learning, and boost the morale of teachers and learners knowing that schools are deemed as hotspots for the widespread of infectious diseases, which was the main reason for the closure of schools worldwide (Abdulamir & Hafidh, 2020).

1.3 The research problem

Teacher leadership is objectively restricted in South African schools (Chatturgoon, 2009;, Grant, 2006; Rajagopaul, 2007; Singh, 2007). The South African education policy does not simplify what teacher leadership involves, nor does it offer strategies on how teacher leadership

should be presented in schools (de Villiers, 2011). It is contended by Fairman and McKenzie (2012) that environments conducive to teacher leadership and development seem to be absent in some schools. Other studies (Grant, 2006; Grant & Singh, 2009; Grant, 2012; Monametsi, 2015; Naicker & Somdut, 2014) suggest that not much support is provided in developing and advancing teacher leadership in South Africa. Similarly, (Grant, 2006, 2008, 2017; Khumalo, 2008) demonstrate that teacher leadership practice is happening at a very slow pace and is not keeping with the new demands policy demands. Evidence emerging from Grant's review of South African studies of teacher leadership suggests that teachers are severely restricted in terms of the degree to which they could become involved in organisational leadership (Grant, 2017). With these restrictions, the question arises as to how teacher leaders developed and leveraged professional learning communities during and post the outbreak of COVID-19 pandemic to enhance professional development in their schools.

Since the outbreak of COVID-19 pandemic in South Africa in early March 2020, teacher leaders have been challenged by the precise and demanding regulations and protocols promulgated to curb the spread of this virus (Abdulamir & Hafidh, 2020). As a result of the surge of this virus, teacher leaders are confronted with the conundrum of adapting their known and expected leadership practices to lead in these unprecedented changes with the aim of achieving quality teaching. There seems to be limited research on how these accelerated COVID-19 related changes impacted on how the teacher leaders developed and leveraged professional learning communities during and post the outbreak of COVID-19 pandemic to ensure that the quality of teaching and learning is maintained in schools. Little is known about how teacher leaders, for example, take affirmative measures to set instructional culture of the schools, follow COVID-19 regulations and protocols to create conducive environment for teaching and learning and boost the morale of teachers. This pandemic has highlighted the need for school stakeholders to collaboratively work closely together for the betterment of the learners (Myende & Nhlumayo, 2020). This study sought to explore how teacher leaders developed and leveraged professional learning communities during and post the outbreak of COVID-19 pandemic. It is worth documenting and learning from teacher leaders' experiences of how they confronted the conundrum of adapting their known and expected leadership practices to lead in these unprecedented changes for present and future reference.

1.4 Study objectives

The aim of this study was to explore how teacher leaders developed and leveraged professional learning communities during and posts the outbreak of COVID-19 pandemic and seeks to achieve the following objectives:

•   To explore teacher leaders' role in developing and leveraging professional learning communities in their schools during and post the COVID-19 pandemic.

•   To explore the challenges encountered by teacher leaders in developing and leveraging PLCs in their schools during and post the COVID-19 pandemic.

•   To explore appropriate strategies that teacher leaders use to mitigate the challenges they encounter when developing and leveraging PLC in their schools during and post COVI-19 pandemic.

1.5 Research questions

The study was guided by the following research questions:

•   What are the teacher leaders' experiences of their role in developing and leveraging professional learning communities in their schools during and post the COVID-19 pandemic?

•   What challenges did teacher leaders encounter in developing and leveraging PLCs in their schools during and post the COVID-19 pandemic?

•   What appropriate strategies do teacher leaders use to mitigate the challenges they encountered when developing and leveraging PLC in their schools during and post COVID-19 pandemic?

1.6 Rationale and motivation for the study

The rationale for undertaking this study has binary dimensions that influenced it; the personal and academic. In my twenty-eight years teaching experience and experiencing lots of curriculum and other changes in the education sector, COVID-19 was the most drastic change I have experienced ever. When COVID-19 first struck, I was in the dark. I did not know what to expect and what to do. In the midst of long list of the things to do and not to do provided by the government and the Department of basic Education, my main concern was the future and

the success of teaching and learning. Encamped by fear and confusion, I waited for the education sector to pave the way forward. I needed to be empowered with the appropriate technological skills, knowledge and expertise due to the introduction of online teaching and learning at the time when staff meetings, corridor laughs and talks disappeared amongst teachers. This increased my interest to explore how teacher leaders would promote professional learning communities to provide the setting and necessary support for classroom teachers to participate collectively in development activities.

The schools' genuine objective was to create credible teaching and learning practices in line with COVID-19 guidelines for schools to enable teacher preparation programmes. It was not easy to adopt the new preparations programmes. When we return to schools, the school life had radically changed, both socially and professionally. School life was not the same as it was when we left before COVID-19 struck. Social learning opportunities which exist in the workplace are essential to brainstorm ideas, to discuss teaching practices, and to problem-solve situations (Gerken, Beausaer, & Segers, 2016). Teacher leaders in my school seemed to have no platform to help teachers with online teaching because of the social distancing policy which was highly exaggerated by some staff members. Technology implementation has been shifting not only the way communities work but also how education forms our current generations. Digital contexts have become indispensable tools to work, communicate and engage with individuals from professional to personal environments (Schmidt, Tschida, Christina, & Hodge, 2016). While the challenges facing the country's education system are diverse, solutions need to be specific, clear, sustainable, and relevant (Beaunoyer; Dupéré; Guitton, 2020). In tackling some of these barriers, one wonders how the teacher leaders could play a meaningful role to teacher development.

The March 2020 COVID-19 social distancing practices resulted in the abrupt, required transition to online learning and the dependence on instructional technology. However, having access to technology is not enough when educators find themselves with an opposing perception towards technology due to a lack of knowledge or digital skills (Dinc, 2019; Vongkulluksn, 2018). Educational technology in the classroom might leave a negative impact on teacher preparation if there is an unforeseen transition from regular methodologies to the implementation of digital tools due to the lack of support and knowledge (Vongkulluksn, Xie, & Bowman, 2018), which occurred during the pandemic transition.

Over the last two decades, research on teacher leadership in South Africa has gained momentum (Grant, 2019; Makoelle & Makhalemele, 2020; Naicker et al., 2016). It has gained momentum to the point that teacher leadership models have begun to develop. For example, Grant (2008) developed a teacher leadership model that encompasses four zones where teachers should be active participants in order to be called effective teacher leaders. Other researchers have interrogated the enablers and constraints to teacher leadership practices in South African schools (Blose & Khuzwayo, 2020; Naicker et al., 2016; Webber, 2021). The extant research literature reveals several mechanisms of successful teacher development, including the approach of in-service co-learning through a system of professional learning communities (Feldman, 2020). However, this does not occur naturally, and requires school leaders to develop and support it. The literature I have engaged with demonstrated complications in the teacher leaders' understandings of their leadership roles owing to complex nature of various contexts. One can imagine that the complexity and uncertainty brought by COVID-19 pandemic does not make it particularly easy for teacher leaders to perform their duties to the best of their abilities to ensure that effective teaching and learning still takes place in schools. That is where my interest arose from, and I was keen to explore the leadership experiences of teacher leaders during COVID-19 pandemic. Therefore, this study sought to explore how teacher leaders developed and leveraged on professional learning communities during this unprecedented time. There is paucity of research exploring the concept of professional learning communities and the role that can be played by teacher leaders in developing and leveraging on PLCs during and beyond COVID-19 crisis.

1.7 Significance of the study

The intended outcome of this research is to explore how teacher leaders develop and leveraged professional learning communities in their schools during and post the COVID-19 pandemic. Therefore, it is crucial that we document and learn from their experiences. These lessons could be useful to other teacher leaders working in similar contexts where they are expected to effectively lead during a time of crisis such as COVID-19. Through this practice, current and aspiring leaders can focus their efforts on aspects of the job that are likely to be most effective and efficient in improving teaching and learning. Also, the findings generated from this study could act as a blueprint of understanding teacher leadership that might contribute to the improvements in the instructional leadership culture of the school during an unprecedented

time. Departmental officials at circuit and district levels responsible for policy formulation may benefit from this study since it can assist them in designing relevant policies and mechanisms for teacher leaders to improve their leadership skills when confronted by uncertainty.

1.8 Clarification/Definition of key concepts

There are four key concepts that are clarified in this section, and these are leadership; teacher leadership; professional learning community and then COVID-19 pandemic.

1.8.1 Leadership

The concept 'leadership' has been widely researched and is often seen as a contested concept because of the different views that researchers have taken in attempting to give leadership a definition (Bush, 2015; Bush & Glover, 2016). Leadership is about vision and about leaders working with people to shape motivations, actions, and goals to move the organisation in the right direction (Andriani, Kesumawati, & Kristiawan, 2018). As part of working with people to move the organisation forward, leaders need to influence and direct people to achieve the vision set out, particularly when change is being implemented (Bush, 2015; Bush & Glover, 2016). I use leadership to refer to anyone who influences other colleagues in achieving the school goals.

1.8.2 Teacher Leadership

There are formal teacher leaders who apply, are chosen and selected for positions and obtain training for their accountabilities; and casual teacher leaders who arise impulsively from the teacher positions (DeMore Palmer, 2011). Formal leaders as I understand them are those who form the School Management Team (SMT) in a school, namely, the school principal, the deputy principal and departmental heads. Conversely, informal teacher leaders are PL1 teachers who spontaneously play leadership roles within and outside the classrooms and in the community. The attention of this study is on PL1 educators as teacher leaders and how they enact teacher leadership in schools. Jackson, Burns, Bassett and Roberts (2010) indicate that teacher leaders should have leadership, vision, positive effect, work ethic, openness, team work

and risk taking and teacher related skills for them to be recognised as teacher leaders. Again, Jackson et al. (2010) recognised the requirement for teacher leadership to improve capacity to work with other teachers as part of teacher leadership enactment. Teacher leadership in this study refers to teachers or leaders working with colleagues to achieve a vision that enables the advancement of teacher leadership, which enhances student achievement. I also use leadership to mean teachers that use their skills, energy and creativity to enhance teacher leadership within their schools by influencing, directing and motivating their colleagues to participate in leadership tasks that champion teaching and learning. Teacher leaders take chances in initiating new things in order to display their teaching skills and they are also creative thinkers in solving problems (Danielson, 2006; Katzenmeyer & Moller, 2001). Teacher leaders are expected to function in the following areas: in the classroom engaging in teaching and learning, outside the classroom engaging with their colleagues and learners, as part of the whole school development and as a community member (Grant, 2012).

1.8.3 Professional Learning Community

The second concept that is briefly discussed is Professional Learning Community (PLC). This concept is a professional development framework that helps to create a sense of community as well as offering a space where teachers can collaborate and learn together (Banasik & Dean, 2016). Panich (2016) describes PLC as a continuous process where teachers leaders together with teachers work in the cycle of common questioning and learning to achieve better learning outcomes for themselves and for the learners (Bakar & Jamian, 2016). It is used as a platform for planning, strategising to tackle problems and building teaching confidence. Moreover, PLC has proven to have positively impacted teachers' professional development and school improvement (Harris & Jones, 2017)). During this time of the pandemic outbreak, PLC can be is used as the skills developer for teachers who are technologically challenged. DuFour (2006) explains that to accomplish a successful PLC, it is necessary to integrate three elements, namely,: setting up goals for student learning success by identifying their different needs, creating a strong sense of collaborative culture amongst teachers, and finally, teachers should work together to reach results based on continuous up-to-date teaching practices. Therefore, a positive school environment is created by effective PLC where teachers interact and communicate with one another, exposing barriers and aligning digital tools with their instructional goals (Baran, 2016).

1.8.4 COVID-19 Pandemic

According to Du Toit and Anadolu (2020), COVID-19 started in Wuhan City, Hubei Province of China (Original epicentre of COVID-19) and spreading around the world in less than 3 months. COVID-19 pandemic is considered as one of the biggest pandemics that have ever been found among humans. The medical features of COVID-19 are well documented, with most people displaying severe acute respiratory symptoms or mild symptoms or none at all but they ended up being dead because of COVID-19. This occurred mainly to the elderly and chronically ill patients. The spread of COVID-19, among several disruptions to normal life, necessitated more than 160 countries to effect temporary closure of schools. The World Bank (2020) estimates that the closure of schools left 1.6 billion children and youth out of school.

In South Africa, the government was forced to enact a national lockdown, which meant that there was total closure of all schools, including universities. This caused a halt to the learning process. There is concern among some in society that the widespread school closures would lead not only to the loss of learning, but also to the loss of human capital and diminished economic opportunities in the long run (The World Bank Rapid Response, 2020).

1.9 Delimitation/Demarcation of the study

This study was conducted in two of the schools in the Pinetown District. The schools where the study was conducted are located in a densely populated and is known to have a high rate of unemployment. Most of our learners' parents have primary school education or no education at all. The study comprised four teacher leaders. The participants were two teacher leaders, leaders per school, and were drawn from different phases in each school. Two teacher leaders were from primary school and the other two were from the secondary school in the same community. The focus of the study was on their role in developing PLC during and beyond COVID-19 pandemic.

1.10 The overall structure of the study

This study is made up of five chapters and in this section I sign-post the route I have taken in compiling this study report. Chapter one is about the background and the orientation of the role of teacher leaders in developing and leveraging professional learning communities in their

schools during and posts the COVID-19 pandemic. The purpose and rationale for the study is outlined. The significance of the study is explained. Aims and objectives are identified with key questions that the study sought to answer. Chapter Two presents the literature review and theoretical framework of the study on teacher leaders and how they develop and explore barriers and strategies to mitigate barriers through professional learning communities. In this chapter, I unpack critical concepts with regard to the study, scholarly debates on teacher development and learning communities during and beyond COVID-19.

Chapter Three describes the research design of the study, an overview of the empirical study, the approach, research design and methodology, including sampling procedures, the selection of participants, the discussion of ethical issues, limitations and trustworthiness and how rigour was exercised. Chapter Four discusses, and analyses the data produced with regard to the research topic. As part of the analysis and the discussion, I injected both local and international literature as well as theoretical frameworks. Chapter Five presents the results of the analysis of features of the teacher leaders in professional learning communities and how it relates to the findings of the study. In presenting the results, I begin with the summary of study, draw conclusions of the study and make recommendations.

1.11 Chapter Summary

This chapter deals with the introduction and overview, it includes the purpose and the rationale of the study. Critical questions and objectives of the study are listed as well. Key concepts are defined. Lastly, delimitations of the study are highlighted as well as how the outline of the study was organised. Literature review including conceptual frameworks is used in the study. The next chapter presents a review of literature and the theoretical framework of the study.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

The previous chapter provided an orientation and a direction to the study. A layout of all critical parts of the research process was talked about. This chapter discussed international and local literature on the role played by teacher leaders in the development of PLCs during and after COVID-19. Moreover, this chapter deliberated on how to create an online community of teaching learning, the barriers encountered as well as mitigation of the barriers encountered. I begin the discussion of the review of literature by conceptualising teacher leadership. This is followed by other key aspects of this chapter such as conceptualising Professional Learning Communities, the role of teacher leaders in developing Professional Learning Communities, leveraging Professional Learning Communities, barriers to developing and leveraging Professional Learning Communities, strategies to mitigate barriers encountered by teacher leaders when developing and leveraging Professional Learning Communities. Towards the end of the chapter, I discuss the theoretical framework underpinning the study.

2.2 Conceptualising teacher leadership

Leadership includes both assigned leaders, who hold formal leadership positions within an organisation as well as emergent leaders, those who do not hold formal leadership roles but are influential to group or organisational members and of whom group members are accepting of this influence (Northouse, 2019). Teacher leaders must frequently communicate with all stakeholders to solve different matters related to teaching and learning utilising distinctive correspondence channels. The main reason for teacher leaders is to ensure that teaching and learning and is smoothly taking place and is mostly productive. Teacher leaders and school management team are ordinarily considered liable for of their learners academic achievements (Busch, O'Brien & Spangler, 2005). They ensure smooth interaction amongst teachers and they work hand in hand with the school management team.

Schott, van Roekel, and Tummers (2020) refine the concept of teacher leadership in three- fold: (1) teacher antecedents which involves teachers' skills, attributes, knowledge, and personalities. (2) Schools' antecedents which involves the principal and his SMT and how they provide support and growth opportunities. At times it may include peers' role-modelling or organisational policies: (3) Supra-school level antecedents which are a pre-service training, professional learning and governmental certification.

2.3 Conceptualising Professional Learning Communities

Basically, within the school context, PLCs can be viewed as including professionals enabling teachers to continually acquire from one another through shared visioning and organising, and evaluating what to achieve and that there is less in improving learners achievement (Opfer & Pedder, 2011). The notion of the PLC seems to be the most outstanding professional development and adjustment routine in many schools. When there are functional PLCs, these leads to visible improvement in learners' learning (DeWitt, 2016).

2.4 The role of teacher leaders in developing Professional Learning Communities

The role of teacher leaders in developing professional learning communities is discussed under three themes, namely, the teacher leader as a leader and a facilitator; promoting cohesion and connecting, as well as the teacher leader as a skills developer.

2.4.1. The leader and the facilitator

According to Wenner and Campbell (2017: p 134-171), "teacher leaders have the capacity to lead the school via increasing teacher collaboration, spreading best practices, encouraging teacher professional learning, offering assistance with differentiation, and focusing on content-specific issues". This includes both formal and informal roles as teacher leaders inside and outside the classroom. Teacher leaders have dual roles that of being teachers and also being leaders. Supporting this assertion, Shen et al. (2020), describes teacher leaders as advocates of learning beyond their classrooms and can influence and inform improvement in their respective schools. In the context of this study transitioning from face to face teaching and learning to online/digital teaching and learning, their responsibilities will surely increase.

Developing PLCs in semi-rural and mostly under resourced schools would be "a process of influencing others rather than a collection of characteristics or tasks of so-called teacher leaders" (Scott, Roekel, & Tummers, 2020: p. 100352). They have their own subject that they teach whilst managing others. They are entrusted with extra responsibilities that go beyond collaboration implementation, leading teams of people, managing resources, solving problems,

being innovate and developing teachers' confidence and interdependency in their respective sectors (Shaked & Schechter, 2017). According to Chiniara and Bentein (2016), teacher leaders support their colleagues' need for independence by enabling them to take the initiative, learn from mistakes, and handle difficult situations in their own way. The sudden change that COVID-19 pandemic brought must be overcome by facilitating teachers' PLCs and professional developments' support (Reimers & Schleicher, 2020).

2.4.2 Promoting cohesion and connecting

The National Council of Teachers of Mathematics (NCTM) (2016) highlights that "coherence means that connections are made from one year to the next, from one idea to another, from one representation to another. For a school to be successful in needs effective leadership and management. Effective teacher leaders provide good learning opportunities for learners. High quality leadership makes a meaningful school improvement and learning outcomes. Webber and Nickel (2021; p 17-49) suggest "teacher leaders must necessarily seek a sustainable balance in their commitment to the multiple educational priorities that compete for their attention". For this study because of the impact of COVID-19 teacher leaders tried to avoid the top-down traditional ways of professional development. Traditional ways are often occasional and unclear at times to impact teachers. Hence, cohesion and connection is not happening because teachers seem to be followers not owners of developments.

A peer centred way of doing things is implemented easily by teachers. Creating more coherence and connected opportunities through peer centred way is not automatic but it can be developed in any way suitable for them. Teacher leaders are responsible for encouraging and motivating teachers to work together and work hard through information sharing. Teacher leaders connect with PLCs through service, influence, leadership, and informal power aspect (Cansoy & Parlar, 2018).

2.4.3 The teacher leader as a skills developer

In the 21st century, there is a growing realisation that headship is a specialist occupation that requires specific preparation. Effective preparation is one way of reducing the 'shock' and helping leaders to cope. In some instances teacher leaders and teachers have varying degrees

of online-based facilitation and learning experience. Chothia (2020) states that schools need to use the lockdown break to explore digital and online delivery methods for teaching and learning to support programmes at a later stage. In the meantime schools, teachers and learners in South Africa have inadequate or no access to computers, laptops and cell phones, which are necessary for online teaching and learning, especially in the rural and under resourced communities (Bhengu, 2021, Black, Spreen & Vally, 2020). As lockdown eased in some countries, the convenors of informal educational activities faced unexpected costs to ensure the safety of participants and facilitators. O'Toole's (2018) work found that teachers are a type of first responder in a crisis – but unlike other types of first responders, they are not trained to work safely or effectively in this capacity. In this case, O'Toole (2018) also noted that teachers shared in the trauma of the incident – having their own lives and families impacted. The idea of providing the right resources and motivation in a crisis is not unique to COVID-19 cases.

The work of teacher leaders during difficult times can be daunting and exhausting. Teacher leaders' exhaustion escalated where schools resources were not provided to help educate/skill teachers technologically and giving them emotional support to deal with high load of family priorities, apprehension around finances and job security. Fletcher and Nicholas (2016) maintain that it is important for leadership to be flexible in improvising and adjusting throughout the crisis and being prepared for times ahead. However, one cannot say that there will not be blunders and amendments along the way.

2.5 Leveraging Professional Learning Communities

The discussion about leveraging on professional learning communities is presented under four themes, namely, promoting a collaborative learning culture; creating an online teaching and learning platforms for collaborative learning; building school capacity through PLCs and professional evaluation reflective and feedback. These are discussed next.

2.5.1 Promoting a collaborative learning culture

"Studies show that promoting curriculum change via teachers can be best achieved through utilizing teacher development and through stimulating collaborative curriculum design" (Garet, Porter, Desimone, Birman, & Yoon, 2001; Penuel, Fishman, Yamaguchi, & Gallagher, 2007). Teacher collaboration is an important piece of developing both a shared definition and coherence. The benefits of teachers collaboratively generating new knowledge about curriculum and teaching in schools or teams are increasingly recognised (Bhengu & Blose, 2022; Cober, Tan, Slotta, So & Könings, 2015; Cochran-Smith & Lytle, 1993, 2009; Hubers, Poortman, Schildkamp, Pieters & Handelzalts, 2016; Pareja, Roblin, Ormel, McKenney, Voogt & Pieters, 2014).

In context of this study, I regard collaboration as a way that will make transition easy-going. As much as collaboration is a product activity, it is not a forceful activity, it is voluntary (Wilson, 2016). All in all, school leaders and teacher leaders must help all teachers in the school to be part, to be attached and be committed to collaboration. A few different ways to do this including articulating a reasonable, explicit and convincing vision; coordinating with assignments and roles to staff individuals who are actually put resources into them; extending influential positions; and making coordination simple. Occasionally, teachers make excuses for not collaborating. The truth is that they have tight schedules at hand and they may find it easy to work in isolation than working in collaboration which is as productive as collaborating (Wilson, 2016).

2.5.2 Creating online teaching and learning platforms for collaborative learning

Collaborative learning is viewed as a fundamental supporter of active learning and colleagues share information and exchange knowledge; it also promotes learning which improves learners' effectiveness as well as advances learning performance (Chen, Law & Chen, 2017). The implementation of digital proficiency and the change of required technological skills in teacher leadership roles (Van Wart et al., 2017). The Glossary of Education Reform, (2014) speaks of vertical coherence and horizontal coherence. Vertical coherence it is when teachers teach the same programme in a grade, horizontal is when same grade teachers collaborate to align their learning activities, instruction, and assessments. Before the arrival of COVID-19 teacher leaders depended on curriculum resources and standards but during COVID-19 they were forced to rely on online resources to connect vertically and horizontally (Djalante, Lassa,

Setiamarga & Rafliana, 2020). These ways make teachers leaders and PLCs to collaborate to develop a high-quality coherent curriculum (Chalk, 2020).

Zhong (2017) discusses digital teacher leadership roles as modelling and of creating a shared vision. Teacher leaders and PLC members can use technology to teach, assess learners and as the tool for teacher development. Concurrently Leithwood and Jantzi's (2000) highlighted that for a school to be successful during the transformation period purposes and goals must be absorbed by teachers and formal leaders of the school. Nowadays online-based PLCs importance is more of a professional work to teach, assess and record keeping, and these considerations are done online. When learners and teachers obtain the appropriate assistance for digital online learning, the results are mostly outstanding.

2.5.3 Building school capacity through Professional Learning Communities

'We are all in the same boat' is a phrase that is used when people work hand in hand. Commitment to professional roles, colleagues' growth, coaching, and mentoring are a collective responsibility. In order for the PLCs to be effective in schools, school leadership must be part of the shared responsibilities for school and staff development. Using digital information must become a top priority in schools. School leadership through their commitment to schools' development must support teacher technology skills training together with teacher leaders. Around the world, teacher leaders have thrived to obtain solutions and support learners' learning through different appliances (Netolicky, 2020; Rasmitadila et al., 2020). At times COVID-19 reports can be demoralising to teacher leaders and their PLCs but working synchronously with school leadership gives relief. For a school to smoothly usher in online teaching and learning, school leadership must also regard themselves as facilitators of PLCs between members by maintaining effective communication among teachers. This helps the school, teacher leaders and PLCs to discover 'hidden potentials' and expertise of novice teachers. They can be encouraged and develop their abilities and be leaders. These potentials and expertise can be utilised for school capacitation and improvement.

For this study the researcher wants to know about the resources for technological development of PLCs during the pandemic era, because semi-rural schools lacked computer labs and internet coverage. Many schools have no access to official websites, or e-mails to communicate with peers, parents and learners (Alhouti, 2020). Therefore, the COVID-19 pandemic challenged

almost everybody, even the well- groomed and knowledgeable teachers (Darling-Hammond & Hyler, 2020). The plan and substance of training programmes should be contain the required to be transferred to the school situation.

2.5.4 Professional evaluation reflective and feedback

Professional reflective ensures effective implementation of the subject-teaching methods. It is used as the platform to share ideas, concerns, successes, failures, uncertainties and opportunities. This platform will help the attitude of teachers and help them speak freely about our concerns and try to avoid the same mistakes in future. With this platform teachers are able to take risks and attempt online teaching, including several new teaching methods and skills.

Evaluation and reflection during this period of COVID-19 must be continuous and be a process to 'force' teacher leaders to take risks with unfamiliar gadgets and at times unfamiliar platforms to check which one will work best for teaching and learning. We have been under pressure, so we discuss issues that face us, think about solutions, and analyse our practice to improve online teaching quality. 'Each one, teach one' phrase on mentoring novice teachers during time can be productive for PLCs. This collaboration brings a smart transition, traditional teachers teach the novice teachers the traditional ways of teaching whilst novice teachers bring their technology expertise on board. Evaluation and reflection also happened within small groups motivated with friendship or common interest. The mentors might not be well-trained and motivated leaders when it comes to technology but developing PLCs with limited available resources will be a major asset to school leadership and teacher leaders in semi-rural schools.

In the interest of the study this can bring proper development on PLCs and best transition and massive improvement to online teaching and learning. The challenges that are met will be easily tackled. Important, and incurred, school improvement is likely to require school leaders to redefine their role as professional leaders, with a central focus on leadership for teaching and teach (Bush et al., 2010).

2.6 Barriers to developing and leveraging Professional Learning Communities

There are two main barriers to developing and leveraging professional learning communities and these are the lack of adequate support from departmental structures; lack of resources for the successful implementation of online education and resistance to change.

2.6.1 Lack of adequate support from departmental structures; lack of resources for the successful implementation of online education

Successful online collaboration in schools is faced with various types of challenges (Hew & Brush, 2007), especially in developing countries in the Sub-Saharan African (Aksal & Gazi, 2015). The lists of things listed by Sarkar (2012) were to be considered when implementing online collaboration learning includes; leadership issues, equitable distribution of resources and sustainability, and financial issues. Some of these challenges include district officials who have not succeeded in building collegial relationships between school leaders, teacher leaders and teachers. The district officials in many instances have fully committed to the implementation of online programmes prior to its commencement (Powell, & Border, 2019). For example, the introductory sections of the initiatives to improve the facilitation of technology-driven learning by the government have not been fruitful since the urgency of returning back to school after the COVID-19 closure was also rushed in South Africa (Meringue & Garidzirai, (2021). Engagement in the professional development process, which included planning to meet the needs of teachers and evaluating the effectiveness of the professional development, have not occupied in schools. All this is attributed to the lethargy of the district officials (Devlin & Fisher, 2021). It is reported in the literature that many of schools were dissatisfied with the way authorities operated (Devlin & Fisher, 2021). There have been challenges on the ground that had made school leaders to feel that they were not supported by the government. The officials in districts have not consulted widely as well. In short, poor interrelationships between the district officials and school-based stakeholders have exacerbated the problem even further.

One of the government challenges is money. This leads to a lack of materials for digital learning like smartphones, laptops, and so forth. Limitation of funds affected the quality of professional development to be brought to schools by the government. And this can be combined with the lack of expertise in the administration of various school programmes (Baldwin & Wilder, 2014). The other challenges include insufficient planning time, and unpredictable daily schedules for implementation whereas for organisational and leadership interventions to

succeed, initiatives like success of online learning should be implemented with minimum hustles (Aarons, Ehrhart, Farahnak & Hurlburt, 2015; Glisson & Schoenwald, 2005). In the context of South Africa, government policies have not been uniform applied across all the races. This is one of the challenges in schools during COVID-19 period, and the responses to this pandemic have tended to reflect racial disparities that are associated with the countries historical legacy of inequalities (Bhengu, 2021).

2.6.2 Resistance to change

The second barrier is about resistance to change. With COVID-19 pandemic, it has become clearer that education system is open to external dangers (Bozkurt & Sharma, 2020). Ribeiro (2020) rightly noted that this digital transformation of teaching and learning delivery came with several logistical challenges and attitudinal modifications. Resistance to change is embedded in deficiency and unhappiness, and it must be understood to teacher leaders who try to influence the instituted habits of their associates that there is emotional attachment and that teachers feel toward their well-known practices (Donaldson et al., 2008; Evans, 1996; Katzenmeyer & Moller, 2009). This can happen when teachers pull back from disagreements, shutting all the communication avenues, or show any sign of resistance that will lead to ineffective and inoperable PLCs (Donaldson et al., 2008; Evans, 1996). Katzenmeyer and Moller, (2009) cautions that at times, leaders can be wrapped up on advancement can become "swept up in the urgency of a problem and the promise of a solution, turned to neglect and misjudge the effort and distress of the individuals who must adjust". If the approach is systematic, there will be no last minute organising and known what is expected of individuals, I guess resistance can be eliminated during the pandemic era.

Some leaders lack the feeling of agency, and this can bring the schools downfall, because there are people who look up to school leaders and when they face challenges technologically, they can turn on them for support (Muñoz et al., 2016). When teacher leaders support their colleagues and teams in almost everything that has to do with technology develops their agency and sense of efficacy in technology (Holden & Rada, 2011). School leadership, especially the principal can be a stumbling block when it comes to change. If they do not engage and lack of communication to improve school culture and climate (Koonce et al., 2019), planning and organisation between teacher leaders and school leadership exacerbates problems for professional development process.

2.7 Strategies to mitigate barriers encountered by teacher leaders when developing and leveraging Professional Learning Communities

In this section, I discuss four strategies that the literature has identified as critical to mitigating the barriers to developing and leveraging the PLCs. These strategies are, generosity, appreciation and compassion; Setting sensible expectations for colleagues and having tolerance for other people and self; creating positive philosophy to produce professional abilities, capabilities and skills to enhance and broaden other leaders' expertise/cultivating and growing other leaders, and teacher leadership as the web of teacher collaboration.

2.7.1 Generosity, appreciation and compassion

Providing individuals with the opportunity of shared leadership contributes to a positive school culture which can result in increases in the learners' achievement (Leithwood et al., 2008). When principals enact core collaborative leadership practices, they can influence the motivation and beliefs which lead to significant influence on classroom practices of teaching and learning (Leithwood et al., 2008). Gilligan (2011) expresses that what is needed during unprecedented crises is an "ethics of care" because it is inductive, contextual and psychological, rather than deductive. School leaders, teacher leaders, teachers, learners and everyone in the education fraternity was during this time emotionally, spiritually and physically drained and demoralised by the COVID-19. All that was needed was a little bit of generosity towards one another in order to be able to cope with what was happening around us. This study looks deeply at what teacher leaders do in applying generosity of development of PLC during the confusing times. At times they themselves can be confused but they have to be ten times as generous as they can to others in order to move forward (Pe Narroja et. al. 2013). Gilligan (2011) further states that the world complexity is "like a puzzle with humans" when we look at it through the lens of "an ethics of care". As much as teacher leaders are not state paid leaders but because of their experience in leading at times they offer personalised kindness to their groups and are prepared to "go beyond the call of duty" in transmitting their responsibilities. Gilligan (2011) defines such leaders as caring leaders. Care, after all, is not just about the self; it is about active involvement with others (Ciulla, 2009). According to Gabriel (2015), the criteria to judge leaders is a fantasy and myth together with early life experiences. In the case

of COVID-19 in South African, schools teacher leaders were not trained to lead in such a time but they were expected to push as much as they can to keep teaching and learning on board.

COVID-19 pandemic was more of the national disaster, and thus political intervention was expected. Drawing from an ethics of care and compassion, Tomkins (2020) questioned Boris Johnsons' absence from handling the pandemic in the context of the United Kingdom politics. This scholar shares similar views as Ciulla (2009) emphasising that "the role of a leader includes caring for others or taking responsibility for them". At times schools and teacher leaders might not have all the resources and the technological skills to mitigate the barriers encountered but their presence is crucial to accomplish both the PLCs' development and leveraging, and to show that they care (Tomkins, 2020). Lowrie, (2020) perceives such leaders as not careless but rather carefree leaders.

2.7.2 Setting sensible expectations for colleagues and having tolerance for other people and self

Leaders who build a shared vision foster the acceptance of group goals and maintain high-performance expectations, create the conditions for establishing a collaborative community of teachers, learners, and stakeholders (DeWitt, 2016; Leithwood, Harris & Hopkins, 2008). The commitment and collaborative leadership have the ability to positively manipulate victory for all the learners. By incorporating professional development of teachers and leaders in the remedial efforts enhances learning and sustenance of the clients' wellbeing and integrates them with the standard professional development programmes. Teacher leaders reinforce relations between schools and communities to facilitate change and follow-up.

Successful teacher leaders tend to have a long-term view of education, and they have the skills to bring a school community together to establish an agreed upon direction (Fullan & Hargreaves 2016). They are able to articulate a vision for many years, and make sense of this vision so that school communities do not only understand what is happening in the present, but also understand how this vision fits with the future progress of the school. These leaders are people-centred, and are particularly focused on developing the staff (Yin et al. 2019). They are good at leading change and putting in place the organisational aspects that will lead to sustained success. Successful teacher leaders know about good curriculum, pedagogy and assessment, and how to help improve teaching and learning. To these four areas of practice there are at least

three other areas that help to promote success (Zahroh, 2015)). Successful teacher leaders understand that ultimately they are responsible for their own professional development, and they are proactive in their development and are restless for new ideas. They also understand that leadership is about influencing the behaviours of others in a deliberate process that leads to behaviour change. Finally, they understand the multiple contexts in which their school exists, and they are able to respond to, and often influence, these contexts (Kali, 2020; Lavonen, 2017). They become storytellers and sense makers to help others understand the place of a school in a complicated set of contexts.

2.7.3 Creating positive philosophy to produce professional abilities, capabilities and skills to enhance and broaden other leaders' expertise/Cultivating and growing other leaders

The discussion on the notion of creating a positive philosophy to produce professional abilities, capabilities and skills is drawn from the work of (Bobley, & Best, 2021). For a school to be viable, it needs to have an unmistakable, aggregate commitment alongside committed sustenance leadership at the school and district level. At the point when uncertainty, wavering and frailty struck, they would all be able to stand and work as the collective. School leaders and teacher leaders should analyse how school components are important for their COVID-19 reaction approach, they ought to ask: (a) WHAT is expected to help incredible teaching and learning?, (b) WHO is expected to realise a responsive and powerful community school procedure to help student achievement?, and (c) HOW to assemble a solid association utilising the methods and implementations?

District, school leaders and teacher leaders need to be innovative in providing sufficient cost-effective training and resources (Bardesi, Al-Mashaikhi, Basahel, & Yamin, 2021). Face-to-face contacts might be affected but with the help of technology teaching and learning has to continue. Some schools in South Africa ensured the continuity of learning while schools were closed, by utilising numerous remote learning channels, namely television, radio, online platforms, and home correspondences (Dreesen, Akseer, Brossard, Dewan, Giraldo, Kamei, & Ortiz, 2020). Furthermore, the government and the education sector began planning accelerated learning and recovery programmes to recuperate learning lost due to COVID-19 interruptions (Nugroho & Atmojo, 2020). Developing and sustaining PLCs, equipping teachers and learners with technological skills and supplying schools with needed resources will produce good learner outcomes. Teacher and learners must be properly skilled in order to cope with

conditions such as those posed by COVID-19 pandemic. The education sector, the schools' district and relevant stakeholders must collaborate to design new systems and school improvement strategies (Holmén, Adawi & Holmberg, 2021). Thus, this study examines teacher leaders together with their PLCs' mandates during COVID-19.

Bearing in mind that the schools in the study are from semi-rural, densely populated area, high-poverty district with limited resources in Pinetown, efforts that are geared towards helping the schools are desperately needed. Distributing leadership has the potential to builds capacity supports change and can increases the extent of change in leading educational improvement attempts (York-Barr & Duke, 2004). Distributed leadership needs to be connected with practitioners and it places emphasis on interactions rather than actions of school leaders (Harris, 2013). The sharing of leadership responsibilities develops interdependence among members and how one's behaviour impacts the organisation increases their contribution in decision-making (Fullan, 2001). Distributed leadership develops effective leaders who understand their roles and how it impacts the role others (Elmore, 2002). Daily challenges diminish when responsibilities are shared. When different leaders lead various aspects of leadership, school leadership become more productive in completing all of the tasks. Distributed leadership is a sign of transformation in leadership style. It transforms and raises motivation of both formal and informal leaders, as well as members to achieve more than what is expected.

2.7.4 Teacher leadership as the web of teacher collaboration

Teacher leaders are a vital segment of school progress and constitute a crucial factor of distributed leadership (Blose, Mkhize, Ngidi & Myende, 2022). Teacher leaders are influential teachers and influence schools' direction or procedure, have become an increasingly acknowledged device for transformation (Cambum, Rowan, and & Taylor, 2003; Stein, Macaluso & Nevins, 2016). Attempts to expand and improve the role of teacher leaders in steering instructional adjustment have become prevalent (Berg, Carver & Mangin, 2014). In this study, school and teacher leaders, teachers and learners themselves need transformation for a smooth transition to take place from traditional ways of teaching to digital/online teaching and learners. South Africa might not have the best resources that the education system needs for transition to happen swiftly but teacher leaders and teachers' attitude can make a big difference (Bhengu & Blose, 2022). Generating and sharing teacher technological expertise can be used to empower school and teacher leaders and teachers can build beneficial and joint

interactions. Discovering diverse expertise from teacher leaders can be productive in classrooms.

Brewer et al. (2018) found that teacher leaders can support change in others through a feeling of workforce, which can propel deliberate and cooperative practice in education. For teachers to be proficient in the online teaching, extensive and generous technology training was needed. Both school leaders and teacher leaders are supposed to work around the clock for the successful implementation of online teaching and learning in schools (Adarkwah, 2021). The study reported here indicates that through the use of PLC developments and teacher leaders' involvements has a potential to address the challenges brought about by the emergence of COVID-19 pandemic. Nowadays, teacher leaders are known as classroom teachers who allocate their expertise in countless ways (Nappi, 2014). In concurrence, Danielson (2006) states that teacher leaders' influence goes beyond their own classrooms because of the improvement in the quality of teaching and learning demonstrated by teachers, thus they are perceived as a set of skills. Teacher leaders are not confined to specific roles; they perform different roles in the organisations. The leadership network perspective is cultivated in the concept of distributed leadership (Spillane, Halverson & Diamond, 2001), which is influenced by social and contextual factors

2.8 Theoretical framework

The distributive leadership concept was created in late 2000s based on Lave and Wenger's (1991) communities of practice theory and from the speculations of distributive cognisance and action hypothesis to expressly zero in consideration on how initiative was supported as an action and extended across the collective and conditional settings (Spillane, 2001). This leadership relies upon shift in concentration in leaders' practices towards the entire organisational objective (Shava et. al., 2018). Distributive leadership implies appointing the roles and responsibility at numerous sources in the foundation levels and gives direction to esteem expansion (Harris, 2004). Distributive leaders centre primarily around creating collaboration effort with a common perspective and aggregate duty regardless of role or position (Keppell, O'Dwyer, Lyon & Childs, 2010) and build up a culture that advances commitment, adaptability and development based on shared trust (Brown, 2004) to achieve

change in an educational framework while operating with a collegial outlook (Bakshi, 2019). Teacher leaders influence the abilities and proficiencies of the colleagues by connecting distributive leadership method that would empower collaborative efforts and permits every staff to function uncompelled. Distributed leadership embrace and promote individual agency and collaboration rather than waiting for people in positions. Teacher leaders may apply a distributional leadership approach when assisting teachers during a crisis situation (Bolden, 2011; Murphy et al., 2009; Spillane et al., 2015), and during technology implementation. Distributed leadership is regarded as a democratic style of leadership that is relevant for supporting interventions and collaboration of community members (Shepherd-Jones & Salisbury-Glennon, 2018).

Different challenges are faced by teachers in trying to adjust to online teaching and learning and keeping the lines of communication with learners open learning, supporting and development. Nonetheless some teachers have mastered these challenges. Leaders who enable a supportive and open climate among team members contribute to the members' convergence around the team and increase bonding among team members, which are central aspects of group cohesion (Post, 2015). Furthermore a leader who fosters participative decision making increases employee's degree of job autonomy (Cheong et al., 2016, Mertens & Recker, 2020).

According to Fernandez and Shaw (2020), some of the best distributive leadership practices are; associating with individuals as people and building up common trust, distributing leadership all through the association and conveying plainly and frequently with all partners. Even if these prescribed procedures are illustrated here with regards to educational institutions rotating to online classes, confronted with the current untimely COVID-19 pandemic, they may similarly be implemented by practitioners working in different areas confronting their own crisis. Since interfacing with individuals and building up common confidence, just as transitioning to a common leadership concept can require some serious energy, those in leadership roles ought to focus on these duties promptly after tolerating the position instead waiting for another wave of crises to show up. The credits of compelling teacher leaders when confronting versatile difficulties have been recently depicted (Fernandez & Shaw, 2020); they are not restricted to issues of responsibility, reliability, and honesty.

2.9 Chapter summary

The review of literature presented in this chapter provided insights about teacher leadership role during COVID-19 in schools. Leadership theories and styles were discussed, including the challenges associated with their implementation. Strategies to mitigate the barriers encountered by teacher leaders when developing and leveraging PLCs, setting sensible expectations for colleagues and having tolerance for other people and self, and creating positive philosophy to produce professional abilities, capabilities and skills to enhance and broaden other leaders' expertise or cultivating and growing other leaders was also looked at. The chapter also presented distributive leadership theory, as it is the theory that embraces and promotes collaboration effort and permits every staff to function at most their optimum levels. The next chapter focuses on issues of research designs and methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter presented the literature review and the theoretical framework regarding the development of professional learning community turbulences such as during COVID-19 pandemic. This chapter presents the research design and methodology that was employed to generate data about the perspectives of teacher leaders in leveraging and mitigating the challenges encountered in the online teaching and learning as a response to COVID-19 pandemic imperatives. Bertram and Christian (2014) define methodology as the study of different methods through which knowledge is obtained and aims to present the work plan of the entire research. This chapter also discusses research techniques and steps that were applied in the process of generating and analysing data. The trustworthiness of the research and the

ethical considerations it entailed form part of the discussion in this chapter. Finally, a summary of the chapter is provided.

3.2 The research Paradigm

The term paradigm has been dissected differently by various scholars. A paradigm is a pattern comprising a number of assumptions about peoples' thinking or how one views the world. Research paradigm is described by Maree (2015) as a set of conventions and views on important aspects of reality that allows for specific views of the world. Bertram and Christiansen (2014) concur with this view by defining paradigm as framework that represents a particular worldview about what is acceptable to research and how this should be carried out. It is further defined as a conventional belief about what we think about reality and addresses fundamental assumptions taken on faith, such as beliefs about the nature of reality (ontology), the relationship between the knower and the known (epistemology) and assumptions about methodologies (Creswell, 2014; Nieuwenhuis, 2007). Researchers (Bertram & Christiansen, 2014; Cohen, et al., 2011; Creswell, 2014) acknowledge that people have different philosophical orientations about the world and nature of research. In addition, a paradigm provides guidance and directs thinking and action in relation to observed reality.

There is a vast number of paradigms as researchers view the world differently. The widely discussed paradigms are positivism; post positivism; constructivism/interpretivism; transformative/critical paradigm and pragmatic paradigms. This study is framed within the interpretive paradigm. By interviewing teacher leaders, I was able to glean information, which afforded me insights into understanding their daily experiences, both positive and negative, of leading to online teaching and learning in the midst of COVID-19. It also contributed valuable information in answering my research questions.

An interpretive paradigm involves methodological approaches that allow an opportunity for the concerns, voice and practices of the participants to be heard (Cole, 2006). In the context of this study, I ensured that she engaged and interacted with the participants and allowed them to fully express their views and experiences about the studied phenomenon. Punch and Oancea (2014) posit that reality is limited to context and cannot be generalised. The data from this study is not prone to generalisation due to the use of an interpretivist paradigm. Therefore, the

data that was generated will not be generalised into one common reality. Conversely, this paradigm had a great impact on how then I perceived reality and interpretations of the findings. Since this study was embedded on the interpretive paradigm, interpretivists assumed that reality has many truths; it was therefore imperative to listen to individual's social experiences.

3.3 Research approach

In this study a qualitative approach was used to as it satisfied the researchers' curiosity and desire for a better understanding of the phenomenon under the gaze. A qualitative research approach focuses on methods of investigation that consider the participants' culture, history, emotional lives and interactive activities (Berg & Lune, 2014). Qualitative approach does not generalise the findings from the generated data but it is more of a compass to find direction that one follows to uncover phenomena and helps in finding valid answers for research questions (Kumar 2011). Data is naturally generated from the participant's own setting. In this study, it was the role of teacher leaders in developing and leveraging professional learning communities during and post COVID-19 pandemic in schools.

According to Punch and Oancea (2014), a research approach is a fragmented fundamental plan which includes four key ideas; strategy, conceptual framework, the question of who or what to be studied, and lastly a tool design. One of the strategies is that qualitative researchers lean towards generating data in the participant's place. In qualitative research, the researchers do not invite participants in a neutral place and they do not send out instruments to generate data. They go to the participants' natural setting and directly interact with the participants to see their actions and behaviours within their own context (Creswell, 2014). Amongst other factors qualitative researchers are determined to understand social phenomena from the view points of the participants; sometimes they go beyond and generate a theory. Therefore, qualitative research approach was found suitable for this study because it allowed me to know participants personally, to understand their daily challenges and how they face these. This research approach assisted me in making interpretations and best described the participants' actions (Brynard, Hanekom & Brynard, 2014). It provides a unique example of real people in real situations, enabling readers to understand ideas more clearly than by simply presenting them with abstract theories or principles (Cohen et al., 2011).

3.4 Research design

This study adopted a case study as its research design. This study adopted case study design as it has the potential to achieve an in depth understanding of the research phenomenon. A case study design is described as a rigorous exploration approach that allows researchers to search and discover a researched phenomenon of the study (Flick, 2018), meaning a certain level of due diligence must be upheld. Flick (2018) further supports the use of a case study as it brings simplicity to the exploration of the research phenomenon. This view is in line with the aims of this study as it aims at gaining an insight on the exploration of how teacher leaders develop and leverage professional learning communities during and beyond the unprecedented time of COVID-19. The interactions with teacher leaders help to probe deeply and to analyse vehemently the multi-truths constituted in the phenomena (Cohen et al., 2011). In studies that seek the 'what is it like', case studies are appropriate as they allow the researcher to be up close and take advantage of the relations case studies allow to gain thick descriptions. Case study allowed me as a researcher to be exposed to the real context of the research phenomenon and behaviours of teacher leaders and situation that were being researched. A case study provided insightful learning about teacher leaders' leadership practices in semi-rural schools.

3.5 Selection of participants

When selecting my participants, I had to make certain that I have participants who want to participate in my study, and on the other hand, I had to make sure that I had participants that were going to provide a rich diversity of data about developing and leveraging on PLCs in times of crisis. The sampling methods that was apt for my study was purposive and convenient. Purposive sampling allows the researcher to select participants that are relevant for the study (Braun & Clarke, 2013; Rule & John, 2011). Purposive sampling can also be comprehended as subjective, judgemental and selective. All participants of this study were selected based on their geographical accessibility and willingness to participate in the study. Therefore, participants were only made-up of teacher leaders as I was specifically looking for their perspectives. As such, I intentionally selected four teacher leaders of schools located in semi-rural area. The following criteria were used to select participants for this study: (a) they must be teacher leaders during the COVID-19 era; (b) they must be under Pinetown District; (c) they

must be members of PLCs in their respective schools. Convenient sampling involved selecting participants that are accessible and convenient for the researcher. Purposive and convenient sampling methods are often used in small-scale qualitative studies (Cohen et al., 2011). My inquiry was a small-scale study.

3.6 Data generation methods

Bertram and Christiansen (2014) describe data as evidence that researchers gather to find answers to the specific questions they are asking and data is used to gather information for a certain study (Cohen et al., 2011). The researcher in qualitative inquiry is a vital instrument of generating information in a relational atmosphere. The concept of a researcher being a research instrument arises from the fact that the researcher personally goes and interacts with the participants in their regular venue (Cohen, Manion & Morrison, 2018; Henning, van Rensburg & Smit, 2004). The researcher does not control or manipulate the behaviour of the participants; hence, qualitative research is described as naturalistic (Cohen et al., 2018). This study has embraced the same rationale. I used semi-structured interviews to generate data. Semi-structured interviews allow flexibility in that the interviewer can adjust the sequence on how topics are covered (Bernard et al., 2016). Semi-structured interviews were chosen because they allowed follow-up and probing, as well as clarifying some questions (Bertram & Christiansen, 2014). Cook (2008) and Kvale (1996) conclude that the semi-structured interview is neither a structured "questionnaire" with preconceived questions nor an unstructured conversation with no prescribed topics. It is a conversation where the interviewee makes account of his subjective experiences related to the theme set before him by the researcher, and the interviewer attempts to explore these experiences for further details worth analysing.

I had direct interaction individually with selected teacher leaders leading PLCs during the times of the pandemic to get their intimate information about their thoughts and heart-felt feelings about leading in under resourced schools during these trying times. I interviewed four teacher leaders, two from the primary school and two from schools located in the Pinetown District. My interviews took about forty to sixty minutes, sometimes five to ten minutes more because of laughs, giggles, anger and surprises. The interviews were face-to-face interviews and the COVID-19 protocols were highly observed, which was wearing of masks, using sanitisers and social distancing. The beauty of adopting qualitative, semi-structured interviews is that they are flexible and can be adjusted accordingly as the need arises (Cohen et al., 2011).

3.7 Data analysis

Analysing qualitative data is founded on some of key worldviews underpinning the study. In other words, the fact that this study was located within an interpretative research paradigm implies that the analysis technique has to align to this paradigm (Maree, 2015). Qualitative data focuses on smaller number of participants as compared to quantitative data which consist of large samples and huge quantities of data. Data was generated from four teacher leaders from two schools located in semi-rural areas. This means that the volume of data was manageable. This assisted me, as a researcher to analyse the data thoroughly and achieve detailed and rich data. Qualitative data analysis incorporates placing data in a logical sequence in terms of participants' descriptions of situations, observing patterns, themes, categories and regularities (Cohen et al., 2011).

The data for this study were analysed using thematic analysis, which is a process of identifying patterns or themes within qualitative data (Braun & Clarke, 2013). Raw data that was generated was the starting point; thereafter, patterns were detected (Bertram & Christiansen, 2014). All interviews were audio recorded with the participants' permission and were transcribed verbatim. This assisted with descriptive codes for analysis which aimed at identifying, linking and labelling the interviews to determine themes and patterns. The codes were then divided into categories that were evident in the data. The categories that were distinctive were grouped into themes (Creswell, 2009; Saldana, 2009). These themes were used as subheadings to group the findings of this study. This assisted me as the researcher in answering the research questions.

3.8 Trustworthiness

Norman (2020) infers that trustworthiness as "The degree of trust one has in the person telling the tale has much to do with the degree of trust attributed to the telling". Lincoln and Guba (1985) talks about four factors that are entailed in trustworthiness, which are credibility, transferability, dependability and confirmability. It is very essential that every study must be trustworthy by showing true picture of the phenomenon studied and participants' descriptions to enable the reader to decide if the situation is applicable other contexts (Korstjens & Moser,

2018). To ensure trustworthiness of the findings, I utilised these four factors, and are discussed below.

3.8.1 Credibility

Norman et.al (2020) says that the findings must be valid and believable in order for a study to be acceptable. Using different methods and source of information to generate data is one of the techniques of enhancing the study's credibility. However the used methods and sources repeatedly give similar outcomes. This can be done by using different methods and sources repeatedly, and they all give similar outcomes, credibility of the findings can be said to have been realised. This study was enriched by employing of digital recording device for data generation instead of writing down notes. I brought to the participants' notice that there was no wrong or right answer and that the researcher was looking for their point of view. In that way, the participants could speak freely in relation to what they had experienced. I also enhanced credibility by giving the participants a copy of the transcripts to listen to and confirm whether it was precise, if not corrections were made. Credibility of the research must reflect the reality and lived experiences of the participants (Bertram & Christiansen, 2014).

3.8.2 Transferability

The concept of transferability refers to a situation where the findings of a study can be replicable in another similar situation. Bertram and Christiansen (2014) state that data generated in a study can be applicable to the other study with the same context. To enhance transferability, qualitative researchers have to provide thick details about every aspect of the study, including the study context (Cohen, Manion & Morrison, 2018). Looking at the features of the qualitative study, the findings may not be generalised (Creswell, 2014). In qualitative research the findings are not generalisable. Proper data needs to be generated to support the investigated phenomena (Petty, Oliver, Thomson, & Graham, 2012). To enhance transferability in this study, I ensured that I give a detailed description of the research sites and also all the whole process of conducting the research.

3.8.3 Dependability

Dependability in a study is seen by being reliable and the distinctiveness to specific times and place. However, the concept of reliability is frowned at in qualitative research because reliability is a quantitative concept that is used in quantitative research that also comprises big samples for generalisability purposes. Therefore, reliability is qualitative studies is unattainable therefore to achieve dependability in a qualitative study. Credibility cannot exist without the presence of dependability, and credibility is truly the root of quality (Lincoln & Guba, 1985). To ensure dependability I gave a thorough description of how data was generated and analysed. Bertram and Christiansen (2014) substantiate that dependability is when the researcher can justify why there may be variations. In order to address the dependability issue more directly, they argue that the processes within the study should be reported in detail, thereby enabling a future researcher to repeat the work, if not necessarily to gain the same results in the study.

3.8.4 Confirmability

Confirmability is getting close to objective reality as qualitative research can get (Lincoln & Guba, 1985). Confirmability is about getting closer to the objectivity ensuring that the understandings and discoveries are from the participants' lived encounters and do exclude the researcher's biases. To achieve confirmability in this study, I used a number of techniques. The first one was to ensure that there is no imposition of my personal interpretation in the findings or the discussions thereof. The second technique entailed giving the participants the transcripts to check the accuracy of the interview recordings. To moderate these issues, participants must recognise their voices and confirm that the transcripts are a true reflection of the content of our discussion during the interviews (Korstjens & Moser, 2018).

3.9 Ethical Issues

Ethical consideration is the main issue in a research project, more especially because it pertains to human beings (Cohen et al., 2013). Lynch (2012) calls it as the ethics of the profession where professionals are constantly aware of their code of ethics, of what is anticipated from them and what they are relied upon to do to serve the well-being of the students. Participants must be educated that the study is wilfully and voluntary and that they can pull out whenever they fill like without any cause or notice. In short, the participants have to know their rights and

autonomy; and therefore, that they cannot be forced to participate in the study if they do not want to.

This study complies with the procedures of the Department of Basic Education in South Africa. The University of KwaZulu-Natal ethical protocol in conducting research was followed. The University gave consent and the Department of Basic Education in the province of KwaZulu-Natal gave me permission to conduct the study in its schools during the agreed upon period. The Human and Social sciences Research Ethics Committee (HSSREC) of the University of KwaZulu-Natal issued the ethical approval letter, and it is attached in the dissertation. I sought the permission of the four teacher leaders to conduct interviews with them on the research topic. The necessary documentation and permission letters were signed to indicate that the participants voluntarily consented to the interviews. I assured the participants that whatever they told me would be treated with the greatest confidentiality and privacy.

All the participants were furnished with informed and educating consent. During data generation process, every conceivable exertion was made to identify nonverbal signs of inconvenience or any sign of a wish to pull out from the interviews. All the participants were guaranteed and given assurance that their identity would be kept confident. Participants' personal information would not be exposed even under any circumstances. For identification of participants for research, pseudonyms were used instead of their real names. In advance, appointments and interview sessions were scheduled to ensure the timeous completion of the interviews. Participants agreed to their voices being tape-recorded. All transcriptions would be kept in a secure place to ensure strict confidentiality. All transcriptions were read by the participants to ensure that they felt comfortable with the information they imparted and if they wanted anything removed, it was accordingly done as they needed to be at ease with their responses.

3.10 Chapter Summary

This chapter deals with the research design and methodology. It includes the data generation methods or techniques used in the study. Research paradigm, research design and research approach of the study are explained as well. Sampling procedure and after the discussion of the analysis techniques used, measures to ensure trustworthiness are highlighted as well. Lastly, ethical issues are discussed. Chapter Four will present a presentation and analysis of research

findings about the research topic, which is about understanding issues around the role of teacher leaders in the development of professional learning communities during COVID-19 and beyond.

CHAPTER FOUR

FINDINGS AND DISCUSSION OF DATA

4.1 Introduction

The previous chapter outlined the research design and methodology that was employed in the study. This chapter, Chapter Four is the analysis presentation of research findings about the role of teacher leaders in developing and leveraging professional learning communities during and post the COVID-19 outbreak. This chapter analyses and presents the findings of the data generated from teacher leaders through the use of semi-structured interviews. The chapter discusses the following themes that emerged from the research data. These themes are as follows: (a) Participants' understanding of professional learning communities (b) Teacher leaders' role in developing Professional Learning Communities at the school (c) The impact of COVID-19 on the functioning of Professional Learning Communities in schools (d) Promoting cohesion and connecting opportunities for teacher learning in Professional Learning Communities during the pandemic (e) Challenges encountered in developing Professional Learning Communities during this time (f) Deprivatising practice and preventing teacher isolation with the COVID-19 protocols in place (g) The means or strategies tried to leverage Professional Learning Communities during the pandemic (h) Maintaining shared routines, (j)

The way forward for the Professional Learning Communities post the pandemic. The study's main research questions are:

•   What are the teacher leaders' experiences of their role in developing and leveraging professional learning communities in their schools during and post the COVID-19 pandemic?

•   What challenges do teacher leaders encounter in developing and leveraging Professional Learning Communities in their schools during and post the COVID-19 pandemic?

•   What appropriate strategies do teacher leaders use to mitigate the challenges they encountered when developing and leveraging Professional Learning Communities in their schools during and post COVID-19 pandemic?

4.2 Profile of participants

This section provides a short profile of each participant. Pseudonyms were used to ensure participant anonymity, confidentiality, and ethical considerations. The study was conducted in two schools, one primary and one secondary school in the Pinetown District of the province of KwaZulu-Natal, South Africa. The two schools that participated in the study are from a semi-rural area. The data sources were teacher leaders.

Vesi, teacher leader at Kholwa Primary School

Vesi is a male teacher who is a senior teacher in the school. Vesi is a teacher leader at Kholwa Primary School. He has been teaching for thirty-four years. He has a Senior Primary Teachers Diploma (SPTD). Vesi is teaching English in Grade 5 and Grade 6. Like most primary school teachers Vesi has taught Afrikaans, History and Geography and Mathematical Literacy, Mathematics and Mathematical Sciences (MLMMS) in Grade 5. Vesi is a post level one educator, because of the years of experience, he is now a senior teacher and he sits in some of the School Management Team meetings.

Nomkhu, teacher leader at Kholwa Primary School

Nomkhu is a female teacher leader at Kholwa Primary School with thirteen years teaching experience. Nomkhu has a B.Ed. Honours. She is teaching Maths and Economics and Management Sciences (EMS) in Grade seven.

Gosakazi, teacher leader at Thandaza Secondary School

Gosakazi, a female secondary school teacher, and has nine years of teaching experience. Gosakazi is a teacher leader at Thandaza Secondary School. She has B.Ed. Honours degree with Maths and Science specialisation. She is teaching Mathematics in Grade 10. She has high knowledge of technology. She is technologically skilled.

Novangeli, teacher leader at Thandaza Secondary School

Novangeli, is a female secondary school teacher with 23 years teaching experience. Novangeli is a teacher leader at Thandaza Secondary School. She has an Advanced Certificate in Education (ACE), with specialisations in English and Biology. Novangeli is teaching Life Sciences in Grade 9.

4.3 Data generation and discussion

The data generated from the semi-structured interviews is organised into broad themes and subthemes. The themes and their subthemes are thoroughly discussed below.

4.3.1 Teacher leaders' understanding of professional learning communities

The teacher leaders in this study were asked the question: "What do you understand about professional learning communities (PLCs)?" This question assisted the researcher to find out if the participants understood or knew anything about what the PLC is. Evidence from the participants' responses show that they had varying understanding of what PLC is about. In airing their views Nomkhu seem to have an idea of what PLC is about while Vesi, and Gosakazi, did not seem to have a clear understanding, but tried to say something about it. The emphasis from these teacher leaders was that PLC is about collaborative learning where teachers share information, work together to face challenges, paves the way forward and develops each other. This was evident from the following excerpts of their responses:

Nomkhu:

I think the professional learning community is the group of teachers that can work together to create learning communities. PLCs help increase the effectiveness of education being offered to learners. I also think that professional learning community is a method of fostering collaborative learning among colleagues with a particular work environment.

Vesi

To me the term PLC is the same as subject committee; it is just a change of terminology. PLC is more or less like subject committees, where teachers are grouped together, plan teaching strategies and look at challenges in certain the subjects. They share information and assist each other in terms of subject matter which is very much required these days because of different kinds of teaching experiences, some are still novice teachers and some are experienced teachers. Therefore PLCs are for teachers to develop each other, as well as self- development.

Gosakazi:

It is a community; in this context, the community is a school, where there are teachers, learners and other people like cleaners, admin clerks, the school governing body and general workers that make teaching and learning possible. Not everybody in this community is a professional, I think when they talk about professional they are referring to teachers. In that case teachers learn from each other. If there are any developments, strategies and challenges happening in the school, each one teaches one. I think that is the professional learning community.

Novangeli declared that he knew nothing about PLC and complained about the Department of Education (DoE) that introduces new terms now and again till teachers lose track. When probed further, she associated the term to support groups or team teaching. Her response was:

Novangeli:

In all my teaching experience, I have never heard that word. As we are about to retire, new things are coming out. Almost every day in our teaching experience we hear and

learn new things. All these terms make the teaching profession not to be as interesting as before…. I think you are talking about what we call support group or team teaching.

The findings suggest that although the participants showed varying understanding of the concept of PLC, their explanations emphasised some key construct shared by the literature that it is about collaborative professional development where groups of teachers team up and support each other to enhance practice. In line with these findings, literature (Jones, 2010; Whitford & Smith, 2010; Yendol-Hoppey, 2010) corroborates the notions that PLCs are support groups of professionals that participate collectively in determining their own developmental courses, and to set up exercises that will drive their development. At the centre of the concept PLC, lays the reason of improving and developing learners' learning by developing teaching practice. Whitford and Smith (2010) describe PLC as small groups of teachers meeting regularly to engage in a systematic peer critique and support by sharing their own professional practices. Yendol-Hoppey (2010) further describes PLCs as teachers' shared commitment to student learning through collaborative practice and decision-making. PLCs often exist within grade or content level teams, but they do not have to be limited to one school. PLCs may provide benefits at many levels, most notably to develop learners' success (Jones, 2010).

4.3.2 Teacher leaders' role in developing Professional Learning Communities at the school

The participants were asked about their role as teacher leaders in developing PLCs at their schools. The four participants shared similar views about their roles as teacher leaders. The culture of collaboration is seen in the participants' responses that ensures and promotes effective teaching and learning. It is stated by the participants that teachers need to work together by sharing information and learning from each other. Teachers need to work with relevant material like ATPs. In response to what has been asked, they said:

Vesi:

My main role as a teacher leader is curriculum coverage. We develop each other by keeping track of annual teaching plan (ATP); whenever I meet with the PLCs. We check what needs to be done, and I try to assist by collecting as much information and share it in the best way I know how. So, my role is to lead, develop and to guide my team. In

some instances, we tackle challenges that relates to some subject matter. We try to cover what the ATP requires us to cover since ATPs are the order of the day.

Nomkhu:

My role as a teacher leader is to schedule and conduct PLC meetings, give support to teachers in whatever they do. I guide and supervise colleagues. If there is extra needed material, I give my all for that material to be accessible to the PLC.

Gosakazi:

To me, developing each other is a main issue. Being informative and relevant as a teacher leader is a must. Teacher leaders must be able to usher in new skills to PLCs. My role is to blend experienced teachers and novice teachers in order to be able to work together. As much as teaching and learning is about curriculum coverage but transformation is needed. My role is to monitor the process of teaching and learning together with teacher development. Self-confidence to novice teachers' is still a challenge. Since teachers know that we are approaching the new era in teaching, therefore development is essential for every school, teacher, subject and content. This will improve teaching and learning.

Novangeli:

My role is to plan and call my support groups meetings. We look at the curriculum and what it entails. I encourage and motivate my group members to work in one accord. I listen to PLCs' challenges, derive new strategies and implement. The planning, implementing, assessing one another and giving feedback of work done, leads to successful teaching and learning. When planning the processes of teaching and learning, appropriate teaching and learning methods must be in place.

Teacher leaders' responses revealed that they had good understandings of their roles in the PLCs. At times, the understanding of teacher leadership can be mistaken with matters of office and power, whilst it is more of skills development and carrying out duties and obligations by teacher leaders. As teacher leaders continue leading and developing others, leadership skills can be seen. Leadership includes both assigned leaders, who hold formal leadership positions within an organisation as well as emergent leaders, who do not hold formal leadership roles but are influential to the group or organisational members and of whom group members are

accepting of this influence (Northouse, 2019). Sharing the same sentiment, Kotter; (2001) states that teacher leadership can either are formal capacities of administration and management, or informal capacities of teacher leaders and coordinators. Leithwood; (2003) states that teacher leadership is something of nature, continues to develop, and impacts schools and learners. Teacher leaders must be influential people who have the best interest for leaners and his team and be willing to contribute to transformation of education and learners' success. They must not only support the subject committees but must be actively involved in all activities. Their involvement must not be of a superior but of a peer who sees to it that team members have their share of the knowledge. They must ensure that team members benefit from the group. When looking at the role of teacher leaders' scholars (Admiraal et al., 2019; Maloney & Konza, 2011; Printy, 2008) emphasised the role of teacher leader as creators and facilitators of teachers' participation in PLCs. Huijboom et al. (2021) mentioned three steering factors to PLC – leadership, collective autonomy, and facilitation of group dynamic processes.

4.3.3 The impact of COVID-19 on the functioning of the Professional Learning Communities in schools.

Harris and Jones, (2010) and Hord, (2004) stated that when schools are developed as PLCs, their ability to change and improve is to build. Development in schools occurs when there is interaction between individual skills, interpersonal interactions, and organisational structures (Mitchell & Sackney, 2001) that is, the improvement of collective skills. The participants were asked to explain: "how COVID-19 had impacted on the functioning of PLCs in their schools" The participants highlighted that they had a problem with the cooperation of the PLCs functioning, not only on PLC but the school at large is affected as well. In response this is what they said:

Vesi:

> *COVID-19 has just stepped in the whole world and everything has changed. So, everybody and everything in the education sector has to adapt into a new normal. Whatever we are doing now; is totally different from what we used to do. The seating arrangement in classes, school attendance and teaching itself, all have changed. So COVID-19 has affected the PLC a lot and it affects even the curriculum coverage and the subject delivery. We don't meet as often as we used to with the PLC members. Others have bailed out of the group.*

Nomkhu:

As far the PLC is concerned, COVID-19 impacted negatively in it. Now, it is difficult to meet face to face. We hardly meet as PLC and in our meetings members are demoralised by the changes they had to adapt to. Two of our members once tested positive to COVID-19 and were seek and that brought a major blow to other PLC members?

Gosakazi:

School functioning is no more the same for teachers, learners and the PLC. The pace in which the school functions is stressful. PLC members have phobia in being behind closed doors that affects our PLC meetings. Our ways of communication with members seem to have a downfall. Hence teacher development is affected as well as the process of teaching and learning.

Novangeli:

I think the PLC is becoming inefficient due to the complaints by PLC members who say they are overloaded which bring high pressure in their regular class work. They said they are trying to normalise the abnormal ways of working and PLC adds another pressure. Their main goal in school is to teach learners not teachers. Let us first get used to this new way of doing things then we will come back to PLC. That is my main challenge for now.

One can tell that COVID-19 has impacted negatively in these schools because the data states that the four teacher leaders in both schools share the similar sentiment about the functioning of PLCs in their schools. Vesi mentioned that members have bailed out from the PLC. Nomkhu said members are demoralised. Gosakazi stated the downfall in communication amongst PLC members and Novangeli said that their PLC as inefficient because their main focus is on learners not PLC. On several occasions, teachers have positive attitudes towards PLC but they are not willing to collaborate if they feel there is restricted and limited autonomy (Al Shammari et al. 2020). Thornton and Cherrington (2014) highlighted the role of teacher leaders, taking note of that appropriate and upheld leadership was fundamental for moulding trust relations. Upgrading the limit of PLCs further develops teaching and learning, supporting collegial

relations; empowering teachers' thoughts, individual and aggregate proceeding with proficient turn of events, and advancing a school culture of trust (DeMathews, 2014). Because of high death-rate in their district, teachers do not trust each other and this has caused the collapse of the functioning of PLCs in two of the schools.

To probe further, I asked the participants to please comment on how teachers interact and collaborate with each other in PLCs during this time. I then asked them if they are able to foster an atmosphere of trust. In response to my questions, the participants said:

Vesi said:

> *It is very much difficult because as we speak of this pandemic, with the set meeting programmes it is only the certain individuals who will come to the meeting. They are scared of those who have tested positive COVID-19 among them, even if they are fine.*

Nomkhu:

> *Members started fearing for their lives. Being around members that were once infected put their lives at risk therefore they prefer not to come to meetings which cause a major drawback on collaborative teaching and interaction.*

Gosakazi:

> *The level of distrust among teachers has escalated. Collaborative teaching is not happening due to COVID-19. Teachers have opted to work as individuals. They have decided to live with the fact that 'what is mine is mine.' To cascade the information, is not as effective as when PLC meet face to face.*

Novangeli:

> *Not interaction, no collaboration and no trust amongst members. Teachers do not want to come to meetings to address issues. Strengths and weaknesses that members have among are now known as we speak.*

In both schools participants acknowledged that collaboration, interaction and trust have been negatively affected by the pandemic amongst teachers. Through collaboration and interaction problems that arise are easily solved because teachers draw inspiration from one another. Hord

(1997) advocates that when PLCs work together with teachers, problems are solved together. Teachers collaborate to discuss strategies to improve learner achievement. Hord (1997) argues that collective creativity helps teachers to learn and discuss new teaching issues in order to improve learner outcomes. The roles of leadership should arrange conditions for excellent education that will produce improvements in learner outcomes (Leithwood et al., 2019). These conditions will incorporate ideas from other leaders of supporting and training colleagues (Breitkopf, 2018). Teachers are not working as teams anymore; they prefer to work as individuals. Teachers are demotivated and are not committed; if they are not working as a team new ideas and knowledge are not contributed. Scholars such as DuFour (2011) and Sargent and Hannum (2009) agree that effective collaborative learning helps teachers to learn new ideas about teaching and about learners learning.

Three participants reported that their instructional activities as PLC had become ineffective and inefficient due to low level of cooperation among PLC members. Teacher leaders working with teachers on classroom observations and constructive feedback conversations are put on hold for a while because of the pandemic that is reported to be escalating. When participants were asked: Do you continue to monitor the work of PLCs and provide constructive feedback? They responded by saying the following:

Vesi:

> *It is very difficult because it is said that the levels of infections are escalating, and that affects teachers as well. Remember that when people have tested positive, they have to stay home at least 10 days and there is no recovery and monitoring plan in place. When the teacher recovers from the infection and come back to work a lot has been done on curriculum coverage, monitoring and feedback. So, obviously, s/he will be behind in of a terms' work. So, it is a challenge indeed.*

Nomkhu:

> *Teaching and learning is a process. PLC is not only about developing each other effectively it is also about teacher sustenance in spite of hindrances and problems as well. On a small scale with those two or three members who are still on board, I monitor, give support and constructive feedback.*

 Gosakazi aired her dissatisfaction by saying:

Monitoring and giving feedbacks to PLC members has dropped. Lately, communication has become difficult among PLC members. Escalation of COVID-19 infection cases is causing a major problem in my school. But for the fact that we are still committed in teaching and learning, we are trying. There are those individuals that are still as positive about collaborative teaching. The procedure has not changed we plan, deliver, monitor and give feedback with those few individuals.

Novangeli:

In fact, the process monitoring, reflection and feedback has decreased during the pandemic. For instance, lack of adequate support in the process of teaching and learning is the cause. Bringing almost everyone on board is sometimes difficult because there are no open dialogues that are taking place in our respective PLC due to COVID-19.

The voices above stated clearly that communication and collaborative teaching in these two schools is voluntary to PLC members who still see PLC as the platform for teacher support. Vesi is concerned about the level of COVID-19 infections that affects teachers' and their performance. The three participants' responses stated that the level of monitoring and feedback has dropped tremendously in their PLCs. If there is cooperation within PLCs teacher leaders have time to monitor progress, give feedback and provide support to teachers and still be able to teach their classes. Teacher leaders know that teachers gain confidence and trust to members and feel that they are being valued in the PLC. Feedbacks enhance critical self-reflection whether it is done casually or systematic. When novice teachers are monitored and given feedback in their teaching practice plays a big role in fine-tuning their roles in the PLC and the school at large.

Instructional leadership theory perspective is that trust between the teacher leaders and the teachers will lead to open and flexible relationship that allow teacher leaders and the teachers to communicate from their sense of truthfulness (Wanzare, 2012). This increases the level of respect, understanding and accepting differences amongst colleagues at work. Communication builds trust between teachers and superiors and maintains confidentiality. Instructional leadership theory promotes proper collaboration and communication.

To probe further, I posed this question to them; Are you able to address the most pressing instructional challenges in your PLCs? And their responses are indicated below.

Vesi:

> *Fortunately, now, yes…When schools opened for the first-time last year. I had no idea of how and where to start but as time progresses things began unfolding, and I began to understand a thing or two about COVID-19 and things started to loosen up. So, it becames easier for me as the teacher leader to request teachers to share with me or the PLC their challenges they are facing. There are those challenges that can be tackled overnight and there are those ones that need more brains. But in one way or the other, we as the team are able to address challenges.*

Nomkhu:

> *Yes, I'm able to address challenges. During this pandemic, PLC membership has decreased. As much as developing and sustaining PLC is a challenge on its own but 'the fewer the members the fewer the challenges'. With the few members left communicating has turned out to be much easy.*

Gosakazi:

> *Due to COVID-19 problems, PLC transformation to access teaching and learning support had been scarce among teachers. Teachers have adopted the passive role when it comes meeting, sharing of ideas and information and to teaching practices. No interaction of any kind among them.*

Novangeli:

> *If I have the power to bring teachers together to talk, plan and work together for the sake of learners I was going to, but since everyone here (PLC) has a mind of her/his own it is hard for me to do that. The pandemic has destroyed our wonderful profession.*

Three participants communication between them as teacher leaders and PLC members is dented. Vesi and Nomkhu mentioned that they could not say that there are no challenges but, they are doing their best to work with the few remaining PLC members. On the other hand, Gosakazi and Novangeli mentioned that there is no communication and no interaction among PLC members in Thandaza Secondary School. The worldwide perspective of online education has been seen as a good-to-have alternative but in all honesty it was not a model to ensure consistence of instructional activities (Ribeiro, 2020). Other schools find it easy to transform from traditional ways of teaching whilst others the migration process leads them to crisis due

to the pandemic, as cited by Hodges et al. (2020) and Manfuso (2020). The crisis-response migration procedures focused on the development of instruction online that will accommodate flexible teaching and learning.

4.3.4 Promoting coherence and connecting opportunities for teacher learning in the Professional Learning Communities during this pandemic

The top-down traditional ways of professional development are often occasional and unclear at times to impact teachers. Many times teachers were given one very shot presentations by the experts. They were expected to implement without having acquired or demonstrated any understanding and monitoring skills. PLCs provide a better option for teacher development which is more peer centred. Even though it does not automatically create more coherence and connected opportunities but it is theirs and they are able to develop it in the way it suits best. Teacher leaders are responsible to encourage and motivate teachers to work together by sharing information.

In the context of this study, I posed the following question to the participants: "As a teacher leader, are you able to promote coherent and connected opportunities for teacher learning in your PLCs during this pandemic?", and in responding to the question this is what they said:

Vesi:

> *Stigmatisation is still one of the major challenges in promoting coherency and connection opportunities for teacher learning in PLC in my school. Teachers who have had COVID-19 before, most of the time, are labelled as such. When it is time for PLC meeting other teachers still find it hard to come to the meetings. Others prefer to come to me individually to ask about the PLC progress, others ask from other members who are still involved with PLC. Therefore, it is still hard to connect with others as one big unite group PLC.*

Nomkhu:

> *Face to face meetings seems to be problematic because of COVID-19. If one suggests or calls for zoom meetings, it is like opening a can of worms because some colleagues are technologically challenged. They do not know how to use zoom; others will*

> *complain about unstable network and others will complain about data. We do not have a clear, logical and systematic way of connecting.*

Gosakazi:

> *Not exactly… not as before. We used to meet anytime, anyhow and when the need arises not worrying about social distancing. Now teachers find it difficult to ask whenever they encounter problems. They have the tendency of not wanting to be close to others. Clear meeting schedules and working programs that we had are now inactive. People seem not to be enthusiastic about them, not only meetings also about learning from each other as well.*

Novangeli:

> *Encouragement of higher levels of dialogue should be done because teachers are now living in fear. They are fearful of everything and anything and when they are in that mode they retreat.*

One can claim that there is no coherence or connection in the two schools. Teachers have taken a 'backseat' when it comes to working with others. Teachers are living in fear of being infected by COVID-19. Vesi mentioned that teachers who have been infected with COVID-19 are stigmatised, that collapses coherence. Nomkhu stated that even communicating through zoom is a problem because teachers are expected to be provided with data to use zoom. Gosakazi stated that teachers did not want to adhere to meeting schedules and working programmes. Novangeli is opting for open dialogue to calm fear among teachers.

Capra (1996) states that the theoretical level of connectivity are firmly identified with systems/complexity thinking where associations around the globe are made to adopt a powerful harmony between framework constituents at a specific time. When PLCs in schools can promote connectivity and coherence during these tough times they will achieve much in due time. As time goes on, framework can be broken due to diversity and individualism of certain people. Even if times change, PLCs can still stand together. The teaching practices through PLCs encompass increasing connectedness and interdependence between teachers and learners, the exchanging of teaching materials and sharing of information (Ghemawat, 2003). PLC members and teachers need to understand the importance of togetherness. Blömeke and

Delaney (2012) mention that connecting concepts, processes, and representations increase familiarity with basic constructions and ideas for learners and teachers. Hiebert and Carpenter (1992) recommend that it is vital to make connections if one intends to develop understanding, skills and knowledge and advance teaching and learning to support in different ways.

4.3.5 Challenges encountered in developing Professional Learning Communities during this time

New policies must be dispensed to help teachers and schools during these trying times. Developmental programmes and capacity building workshops must be the basic piece of invalidating the challenges teacher leaders and teachers experience when they are developing PLCs and managing teaching and learning in schools. Relying on different interested parties to share their expertise in solving the existing challenges in school is a working solution to the challenges of PLC and teacher leaders. The provision of the incentives for those who do well in different categories helps eliminating some challenges. I also asked the participants the following question. What challenges (if any) have you encountered in developing PLC during this time? Their responses were affirmative, and explained the types of challenges that they encountered. The following extracts illustrate their responses:

Vesi:

> *The belief of individual working to other teachers is a huge drawback to the PLC. These teachers are keeping their thoughts and views to themselves; they are not even willing to share with their PLC members. Others even mention that they have to much on their plates because a lot needs to be done in a short space of time for learners' progression at the end of the year. The frequent meetings that used to take place among PLCs are no more. That leads to dysfunctionality of the PLC.*

Nomkhu:

> *We used to have objectives and goals to be met by our PLC. It seems that the level of commitment for members has dropped. That has caused my energy, enthusiasm, moral and love level as the teacher leader to decline due to the workload caused by trying to uplift members. The PLC has become dysfunctional. I have is proper participation in my regular class work.*

Gosakazi:

> *Fortunately, about two or three years back an NGO donated laptops and overhead projectors to our school for both teachers and learners. Teachers did not want learn how to use the gadgets. Now with the pandemic at hand, nothing has change they still do not want to learn that is making matters worse because we are faced with this time that demands technological skills. This is shocking because teachers are reluctant to meet face to face and when the alternative is given they still do not want to involve themselves, they confidently say that technology is not for them. They have taught before without technology they are still going to teach even now. They do not have the right attitude towards technology/online teaching.*

Novangeli:

> *Challenges are there and they will always be there because we are working with people and PLC members do not want to adhere to whatever the group is doing. The pandemic has caused other teachers not want to work as a team. It is not that before the pandemic things were excellent but the level has dropped drastically.*

The participants emphasised that they were not happy about the performance level of PLC in their respective schools. Vesi and Novangeli saw individualism as a challenge that leads to dysfunctionality of PLC in their schools. Nomkhus' moral had declined because of the level of commitment for PLC members. On the contrary, for Gosakazi the school was provided with technological gadgets but teacher did not want to be technologically skilled.

Before the pandemic, online teaching training was not included in teacher development plans. Alhouti, (2020) maintains that when the Department of Education fails to provide financial help for public schools, the implementation of online learning fails as well. Existing studies by Maloney and Konza, (2011); Printy (2008) and Watson, (2014) provides evidence that sharing expertise and knowledge fosters growth and learning and solve teaching issues for teachers in PLCs and it also improve learners' learning and school performance (Ratts et al., 2015; Thompson et al., 2004).

4.3.6 How to 'deprivatise practice' and prevent teacher isolation with the COVID-19 protocol in place

This theme is mainly about going back to the ways of doing things in a collaborative manner, and move away from individualistic tendencies that may have developed due to isolation caused by the COVID-19 pandemic. Because of the pandemic, a number of teachers have become accustomed to having privacy and independence and to teach in a manner in which they want. Some of them do not even want others' contributions to their ways of teaching. Such behaviour has caused their colleagues not to be able to help where necessary. Curry, (2008) mentioned that working in groups like the PLCs helps teachers to share teaching practices and challenges and confidently reflect on their work. Isolation has caused teachers in this study to not return to the past discussions and learn from others' experiences. Teachers' hesitance to work together is the obstruction of their cooperative learning in the two schools. This has come out strongly when I posed the question; "With the COVID-19 protocols in place, how have you tried to 'deprivatise practice' and prevent teacher isolation?" Their respective responses are captured below as follows:

Vesi:

> *COVID-19 has its protocols in place like social distancing and sanitising or the constant washing of hands and of wearing of masks. With my understanding COVID-19 protocols were a strategy to minimise the spread of the pandemic in a school environment instead they are individualising teaching and learning processes. Proper workshops or training to educate teachers about the pandemic protocols were very minimal before the school reopen and when teachers return back to schools they were scared of being in close contact with anyone. The shortage of PPEs escalated the problem. Teachers now prefer to isolate them themselves from the group to avoid being infected. To avoid teacher isolation developed overlapping exercises to that will accommodate close and distant colleagues.*

Nomkhu:

> *I suggested zoom meetings to the PLC members to prevent individual teaching and to avoid isolation. My suggestion was not warmly welcomed by the majority. The few that accepted the idea are not always present for zoom meetings but ideas and challenges are shared and new teaching strategies are developed. Zoom meetings will capacitate teachers and promotion of learner and school improvement in our individual spaces.*

Gosakazi:

In fact, these protocols instead of helping individualism, it promotes isolation. Some of the teachers prefer to be on their own to be where they are comfortable. They do not go to staffrooms anymore. Greetings, small chats and sharing of family stories in corridors are gone. Providing a way forward for teaching and learning activities must suit each and every ones' personal needs in order to build the effective relationships and to ensure social sustenance.

Novangeli:

We are dealing with people; people will always be people. At times they resort to isolation because they are not keen to share their information and for other people to know their problems as well. They see PLC as a platform that is not for them because they are not eager give assistance to others. Sharing information with teacher leaders is fine with them but not someone else. Broadening the concept of care is not for them.

The introduction of COVID-19 protocols was meant for good outcomes but because people have different views it ended up being the one that promotes individualism and isolation in these two schools. Vesi, Gosakazi and Novangeli share similar sentiments about teachers view on deprivatisation of isolation. The participants aired their frustrations on COVID-19 protocols that brought high level of isolation. One example of this was Nomkhus' zoom suggestion that was rejected by the majority of PLC members. According to Levine et al. (2015) PLCs are not the same novice teacher's voices are not heard they are told "you're first year, don't say anything, just sit there and be quiet" which indirectly destroys their confidence.

Other teachers feel like they are losing authority and control when using technology to teach. Ertmer (1999) terms these feelings "the second order barriers" that include attitudes and resistance to teachers. In agreement with this notion Chigona et al. (2010) states that other teachers perceive technology as a threat and something that is not beneficial to teaching and learning. Teachers who have no experience in the online teaching or have difficulty in operating technology and information gadgets usually have problems and challenges in smoothness of instructional activities (Conrad & Donaldson, 2011; Ko & Rossen, 2017; Watson, 2020). Patrick et al. (2000) affirm that teacher enthusiasm is directed at achieving high teacher performance but the lack interaction physical leads to weakening of enthusiasm to teach (Hennessy et al., 2005; Ruthven et al., 2004; Strunc, 2020).

4.3.7 The means or strategies tried to leverage the Professional Learning Communities during the pandemic

The major part of teacher support is professional development. The majority of the participants concurred that development of staff was an essential element in uplifting the standard of teaching and learning. The most common cited by almost all four of them was the use of workshops, whereby different experts can be invited to the school to offer skills that most staff members or even for one teacher's need. When participants were asked the question: "What means or strategies have you tried to leverage PLCs during the pandemic?" their responses in which they described strategies they used, they highlighted the following:

Vesi:

> *Strategies to leverage PLC for now, I think, it is a far-fetched theory. When schools were opening during COVID-19 teachers who were expected to work whilst were not catered as far as teaching skills under the new normal is concerned. The government must now think of what to do in order for us to continue with smooth and effective teaching under this COVID-19. Digital schooling system must be introduced to schools today and relevant gadgets must be provided, and proper training to use the gadgets must be provided as well. This strategy can then be proficient to both teachers and learners.*

Nomkhu:

> *As hard as it is to meet face to face and with zoom, we have a WhatsApp platform where we talk about everything pertaining teaching and learning. Teachers are engaged in continuous activities of our PLC. At all cost, we are trying to sustain one another's support and networking. It is not every member who participates but we work with those few who are present and willing to cooperate.*

Gosakazi:

> *The on-going engagements about classroom management, content for teaching and learning, curriculum coverage, encountered challenges and outcomes in support for professional development are things to talk about in our PLC meetings. At times it is not easy because not everyone showed up but we push in spite of that.*

Novangeli:

The majority of our traditional members did not want transformation to the proposed changes but because of changing times they find themselves on the fence. The introduction of new skills mastering of new teaching approaches that are learner-centred will ensure effective teaching process.

The data indicates that the participants concurred that traditional or face-to-face ways of holding meetings are slowly expiring. It is clear that they all see technology as one of the strategies that can be used to deal with the barriers that they had encountered to leverage the PLC especially during these trying times. They are driven by the fact that having a few that are receptive to change, the future is bright and they will win. They know that no matter how few they can be, but they are willing to push forward. Their main problem is the traditional members of PLC. The data revealed that some participants did not cooperate with others despite of the obvious benefits to do so.

Bozkurt and Sharma (2020) argue that it has become obvious that the education system is not exempted from being swayable to external threats with COVID-19 pandemic, Ribeiro (2020) adds by stating that digital transformation came with a number of planning challenges and defiance adjustments. To tackle the challenges that accompany the introduction of digital teaching as an emergency, Ala-Mutka et al. (2008) suggest that schools should not develop isolated programmes for learning digital skills; instead all the subjects should be inserted in teaching and learning processes of skills development. Omotayo and Haliru (2020) further state that motivating learners to be digital competent will let them to remain relevant and modern.

Before the arrival of COVID-19 pandemic many countries did not include online teaching and learning as part of teacher development programs. In agreement, Kaden, (2020) and Trust and Whalen, (2020) maintain that in many countries the imperatives brought about by pandemic protocols have brought to the fore more responsibilities for professional development and staff meetings. Harris et al. (2020) argue for the significance of a PLC during the pandemic for demonstrating the 'power of collective professional learning' in the absence of traditional learning. The participants were asked the question: "Have you tried using digital networks?" their responses are given below.

Vesi:

No, I have two reasons. Firstly, teachers do not have electronic gadgets to use when teaching they will need data and skills to use the gadgets. Secondly, the learners will

need to have gadgets as well for teaching and learning to take place. Our community has high rate of unemployment.

Nomkhu:

Not fully…We do not have the gadgets like laptops or computers to use for meetings, collaborative teaching and teacher development programs. We use WhatsApp for PLC meetings and other special announcements. At times I do not get full cooperation from teachers because they complain about data.

Gosakazi:

No. Digital networks are not the answer for now. The answer is the teachers' attitude towards technology. They are negative about learning new things yet the era we are facing forces the whole education sector to change.

Novangeli:

Not fully…Since we have two groups in our PLC, experienced and novice teachers. Experienced teachers lack skills to operate computers, laptops and other technological gadgets. They do not even want to learn how to use their smartphones as supplemental for online teaching and learning.

Two of the participants have said they have not tried using digital networks because of the so-called experienced teachers' attitude and the socio-economic status of the school community. The other two participants have partially used online communication through WhatsApp to cascade the information amongst PLC members. Prensky (2001) speaks about learners who are born and raised during digital period as 'digital natives' who are expected to be technologically competent and confident. Even though a number of them do not have expected skills (Bennett et al., 2008), that trigger Shariman et al. (2012) to say that properties of new digital technologies to outline knowledge is yet to be discovered completely.

Beddoes, Prusak and Barney (2019) as well as Beddoes, Prusak, and Hall, (2014), describe technology as one of the benefits of PLCs and a potential for teachers to shape their own destiny and overcome the barriers they encounter. Online teaching can be effective if teachers and learners can be sufficiently prepared and supported. Apparently online teaching and learning

might present additional benefits that could lead to better results, irrespective of technological and socio-economic issues faced by the marginalised social groupings that have experienced limited access to education. To probe this issue further, I posed the following question as: "What are the benefits and/or the challenges of using digital networks to leverage PLCs?" Their responses were as follow:

Vesi:

> *If digital networks are used by our PLC it would have been beneficial by influencing our style of teaching, proficiency and development. I think the department must move away from supplying schools with books, instead, the department must provide schools with the e-books in order for schools to move forward. Like I said, teachers themselves are not willing to try using technology maybe if teachers are provided with electronic gadget that can be the change of attitude. Most teachers have no computer skills and that causes them to have no confidence in digital networks.*

Nomkhu:

> *Technology has been beneficial to our PLC; the WhatsApp platform that we have used has shown the commitment, genius, and creative side of those who are involved in keeping PLC alive in the school. Tremendous developments brought in by novice teachers have led us to the new normal. We have created a vibrant PLC that is ambitious and has hope for tomorrow.*

Gosakazi:

> *If teachers can be positive about digital network, it can be beneficial. PLC members' commitment varies. Most members sing praises for digital networks at a distance, as something for members not them. Digital networks can be fruitful and productive and learners' results can be a successful if teachers are adequately supported. Therefore, implementation under these situations is still a challenge.*

Novangeli:

> *Teachers need a broader perspective of digital networks and consciousness of working in a PLC during these trying times. Engagements where teachers can realise the*

importance of their growth and skills development that can be brought by technology during these times must be introduced. Teachers' empowerment and improvement is eminent for themselves, the learners and the education sector at large.

Three of the participants, Vesi, Gosakazi and Novangeli can attest that digital platforms are beneficial but have not used them because of their colleagues' attitude. Nomkhu and her PLC had improvised by using WhatsApp platforms just get somewhere instead of letting PLC collapse because of traditional teachers.

During these crucial times, schools have investigated time-productive and significant approaches to give high standards of professional development to teacher leaders that would uphold both their digital skills and give professional help from peers (Jin & Redish, 2020). Sadly, research about equipping teachers with skills for online teaching regularly includes restricted detachments of information and skills without a significant direction on how it must be taught. That is true for the two studies that include teacher leaders and teachers (Moore-Adams et al., 2016; Parrish & Sadera, 2019). It is recommended that consistently consolidating technology use can benefit the schools as well as the teachers (Cooper et al., 2020; Gosselin et al., 2016; Norton & Hathaway, 2015).

4.3.8 Maintaining shared routines and the way forward for the Professional Learning Communities post the COVID-19 pandemic.

Fullan (2001) states that leadership is not the sole responsibility of the SMT members and teacher leaders, instead leadership is for everyone who is willing to promote collaboration, democratic group processes and create relationships. Teachers control institutional methodology, educational and technological help, required time, teacher expertise, and learners' capacity and willingness to apply technology (Fullan, 2001). PLC members must at least take ownership of the group. Ownership will cause PLC members enthusiasm for teaching to increase and be motivated to develop new ideas moving forward. If PLC members are not enthusiastic about assembling goals and objectives but teacher leaders must be motivated to do so. In this regard, the participants were asked the question: "To what extent are you able to maintain shared routines in your PLCs?" Their responses were as follows:

Vesi:

COVID-19 has taught us that teaching and learning does not only take place in the school and within the four walls of the classroom; technology can help us in this issue. Teacher's participation has slowed down tremendously during COVID-19. Therefore successfully sharing PLC leadership responsibility routines is a challenge as well.

Nomkhu:

Maintaining the shared routines is a bit challenging at the moment. Since we are at the peak of COVID-19, colleagues' commitment is not guaranteed. As much as we are not meeting face to face and virtually but WhatsApp platform is helping us. When one is expected to take a certain role in the PLC and only to find out that that individual is not at work due to COVID-19 and the remaining members do not want to help and take responsibility with the tasks at hand. Individual lack of commitment and ownership of the PLC is still high.

Gosakazi:

It is not maintained in a way that is supposed to happen since PLC members are not as committed as before. Challenges of development are escalating. Sharing of ideas and expertise are compromised by the lack of commitment and dedication. Hence I say to you maintaining shared routines are happening at a very minimal scale.

Novangeli:

Teachers are challenged by this pandemic period and they bail out from any responsibility given to them whenever they feel like. Teachers have lost confidence in almost everything and everyone, the education sector, the schooling system, PLCs and even themselves.

From the above utterances I can tell that the maintenance of shared routines is not happening in the two schools (Thandaza Primary and Kholwa Secondary School). I can also claim that fear is the major challenge in these schools because teachers did not feel secured. There is a lot of tension among them. The future of their PLCs is uncertain.

During these times of the COVID-19 pandemic and beyond, strategic methods of teaching, adjusted educational schedules must be reviewed by the usual forms of teaching, and find

options that will motivate and promote teachers and learners' emotional welfare even at a distance (Couto et al., 2020). The lack of interactions between teachers and learners because of the effect of COVID-19 pandemic was the main challenge because it is imperative for traditional teachers to adapt to classes, resources and accomplishments of different version (Basilaia & Kvavadze, 2020). The participants further aired their views about the way forward for PLCs post the pandemic. The participants had this to say in that regard:

Vesi:

> *Teachers are overworking in a school that does not have resources to teach in these trying times. Teachers and learners must have computers, internet and proper training to use them because most of them are computer illiterate. What is imminent now is for our education system need to be hands-on.*

Nomkhu:

> *There will be a way forward after pandemic COVID-19 because teachers always need each other's expertise, and they will always need support from teacher leaders and their peers. They need to work collaboratively to produce good learners' results. The success of teachers, learners and the success of their schools lays on how effective the PLCs are. Therefore, I think that there will be a way forward after this pandemic COVID-19.*

Gosakazi:

> *I do not see any 'post COVID-19'. When is that? It is said that as from December 2021 onwards there is going to be the fourth wave? This pandemic is our new normal now; all we need to do is to adapt and learn to live with COVID-19 as part of us. Whatever we are planning from now onwards must be in-line with Covid-19 protocols. Really, I do not see any 'post pandemic' happening.*

Novangeli:

> *In the education sector the way forward can be done through progressive trainings and workshops within the PLC members. Such workshops can provide opportunities for advanced teaching and learning which is done through peer coaching and study groups. The use of significant tools or proper gadgets will keep the education system afloat in the midst of the trying times.*

On the question asked, the data shows that two of the participants Nomkhu and Novangeli are positive about the 'post pandemic era' if the Department of Basic Education can intervene to redeem the situation. Vesi is on the fence about the 'post pandemic era'. Gosakazi sees no 'post pandemic era' because of the predictions about uncertainties relating to the pandemic.

Beech (2020) likens the technological innovation opportunities brought by COVID-19 that ushered in by the rocket technology and digital computer. Monique Sendze as rightly quoted in Manfuso (2020), views Information Communication Technology (ICT) professionals responded quickly to the crisis to provide solutions, with the current technological interventions provided by ICT professionals during this COVID-19 pandemic. There is no doubt that they are up to the task in providing more if more crisis erupts. Thus, this can be adopted in continuity of business and adversity rescue strategies.

After the participants have aired their views about PLC and the present and post COVID-19, at the end of the session I posed the following question: Is there anything that you would like to add as your closing remarks? This question was not directed to any specific issue relating to COVID-19. The participants responded as follow:

Vesi:

> *Firstly, the education sector must move away from the mentality that teaching can only take place within the four walls of a school setting. Community libraries and churches must be learning centres to help with social distancing. Secondly, employing teachers, there are so many unemployed qualified teachers out there, who can fill the gaps of late, COVID-19 victims. For now, the government is giving schools teacher assistance that have no idea of what is happening in the education sector, leaving many teacher graduates who can be helpful when it comes to digital teaching and learning.*

Nomkhu:

> *COVID-19 is here to stay; technology has to become the order of the day from now onwards. Changing our attitude and learn to live with it will benefit us. We must focus our attention on the changes and be motivated to do better. PLC must advocate for teacher support in the best way possible. Our core mandate as PLC is teaching therefore we must use all the avenues set before us to carry our task to the core. We must be disciplined in order to be effective as PLCs.*

Gosakazi:

With the pandemic at hand, things are getting harder and harder. Fourth, fifth to whatever predicted wave, as for me I'll cross that bridge when I get to it. I have accepted that GOVID-19 is here to say. I must learn to live it.

Novangeli:

Teaching and learning does not involve teachers leaders and learners only, it includes parents as well. Whenever the department is developing teachers and learners technologically, parents must be developed as well. They are the ones that will encourage and help learners with their homework and buy them data, if that is possible, because digital networks need data to function.

Vesi decried the employment of the unemployed teachers who have technological skill and the usage of churches and libraries as teaching spaces to minimise physical contacts in schools. Nomkhu had a feeling that COVID-19 will be with us for some time and that teachers need to adapt to the order of the day for teaching and learning to be progressive. Gosakazi did not want to predict anything about the future she will see it when she gets to it. Novangeli's concern was the parental involvement in every skill that the government will do to equip learners and teachers because they are the ones that will help the learners with school work when learners are at home.

Jones et al. (2013) propose the issue of having a procedure to manage time limitations for teacher collaboration learning figuring out how it will happen. These schools further suggests that teacher leaders, and the PLC together with the SMT should arrange time during the working hours for teacher collaborative learning to be viable (Jones et al., 2013). Little (2003) recommends that teacher leadership creates procedures and engagements for restructuring skills for leadership and management in schools. The developmental model on changes in teacher leadership arose as a significant component of the reform procedure and policy in the modern era and the role of teachers as leaders of teaching (Brooks, 2017; Brooks & Mutohar, 2018; Ezzani & Brooks, 2019).

Due to the pandemic online classes are becoming common at the school level. Online courses are designed to ensure the application of online teaching, principles for teachers role, getting to apparatuses to give better input, leveraging of advantages, supporting reasonable teacher-learner ratio, and learners roles in online courses (McPherson & Nunes, 2006: Means et al., 2014). Furthermore teacher leaders must be able to train their PLC members with necessary technological skills, teaching and learning will never be the same again. Moreover, teachers' involvement in PLCs' advance their skills in teaching (Kruse & Johnson, 2017). Through PLC, teachers are accommodating to new concepts and embrace diversity in teaching practices (Lee et al., 2011) to assist in learners' diverse requirements, that assists with propelling learners in learning (Stoll et al., 2006).

4.9 Chapter Summary

This chapter provided a detailed presentation and discussion of the data that was generated from semi-structured interviews, using 8 themes. Data were generated from two peri-urban schools. It was found that, participants were stressed and confused about the impact of COVID-19 in PLCs in the schooling. Because of their socio-economic status in the area technology is not at all helping them with teaching and learning. Their instructional strategies to leverage challenges were not helping, not because of insufficient working material only but because of teacher's attitude as well. Teacher leaders are not supported by PLC members, PLC members have opted for isolation and there is no collaborative teaching happening. The following chapter provides the summary, conclusions and recommendations of the study.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In the preceding chapter, I presented findings that emanated from data collected by means of semi-structured interviews. This chapter presents some lessons learnt from the research process by way of drawing conclusions and making recommendations. I begin the presentation of this conclusions chapter by providing summary of the whole study. However, before I give that summary, I restate the three research questions. This is to remind the readers about what guided this study, and, then, to use these questions to organise the discussion of the conclusions. After discussing the conclusions, I make recommendations directed at various stakeholders.

 The research questions of the study:

•   What are the teacher leaders' experiences of their role in developing and leveraging professional learning communities in their schools during and post the COVID-19 pandemic?

•   What challenges did teacher leaders encounter in developing and leveraging the Professional learning Communities in their schools during and post the COVID-19 pandemic?

•   What appropriate strategies did teacher leaders use to mitigate the challenges they encountered when developing and leveraging the Professional Learning Communities in their schools during and post COVID-19 pandemic?

5.2 The study summary

This study is aimed at exploring the role of teacher leaders in developing and leveraging professional learning communities during and post the COVID-19 pandemic. The development and leveraging of professional learning communities (PLCs) and the role that can be played by teacher leaders to develop digital network strategies during and beyond COVID-19 crisis in

Pinetown District was explored. The first chapter is the overview of the problem underpinning the study. The chapter provides the background and the rational for the study. The three research questions that guided the study are also stated. The significance of the study is also stated in terms of which, the importance of understanding the role that can be played by teacher leaders to develop digital network strategies is outlined. The elucidation of key concepts, the outline of the study, the statement of the aims and objectives of the study and demarcation of the study, as well as the demarcation of the study follow. In Chapter One, the unprecedented closure of schools in South Africa due to COVID-19. And its ramifications were explained. The notion of teacher leadership and its possible contribution in the creation and strengthening of the PLCs in terms of responding to the COVID-19 pandemic was introduced in this chapter, and more discussion is needed. Such a detailed discussion is provided in the next chapter, namely, Chapter Two.

The next logical step to take in the research process is the detailed engagement with literature. In this study, literature review and the discussion of the theoretical framework is discussed in Chapter Two. The discussion of Chapter Two begins with the outline of key concepts that underpin the study. This is done by drawing from various scholars and also explaining how these concepts are applied in this study. The next step is about explaining the methodology that was used in generating data that would help address the research questions. This is done in Chapter Three. As part of the descriptions of the methodological issues, this chapter provides a detailed discussion about a variety of methodological issues, and these include the discussion of the research design of the study, an overview of the empirical study, the approach used, the sampling procedures, the allocation of participants to the study, the data generation techniques, as well as the analysis, the trustworthiness issues and ethical considerations. The fourth chapter presents a discussion about the analysis and presentation of the generated data. Verbatim quotes from the research participants are used to support the claims that I make drawing from the analysis of the interviews. The fifth and final chapter presents the conclusions that I draw from the findings presented and discussed in Chapter Four. Recommendations drawn from the conclusions are made.

5.3 Presentation of conclusion

The research findings highlighted that teacher leaders in the participating schools are faced with numerous barriers in promoting collaborative learning through professional Learning

communities. What has also emerged is that, although though the PLC existed in all four schools in one form or the other some teachers still did not want to cooperate with teacher leaders who facilitated the operations of these PLCs. This was more pronounced after the outbreak of COVID-19 pandemic. Operational protocols that were introduced in response to the pandemic's outbreak undermined all the principles of collaborative learning environment. Conclusions are presented and discussed under the following heading; (a) Participants' understanding of professional learning communities (PLC) and their role in developing PLC at the school; (b) The impact of COVID-19 on the functioning of PLCs and promoting cohesion and connecting opportunities during this pandemic; (c) The challenges encountered in developing PLC and 'deprivatise practice' and prevent teacher isolation with the COVID-19 protocol in place during this time, and (d) The strategies to leverage and maintaining shared routines and the way forward for PLCs post the pandemic.

5.3.1 Participants understanding of professional learning communities (PLC) and their role in developing them at the school

The study is about PLCs and how, through this structure, collaborative learning can proceed during and beyond the pandemic (COVID-19). According to Whitford and Smith (2010), PLCs are a "small groups of educators meeting regularly to engage in systematic peer critique and support by sharing their own professional practices as well as artefacts of student learning". A PLC can be operationalized as educators working collaboratively and interdependently through on-going collective inquiry and action research with an intense focus on student learning (Mattos, DuFour, DuFour, Eaker & Many, 2016). At the centre, of the concept a PLC lays the reason of improving and developing the learners' learning by developing and enhancing teaching practice. One of the assumptions I had before conducting this study was that all teacher leaders had some ideas about what PLCs are. However, one participant had no idea about PLC and declared that she had never heard of the term PLC. However, during our conversation with this participant, it emerged that, in fact, she had some ideas about what constitutes PLCs, although she had not been exposed to this concept. One participant expressed a clear understanding of what a PLC is. The other two participants did not know the term they gave it a tried since they said the term is self-explanatory. When the participants were asked whether they understood their roles as teacher leaders it became evident that they had good understandings of their roles in the PLCs. When looking at the role of teacher leaders, scholars

(Admiraal et al., 2019; Maloney & Konza, 2011; Printy, 2008) emphasised the role of teacher leaders as creators and facilitators of teacher participation in the PLCs. Notably, even the two participants who had said that the term is self-explanatory, expressed their understanding of their role in the PLCs quite eloquently and in a manner that is consistent with the key principles of the concept.

Scholars define leadership as inclusive of both assigned leaders, as well as emergent leaders, who are influential to the group members and of whom group members are receptive of their influence (Northouse, 2019). As teacher leaders continue leading and developing others, leadership skills can be seen and demonstrated. Huijboom et al. (2021) identify three steering factors to the PLC – leadership, collective autonomy, and the facilitation of group dynamic processes. Based on the findings presented in Chapter Four, I can conclude here that the participants as teacher leaders met some of these steering factors. For instance, they did exercise leadership in ensuring that effective teaching and learning occurred before and during the outbreak of COVID-19 pandemic. It is also clear to me that, the outbreak of COVID-19 brought about frustration among them such that the basic notion of PLCs seemed to have eluded them altogether. In short, the challenges were so frustrating that they found it difficult to think through and beyond the pandemic. In terms of facilitating group dynamics processes, they seemed to have made minimum success, especially after the outbreak of the COVID-19 pandemic.

5.3.2 The impact of COVID-19 on the functioning of Professional Learning Communities and promoting coherency and connecting opportunities during this pandemic

One can tell that COVID-19 has impacted negatively in these schools because the data indicates that the four teacher leaders in both schools share the similar sentiment about the functioning of PLCs in their schools. They mentioned that members have bailed out from the PLC and they said that members are demoralised. That has led to the downfall of communication among PLC members and they stressed that their PLC were inefficient because their main focus was on learners not on the PLC. There were instances where teachers had positive attitudes towards the PLC but they were no longer not willing to collaborate if they feel there them had restricted and limited autonomy. These issues are also echoed by other scholars (Al Shammari et al. 2020; Thornton & Cherrington (2014). These scholars emphasise the point that the role of teacher

leaders is fundamental for moulding trust relations and restrictions undermined their independence and trust amongst the members of the PLCs.

The participants' reported that their instructional activities as PLC had become ineffective and inefficient due to low level of cooperation among PLC members. Teacher leaders working with teachers on classroom observations and constructive feedback conversations were put on hold because of the pandemic that was reportedly escalating. Cohesion and staff morale plummeted. The worldwide perspective on online education has been seen as a good-to-have alternative but in all honesty it was not a model to ensure consistence of instructional activities (Ribeiro, 2020). Other schools find in easy to transform from traditional ways of teaching whilst others the migration process led them to a crisis due to the pandemic, as cited by Hodges et al. (2020) and Manfuso (2020.

Literature indicates that teacher leaders are responsible to encourage and motivate teachers to work together and working hard by sharing information. The top-down traditional ways of professional development are often occasional and unclear at times to impact teachers. PLCs provide a better option for teacher development which is more peer centred. Even though it does not automatically create more cohesion and connected opportunities but it is theirs and they are able to develop it in the way it suits best. The pride in PLCs is in ownership. One can claim that there is no coherency or connection in the two schools. Teachers have taken a 'backseat' when it comes to working with others. The findings have indicated that those who contracted the virus were their coherency collapsed due to stigmatised instead of exercising compassion and understanding. What I can conclude on this matter is that the participants seemed to lose a lot regarding the existence of the PLCs and how they can be strengthened. It is evident that cohesion which should have been developed and enhanced was lost completely

5.3.3. The Challenges encountered in developing the Professional Learning Communities and 'deprivatise practice' and prevent teacher isolation with the COVID-19 protocol in place

Teacher leaders from the two schools saw individualism as a challenge that leads to dysfunctionality of the PLC in their schools and their moral had declined because of the level of commitment for PLC members. The participants expressed unhappiness about the performance level of the PLC in their respective schools. Teachers leaders in this report felt

that if the government has technologically equip teachers before the outbreak of COVID-19, major challenges would have been avoided. Alhouti, (2020) argues that when the Department of Education fails to provide financial help for public schools, the implementation of online learning fails as well. Existing studies (Maloney & Konza, 2011); Printy (2008); Ratts et al., 2015; Thompson et al., 2004; Watson, (2014) provided evidence that sharing expertise and knowledge fosters growth and learning and solve teaching issues for teachers in PLCs and it also improve learners' learning and school performance.

The introduction of COVID-19 protocols was meant for good outcomes but because people have different views it ended up being the one that propelled individualism and isolation in these two schools. The participants aired their frustration on COVID-19 protocols that brought high level of isolation. Teachers who have no experience in online teaching or have difficulty in operating technology and information gadgets usually have problems and challenges in smoothness of instructional activities What I can conclude from the findings is that the participants were so absorbed by the challenges they encountered to the point that teacher leaders seemed to have forgotten that PLCs stand a better chance of mitigating the challenges posed by the pandemic. The bigger picture was completely lost. For instance, online learning was meant to ensure that learning can continue without people having to meet physically. However, the participants did not see that point, and preferred physical presence, and without it, life seemed to have come to an end for them. The second point is that the fact that due to the pandemic, a number of teachers have become accustomed to having the privacy and independence to teach in the manner in which they want, they did do not want others' contribution and interference in their teaching. The conclusion I make is that the participants did not understand the strength of the PLC in terms of ensuring that connectivity can continue even though people are working in their own individual spaces. Again, I can conclude that the participants' understanding of the PLCs was limited, especially when it comes to what the PLCs can contribute. The threats to the quality teaching and learning environment as posed by COVID-19 pandemic can arguably be addressed through the use of the PLCs. Therefore, the collapse of the work of the PLCs suggests that teacher leaders may not have clearly understood the essence and the benefits of the PLCs.

5.3.4 The strategies to leverage and maintaining shared routines and the way forward for PLCs post the pandemic.

The major part of teacher support is professional development. All four participants concurred that professional development of the teaching staff was an essential element in uplifting the standard of teaching and learning. The most commonly cited by almost all four of them was the use of workshops whereby different experts can be invited to the school to share skills that most staff members or even for one teacher's needs. The data indicates that the participants concurred that traditional or face-to-face ways of holding meetings are slowly expiring. It is clear that they all see technology is one of the strategies that can be used to deal with the barriers that they had encountered to leverage PLC especially during these trying times. They have the mentality that no matter how few they can be but they were willing to push forward in terms of maximising their efforts to strengthen the operation of the PLCs. However, the data revealed that some participants did not cooperate with others despite obvious benefits to do so. The irony is that, the participants seemed not to recognise that the PLCs stood a better chance to address most of the challenges posed by both the pandemic in terms of isolation and online, remote teaching, as well as the challenges relating to infrastructure at school and the teachers' skills deficit. The benefits of digital technology and its integration in teaching and learning has been acknowledged by scholars (Ala-Mutka et al., 2008; Bozkurt & Sharma, 2020; Kaden, 2020; Omotayo & Haliru, 2020; Ribeiro, 2020).

Drawing from the findings and discussions as presented in Chapter Four, I can conclude that teacher leaders in this study did not have a clear and effective strategy to leverage and maintain shared routines and the way forward for PLCs post the pandemic. The data has shown that the PLCs were collapsing and they did not put up any efforts or resistance to this other than the laments and frustrations about what was happening. With regards to the way forward for the PLCs, it is evident that they had no clear plan other than wishful thinking and hope that things will be better. My view is that what the teacher leaders were proposing as a way forward did not show that they had a clear understanding of the PLCs, and to work with the teaching staff to build confidence in this important structure, and what they stood to achieve if the PLCs were strengthened.

5.4 Recommendations

Based on the findings and conclusions made, I have a number of recommendations which I believe will benefit knowledge area, including stakeholders involved in facilitating effective teaching and learning in schools. The first recommendation is directed at teacher leaders as

facilitators of continuous professional development. It is therefore, recommended that teacher leaders should strengthen their efforts in ensuring that teachers work together as a community of professional who continuously hone their teaching skills despite various challenges in the environment inside and outside the school premises.

Secondly, the findings have demonstrated that issues of technology and its integration to curriculum delivery are a current reality and a feature for the future. It has also emerged that many teachers have skills deficit when it comes to the use of computers and online teaching and learning scenarios. Directly linked to that is a fact that many schools from deprived school contexts do not have requisite infrastructure as alluded to by various scholars. Therefore, the second recommendation teacher leaders need to maximise their efforts in supporting teachers to embrace the use of technology to enhance teaching and learning. They need to do more work in terms of sensitising their staff in terms of honing their skills in this regard and also put more efforts towards exposing them to training in these skills.

The third finding demonstrated that isolation due to COVID-19 pandemic has contributed to the decline in teacher participation in the PLCs. The teachers did not realise that PLCs are actually, vehicles that can enhance improvement in teaching and learning even in hostile conditions such as those imposed by COVID-19. In fact, the lack of interaction between teachers and learners because of the effect of COVID-19 pandemic, which appeared to be the main challenge, should not be seen as impediment to the sustainability of the PLCs. Such realities need to raise the consciousness of teacher leaders about the need to brainstorm ideas that can help to adapt to new ways of handling classes, mobilising resources and exposing staff to training that will ensure accomplishments of school goals.

5.5 Chapter Summary

Chapter Five has presented the results of the study based on the findings that were discussed in the previous chapter. The chapter began with a summary before conclusions reached were discussed. Recommendations made, based on the conclusions have been made.

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APPENDIX A: PERMISSION LETTER TO KZN DoE

12John Rose Drive

Mariann Heights

3610

26 February 2021

Dear Sir/Madam

REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT YOUR SCHOOL

My name is Ngoako Gloria Khululiwe and I am conducting a research as a requirement of the University of KwaZulu-Natal towards a Degree of Masters in Education. The title of the research study is "The role of teacher leaders in developing and leveraging professional learning communities during and post the COVID-19 pandemic".

I would like to use your school as one of the research sites, and this letter intends to request your permission. The focus of the study is on teacher leaders therefore I would like to request your teachers to participate in the study. Should permission be granted, the interviews with the … will be scheduled for dates and times that are convenient for them. Care will be taken that no disruption is caused during such interviews. Please also note that the participation in this study is voluntary, and the participant has the right to withdraw from the study at any time without any negative consequence. In addition, you are assured that details of the school and the participant will be kept confidential, and your identity will never be disclosed to anyone.

For more information and questions about the study, you may contact the researcher or the research supervisor on the following details:

Name of researcher: Ngoako Gloria Khululiwe. ▮▮▮▮▮▮▮▮▮▮

Email: gkhululiwengoako@gmaill.com

Supervisor: Dr. BNCK Mkhize: Tel No.: (031) 260 1870; Email: Mkhizeb3@ukzn.ac.za

You may also contact the Research Office through:

Govan Mbeki Building

Westville Campus

HSSREC@ukzn.ac.za

 Research Office,

Tel.: 031 260 4557 E-mail: mohunp@ukzn.ac.za

Thanking you in advance.

Yours in Education

Mrs. G.K Ngoako

APPENDIX B: PERMISSION LETTER TO SCHOOL PRINCIPALS

12 John Rose Drive

Mariann Heights

3610

26 February 2021

Dear Sir/Madam

REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT YOUR SCHOOL

My name is Ngoako Gloria Khululiwe and I am conducting a research as a requirement of the University of KwaZulu-Natal towards a Degree of Masters in Education. The title of the research study is "The role of teacher leaders in developing and leveraging professional learning communities during and post the COVID-19 pandemic".

I would like to use your school as one of the research sites, and this letter intends to request your permission. The focus of the study is on teacher leaders therefore I would like to request your teachers to participate in the study. Should permission be granted, the interviews with the … will be scheduled for dates and times that are convenient for them. Care will be taken that no disruption is caused during such interviews. Please also note that the participation in this study is voluntary, and the participant has the right to withdraw from the study at any time without any negative consequence. In addition, you are assured that details of the school and the participant will be kept confidential, and your identity will never be disclosed to anyone.

Your positive response in this regard will be highly appreciated. Should you need further information regarding the matter, you may contact me, my supervisor and the Research Office of the University.

CONTACT DETAILS

Researcher: Ngoako Gloria Khululiwe

Email: gkhululiwengoako@gmail.com

███████████

Supervisor: Dr BNCK Mkhize,

Email: Mkhizeb3@ukzn.ac.za

████████

Telephone: 031 260 1398

You may also contact the Research Office through:

Govan Mbeki Building

Westville Campus

HSSREC Research Office,

Tel.: 031 260 8350/4557/3587

E-mail: hssrec@ukzn.ac.za

Yours sincerely,

Ngoako Gloria Khululiwe

APPENDIX C: PERMISSION LETTER TO PARTICIPANTS

<div align="right">

12 John Rose Drive

Mariann Heights

</div>

26 February 2021

Your participant

REQUEST FOR PARTICIPATION IN THE RESEARCH

My name is Gloria Khululiwe Ngoako and I am conducting a research as a requirement at the University of KwaZulu-Natal towards a Degree of Masters in Education. The title of the research is "The role of teacher leaders in developing and leveraging professional learning communities during and post the COVID-19 pandemic". The objectives of the study are:

•	To investigate the role of teacher leaders in developing and leveraging professional learning communities in their schools during and post the COVID-19 pandemic

•	To explore the barriers that teacher leaders may encounter when developing and leveraging PLCs in their schools during and post the COVID-19 pandemic

•	To explore strategies that teacher leaders may use to mitigate the barriers that they may encounter when developing and leveraging PLC in their schools during and post COVI-19 pandemic

The study will focus on teacher leaders. This letter intends to elucidate the purpose of the study and to request your participation in the study.

Please note that:

•	Your confidentiality is guaranteed as your inputs will not be attributed to you in person, but reported only as a population member opinion.

•	The interview may last for about 1 hour and may be split into two parts depending on your preference.

•	Any information given by you cannot be used against you, and the collected data will be used for purposes of this research only.

•	Data will be stored in secure storage and destroyed after 5 years.

•	You have a choice to participate, not participate or stop participating in the research. You will not be penalised zed for taking such an action.

•	Your involvement is purely for academic purposes only, and there are no financial benefits involved.

• If you are willing to be interviewed, please indicate (by ticking as applicable) whether or not you are willing to allow the interview to be recorded by the following equipment:

	Willing	Not willing
Audio equipment		

I can be contacted at:

Email: gkhululiwengoako@gmail.com

Cell: 0723031603

My supervisor is Dr. BNCK Mkhize who is located at the School of Education, at the University of KwaZulu-Natal. He can be contacted at:

Email: Mkhizeb3@ukzn.ac.za

Phone: 031 260 1870

I hope this letter will find your positive consideration, thanking you in advance.

Yours Sincerely

Ngoako Gloria Khululiwe

APPENDIX D: DECLARATION

Declaration

PLEASE COMPLETE THE FOLLOWING SECTION FOR CONSENT OF

PARTICIPATION:

I _____ (Full names of participant) hereby confirm

that I understand the nature and purpose of the study entitled: "The role of teacher leaders in

developing and leveraging professional learning communities during and post the COVID-19

pandemic". I agree to participate in the study. I am also fully aware that I have the right to

withdraw from the study at any point should I wish to do so, without any negative or

undesirable consequence. I am also aware that there are neither any foreseeable direct

benefits nor direct risks associated with my participation in this study. I therefore understand

the contents of this letter fully and I do GIVE CONSENT / DO NOT GIVE CONSENT for

the interviews to be digitally recorded.

_____   _____

Signature   Date

APPENDIX E: INTERVIEW SCHEDULE RESEARCH INSTRUMENTS

Interview Schedule

When conducting the interviews, the open-ended questions will be asked. The interview will be in one day but it will be spread in two sessions with two participants per session.

Semi-structured interview

Interviews will be conducted through zoom.

1.   What do you understand about professional learning communities (PLCs)?

2.   As a teacher leader what is your role in developing PLC in your school?

3.   How has COVID-19 impacted on the functioning of PLCs in your school? Please elaborate. Probes: Please comment on how teachers interact and collaborate with each other in PLCs during this time. Are you able to foster an atmosphere of trust? Do you continue to monitor the work of PLCs and provide constructive feedback? Are you able to address the most pressing instructional challenges in your PLCs?

4.   As a teacher leader, are you able to promote coherent and connected opportunities for teacher learning in your PLCs during this pandemic? Please elaborate. Probes: If so, how? If no, Why?

5.   What challenges (if any) have you encountered in developing PLC during this time? Please elaborate.

6.   What means or strategies have you tried to leverage PLCs during the pandemic? Probes: have you tried using digital networks? If so, what are the benefits and challenges of using digital networks to leverage PLCs?

7.   With the COVID-19 protocols in place, how have you tried to 'deprivatise practice' and prevent teacher isolation?

8.   To what extent are you able to maintain shared routines in your PLCs?

9.   What do you think is the way forward for PLCs post the pandemic?

10.   What other information can you add that I may not have asked you about your role in developing and leveraging PLCs during and beyond the COVID-19 pandemic?

APPENDIX F: TURNITIN CERTIFICATE

Khululiwe Ngoako Second Draft Turnitin

APPENDIX G: ETHICAL CLEARANCE CERTIFICATE

UNIVERSITY OF
KWAZULU-NATAL ™

INYUVESI
YAKWAZULU-NATALI

14 December 2021

Gloria Khululiwe Ngoako (203516362)
School Of Education
Edgewood Campus

Dear GK Ngoako,

Protocol reference number: HSSREC/00003651/2021
Project title: The role of teacher leaders in developing and leveraging professional learning communities during and post the COVID-19 pandemic.
Degree: Masters

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 24 November 2021 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. **PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.**

This approval is valid until 14 December 2022.
To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,

Professor Dipane Hlalele (Chair)

/dd

INSPIRING GREATNESS