SOUTH AFRICAN TEACHERS' CONCEPTUALISATIONS OF PLACE IN GEOGRAPHY: A CASE STUDY

by

Sizwe Njapha

Submitted in fulfilment of the requirements for the degree of

MASTER OF EDUCATION

at the

UNIVERSITY OF PRETORIA

Supervisor: Dr C. D. van der Merwe

Co-supervisor: Dr N. Mbewe

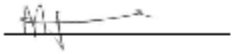
NOVEMBER 2021

ETHICAL CLEARANCE CERTIFICATE

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
Faculty of Education

RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE	CLEARANCE NUMBER: **EDU010/20**
DEGREE AND PROJECT	M.Ed South African Teachers' Conceptualisations of Place in Geography: A case study
INVESTIGATOR	Mr Sizwe Cyril Njapha
DEPARTMENT	Humanities Education
APPROVAL TO COMMENCE STUDY	29 April 2020
DATE OF CLEARANCE CERTIFICATE	01 April 2022
CHAIRPERSON OF ETHICS COMMITTEE:	Prof Funke Omidire



CC	Mr Simon Jiane Dr Clinton van der Merwe Dr Nthembe Mbewe

This Ethics Clearance Certificate should be read in conjunction with the Integrated Declaration Form (D08) which specifies details regarding:

- Compliance with approved research protocol,
- No significant changes,
- Informed consent/assent,
- Adverse experience or undue risk,
- Registered title, and
- Data storage requirements.

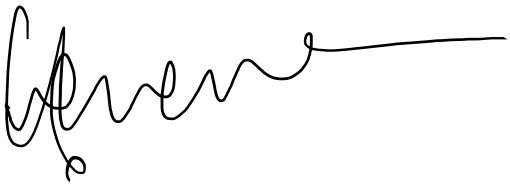
DECLARATION

I, Sizwe Njapha, student number 11368731, thus declare that this dissertation, titled "South African Teachers' Conceptualisations of 'Place' in Geography: A case study", is my research project, and it has never been submitted for a degree at any other institution of higher learning, and all sources that I have used or quoted have been referenced. This dissertation complies with the requirements of the University of Pretoria.

Sizwe Njapha
30 November 2021

SUPERVISOR'S DECLARATION

We, as the candidates' supervisors, agree to the dissertation's submission.



Dr CD van der Merwe (Supervisor)
6th December 2021

Dr Nthembe Mbewe (Co-Supervisor)
6th December 2021

DEDICATION

This dissertation is dedicated to my late father, Mthembeni *"Gqisha Nomzimane"* Njapha, and mother, Betty Njapha, who are honoured with this dissertation, for their unwavering support of my academic pursuits.

ACKNOWLEDGEMENTS

To complete this momentous task, I want to convey my sincere gratitude and appreciation to the following people and institutions:

- Dr Clinton van der Merwe, research supervisor, for his guidance, patience, support and encouragement particularly during the difficult times in this research study.
- Dr Nthembe Mbewe, co-supervisor, for her guidance as well, profound advice as I was attempting to write and for helping with a foundation for this research study.
- My employers, Future Nation Schools, for their support and for always granting me study leave when necessary.
- The Gauteng Department of Education and Independent Schools Association of Southern Africa, for granting me permission to conduct this study and allowing me to collect data within school premises.
- Editor, Sandy Kerr.
- Last, but not the least to my number one support, Dr Bafana Mdhluli, who listened and supported me; my sister Lindiwe Ngcobo-Hadebe for always encouraging me, and my niece Nokubonga Mabaso who has always believed in me.

ABSTRACT

Geography, like other subjects, has a set of unique concepts. In South Africa, the national curriculum for school geography (CAPS) outlines "geography's four key" concepts; namely "place, spatial distribution, spatial processes, and human and environmental interaction". The existing literature points out that geography is the study of places and geographers strive to comprehend how places are related and distinct from one another. This research employs a qualitative case study methodology to explore teachers' conceptualisation(s) of the concept of 'place', through eight geography teachers at state and independent schools in South Africa. Data collection instruments included official document analysis, card sorting, and interviews. School geography teachers were requested to explain and describe their knowledge of the concept of 'place' in school geography and explain strategies as to how they facilitate and implement geographic learning of 'place' in their lessons. The concept of 'place' was overwhelmingly regarded by teachers as the most important. The study further revealed that teachers had various perspectives about place, and thus conceptualised place differently. The reason for this is that the concept of 'place' in geography, is open to multiple interpretations. This study illustrates the apparent relationship between teachers' conceptualisation of the concept of 'place' in school geography and their ideals, educational training, social standing, working environments and teaching experience. Therefore, this study recommends that the concept of 'place' be unpacked in the CAPS FET Geography curriculum document so that the fundamental details on which it is founded, and which give it form, are made visible.

Keywords: geography's 'big' and key concepts, place, concept of place, teacher conceptions, school geography, CAPS, qualitative research.

LANGUAGE EDITOR CERTIFICATE

Sandy Kerr
37 4th Street
Parkhurst 2193
084 306 1210
sandy@greatoaks.co.za

28 November 2021

Client: Sizwe Njapha

UNDERSTANDING TEACHERS' CONCEPTUALISATIONS OF PLACE IN GEOGRAPHY
By
SIZWE CYRIL NJAPHA

Supervisor: Dr Clinton Van Der Merwe

Co-Supervisor: Dr Nthembe Mbewe

It is hereby certified that the editing services in this dissertation have been performed by me as editor as set out below:

Professional layout of document
Correction of sentence construction, spelling, grammar and punctuation
Table of contents

Sandy Kerr

LIST OF ABBREVIATIONS

DBE: Department of Basic Education

CAPS: Curriculum Assessment Policy Statements

FET: Further Education and Training

GE: Geography Education

GIS: Geographic Information Systems

IEB: Independent Examinations Board

PCK: Pedagogic Content Knowledge

PGCE: Postgraduate Certificate in Education

SRQ: Secondary Research Questions

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1: INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 Introduction

Geography, like other subjects, has a set of unique ideas or concepts. The significance of having unique concepts is that they bring every day and academic knowledge, in other words, powerful knowledge as articulated by Young (2010). As a result, unique concepts are used to establish the curriculum's actual content as well as to ensure that geography is a discipline that is organised, logical, and orderly (Maude 2015).

Further, Brooks (2017) classifies geography's key concept as hierarchical concepts that serve as a content container for geographical knowledge to be taught. Maude (2021) adds other two characteristics for classifying key concepts. Maude (2021) emphasises that the key concepts can be applied to a wide range of topics and fields in geography. They must also perform a variety of functions, such as guiding the formulation of questions, identifying possible explanations, and suggesting methods of analysis, among others (Maude 2021). However, the choice of concepts varies between countries, as well as among geography writers. In South Africa, where this study was conducted, the South African Further Education and Training (FET) geography curriculum makes provision for four key concepts, namely, place, space, the physical Earth, and human-environment interaction (DBE 2011).

Without a doubt, key concepts are fundamental ideas in geography, in the same way, the conceptualisations of these key concepts by geography teachers are important, mainly because they are curriculum implements. Hence this study focusses on the concept of 'place', attempting to fill a gap by exploring how South African teachers conceptualise place. While Young (2010) asserts that unique concepts bring both every day and academic knowledge, the researcher contends that the concept of 'place' brings supplementary every day and academic knowledge.

Within the South African context, the researcher believes that the concept of 'place' should be considered as one of the foundational concepts. Primarily, because geography has traditionally been explained and commonly understood as a "science that explains the character of places" (Rusznyak 2017:50), meaning, the teaching and learning of both physical and human geographies must be place-based. Furthermore, the introduction of Geographic Information Systems (GIS) is another recognition that the concept of 'place' is significant. For example,

GIS deals with the digital collection of layers of special data about a location and thus aids in the identification of both physical and man-made features (Esterhuysen et al. 2020). The researcher is of the view that the concept of 'place', makes classroom-learning geographical. Therefore, the concept of 'place' is important in school geography. However, the extent to which South African school geography teachers conceptualise the concept of 'place' is vague and ambiguous. Hence, the purpose of this study was to learn from eight geography teachers, representing state and independent schools, on how they conceptualise the concept of 'place' in school geography.

The researcher supports the notion by Castree (2009) that geography is all about places, and therefore there is no geography without places, precisely the concept of 'place'. Castree (2009) also considers 'place' as a 'big' and significant concept in geography as a discipline. Consequently, space, the physical Earth and human-environment interaction are all interconnected within the concept of 'place'. 'Place' for example, complements space with the contribution of the human-environment relationship and is central in understanding humans' behaviour as geographical agents (Larsen & Harrington 2018). Furthermore, space is a fixed entity with co-ordinates and has no social interaction with people, whereas place is an open entity where people interact (Madikizela-Madiya 2018), which in the researcher's view makes 'place' a foundational concept in geography.

In human geography, for example, the concept of 'place' has three meanings: "a point on the Earth's surface, the locus of individual and group identity, and the scale of everyday-in life" (Castree 2009: 153). Indeed, the place's three meanings are all interconnected with space, the physical Earth, and human-environment interaction. In physical geography, the concept of 'place' can connect local cultural environmental conditions to the Earth system (Madikizela-Madiya 2018). Consequently, all aspects of both human and physical geography occur in a 'place'. As a result, the concept of 'place' is at the centre of geography as a discipline.

Within the discipline of geography, the concept of 'place' has evolved, and yet it remains significant, the foundation and pillar of geography as a subject. Indeed, educational geography and geography as a whole are built on the foundation of place (Larsen & Harrington 2018). Cresswell (2008) states that the concept of 'place' is central to geography and serves as its foundation, making it one of the most important concepts in geography. Maude (2009) further adds that geography is the study of places, place as a specific area of space. The general

geographical questions are: “What are the characteristics of this place? How can they be understood and explained? How and why do these characteristics differ from those of other places? What is the significance of these differences?” (Maude 2009:369-370). These are significant geographical questions and reasons why the concept of ‘place’ is the foundation, a vital and central component of geography.

Supported by scholars, the researcher maintains that understanding ‘place’ is an important aspect of geography. Studies by Cresswell (2008), Maude (2009) and Brooks (2010) have investigated the importance of ‘place’ in school geography, and they maintain that school geography’s effectiveness is heavily reliant on teachers’ understanding of the concept of ‘place’. These are all relevant findings in upholding that ‘place’ is one of the priorities in the field of geography. However, most emphasis has been on the understanding of ‘place’ as a comprehensive idea and broad context of geography, not as an independent core concept of geography. Although ‘place’ is the one of the foundational concepts in geography, the extent to which school geography teachers and geographers understand the concept of place is unclear, if not ambiguous. Moreover, the concept of ‘place’ within the discipline of geography is not well defined and remains a greatly theorised concept (Clifford et al. 2009). Therefore, it is critical to examine the concept of ‘place’ autonomously, in its own right and as a principal concept of geography. According to Ontong and Le Grange (2015), place-based education cannot be practised meaningfully unless teachers understand the concept of place. In addition, teachers must also be aware of their students’ sense of place before they can implement it meaningfully (Ontong and Le Grange 2015). It should be noted that the concept of ‘place’ plays an important role in educational geography. The researcher, on the other hand, believes that teaching concerning ‘place’ characteristics is frequently overlooked. Hence, it was important for the researcher to investigate how teachers conceptualise the concept of ‘place’ in school geography.

Furthermore, geography is a field of study that is generally concerned with physical and human features so that a deeper comprehension of the world can be understood (DBE 2011). Geography is a field of study that is crucial because both physical and human geographical processes are explained and interpreted (Walshe 2007). It even crosses over into other fields like sociology, psychology, history, and science (Walshe 2007). Hassen (2015) states that geography is an outdoor-oriented subject in which students have opportunities to construct their knowledge through interacting with their holistic environment, for example fieldwork. In

addition, geography is a unique subject because most of its contents are found outside the classroom, mainly in the real world (Hassen 2015). By its nature, geography content allows for student orientated education and place-based teaching and learning.

Additionally, for students, geography offers a clear link between home, school, and the world beyond. It starts as early as when a child encounters and begins to discover the world. It serves as a vital educational goal that nourishes and enriches a long lifetime of learning (Geographical Association 2009). For example, each individual student lives in a unique place within its surroundings, and therefore, geography as a subject is significant in connecting both natural and social sciences. Therefore, geographic knowledge and skills are also essential in understanding the activities and patterns of places and the lives of others. Overall, geography teaches students a fundamental knowledge and enhances their appreciation of their individual places and the world in general. Hence, this can only be accomplished if teachers are well equipped with geographic knowledge and the proper skills to teach geography.

For this reason, Brooks (2006) suggests that in order to effectively teach geography, school geography teachers should have a detailed knowledge about the subject, in other words powerful subject knowledge. Catling (2017) also supports this by adding that teachers need to become knowledgeable about geography in order to teach it effectively to their students. If the subject is well taught, students are likely to be more engaged with geography and to have a strong motivation to make important connections. Concerning the concept of place, some geography teachers are unable to develop a proper place-based learning environment (Larsen & Harrington 2018). Hence, geography teachers should have a proper understanding of what makes concepts difficult for their students and what types of ideas will thrive in a geography classroom. By being aware of this, teachers will be able to choose the best techniques to assist students to reconstruct their intuitive beliefs and gain a deeper grasp of geography (Lane et al. 2019). Therefore, the review of the Curriculum Assessment Policy Statements (CAPS) document served as the foundation for this research study, which sought to explore the nature of ‘place’ in school geography. Secondly, to explore whether school geography teachers understand this nature. To do this, the researcher investigated the extent to which teachers understood, described, and implemented ‘place’ in school geography. The aim was to obtain information from the eight different school geography teachers, representing both state and independent schools. Lastly, the research concludes by arguing that in order to effectively teach

geography, school geography teachers must be able to comprehend the concept of 'place' as a central concept and develop geographical thinking around it.

1.2 Background and Context

Rusznyak (2017) points out that in post-apartheid South Africa, the school geography curriculum has evolved. It has included perspectives and viewpoints that were marginalised and silenced throughout apartheid. Human rights, social equality, inequity, citizenship, and scientific and technological advancements, such as the introduction of GIS, are now prioritized (Rusznyak 2017). However, the knowledge structure associated with the subject, as well as key geography concepts are still stable (Rusznyak 2017). In other words, geography remains a study of places. Therefore, the concept of 'place' has evolved over time but remains as one of the foundational and important concepts in geography. The official South African Geography curriculum outlines four of geography's main concepts, namely, "place, spatial processes (space), spatial distribution patterns (physical Earth) and human-environment interaction" (DBE 2011). Geography's main concepts are central to geographical knowledge, which suggests that teaching and learning of geography must be centred on these concepts (IEB 2019). Concepts are central in educational geography and, therefore, school geography revolves around these important concepts (Lane et al. 2019). As a result, school geography teachers are required to instil a deep 'geographical' conceptual thinking in their students in all their lessons (Lane et al. 2019).

In the South African context, several issues may hinder place-based education and the integration of other concepts (Rusznyak 2017). Some teachers don't have the necessary qualifications to teach geography. In some cases, humanities teachers, especially history teachers, are tasked with teaching geography. The same issue applies in the senior and intermediate phases, where geography teachers don't have the necessary skills to teach geography (Madikizela-Madiya 2018). The danger is that unskilled teachers concentrate on teaching content while overlooking geographical values and key concepts. Another dilemma is that some school geography teachers were trained to teach geography traditionally. Similarly, their approach is content driven, rather than infusing geographical values and key concepts. In addition, the CAPS for Geography FET Band document that was written in 2011 only lists these concepts as key (DBE 2011). There are no further details as to how these key concepts should be implemented and integrated into teaching. Furthermore, there are no specifications

on how concepts should be taught and linked to different school geography topics. In this manner, school geography teachers are merely technical implementers, rather than being both interpreters and implementers of a curriculum (Rusznyak 2017). The researcher believes that current South African school geography curriculum is content-rich, but lacks key geographical approaches, especially key concepts. The key concepts in geography are what make geography a subject. Content-driven teaching approaches don't support students' development of geographical thinking. Hence, Rusznyak (2017) suggests that teachers' professional foundations should be based on the subject they teach. In the case of geography, they should be able to teach geographically. The researcher stated in the introduction that school geography teachers face a dilemma in incorporating key concepts within their lessons. As a result, there are unable to choose the most effective methods for assisting students in reorganising their intuitive ideas and developing a deeper understanding of geography. Therefore, without understating concepts, without conceptualising 'place', without place-based education, geography as a subject doesn't meet its subject mandate.

Regarding key concepts in geography, Campbell (2016) similarly categorises geography into space, place, and scale. Campbell (2016) further asks a critical question regarding space and place, that it is not about what they are, but it about what they do. The 'place' is the physical leeway that individuals naturalise through patterns, behaviour, and communication (Campbell 2016). In other words, 'place' is a location with meaning. Wood (2009) also identifies the 'place' as the core concept, central and essential component of school geography. Furthermore, physical, human, and environmental geography are all centred around the concept of place (Castree 2009). On the other hand, (IEB 2019) states that some geography topics in the curriculum concentrate on one concept, while other topics require more than one concept. The research is of the view that the concept of 'place' is required for all topics in the school geography curriculum.

On the other hand, Cresswell (2008) states that most school and university students are studying geography because they have an interest in places and the differences between them. Brooks (2010) also maintains that the theme of 'place' is a dominant and a motivating fact for teachers to teach geography. Brooks (2010) further adds that teachers perceive 'place' as a major influence in the growth of young people, particularly the students. It is beyond doubt that in geography, place is a location with meaning, that people (specifically students) identify and give meaning to (Cresswell 2008). In other words, students will be better citizens and

understand their place in the world if they develop a sense of place. The significance of place also influences teachers to be more engaged with geography and have a strong desire to teach it (Brooks 2010). As a result, this study seeks to explore the manner in which school geography teachers conceptualise the concept of 'place' in school geography, with the purpose of probing how their understanding might impact the teaching and learning of students taught by these teachers at school.

Likewise, place-based education is significant in bringing indigenous and non-indigenous knowledge, as well as students from all over the world (Reid 2019). When it comes to intercultural learning, giving students opportunities to create connections between their personal experiences and world interpretations is critical (Reid 2019). Reid (2019) further adds that place-based education has assignments that permit insights from both the global and local levels to inform each other (Reid 2019). It enables students to reflect positively to different worldviews and appreciate the uniqueness of places. In a South African context, place-based learning can also be used as a social transformation tool to resolve the socioeconomic inequities left over from apartheid government (Ontong and Le Grange 2015). As a result, place-based teaching is also vital in dealing with current spatial and political challenges facing a democratic South Africa (Ontong and Le Grange 2015).

Having considered place-based education, the 'critical pedagogy of place' provides a desperately needed structure for research in education (Gruenewald 2003). In addition, 'place' based knowledge has the power to change researchers' perceptions of how students comprehend concepts (Reid 2019). The concept of 'place' is important because it uncovers how economic and political actions affect a specific 'place' (Gruenewald 2003). Therefore, place-based pedagogies are required in order to have an unswerving influence on the well-being of the social and natural environments in which people live (Gruenewald 2003).

Despite the fact that place-based education and 'critical pedagogy of 'place' exist, school geography curriculum has been criticised for holding onto outdated knowledge, which is disconnected from academic geography (Puttick 2015). As a result, the disjoint of school geography resulted in it becoming obsolete (Puttick 2015). The Geography Education (GE) association's research generally agrees on the need to pay more attention to knowledge in school geography (Puttick 2015). Geographers must be able to manage concerns about geography education research in order to maximize the efficiency of the teaching process. A

common view amongst geographers is that the teaching of 'place' is important because it promotes creative ways of thinking about and being in the world, hence, in higher education, place matters the most (Reid 2019). In addition, researchers can better comprehend how complex concepts are developed in the long run, within different age groups, cultures, and societies by using the concept of 'place' (Larsen & Harrington 2018). This will ensure that geographers, researchers and curriculum implements have a clear knowledge of past and present geography, as well as how it has influenced the evolution of people, concepts, places, and the environment.

1.3 Rationale and Motivation

1.3.1 Rationale

According to Macmillan & Schumacher (2014), a research study begins with research questions, which are then used to formulate a research problem. In this way, a research problem is the issue, debate, controversy, or concern that prompts the study (Macmillan & Schumacher 2014). In this study, it was more of a concern by the researcher. To begin, the researcher asserts that the concept of 'place' is one of the foundational and important concepts in school geography. Furthermore, the researcher maintains that in geography and school geography as a whole, the concept of 'place' is fundamental. With changes in South Africa's education structure and particularly in geography as a discipline, teachers are continuously trying to understand educational processes so that they may make well-informed and professional decisions. Thus, the research problem for this study is that it is unclear how South African school geography teachers conceptualise the concept of 'place' in school geography. The adequate conceptualisation of 'place' by school geography teachers is fundamental for successful geography learning. Primarily because the accomplishment of school geography is heavily reliant on teachers' understanding of the concept of 'place'. In support of this notion, other studies by geography gurus, Cresswell (2008), Maude (2009), and Brooks (2010), have also investigated the importance of 'place' in school geography, and they maintain that the success of school geography is heavily dependent on teachers' understanding of the concept of 'place'. Finally, the study provides a detailed context on teachers' general conceptualisation of 'place' in geography, as well as a clear framework on how school geography teachers should teach and apply geographical learning of 'place'. In this way, geography as a study of places will be able to keep its central role. For example, promoting place-based learning as well as

ensuring that all three components of subject knowledge, namely pure, pedagogic, and school, are properly implemented.

Historically, the concept of 'place' is a pillar of geography's identity. Hence without the concept of 'place' educational geography and geography as a discipline will not exist (Larsen & Harrington 2018). In addition, for the field of geography, 'place' is a top priority, especially in a modern changing and globalising world (Larsen & Harrington 2018). However, geography teachers face a conundrum when it comes to creating place-based learning (Larsen & Harrington 2018). In other words, they lack key components to understand, as well as effective ways to teach, the concept of 'place'. As a result, they do not promote place-based learning.

In geography, subject knowledge is divided into three categories: pure, pedagogical, and school-based (Walshe 2007). Pure, pedagogic, and school subject knowledge are all integrated into the concept 'place'. In other words, all subject knowledge aspects must be thoroughly understood by school geography teachers. The danger is that, without having a geographical understanding and representation of 'place', school geography teachers are likely to teach pure subject knowledge only, as a result, neglecting pedagogic and school subject knowledge. This then defeats the rationale of having geography in the curriculum.

Most importantly, concepts are used to organise subject information as well as the content information (Lane et al. 2019). Furthermore, they also facilitate effective teaching and learning between teachers and students. However, concept meaning varies between teachers, which then affects students understanding of concepts. In other words, teachers may constantly refer to the concepts while students do not recognise them (Lane et al. 2019). In this study, the emphasis is on the concept of 'place', and therefore students may not recognise the concepts of 'place'. The concept of 'place' enriches students' search for solutions to the current society's problems that do not have the understanding of the concept 'place' (Larsen & Harrington 2018). Importantly, profound understanding of places clarifies to us how the world works. Therefore, teachers should effectively teach the concept of 'place' through school subject knowledge. If not, it defeats the purpose of having geography in the curriculum.

Consequently, the rationale for focusing on the concept of 'place' in school geography is that geography is deliberately or unintentionally dependent on 'place' (Larsen & Harrington 2018). For example, Mapwork has traditionally been a popular tool for students to locate and identify

places. The introduction of Geographic Information Systems (GIS) in educational geography also makes 'place' an important concept (Larsen & Harrington 2018). Furthermore, the value of studying places in geography is that most of the content is found outside the classroom, mainly in the real world and in different places (Hassen 2015). Consequently, the researcher anticipates that the results of this study will be more useful in coming up with strategies for facilitating and implementing geographical learning of 'place'. Primarily because these strategies will be put forward by other teachers, making it easier for teachers to implement them in their classrooms. Furthermore, the results of this study should help teachers, researchers, and educational policy makers explore effective skills and resources that enhance geographic learning of 'place'. The results of this study will also create opportunities for developing more effective strategies and methods in the teaching of geographic learning of 'place'. The researcher's perspective is that the results of this study will increase teachers' motivation to teach geography and increase students' interest in the subject.

1.3.2 Motivation

Walshe (2007), points out that one needs to consider that both teachers and students have their own perspectives on geography as a school subject, as well as their own experiences and beliefs about the subject. In the view of the researcher, students are influenced by the value system that is prevalent in their culture and communities. In other words, there is a disconnect between students' prior knowledge and the essential elements of geography as a discipline. Therefore, there is a need to strengthen students' pre-existing knowledge and understanding of how it relates to geographical knowledge, and then build from there. For example, this can help students to link and understand basic physical and human structures that affect daily life. Martin (2008) states that it is important to establish methods of conceptualising geography such that students can better comprehend the geographic significance in their daily lives. As a result, it is critical to incorporate geographic values and attributes into geography as a school subject (Hopwood 2008). According to Jackson (2006), thinking geographically is the most effective way of understanding the world; it ensures that citizens are well-informed and knowledgeable. On a larger scale, school geography attempt to instil in students the following important values and attitudes (IEB 2019:21):

- "a concern for the sustainable and fair use of resources for the benefit of all
- recognising the significance of informed decision making
- the application of geographical knowledge and skills in students' personal lives

- respect for the rights of all people
- a sense of fairness, sustainability and equality".

It is beyond doubt that these values contribute to the development of students' ability to think geographically and apply fundamental geographic educational goals. The above-mentioned values in geographic education demonstrate that geography can influence students' opinions and make them think geographically. Bradbeer et al. (2004) further adds that it is important to think and do things in a geographical fashion. In this way, there will be a link between students' pre-existing knowledge and key principles of geography as a subject. This will enable students to think geographically, while applying their pre-existing knowledge. Similarly, Hopwood (2008) also postulates that non-judgmental, non-discrimination, human rights observance, and dedication to long-term sustainable development initiatives are all values of geography education. Frances (2010: 165) maintains that "the substance of geography, its content, is embedded with values about what is significant as perspective and content". It is beyond doubt that these values contribute to the development of students to think geographically and apply fundamental geographic educational goals. The benefits are that students will have a strong understanding of historical geography as well as how it has influenced the evolution of people, places, and the environment. Over and above, they must be capable of making sensible decisions on issues affecting the physical surroundings as well as society.

Accordingly, the researcher's teaching experience as a geography teacher has inspired the motivation for this study, and therefore a theoretical motivation. Firstly, the researcher's experience of teaching geography made the researcher realise that 'place' is the most important concept in geography. Likewise, Cresswell (2008) states that the understanding of 'place' is an important part of geography. Creswell (2004) further adds that 'place' lies at the centre of geography's interests and claims that geography is about places. Walshe (2007) also maintains that the understanding of 'place' as a conceptual framework must be the primary focus in educational geography. As a result, students will be able to understand geography as a unified body of knowledge rather than a collection of separate units of study. Hence, geographers must push for a progressive sense of place among people and the public (Castree 2009).

Interestingly, when the researcher was teaching a unit on human development and inequality, the researcher realised the significance of geographic values concerning the concept of 'place'. The focus was on comparing lives in a highly developed country (Singapore) and a less

developed country (Malawi). The researcher had to ensure that the students thought geographically, with respect for the rights for all when comparing places (Singapore and Malawi). The researcher used a similar approach when teaching a unit on hazardous Earth processes, namely tropical cyclones, earthquakes and volcanoes in developed and developing nations. An example is the varying impacts tropical cyclones have on developed and developing nations, namely Hurricane Katrina in the USA, 2005 and Typhoon Haiyan in the Philippines, 2003. As a developed country, the United States had excellent forecasting and trafficking services and closely monitored Hurricane Katrina (Cooper et al. 2016). In preparation, the government ordered the evacuation of cities such as New Orleans. In the United States 1800 people died, compared to 7000 deaths in a less developed country, the Philippines (Cooper et al. 2016). Hence, thinking geographically provides a language that is made up of thoughts and ideas that might assist students in seeing interconnection among places and scales that others often overlook (Jackson 2006). The main benefit is that students can think geographically and understand where countries are in relation to one another, as well as their level of development.

Walshe (2007) states that the ability of geography teachers to engage students in the learning process is critical for school geography success. Therefore, school geography teachers should know what makes subjects difficult for their students and be familiar with the various conceptions that will emerge in a school geography lessons. As a result, teachers would be able to choose the best techniques to assist students to rearrange their intuitive concepts (Lane et al. 2019). Students must have a better understanding of subject knowledge in order to participate effectively in the teaching and learning of geography (pure, school, and pedagogic) and geographic concepts. On the other hand, Lane (2009) states that teachers need to have a profound understanding of the key geographic concepts. Hence, it does not come as a surprise that geography teachers need to be well-informed about their subject content in order to teach geography successfully. Brooks (2006) further adds that teachers need to engage with geography continuously to ensure that they teach lessons that are grounded in geography content, meanings and morals. It is clear that geography teachers must clearly understand pure and pedagogic subject knowledge, more importantly, school subject knowledge. Thus, teachers with adequate subject knowledge and good pedagogic skills are effective specialist teachers. The researcher's concern is that school geography teachers may not have an adequate understanding of subject knowledge. Teachers with a strong subject knowledge can see how a specific curriculum should be taught effectively and induct students to think geographically.

Hence, the researcher intends to investigate teachers' understanding of the concept of 'place' in school geography, particularly through the application of geographic values and attributes, including the impact this can have on the students who are taught by such teachers. Several studies have shown that some teachers do not have sophisticated conceptions of geography (Bradbeer et al. 2004). On that note, the extent to which South African school geography teachers understand the concept of 'place' is unclear, vague and ambiguous. Furthermore, there have been insufficient studies conducted in South Africa to investigate how teachers understand the concept of 'place' in school geography.

1.4 Focus and Purpose

The primary goal of this study aimed to investigate how geography teachers conceptualise the concept of 'place'. This would provide insight on how far geography teachers understand the concept of 'place' in school geography, and this would provide an opportunity to investigate how school geography teachers describe the role of 'place' in school geography. This will be helpful in coming up with strategies on how teachers facilitate and implement geographic learning of 'place', by looking at teaching strategy, methods and students' work within the geographic learning of place. Lastly, the nature of place in school geography was explored through document analysis.

1.5 Research Questions

Primary research question:

What are teachers' conceptualisations of 'place' in school geography?

Secondary research questions (SRQ);

- What is the nature of 'place' in school geography?
- What are teachers' understandings of 'place' in school geography?
- How do teachers describe the role of 'place' in school geography?
- How do teachers implement geographic learning of 'place'?
- Why do teachers have a dissimilar conceptualisation of 'place' in school geography?

1.6 Research Structure

The researcher has already provided background information for this study in this first chapter. To produce a flowing and organised research project, the secondary research questions are answered, and in accordance with the following other chapters:

Chapter 2: Literature review

In this chapter, the researcher provided a solid background on the concerning 'place', the concept of 'place', and the conceptualisation of 'place' in school geography. The chapter also dealt with geography's four big ideas, geographic learning of these ideas, defining 'place' in academic geography and key characteristics of 'place', the significance of 'place' in the school geography curriculum and society, values in geographic education, geographical knowledge, thinking geographically and rationally. The researcher discussed the existing views on research in educational geography, how teachers gain geographical knowledge, the geographical concept of 'place', and geography as the study of places. The researcher elaborated on conflicts concerning the concept of place in human geography and its history, conflicts concerning the concept of place in physical geography and its history.

Chapter 3: Theoretical framework

In chapter three, the researcher elaborated on the theoretical and conceptual framework, and provided a rationale for choosing a theoretical framework. The researcher discussed concept formation as a concept that guided this study. The theory of concept formation was introduced by Dumont & Wilson (1967) in the field of Sociology. Dumont & Wilson (1967) postulate that concepts are open to more than one interpretation. This implies that people interpret concepts differently. In line with this, geography teacher conceptualisation varies from teacher to teacher. In this study, concept formation helped in understating 'place' as a concept through Implicit Theory, Theory Sketch, and Explicit Theory.

Chapter 4: Research design and methodology

The fourth chapter provided specific research methodologies used in acquiring data for this qualitative research study. It also presented the summary of an interpretive paradigm as well as a rationale for using purposeful sampling. The researcher stated why these elements were important in this investigation. The researcher elaborated on the case study strategy for this research. Following that, the researcher discussed official document analysis, card sorting, and interviews as data-gathering strategies. He then went on to explain how he used these strategies

to produce data. Lastly, the chapter discussed the study's credibility, dependability, and ethical considerations.

Chapters 5 and 6: Data analysis and interpretation

In chapter five, the researcher presented and analysed the research findings. The first step was to scrutinise the official documents (Geography CAPS for FET Band). The following step was in chapter six, where the researcher analysed and interpreted data from card sorting activities and interviews that were conducted with eight geography teachers.

Chapter 7: Presentation of findings

Chapter seven presented the findings from the official document analysis, card sorting, and interviews. This chapter included the analysis of another official document analysis, namely examination papers. Furthermore, chapter seven provides the reader with the study's findings as well as important discoveries.

Chapter 8: Concluding the study

In chapter eight, the researcher presented a summary of the study. Likewise, the researcher made suggestions for future researchers as well as study recommendations, and further highlighted the study's limitations. Finally, the researcher concluded the study with a self-reflection and a discussion of the researcher's personal development and significant advancement as a scholar.

1.7 Conclusion

The main purpose of chapter one was to present an outline for this study. Chapter one presented the study and provided an overview. It then provides the problem that prompted the start of this research, background information about the study, rationale and motivation, focus and purpose, as well as research questions. The background information highlighted the importance of place as an important concept in school geography and the understanding of the concept by geography teachers. The following chapter is the literature review, which concentrated in explaining the concept of 'place' in school geography.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

In this chapter, the researcher reviews the literature to establish a foundation and identify a study niche. This chapter begins by discussing, research in educational geography, powerful knowledge and geography's powerful knowledge which includes key global geography ideas, and then deliberates on powerful knowledge in the geography curriculum, particularly geography's key concepts, which highlights four key concepts in South Africa's National Curriculum. The chapter then turns to examining the concept of 'place' in geography, the complexity of defining the concept of 'place', significance of 'place' in school geography and society, as well as theoretical approaches of 'place' in physical and human geography. The chapter concludes by proposing means of implementing geography that is place-driven, such as fieldwork and active learning.

2.1.1 Research in Educational Geography

Puttick (2012) states that there is a lack of research that concentrates on knowledge within geography education. Similarly, Brooks (2010) also maintains that there is insufficient research that deals with knowledge in geography education. According to Brooks (2010), previous research has primarily focused on newly qualified teachers and their geographic understanding. On the other hand, Puttick (2012) states that the educational geography has received less attention at the classroom level. This suggesting that there is a need for research studies that will primarily focus on the classroom level. While there are increasing levels of research in educational geography, it seems to be largely disconnected from academic geography (Puttick 2015). This suggests that there is a need for researcher within educational geography.

School geography has been criticised for holding outdated knowledge, which is disconnected from academic geography (Puttick 2015). Disconnections between school geography and academic disciplines are thought to have resulted in the school subject becoming outdated (Puttick 2015). As a result, geography education research generally agrees on the need to place a greater emphasis on knowledge in the school subject (Puttick 2015). Puttick (2015:378) states that it "might be better for school geography (or at least geography education research) to get in the kitchen and help with the cooking, even if the actors are positioned as sous chefs working under head chefs". In other words, it's imperative for geographers to address vital issues in the research of the subject in order to achieve effective learning. Moreover, geography has been

undergoing a paradigm shift as teaching methodology and the nature of school geography have changed, and continue to change (van der Merwe 1998). The researcher believes that geographers must also investigate these changes to ensure that geography remains relevant as a discipline.

2.2 Powerful Knowledge

2.2.1 General Explanation of Powerful Knowledge

Lambert et al. (2016:190) shares the same perspective as Michael Young's (2010) original general explanation of powerful knowledge, which advocates for "evidence-based, abstract and theoretical, part of a system of thought, dynamic, evolving, changing-but reliable, testable and open to challenge, sometimes counter intuitive, exists outside the direct experience of the teacher and the student and discipline-based (though this poses the problem of defining a discipline)". Moreover, Lambert et al. (2016:190) further concentrates on powerful knowledge, with a special focus on geography as a discipline. The researcher agrees with Lambert et al. (2016) that David Lambert's comprehensive explanation of powerful knowledge is valid, primarily because it offers alternative perspectives on the curriculum. More so, having well versed knowledge on geography provides a detailed framework for curriculum analysis.

In addition, Young (2010) denotes that adequate knowledge equips students with knowledge and experience that they are unable to acquire at home or from interaction with their environment. Young (2010) also adds that powerful knowledge allows those who possess it to look beyond their ordinary experiences, and it is both conceptual and based on evidence and experience. Lastly, Young (2008:14) claims that it "provides more reliable explanations and new ways of thinking about the world and acquiring it can provide students with a language for engaging in political, moral and other kinds of debate".

Another important aim of teaching 'powerful geographical knowledge' is to teach students and young people how to think geographically, which includes detailed descriptive and explanatory knowledge of the world, such as continents, countries, capitals, oceans, rivers, and mountains (Buddulph & Lambert 2017). Powerful geographical knowledge also enables students to conduct in-depth analyses of alternative social, economic, and environmental futures for specific place contexts and therefore understands why places are not the same (Buddulph & Lambert 2017).

2.2.2 How do teachers gain powerful geographical knowledge?

"Geography teachers need to articulate the importance of knowing the subject matter of the discipline deeply, understanding how knowledge in geography is constructed, applying a range of evidence-based strategies for assessing student preconceptions in core topic areas, and devising strategies for representing these concepts so students can understand them" (Lane 2009: 49). The above articulation fundamentals by Lane (2009) are what delineates a teacher with powerful geographical knowledge, particularly a teacher who ensures that students comprehend fundamental geographical concepts. Furthermore, geography teachers describe their geographical expert knowledge as a core principle in their teaching and learning decisions (Brooks 2010). Subject expertise is important because it allows geography teachers to develop an understanding of their work and effectively teach geography. Studies have shown that teachers have a different understanding of what geography is, and these views affect their teaching (Puttick 2012). Lane (2009) also states that geography teachers have different subject knowledge. Moreover, geography teachers consult their subject expertise as a guiding principle for their practice and decision-making (Brooks 2010). Teachers' geographic knowledge depends on their experience and, on where and when they studied. Brooks (2010) also adds that teachers' subject knowledge offers geography teachers a viewpoint that allows them to understand and analyse their work.

On the other hand, school geography, is perceived by geography graduates to be distinct from their undergraduate studies (Brooks 2010). The main reason for this is that undergraduate courses rarely cover all of the geographical content covered in the school curriculum. As a result, geography teachers may not have a thorough understanding of all of the topics required to teach geography (Brooks 2010). While, Harte & Reitano (2015) point out that newly qualified school geography teachers lack subject knowledge. As a result, more research on ways to support newly qualified geography teachers is mandatory (Harte & Reitano 2015).

Analysing school geography in the United Kingdom from 1850 to 2000, Brooks (2010) contends that it has been shaped by broad pedagogical changes and developments such as what she describes as 'progressive' teaching and learning concepts; where teaching is student-centred, teachers facilitate and guide a lesson. Lane (2009) adds that geography teachers must allow students to express their ideas in class; teachers, therefore, must use students' prior knowledge.

Catling (2017) states that workshops and pre-service training for geography teachers are important. Teachers need to become knowledgeable about geography to teach it effectively to their pupils. Most importantly, Dong-min (2018) also maintains that ongoing professional development are necessary for a better understanding of the subject and its theories. Overall, the researcher believes that in order to effectively teach geography, school geography teachers should be provided with a variety of training opportunities.

2.2.3 Defining Subject Knowledge

There are three basic categories of subject knowledge: pure, school, and pedagogic (Walshe) (2007). This study followed a similar pattern, and therefore subject knowledge was categorised into pure, school, and pedagogic content knowledge. Pure subject knowledge should focus on the academic aspects of geographical ideas (place, space, spatial distribution patterns, and human-environment interaction), geography values, and thinking/rationally geographically (Walshe, 2007). Pedagogic content knowledge (PCK) concentrated on how the subject is understood by others, and the techniques that are used by teachers to teach geography to students (Walshe 2007). More importantly, it looked at how geography teachers understand and teach the concept of 'place'. While, school subject knowledge, which was the central category, focused on key topics, content, and themes. To be more specific, it looked at the contents of a curriculum (Walshe 2007), as well as the nature and implementation of 'place' as a central concept in school geography.

2.3 Geography's Powerful Knowledge

2.3.1 General Overview

Puttick (2012) asks important questions, namely, 'what is geographic knowledge?' and 'why students need access to it?'. Geography aims at describing and explaining the dynamic interrelationship between the physical and human worlds, identifying location of different places on the world map and encouraging the use of new technologies such as Information & Communications Technologies and Geographic Information System (GIS) (DBE 2011). Holt-Jensen (2018) further adds that contemporarily geographers are using GIS and computer mapping, rather than traditional maps. Furthermore, Geography Education (GE) aids in the development of students' individual and interpersonal competence (IEB 2019). In addition, Lane et al. (2019) recognise four distinct types of knowledge as follows:

- The first is factual knowledge, which is the information that is required by students in order to solve problems. In geography, this information is about the world, for example, information on countries, oceans, rivers, or mountain ranges.

- The second is conceptual knowledge, it includes schemas, categorisation hierarchies, and explanations. It also involves the geographic concepts that geography employs to comprehend and make sense of the world, namely location, place, scale, and space.

- The third is procedural knowledge, which includes subject-specific skills, processes, and application of geographical information through inquiry to problem solve and make decisions. It can also be referred to as thinking geographically.

- The fourth is metacognitive knowledge, which includes knowledge and awareness of one's thoughts as well as that of others.

The structure of the article by Lane et al. (2019:11) was based on the second category, that of conceptual knowledge, and guided by the following research questions: "How do we define concepts in geography? How do students develop a deep understanding of geography (conceptualisation)? What is the role of alternative conceptions/threshold concepts in this process? What are the implications for geographical educators in terms of pedagogy?". To sum up the conceptual knowledge; the geography curriculum must be able to guide students through a progression, from identifying and describing geographical concepts, to understanding, explaining, and selecting appropriate information (Lane et al. 2019).

To achieve the fundamental purposes of school geography, Maude (2018) proposed foundational means in which teachers might apply the mastery of the subject. Firstly, he suggests Michael Young's alternative way of interpreting the concept of subject knowledge, as powerful knowledge that empowers students' new ways of thinking, better explains and understands natural and social terms, and considers other alternate futures and what they might be able to do to influence them (Maude 2018). In addition, Maude (2018) adds that powerful knowledge allows students to have some control over their own knowledge and allows them to participate in important contemporary deliberations. Secondly, Maude (2018:181), maintains David Lambert's ideals that "knowledge is 'powerful' if it predicts, if it explains, if it enables you to envisage alternatives, if it helps you to think". Therefore, Maude (2018) argues that the

concepts of powerful knowledge should include a method for determining which components of discipline knowledge are particularly powerful, as well as methods for putting them into practice. Thirdly, Maude (2018) recommends five geographical methods of powerful knowledge that are important in helping teachers to grasp and use concepts more effectively. For example, the first geography form of powerful knowledge states that "Knowledge that provides students with new ways of thinking about the world" (Maude 2018:181). In this way, students are encouraged to be critical thinkers, as a result, students' perceptions and behaviour may change owing to the powerful ways of thinking (Maude 2018). Furthermore, key concepts in geography, such as place, space, and the environment, are integrated into this method because they contain numerous ways of thinking (Maude 2018). This method is crucial in the researcher's viewpoint because geography is a field that solely depends on major concepts, particularly the concept of 'place'. Obviously, this method includes key components of powerful geographical knowledge while also putting the concept of powerful knowledge into practice.

Additionally, Maude (2018:182-186) outlined other important methods as follows:

- "knowledge that provides students with powerful ways of analysing, explaining and understanding"
- "knowledge that gives students some power over their own geographical knowledge"
- "knowledge that enables young people to follow and participate in debates on significant local, national and global issues", and
- 'global geographical issues affecting the world".

For example, Maude (2018) postulates that in year 8 according to the Australian geography curriculum, "Changing Nations", can be used as an interactive and effective geography topic. He did this by employing the five geographical methods of powerful knowledge. In this way, Maude (2018) demonstrated how geography expertise can be integrated into the teaching and learning of the subject. Perhaps, in the South African curriculum, this could be employed in the Grade 12 units on settlements and the economic geography of South Africa. These units are place driven by nature. They give a full understanding of causes and consequences, and therefore a distinct method of thinking. In conclusion, Maude (2018) suggested alternative ways of describing and identifying powerful knowledge and emphasised that the concept of mastery of Geography should give power to those who have it, rather than by the way it is

produced. Maude's five geographical learning strategies are accepted by the researcher because they are practical approaches that foster critical thinking and, more importantly, geographical thinking.

2.3.2 Counter Ideas on Geography Powerful Knowledge

However, the concept of powerful knowledge "does not tell us what to teach" (Lambert et al. 2016:90). In other words, it doesn't provide a clear framework for how it should be implemented. Furthermore, powerful knowledge on what should be taught is not specified for teachers (Lambert et al. 2016). David Lambert's theory of geography curriculum development widely accepted by the researchers, has a shortfall in defining what "powerful knowledge in geography" means (Lambert et al. 2016). The other critical aspect is that there are no specifications as to how the concept of powerful knowledge aids teachers in making decisions about what to teach (Maude 2018). Hence, "the aims of school geography are to equip learners with geographically skillsets that are helpful in their daily lives making them effective problem solvers" (Lambert et al. 2016:89).

2.3.3 Thinking Geographically

Firstly, it is significant that students can think geographically. Geographically skillsets allow students to see the subject holistically and relevant to their lives rather than a collection of disparate units of study (Janis 2017). Well versed geographers can easily connect between global and local scales in contrast to students who have not been taught these skills (Geographical Association 2009). Geographers believe that thinking geographically gives one a greater understanding of the world and in a unique way too, as well as understanding difficult problems from local to global scales (Geographical Association 2009). In addition, geographical thinking has evolved significantly over the past years in global matters such as climate change, impact of wars on humans and the environment (Janis 2017). This has led to an increased demand to support geographical thinking in schools. Geographical skillsets empower the learners to view the world effectively (Jackson 2006: 199). Therefore, teachers' knowledge about the subject enables students to develop their thinking and are bound to think geographically (Janis 2017).

2.3.4 Thinking Rationally

Geography enables students to think rationally about a situation. It allows them to think outside of the box to find a new unique solution to a problem (Jackson 2006). In addition, it creates

room for critical thinking which helps students to objectively analyse a situation without judgment. Rational thinking also produces quality thoughts. Thus students can put together good ideas that are well thought out and understandable. All these factors create students who are independent thinkers. They can think for themselves and do not just take someone's word for it. As a result, the South African curriculum aims to produce students who can "solve problems and make decisions using critical and creative thinking, work effectively as individuals and with others as members of a team, collect, analyse, organise, and critically evaluate information" (DBE 2011:5). In this way, the students will be able to effectively and critically apply science and technology (DBE 2011). Furthermore, geography recognises the importance of informed choices which teaches learners to respect all people's rights as well instil in them a sense of fairness, sustainability, and equality (DBE, 2011).

2.3.5 Key Geography Concepts at Global Level

According to Bjelland et al. (2013), the key characteristics of geography are as follows:

- "place and space
- space and place
- scale and connection
- proximity and distance"

2.3.5.1 Place and Space

To begin, geography helps us to recognise the similarities and differences across the world (Geographical Association 2009). It enables precise location of places be it physical or cultural characteristics and effective function in increasingly interdependent world. Also, we must comprehend society's spatial organisation and see order in what appears to be a random scattering of people and places (Bjelland et al. 2013).

2.3.5.2 Space and Place

The term 'space' refers to the area in and around which all humans exist and where activity occurs (Bjelland et al. 2013), whereas 'place' refers to a geographical location that is distinct in its biology, culture, and social features. Through geography, one can see how space is being transformed in terms of modernity and how the world is being made smaller with technology (Jackson 2006). Geography tries to understand the positive and negative sides to this change

and how we can deal with it. Therefore, it is significant for students to be conscious of the space and place they are in and how it has been transformed for the better and the worse.

2.3.5.3 Scale and Connection

Besides scale showing size on maps, it is also used to refer to the global size of local regions. Connection refers to the linking between places. It can be a tangible or intangible connection and it can create a network between the places (Bjelland et al. 2013). Geography observes the local and global factors of a place. Local factors can have global consequences and global design can have local effects. Local and global places are connected through networks of roads, telephone lines, the internet, and technology (Jackson 2006). There is often an interchange between places which is spatial diffusion. This is the dispersion of ideas from one central place to other places directly or indirectly connected (Bjelland et al. 2013).

2.3.5.4 Proximity and Distance

Proximity and distance in geography can be observed through absolute and relative distance, distance decay, and distance (Jackson 2006). All of this is related to physical distance, which aids in understanding of places, cultures, and people groups. Geographers study why people travel the distances they do, but also why they might not travel a certain distance (Jackson 2006). However, it is also important to study not only the physical distance of a place but rather the nearness through technology and development (Jackson 2006).

2.3.5.5 Contested views on Key Geography Concepts

There are differing opinions among geography writers about what constitutes key geographical concepts, including the aforementioned key concepts. One of the primary reasons is that key concepts, curriculum overviews, and topics differ from country to country. For example, Catling (2021) classifies key concepts as place, space, human-environment interactions and scale. Whereas Maude (2021) classifies key concepts into four; place, space, environment and interconnection. Maude (2021) also adds two analytical ones (scale and time), and two evaluative ones (sustainability and human wellbeing).

The researcher aligns more with Maude's four key concepts, mainly because of a method that he used for selecting these key concepts, the researcher discussed these characterises in the introduction. Another reason was the second level and third-level conceptual understanding

techniques that Maude (2021) used. With the use of second-level conceptual understanding, Maude (2021) incorporated the concept of 'place', and clearly demonstrated how key geographical can be unpacked. He unpacked different ways geographers think about and use the concept of place, for example, "Places are parts of the Earth's surface that have been identified and given meaning by people, and may be perceived and used differently by people of different ages, gender, physical ability, ethnicity or other attributes" (Maude 2021: 30). Most importantly, Maude (2021) suggests that the above mentioned classification of key concepts, will assist students in understanding their various roles and functions, as well as how to use them productively.

While there are differing perspectives on key concepts, there appears to be consensus on the concept of 'place' and space. Brooks (2017) states that place and space are fundamental concepts because they represent geographical ideas that are both technical and abstract. Jankell et al. (2021) make an important addition by stating that the concepts that most geographers agreed to be in the core lens are place and space. Mainly, because, students can learn how the geographer selects, organises and structure's knowledge. The articulations by Brooks (2017) and Jankell et al. (2021) mentioned above are among the reasons the researcher chose to explore the importance and conceptualisations of 'place'. Including the researchers viewpoint that, 'place' is one of the foundation concepts in geography.

2.4 Powerful Knowledge in Geography Curriculum: Geography's Key Concepts

2.4.1 What is a Concept?

According to Brooks (2013), a concept is a broad term that is applicable to a range of situations. In other words, depending on the context, a concept has a varied meaning. For example, in educational geography, concepts have been applied to describe and characterise geographical knowledge (Brooks 2013). However, it is unclear which concepts are key and how geography teachers should apply them (Brooks 2013). To address the dissimilarities within concepts, Brooks proposed the following dimensions (Brooks 2013:77-78):

- "*hierarchical* - concepts as a content container, with the focus on the subject"
- "*organisational*" - concepts help the linking of ideas, experiences, and processes, with a focus on pedagogy", and
- "*developmental*" - concepts reflecting the process of deepening understanding, with a focus on the student".

Firstly, the researcher believes that some concepts are 'big' and more important than others, hence he supports the hierarchical nature of concepts. Therefore, the researcher argues that some concepts are 'big', while others are 'key'. Secondly, the researcher also accepts the organisational nature of concepts. Undoubtedly, 'big' and 'key' concepts should be integrated in order to teach geography effectively. As Brooks (2013) maintains, concepts are viewed as a tool for advancing geography education. Thirdly, the researcher further accepts the development of a concept, with a particular focus on students. Moreover, concepts are developmental in nature, and therefore, students use them to comprehend lesson's content (Brooks 2013). On the other hand, Roberts (2010) suggests that geography education should focus on creation of a conducive learning environment. As a result, geography teachers should pay more attention to key concepts (Roberts 2010). To conclude, the researcher recognises all three dimensions: hierarchical, organisational, and developmental, of concepts, as they ensure that teachers understand what geographical concepts are and how to apply them effectively.

2.4.2 Geography's Key Concepts

It should be noted that the notion of powerful geographical knowledge is grounded in key geographic concepts. As a result, geography education revolves around these key concepts (Brooks 2013). Similarly, Maude (2015) contends that geography's modes of thought are incorporated in key geographical concepts. Indeed, key concepts provide a foundation for school geography. These key geography concepts, on the other hand, differ from country to country. Place, space, and the environment are key geography concepts in the Australian geography curriculum (Maude, 2015), while place, space, and scale are key concepts in the English geography national curriculum (Brooks, 2013). In the South African geography curriculum, key concepts are "place, space (spatial distribution), physical Earth (spatial distribution patterns) and human-environment interactions" (DBE 2011). Interestingly, place and space are referenced in Australian, English, and South African geography curricula, therefore putting the idea that place and space are possibly the most important concepts. However, this study was conducted in South Africa, and the researcher opted to accept the key concepts stated in the South African curriculum: "place, space (spatial distribution), physical Earth (spatial distribution patterns) and human-environment interactions" (DBE 2011). While the researcher accepts these four key concepts, the researcher also claims that the concept of 'place' is one of the foundational and most important concepts in geography. Primarily because the concept of 'place' creates a greater understanding of how the physical and human

components interact, hence 'place' interconnects other concepts. Indeed, geography is the study of places and geography is about places.

2.5 Examining the Concept of 'place' in Geography

2.5.1 The 'place'

First and importantly, the researcher needed to offer a context and explanation for the 'place'. A 'place' is a location that has distinct features that distinguish it from other places (Larsen & Harrington 2018). Similarly, Cresswell (2008) also describes a place as a location with meaning, that people identify and give meaning to. In the same way, Agnew (2011) refers to a place as the terrestrial surface that is unique and cannot be exchanged. When it comes to certain features of 'place', Cresswell (2008) postulates that a 'place' has a physical landscape such as buildings and importantly, a 'sense of place'. Therefore, the meanings associated with a 'place', either individual and shared, are referred to as a sense of place. In that way, a 'place' is the environment in which people experience life, develop connections, and form their own identities (Van Otten & Bellafiore 2018). Within these identities, it is common to hear elderly people describe places they once lived, loved, studied, and worked in some years ago as significant (Van Otten & Bellafiore 2018). Even if certain places have changed, they remain in their hearts (Van Otten & Bellafiore 2018). In the same way, the 'place' where the researcher grew up has remained in his heart, and therefore he accepts the notion that places are unique and significant where people develop connections and identities. The researcher grew up in Enkanyisweni, a small village 44 kilometres south of Durban, KwaZulu-Natal, South Africa. Enkanyisweni did not have electricity, running water, or other basic services at the time. However, the physical features of Enkanyisweni, were present in some way. The topography of the 'place', including hills, valleys, rivers, and mountains, distinguishes Enkanyisweni as a special location, or rather, a location with a meaning.

Places are created by humans in their encounters with the world around them (Larsen & Harrington 2018). As a result, culture, and experience influence people's perceptions of places, and as a result, nature and culture cannot be comprehended outside of a specific place. Furthermore, memories, perceptions, feelings, social interaction with humans, and shared cultural beliefs all contribute to the mental construction of places (Larsen & Harrington 2018). Places are also formed as a landscape and for a variety of reasons social and physical characteristics cannot be separated from these landscapes, but must be combined to produce the anatomy of a 'place' (Larsen & Harrington 2018). Through experience, emotional bonds,

and knowledge that people assign to a place, people can develop a sense of place (Butzow 2019). As a result of these factors, people have varied interpretations of a 'place' or places, because they associate it with specific occurrences (Holt-Jensen 2018).

2.5.2 Complexity in Defining the Concept of 'place'

Having stated that 'place' has multiple dimensions, as well as the fact that individuals interpret places differently. Places can also be categorised and interpreted in relation to social status, cultural influences and socioeconomic prominence (Agnew 2011). Furthermore, Massey (1991:26) adds that:

- "places are not motionless things, frozen in time. They are processes.
- places do not have to have boundaries (boundaries may of course be necessary).
- places do not have single, unique 'identities', they are full of internal conflicts".

Without a doubt, there are complexities in describing the idea of 'place'. Accordingly, the researcher undertakes the idea that there is no single explanation for the concept of 'place'. In essence, there are a variety of ways to characterise a 'place'. "If it is recognised that people have multiple identities" as Massey (1991:28) pointed out, "then the same point can be made in relation to place". To put it differently, Massey (1991) asserts that people have multiple identities which relate to places and that each place can be seen in accordance with its particular uniqueness. Massey (1991) further argues that places cannot be regarded as areas with boundaries around them in other words, any genuine place cannot be defined by political boundaries. To conclude, while the researcher acknowledges that describing the idea of 'place' is complex, the researcher believes that political borders, including administrative boundaries, can define a 'place'. The researcher also sees these locations as having meaning and, more importantly, as places where people can develop a sense of place.

2.5.3 Geographical Concept of Place

To begin, it is crucial to understand the distinctions between a place and a region. A region is a collection of places, which is a convenient way to organise and interpret human-environmental phenomena (Larsen & Harrington 2018). In this way, a region cannot exist without a place. Consequently, regions are collections of similar places. Given the above, the concept of place is a pillar of geography's identity. Hence, without the concept of place, educational geography and geography will not exist (Larsen & Harrington 2018). Moreover, place is a primary consideration for the discipline of geography, particularly in today's changing and globalising world. (Larsen & Harrington 2018) world. Geography educators, on

the other hand, are at a loss as to how to conceptualise 'place' in geography. There are also issues with the public use of the identical term, because the meaning may vary, which influences responses and comprehensions of a concept (Lane et al. 2019). In addition, teachers may constantly refer to the concept of 'place' but occasionally students do not recognise the concept (Lane et al. 2019). Given the afore mentioned, Larsen & Harrington Jr (2016) postulate that 21st-century geography education should nurture the study of geographic concepts most importantly, the concept of 'place'.

2.5.4 Defining 'place' in Academic Geography

The concept of 'place' in geography has been functional since the 1970s, predominantly in human geography (Cresswell 2004). Moreover, geography contributes to the discipline's unification which brings together various specialisations (Maude 2009). As a result, understanding of 'place' is an important aspect of geography. Apart from this, Holt-Jensen (2018) describes geography as an encyclopaedic knowledge of places, in which all human actions, from mountaintops, forests to towns, and streets to houses, are influenced by 'place'. Furthermore, Brooks (2010) suggests that the theme of the 'place' is a dominant and motivating fact for teachers to teach geography, hence 'place' is an important element for learners' development. Through the sense of place, students are likely to be good citizens and they will understand where they are in the world. As a result, the nature of 'place' allows teachers to be more engaged with geography and to have a strong motivation to teach it (Brooks 2010).

Geography is the study of places, and therefore geography curriculum should include a balance of **substantive knowledge** (facts, principles, and explanations) and **procedural knowledge** (concepts, methods, skills, and ways of gaining new knowledge). Furthermore, students should not only learn geography by doing the subject, but they should learn it by applying their pre-existing knowledge. Furthermore, the researcher also believes that project based learning, which is an interactive approach, helps students learn geography more effectively. Maude (2009) outlines that the Australian geography curriculum focuses on the study of places through interactive means. Maude (2009) maintains that this enables students to relate to and comprehend a wide range of contemporary, future, local, and global issues. Most importantly, "what do geographers study? Geography is the study of places, with each place being a particular portion of space (Maude 2009). The fundamental geographical questions are: what are the characteristics of this place, how can they be understood and explained, and how and why do these characteristics differ from those of other places; and what is the significance of

these differences?" (Maude 2009). These fundamental geographical questions are answered by the three components of 'place'; namely location, locale and sense of place. The three crucial components of 'place' are described in greater depth further below.

To begin with, Castree (2009) postulates that the concept of 'place' has three meanings in the geography discipline, namely:

- Place as a location (particular point on the Earth's surface).
- Sense of place (people's feelings about the place, such as group identity).
- Place as locale (scale for people's daily activities).

Similarly, Cresswell (2014) also states that 'place' consists of three components: location, locale and sense of place. Firstly, location relates to an objective position within a spatial framework, precisely longitude and latitude co-ordinates (Cresswell 2014). In other words, location refers to exact position on the Earth's surface. Furthermore, people can use location to locate themselves in relation to other locations that are a certain distance away in a specific direction (Cresswell 2014). On that account, the question of 'where' is answered by location. Secondly, the physical and social framework in which social relations take place is referred to as locale (Cresswell 2014). People, for example, have their own distinct assortment of buildings and parks (Cresswell 2014). To be more explicit, locale refers to the physical setting for interpersonal relationships as well as the setting for specific activities that distinguish it from other places. Lastly, the subjective aspect of a place, or the meanings that people assign to it indicates reference to sense of place (Cresswell 2014). To be more specific, the emotions that people associate with a place, primarily as a result of their own experiences. To conclude, the researcher recognises and believes that these three elements of 'place' are crucial in delineating the concept of 'place'. In addition, the researcher integrates the identified three components of 'place' to the study, which is discussed in chapter three. Furthermore, these three elements of 'place' are employed as a central section of chapter seven, the findings discussion.

2.5.5 The Significance of 'place' in the School Geography Curriculum and Society

The researcher believes that students and communities should be encouraged to develop a sense of place, owing to the fact that geography as a discipline depends on the concepts of 'place'. Furthermore, the advantages are numerous; for example, 'place' doesn't only improve student performance but also society's understanding of environmental, social, and economic issues.

As a result, this section postulates the significance of 'place' in the secondary geography curriculum as well as in society.

2.5.5.1 The Significance of 'place' in the School Geography Curriculum

Emphasising the significance of place, Cresswell (2008) states that most school and university students are studying geography because they have an interest in places and the differences between places. Studying places enable both teachers and students to understand current social and cultural issues (Cresswell 2008), an example is development issues as a topic that focuses on inequality and promote understanding of social issues. A study of events such as natural disasters between developed and developing countries is another example of highlighting differences between places.

On the other hand, the Canadian Council for Geographic Education (2020) outlines ten imperative reasons to study geography. The long term goal is to have geographers who will interpret the 'real world' using fundamental geographic skillsets. Notably, all ten reasons refer directly or indirectly to the concept of place. Five reasons make a direct reference to the concept of place, while the other five make an indirect reference through the use of terms such as physical systems/environment, Earth, and global. This is noteworthy in highlighting the importance of the geographical concept of place. Below are ten reasons that make studying geography crucial (Canadian Council for Geographic Education 2020):

- to understand the **physical systems** that affect everyday life (e.g. earth-sun relationships, water cycles, wind and ocean currents)
- to identify the location of **places** both physical and cultural characteristics in an attempt to function effectively in the interdependent world
- understand the history of geography with regard to the evolution of people, their ideas, **places**, and environments
- to create a mental map of one's community, province or territory, country, and the world in order to understand the "where" of **places** and events
- to elaborate how the processes of human and **physical systems** have changed the surface of the **Earth**
- to comprehend the spatial organisation of society with reference to random scattering of people and **places**
- to identify global spatial distributions that result in complex connectivity of people and **places**

- to deduce sound judgments in matters involving relationships between the **physical environment** and society
- to safeguard and conserve the **Earth** for the benefit of the future generation
- to link the world **globally** and to become a better global citizen".

2.5.5.2 The Significance of 'place' in the Society

In terms of the significance of 'place' in society, first places aid in the comprehension of citizenship and migration debates (Cresswell 2008). Hence, geographers have always been interested in places, but not in a place (Cresswell 2008). Also, owing to advancements in human geography in the 1970s, there was a surge of interest in the study of places (Cresswell 2008). On the other hand, Gruenewald states that place is an important concept because it places emphasis on analysing how economic and political decisions affect a specific location (Gruenewald 2003). As a result, place-based pedagogies are required so that citizens' education can have a direct impact on the well-being of the social and ecological environments in which they live (Gruenewald 2003). Ecological place-based education has several characteristics to this developing field of practice (Gruenewald 2003:6). It:

- "emerges from the particular attributes of place
- is inherently multidisciplinary
- is inherently experiential
- is reflective of an educational philosophy that is broader than learning to earn
- and connects the place with self and community".

2.5.6 Theoretical Approaches of Place

Geography was incepted in the early 19th century, guided by environmental determinism and historicism (Campbell 2016). From the 1940s to the 1960s, geography mainly dwelled on the social history (a place for spatial studies). In the 1970s, geographic inquiry emerged, which emphasised that different settings have a different sense of place (Campbell 2016). Marxist theory which focused on domination and resistance across varied spaces was also used (Campbell 2016).

2.5.6.1 Theoretical Approaches of Place in Human Geography and its History

Castree (2009) points out that the concept of 'place' was neglected for almost three decades, between the 1950s and the late 1970s. This was owing to the application of mathematics and statistics in geography, to make geography a science (Castree 2009). Geography became a

spatial science that focused on measurements, statistics, developing laws, and other theories (Castree 2009). During this period, geography survived well without place as a central concept. However, in the early 1970s, not everybody was satisfied with scientific geography (Castree 2009). Human geographers argued that science in geography was inhuman, which led to the rediscovery of 'place' (Castree 2009). In the early 1980s, the notion of 'place' became the central term in geography. Contemporary geography still shows that the concept of 'place' is interconnected and interdependent in the modern world. In today's geography, this is seen through the global economy, politics, and cultural processes (Castree 2009). Overall, as the world changes, so do the human geography conceptions of place. However, human geographers respect differences in places, while acknowledging interconnections and interdependencies within places (Castree 2009). Overall, place remains an important point on the Earth's surface, where people perform their daily activities and as a significant part of their identity.

2.5.6.2 Theoretical Approaches of Place in Physical Geography and its History

Place was never a primary focus for physical geographers; it was more essential for environmental geographers (Gregory 2009). It did not receive much explicit interest from physical geographers, in comparison to human geography. Physical geographers viewed the place as space that was occupied by living and non-living things (Gregory 2009). The place was regarded as the same as the environment, landscape, and nature (Gregory 2009). The range of terms used indicates that the concept of place was not significant in physical geography.

At the 1992 Rio United Nations Conference, the idea of the place was given more attention (Gregory 2009). Since then, physical geographers have started to view place as an important attribute in geography. A cultural approach towards the physical environment was developed. Two major approaches, namely, conservation and the holistic dynamic environment, became a central focus (Gregory 2009). Furthermore, several disciplines related to the concept of the place were introduced. Sustainable development is a good example: the focus was on the restoration of places due to damage to wetlands, wildlife, and other areas owing to human impact (Gregory 2009). In conclusion, physical geographers are now involved in the design of the places, especially within the physical environment, (Gregory 2009). Indeed, the concept of place is now central to physical geography.

2.6 Means of Implementing Geography that is Place-Driven

2.6.1 The Rationale for Studying Geography that is Place-driven

What are the foundations of geography as a subject? What do geographers offer to equip students? (van der Merwe 1998). According to Hopwood (2008), geography is a school subject that is heavily imbued with significant values and attitudes. Hence, geography students should display responsibility by respecting and preserving their environment. Students must be able to value the environment as a place to live, love and care for, in which we will all live in the future (Sauvé 1996). These values, without a doubt, contribute to the nurturing of social responsible individuals.

Moreover, The International Charter on Geographical Education states the following values in geographic education (Hopwood 2008):

- "appreciation for the beauty of the physical world
- concern for the quality and planning of the environment
- dedication to seeking solutions to local, regional, national, and international problems based on the Universal Declaration of Human Rights
- understanding, tolerance, and friendship amongst all nations".

Students are guided by the values upheld by their culture and community. The above-mentioned values in geographic education demonstrate that geography can influence students' opinions and make them think geographically. Key questions that need to be asked are: How do teachers teach geographic values to students? How should schools instil values in students or teach them to explore and develop their values? How do students make informed geographic decisions using geographic values and attributes? How do teachers teach students to think geographically?

2.6.2 Place-Based Learning

The field of geography contributes greatly in making the world a better place. Israel (2012) states that the subject is a vehicle for international peace, social and environmental justice. Accordingly, place-based education advocates for educational programs that connect students with their place in the natural and social worlds (Israel 2012). The main goal of place-based learning is to change the way students feel about a place and promote the creation of places that are more sustainable for the world (Israel 2012). Furthermore, place-based education enables students to go beyond the classroom and school, it allows them to engage directly with

their local communities and natural environment (Israel 2012). In summary, place-based education promotes and enriches the theory and practice of geography (Israel 2012).

Place-based education originates from the desire of teachers to reconnect with the land, become rooted, and care for places (Ontong and Le Grange 2015). On that note, place-based education is a significant approach for connecting the ideas of sustainability, the environment, and place in geography teaching (Ontong et al 2015). Likewise, place-based education is an important approach in environmental education. It focuses on the sustainable environmental and conservational ethic that includes care for places. On the other hand, it makes students aware of the deeper social, ecological, and political forces that are rooted in places (Ontong and Le Grange 2015). Therefore, the understanding of local and global environmental issues through place-based education enables students to develop caring skills for places (Ontong and Le Grange 2015).

2.6.3 Fieldwork

Butzow (2019) states that geography as a subject is best learned through fieldwork. This takes place through inquiry and exploring. Butzow (2019) further adds that fieldwork enables students to investigate a sense of place and bring about more experiential learning. This makes fieldwork an essential component of teaching geography where students can observe and examine geographical phenomena in real places (Israel 2012). Fieldwork empowers students with practical research experience, direct tactile experience with phenomena, and increases richer observation skills (Israel 2012). Therefore, fieldwork programmes enhance the theory and practices of place-based education. Knowledge acquisition about the place visited is that of “going and finding out” (Israel 2012). The overall purpose of fieldwork is to establish effective connections with, and to act ethically in relation to a place (Israel 2012). Fieldwork and experiential learning enable students to define and construct their understanding of the sense of place (Butzow 2019).

2.6.4 Teaching the Concept of Place in School Geography: Active Learning

What is active learning? Active learning is a methodology that fosters active engagement within the learning environment (Tuna 2012). Active classroom learning is characterised by student-based components such as enquiry-based learning, problem-based learning, collaborative learning, and limited direct instruction from teachers (Tuna 2012). Bonwell & Eison (1991) further add that active learning in the classroom involves more than simply doing

the activity; it should also encourage thinking and reflection on learning activities. The researcher researched several different learning strategies for this study, including group work, role-play, discussions, enquiry-based learning, and debates, to name a few. According to Hanson & Moser (2003), by utilising the many types of learning strategies, active learning can lead to an "increase in student motivation and even build students' critical thinking and problem-solving skills".

In spite of the above articulation on active learning, a study by Scheyvens et al. (2008) found that many geographers believe that there are significant restrictions to adopting an active learning approach and that it can be difficult to implement active learning where students have no prior knowledge of a subject. However, the researcher proposes that active learning should be a method that school geography teachers use to encourage place-driven education. As previously said, people have different perceptions of a 'place' or places, because they associate it with specific occurrences. As a result, the concept of 'place' by its very nature assures that students have prior knowledge.

Different active learning methods can be employed in the classroom. While simple active learning methods such as students taking down notes provide some measure of activity during a class, this method often involves students copying what the teacher has provided, which may easily be void of learning and see students get by without really taking an active part in the class. Other more active methods such as group work (co-operative learning and discussions), debates, critical thinking (learn by doing), curiosity (problem-based learning), and creativity have a more positive effect. (Beylevel 2017) states that active learning allows students to work in pairs, share notes, clarify questions, and participate in group discussions. Further to this, it promotes students' engagement. Different active learning methods can be employed within a lesson, namely collaborative learning, co-operative learning, and problem-based learning.

Group work empowers the students to apply the skillsets they are being taught (Petty 2009). This method of active learning may also see shy students in the class become more involved in the classroom as they can often be coaxed into contributing to a group setting and this, in turn, can produce strong motivation (Petty 2009). When doing group work, the teacher must ask the students the right questions to get the most out of them and this is further supported by Lohman (2011) who states that guided learning is one method of engaging students since they feel empowered in the learning process. There is some research conducted on debates in the

classroom. For example, Marcello (2009) suggested classroom discussions should ensure that relevant issues and topics are debated, and enable learners to apply geographic perspective to understand complex issues. It is the responsibility of a teacher to ensure that the topic is made relevant to the students' interests where possible, as according to Scheyvens et al. (2008), when students are motivated to connect with what they are learning to previous experiences, they learn more effectively, and more likely to absorb new ideas and, in turn, this should increase their motivation and engagement in the classroom.

classroom.

2.7 Conclusion

The researcher began this chapter by outlining the need for research in educational geography and a need for a detailed explanation of powerful knowledge, particularly in geography. The chapter concentrated on the concept of 'place' as well as the geographical concept of 'place'. Indeed, this chapter demonstrated that 'place' is one of the foundational and important concepts in geography and school geography. Importantly, these important subjects were discussed and referenced using South African and international literature, with international experts such as Maude and Cresswell guiding the process. The theoretical framework guiding the study will be explained in the next chapter.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1 Introduction

In chapter one, the introduction, the researcher elaborated that place is a one of the most important concepts in school geography, and thus conceptualisation of place by school geography teachers is also significant. In chapter two, the researcher gave a more detailed elucidation of the concept of 'place'. In this chapter, the researcher focused on studying the theoretical literature to describe the theory that guided this study.

The conceptual and theoretical frameworks are important for guiding the research and also to establish the boundaries of the study (Bak 2003). It includes the interpretation and application of central and significant issues that structure the research (Bak 2003). Hence, researchers need to outline concepts and theories they believe to be the most valid for their research (Badenhorst 2007). This study used a theoretical framework known as concept formation theory. According to Imenda (2014), a theoretical framework refers to the theory that a researcher decides to use to direct his/her study. In addition, a theoretical framework is the use of a theory, or a collection of concepts derived from a single theory, to explain an event (Imenda 2014). Therefore, in this study, the theoretical framework provided a structure and connected important concepts as well as how they relate to one another. Imenda (2014) further states that a selected theory must align with research questions and help the researcher identify the main variables and concepts in a given study. Accordingly, the theoretical framework must also provide a general methodology, namely research design, population, and research sample, as well as guidance in collection, interpretation, and explanation of the data (Imenda 2014). This claim is also supported by (Grant & Osanloo 2014), who maintain that a theoretical framework provides a researcher with general approaches for the methodology, research design, population, and research sample. Furthermore, a theoretical framework guides the researcher in collecting, interpreting, and explaining data (Grant & Osanloo 2014). Additionally, this theoretical framework provides a logical structure of interconnected concepts that helps to create an image of how ideas in a study relate to one another (Grant & Osanloo 2014). For example, in chapter one, the research problem for this study was discussed, and this chapter serves as guidance on how to address it. In other words, there is a strong connection between chapters one and three. Moreover, this chapter also serves as a foundation for the shaping of the following chapter, chapter four. The following research structure was used:

Problem

Teachers are constantly seeking to understand educational processes to make educated and professional decisions as to the South African education system and geography as a discipline shift. The researchers' concern, or rather the researchers' problem for this study, was that it is unclear how South African school geography teachers conceptualise the concept of 'place' in school geography. The research problem for this study was discussed in chapter one, and this chapter serves a guide on how to address it.

Purpose

The primary goal of this research is to investigate ways teachers can conceptualise the concept of 'place' in school geography. Aim number one was to understand the nature of 'place' in school geography. The second aim of this research study was to provide an insight on teacher's understanding, description and implementation of 'place' in school geography. In that case, the theoretical framework, the concept formation, in the form of Continuum of Theory Explicitness, guided both aims. As a result, Implicit Theory, Theory Sketch, and Explicit Theory were used to evaluate the research aims.

Rationale and Motivation

In South Africa, there has been gaps in research on how school geography teachers understand the concept of place in school geography. The findings will help the educational system as to how teachers understand and implement place-based learning. Also, this research is significant because it will potentially increase teachers' enthusiasm for teaching geography in a geographical manner and students' interest in the subject.

Research Questions

Primary research question:

- What are teachers' conceptualisation(s) of 'place' in school geography?

Secondary research questions:

- What is the nature of 'place' in school geography? What are teachers' understanding(s) of 'place' in school geography?
- How do teachers describe the role of 'place' in school geography? How do teachers implement geographic learning of 'place'?
- Why do teachers have a dissimilar conceptualisation of 'place' in school geography?

Literature Review

Research in educational geography, Powerful knowledge, Geography's powerful knowledge, Powerful knowledge in geography curriculum, Examining the concept of 'place' in geography and Means of implementing geography that is place-driven.

Theoretical Framework

Concept formation, which emphasises that the concept of 'place' is open to multiple interpretations. As a result, the phenomenon of explicit theory, implicit theory and theory sketch were employed to answer the research questions and later to analyse findings.

Methods

Qualitative case study of eight school geography teachers in South Africa. Four data sources were official document analyses, card sorting, interviews, and personal document analyses.

Data analysis plan

Content and narrative analysis approach.

Data analysis plan Content and narrative analysis approach.

3.2 Concept Formation Theory

Firstly, it is essential to provide the context for a concept. Concepts are subjects' interpretation(s) or a way of thinking (Fraser 2006). This implies that people understand or conceptualise things differently and may also interpret events differently. Fraser (2006) adds that concepts are like a lens or a pair of glasses through which a person views the world and makes meaning of it. This study seeks to investigate the teachers' conceptualisation of the concept of **place** in school geography. Therefore, school geography teachers may conceptualise the concept of place differently. In addition, Fraser (2006) states that concepts are strongly influenced by background, culture, and point of view. To sum up, while it can be advantageous to work with the formal definitions of concepts, such as the concept of place in geography, Fraser (2006) highlights the vulnerability that concepts are not fully defined.

3.3 Concept Formation

Dumont & Wilson (1967) observed that theoretical concepts in explicit theories were connected either directly or indirectly, with observables by rules of correspondence that have

been empirically justified. They, however, also observed that many concepts in sociology could not be evaluated on that basis because they did not operate within the context of a formal theory. Concerned with evaluation and theory construction, Dumont & Wilson (1967) wanted to find out whether or not there was a basis for giving special attention to some of these isolated concepts. As part of their work, they discovered that the most characteristic feature of concepts is that they tend to be ambiguous (Dumont & Wilson 1967). This implies that concepts are open to more than one interpretation, just like the concept of place in geography. Moreover, Dumont & Wilson (1967) state that concepts should be evaluated based on Implicit Theory, Theory Sketch, and Explicit Theory (Figure 1: Continuum of Theory Explicitness). Implicit Theory focuses on isolated abstract concepts and is not expressed directly but it is still understood. It is suggested by words, while Explicit Theory looks at concepts with epistemic and constitutive significance. In other words, it is stated directly (Figures 1 and 2). To put it differently, implicit implies that something is suggested but not clearly articulated; it is indirect. While explicit implies that something is clearly articulated, to be precise, it is expressed directly. On the other hand, Theory Sketch deals with concepts with epistemic and constitutive connections (Figure 1), therefore relates to both Implicit and Explicit Theory. This study was grounded in the theory of concept formation; hence it relates to the research question and objectives. Thus, this theory emphasises that concepts are open to more than one interpretation (Dumont & Wilson 1967), just like the concept of 'place' in geography.

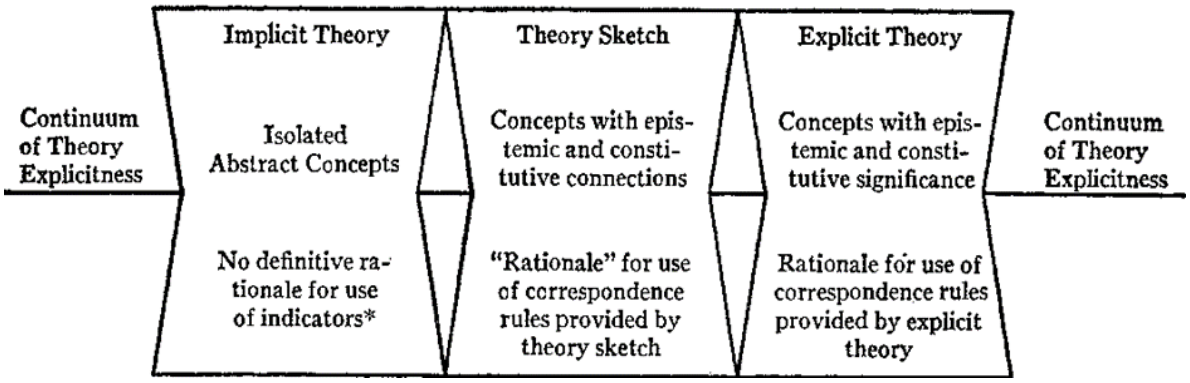


Figure 1: Illustrates the Continuum of Theory Explicitness. Reproduced from Dumont & Wilson (1967: 989)

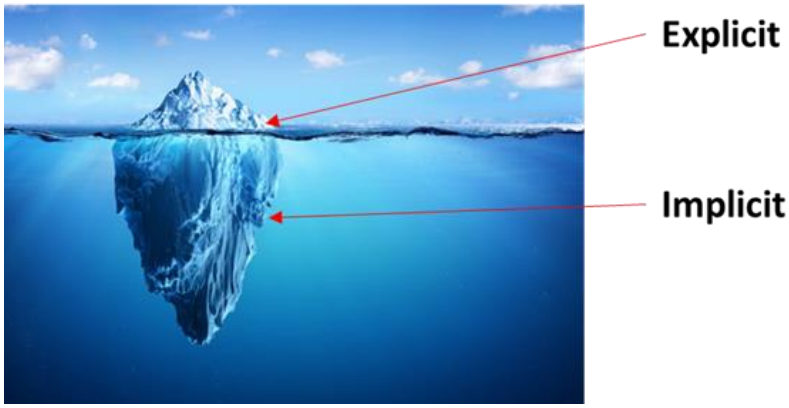


Figure 2: Illustrate differences between Explicit and Implicit Theory. Adapted from Sleek (2018)

Consequently, Badenhorst (2007) points out that the theoretical framework must provide the basic outline for analysing data and drawing conclusions. In this study, Continuum of Theory Explicitness (Figure 1) provided the framework for analysing data and drawing conclusions. Imenda (2014) also adds that a theoretical framework, in this study, concept formation, directed by Continuum of Theory Explicitness (Figure 1), guides the researcher in collecting, interpreting, and explaining data. In addition, Grant & Osanloo (2014) further state that the theoretical framework lays the foundation from which all knowledge is constructed for this research study. For example, Grant & Osanloo (2014) claim that a house cannot be constructed without a blueprint. Signifying that a theoretical framework is a blueprint for the entire research study and serves as the guide on which researchers build and support their studies. Concerning the theoretical framework, Grant & Osanloo (2014) further add that there are two types of blueprints; namely elevation drawing and floor plan. Elevation drawing focuses on displaying the exterior of the home or outside viewing, in other words, a direct technique. While the floor plan deals with the interior details of a home and has more home details, in other words, an indirect (secondary) technique. Moreover, the floor plan blueprint contains the secondary theoretical principles and concepts of a theory (Grant & Osanloo 2014), and this fits well with the concept formation theory.

Indeed, ‘place’ is a concept, and concepts are not clearly defined. Therefore, the concept of ‘place’ should be looked at as either elevation drawing or floor plan blueprints that represent both exterior (direct) and interior (indirect/secondary) ideas. This ensures that both direct and secondary references to the concept of ‘place’ are clearly defined. Hence, the above articulation links well with the theoretical framework, Continuum of Theory Explicitness. For example,

Explicit Theory is concerned with direct referencing, whereas Implicit Theory is concerned with secondary referencing. As a result, to explore the nature of 'place' in school geography, official document analyses Geography CAPS for FET Band document was guided by both Implicit and Explicit Theory. Theory Sketch in the form of card sorting was used to explore teachers' understanding(s) of 'place' in school geography. Since Theory Sketch combines elements of both Implicit and Explicit Theory, the researcher chose it to explore teachers' understanding of 'place'. To explore how teachers, describe the role of 'place' in school geography, interviews were used, with both Implicit and Explicit Theory as guides. The implementation of geographic learning of 'place', official document analysis, and in this case, examination papers were used and also guided by Implicit and Explicit Theory. Lastly, as a deduction from all the above secondary research questions, the researcher scrutinised why teachers have a dissimilar conceptualisation of 'place' in school geography.

3.4 Conclusion

In this section, the researcher explored the theoretical framework's importance, relevance, and significance, as well as its relevance in this study. This was indicated through the theory of concept formation, which emphasised that concepts are open to more than one interpretation. Taking into account that this study seeks to explore the conceptualisation of the concept of 'place' in school geography. Therefore, the conceptualisation of place by geography teachers may perhaps be open to more than one interpretation. The research design and methodology will be looked into in detail in the following chapter.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

The preceding chapter, chapter three, highlighted the theoretical framework that stressed the phenomenon that this study focused on and created the lens through which this study was designed, as well as how the data was analysed. The research design and methodology employed in this study are described, discussed, and justified in this chapter. Research methodology is viewed by Macmillan & Schumacher (2014) as a systematic and purposeful procedure of collecting information on a particular research problem or issue. This chapter explains the purpose of this study, beginning with the research paradigm. The interpretivist paradigm, as well as a qualitative research method, were used to conduct this study. Primarily because the researcher was interested in understanding teachers' experiences and perceptions. In this chapter, the researcher further elaborates on the rationale for selecting a qualitative method. The chapter begins by discussing the interpretivist paradigm. A case study approach was chosen among the interactive qualitative design; the approach is described in detail. The researcher will elaborate on the population, sample, and sample technique. The data gathering instruments, data collection techniques and presentation and analysis were also covered. The issue of reliability, validity, and the ethical protocol were also discussed. Lastly, the chapter concluded with a chapter summary.

4.2 Research Paradigm

According to Ali Riyami (2015), a research paradigm is a set of assumptions and notions that drive the research. Similarly, Mack (2010) states that a paradigm is an overall theoretical research framework. Creswell (2007) also maintains that a paradigm is a collection of beliefs and a worldview that influences actions. Therefore, the researcher accepted the above articulation by scholars, and as a result, the chosen research paradigm guided and provided the foundation for this study, including the research methodologies used.

In exploring teachers' conceptualisation(s) of 'place' in geography, the researcher decided to follow an interpretive approach. Interpretive research enables a researcher to investigate a research phenomenon by using and interpreting the perception and experience of those who participate in the research process (Thanh & Thanh 2015). The key term is to 'understand' and it relates well within an interpretivist approach. The interpretivist strategy advocates respecting the differences between people and capturing different perspectives, meaning that people are

treated as research participants, not as objects (Ali Riyami 2015). It seeks the understanding of meaning, multiple interpretations, and getting fully comprehension of a phenomenon, in its unique context (Ali Riyami 2015).

The researcher then progressed to deliberate on the qualitative research method. Creswell (2007) further adds that an interpretivist approach seeks to find underlying meaning from multiple realities and acknowledges that meaning is socially constructed. Moreover, interpretivist research permits researchers to conduct a study in its natural setting, such as case studies, ethnography, grounded theory, and phenomenology (Ali Riyami 2015). It thus does not come as a surprise that an interpretivist approach prefers qualitative methods for data collection, with interviews being a popular method (Ali Riyami 2015). Based on the above points, interpretivist components are more suitable in answering the research questions. For example, amongst the research questions in this study was to explore teachers' understanding, description, and application of 'place' in geography. In this way, the information is socially constructed by school geography teachers.

To conclude, an interpretivist approach assumes that people interpret events differently, which is the core foundation of this study. Furthermore, interpretivist research aligns well with qualitative research methods, both can only be observed from inside through people's direct expediencies (Mack 2010). Individuals are understood and given the freedom to make meaning based on their experiences (Mukhari 2016). Creswell (2007) further adds that interpretivist seeks to find underlying meaning from multiple realities and recognises that meaning is socially constructed. This research was based on the interpretivist paradigm since it focused on teachers' conceptualisation of the concept of 'place' in geography.

4.3 Research Design

The gist on how the researcher intends to answer the research questions, are both addressed by the research design (Beylevel 2017). In this context, a research design is the process of conducting a study, including when and how data will be acquired from whom and under what conditions (Macmillan & Schumacher 2014). The most important aspect of a research design is the identification of methods of data collection to be used. They are the two most common research designs, namely quantitative and qualitative (Macmillan & Schumacher 2014). Quantitative research designs are objective in measuring and describing phenomena, while qualitative research designs emphasises data collection on naturally occurring occurrences

(Macmillan & Schumacher 2014). Hence, the goal of quantitative research is to explain and predict how objects and events interact (Smit 2010). Contrary, the qualitative research strives to understand the life of individuals or groups in their natural environment (Smit 2010). For this research study, the qualitative research design was used.

4.3.1 Qualitative Research

Qualitative research collects data from people in their natural surroundings through in-depth studies such as face-to-face interviews or observation techniques (McMillan & Schumacher 2014). Biggam (2008) also maintains that qualitative research is an in-depth exploratory study that allows quality responses. Here, the researcher used open ended questions, with the primary goal of extracting themes from the data in order to comprehend a social situation from the perspective of the participant (McMillan & Schumacher 2014). Qualitative research emphasises the gathering of data on the natural environment or setting, and the data is descriptive rather than numbers (McMillan & Schumacher 2014). Likewise, qualitative data is extremely valuable to this research and qualitative research has several advantages, for example "an increased degree of flexibility in the research design; the ability to avoid a reliance on the researcher's pre-determined assumptions; and the ability to focus on the meanings of key issues for participants, especially any contradictions or inconsistencies in their perspectives" (Griffin 2004).

It should be noted that a qualitative research method has various limitations. Firstly, research quality depends on the researchers' individual skills, such as the ability to conduct an interview (Anderson 2010); without proper skills, it becomes difficult to collect data. Secondly, qualitative research can be influenced by the researcher's personal biases (Anderson 2010). As a result, subjective bias is a constant threat. Thirdly, the researcher's presence during data collection, which is unavoidable, can affect the subjects' responses (Anderson 2010). Fourthly, it takes time to analyse and interpret data, as well as characterising findings (Anderson 2010). Lastly, anonymity and confidentiality can be a problem if not handled well when presenting results (Anderson 2010).

To overcome the above-mentioned obstacles, firstly the researcher had previously conducted similar research that involved interviews and was able to gain proper researching skills. Also, the nature of the researcher's job as a professional teacher prepared the researcher to avoid

personal biases. Therefore, during data collection, the researcher was able to assume the role of being a researcher. Regarding the time spent analysing and interpreting data, that was unavoidable as it took a long time to analyse and interpret data. However, in this study, the researcher used different techniques of collecting data. As a result, the researcher was able to analyse and interpret data using a variety of methodologies. Lastly, to address the issues of anonymity and confidentiality, participants were assigned pseudonyms.

To conclude, based on the discussion above on qualitative methods and previous section on interpretivist research paradigm, it is evident that there is a relative connection between these two mentioned methodologies. Cresswell (2003) adds that in a qualitative research method, the enquirer frequently makes knowledge claims based on interpretivist assumptions. For example, Thanh & Thanh (2015) further support researchers' claim that the interpretive research approach relates to and is suitable to qualitative methods as they both allow close interactions with respondents. Without a doubt, the interpretivist research paradigm and qualitative research approaches were the most suitable in this research.

4.4 Case Study

Ethnography, phenomenology, case studies, grounded theory, and critical studies are some of the data collection approaches used in qualitative research (McMillan & Schumacher 2014). Cresswell (2007) also maintains that similar qualitative research approaches, guided by interpretivist perspectives, aid in exploring the nature of this research of understanding teachers' conceptualisations of 'place' in geography. The next section describes the rationale for using the case study method.

A case study looks at a single aspect of a person, group, or circumstance over a period of time (McMillan & Schumacher 2014). It can be a program or situation over a given time frame (McMillan & Schumacher 2014). Therefore, the focus may be one entity or several entities. The primary goal of selecting a case study is to investigate the unique characteristics of a single entity (McMillan & Schumacher 2014), in this case, school geography teachers' conceptualisation of 'place' in geography. Therefore, a collective or multiple case study technique was more appropriate for this study because it involved eight geography teachers.

Also it is a descriptive study that focuses on one person or one situation (Woolfolk 2014). The researcher observes characteristics of an individual or a group, for example a school (Biggam

2008). The main purpose of such observation was to investigate and analyse different phenomena that constitute the sequence of the unit (Biggam 2008). In this study, an individual unit that was observed was the school geography teachers. On the other hand, McMillan & Schumacher (2014) state that a case study enables a researcher to collect data through observations, questionnaires, and taking pictures. Cresswell (2007) also maintains that in case study research, the collection of data involves multiple in-depth sources, namely observation, interviews, audio-visual materials, documents, and reports. Similarly, Biggam (2008) concur that one makes use of questionnaires, individual interviews, and group interviews to collect data. Consequently, documents, card sorting, and interviews were used.

Apart from the points mentioned above, when several different cases are combined in a single study, it is called a collective or multiple case study (McMillan & Schumacher 2014). Collective case studies were used to investigate eight school geography teachers and their conceptualisation of the concept of place in geography.

As Walshe (2007) states, geographic education could benefit more from the use of case study research. Walshe argues that a case study helps investigate contemporary issues and content teachers know with regard to geographic education. For example, Walshe (2007) used a case study approach to explore teachers' conceptualisations of geography. To understand "teachers' experience of information and communication technology use for teaching and learning in urban schools", a case study approach was used by Mukhari (2016). "Exploring Grade 10 rural physical science teachers' perceptions and usage of everyday words in Acornhoek science classrooms in Mpumalanga Province", a case study approach was also used by Zulu (2018). These examples by researchers exemplify the success of using a case study research on exploring teachers' understandings. The researcher strongly believes that a case study research offered similar advantages in investigating teachers' conceptualisation of 'place' in geography.

Even though there are several advantages within a case study, it is necessary to highlight the limitations associated with it. Case studies can be very expensive and time-consuming if attempted on a large scale, and even more time-consuming to analyse (Hodkinson & Hodkinson 2001). Therefore, researchers may not always have time and money. Also, there is often a problem of data representation within case studies. It is difficult to present accessible and realistic pictures of that complexity in writing, which can sometimes lead to numerical representation (Hodkinson & Hodkinson 2001). This type of data collection approach can be

limited by the integrity of the research, as a result, bias is a major threat. Access to participants within their natural settings can result in ethical issues such as participants' confidentiality. Another limitation to be considered is that case studies can be dismissed easily by those who do not like the messages that they contain (Hodkinson & Hodkinson 2001). Lastly, it is difficult for a case study to answer a large number of relevant and important research questions (Hodkinson & Hodkinson 2001).

4.5 Population, Sample and Sample Technique

A population is described as a group of items or individuals who meet certain criteria and to which results can be generalised by researchers (McMillan & Schumacher 2014). A group of items or individuals who meet certain criteria and to which results can be generalised by researchers make up the population (McMillan & Schumacher 2014). The population for this study was South African school geography teachers. On the other hand, the notion 'sample' refers to a group of participants from whom data is gathered (McMillan & Schumacher 2014). The sample is selected from the population, and the main purpose of sampling in research is to select research participants (McMillan & Schumacher 2014). The participant selection technique was purposive sampling, where the participants were selected based on the judgment of the researcher. In this study, eight geography teachers who offer geography at FET band from schools in the Gauteng Province were selected. The rationale for choosing FET teachers was that they are experts who have a deep understanding of the subject.

Within the selected eight teachers, four teachers were from state schools, while the other four were from independent schools. The intention was to get a variety of perspectives from geography teachers in both public and private schools. The selected teachers came from different educational training, social standing, working environments and had individual ideals to obtain more diverse and multifaceted information. The fourth criterion was that participants must offer a wide range of teaching experience, from newly qualified teachers to experienced teachers.

On the other hand, several sampling techniques can be used by qualitative researchers, including purposeful sampling, quota sampling, simple random sampling, system sampling, probability sampling, random sampling, stratified sampling, convenience sampling, and cluster sampling (McMillan & Schumacher 2014). The researcher opted to use purposeful sampling, which was in line with the three criteria mentioned above. As opposed to probability sampling

strategies such as random sampling that are intended to minimise biases, it is necessary to highlight that purposeful samples have major disadvantages in terms of researcher biases and, in that way, alleviate potential researcher biases (McMillan & Schumacher 2014). In other words, purposeful sampling does not guarantee a true representative of the population. For example, the researcher had a preference for school geography teachers who were in the FET band and had a diversified experience background.

However, purposeful sampling permits a researcher to select participants with certain characteristics and assures a researcher of needed information (McMillan & Schumacher 2014). A researcher can make strategic choices concerning whom, where, and how the research will be conducted (Zulu 2018). Mukhari (2016) adds that participants are selected based on the researchers' judgment, depending on their usefulness to the study. Purposeful sampling enabled the selection of geography teachers based on related characteristics for this study, namely school geography teachers within FET band, with different educational training, social standing, working environments, individual ideals and relevant teaching experience within Gauteng Province, South Africa.

4.6 Data Collection Instrument

According to McMillan & Schumacher case study research permits a researcher to collect data in different forms, such as observation, questionnaires, and taking pictures. Cresswell (2007) also maintains that in case study research, the collection of data involves multiple in-depth sources. Similarly, Biggam (2008) adds that in case study research, the above mentioned data collection techniques are effective. As a result, the researcher opted to use document analysis, card sorting, and interviews. The benefits of using these techniques are that they permit a researcher to access a wide range of information, and generate findings that are more robust, trustworthy and compelling than single method studies (Walshe 2007). Biggam (2008) also states that using more than one technique allows researchers to obtain diverse results. In other words, the researcher attains a solid description of what they are investigating and captures different aspects of a phenomenon. In this study, the researcher started with official document analysis (CAPS for Geography FET Band), followed by card sorting and interviews, and then official document analysis (Grade 12 examination papers). It should be noted that interviews were incorporated with card sorting. Figure 3 depicts the data collection process.

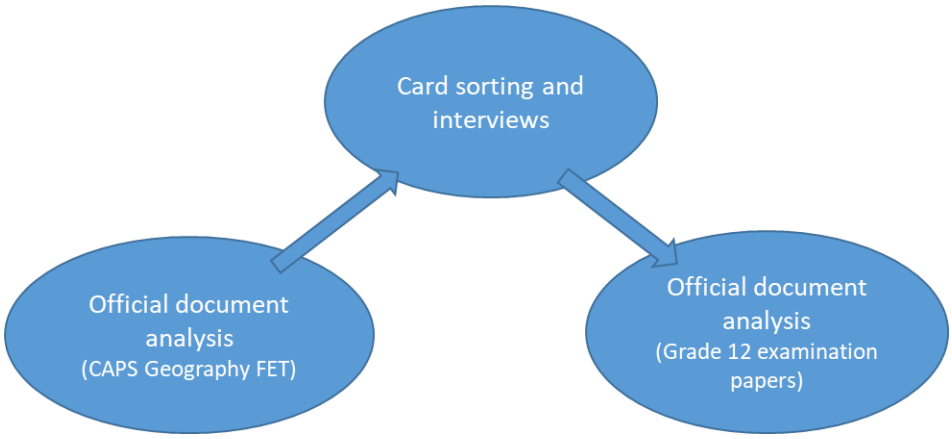


Figure 3: The data collection process

4.6.1 Document Analysis

Document analysis is a process to analyse, assess, or evaluate either written and electronic documents in a systematic manner (Bowen 2009). Documents and artefact collection include personal documents such as lesson plans and official documents such as the National School Curriculum Policy documents (McMillan and Schumacher 2014). An advantage of document analysis is that it works well with triangulation (Bowen 2009). Triangulation enables the researcher to safeguard against the accusation that a study's findings are a simple artefact of a single method (Bowen 2009). In this study, document analysis was used together with card sorting and interviews. Bowen (2009) states that by examining information collected through different methods, results become more reliable (Bowen 2009). Firstly, the notable advantage associated with document analysis is that it is an efficient method. In other words, it is less time-consuming and therefore more time can be spent on other methods. Secondly, official documents such as CAPS are widely available in the public domain. Lastly, official documents are cost-effective or less costly than other methods, so the data is already available. In this study, the official document analysed was CAPS for FET Geography Band (DBE 2011). The analysis of CAPS focused on the nature of place in school geography, by exploring how the document makes direct and secondary (indirect) referencing to the concept of place, as well as looking at how school teachers are expected to implement geographic learning of 'place'. Lastly, the second official documents analysed were the DBE and IEB 2019 Grade 12 examination papers. This was done to explore the implementation of geographic learning of 'place', in the form of direct and secondary (indirect) references to the concept of place.

Document analysis, on the other hand, has a notable limitation, for example, the inability to accommodate user perspectives and the possibility that the researcher will misunderstand the document's content (Bowen 2009). Other noteworthy limitations are insufficient details and biased selection (Bowen 2009). However, it offers more advantages that outweigh the limitations and the fact that the researcher analysed a wide range of documents: namely CAPS for Geography FET Band, DBE 2019 Grade 12 examination papers and IEB 2019 Grade 12 examination papers.

4.6.2 Card Sorting

The second method of data collection was card sorting. According to Paul (2008), card sorting is a hands-on and user-centred technique for gathering input, and therefore users impose their organisation on a set of concepts or cards. Dube (2018) adds that card sorting allows the researcher to collect data by offering participants cards to sort. The benefits of card sorting are inexpensive, user-friendly, and produce quality results (Paul 2008). Furthermore, card sorting is a quick, basic technique for generating conversation around the topics that are most important to the participants (Morley 2016). The best way is to write information on cards, and then ask participants to sort the cards into a sequence (Morley 2016). It is a quick and easy technique to gather information, and it also helps to break up the interview and keep the interviewee involved, focused, and energised. Morley (2016) adds that the card sorting method is a fun and unintimidating process of collecting data, and card sorting yields results that are difficult to replicate with interviews and questionnaires. However, if a researcher is seeking more specific information, the motivation behind each move, or to compare facts, card sorting may not be the best strategy because it only handles static data (Morley 2016).

There are two types of card sorting; open and closed (Morley 2016). Participants can create their own categories with open card sorting. On the other hand, closed card sorting has clearly defined categories and requires that material be sorted into those categories (Morley 2016). In this study, both open and closed card sorting were used. However, all participants opted for closed card sorting, and consequently, the cards were sorted using diamond 9 (Figure 4).

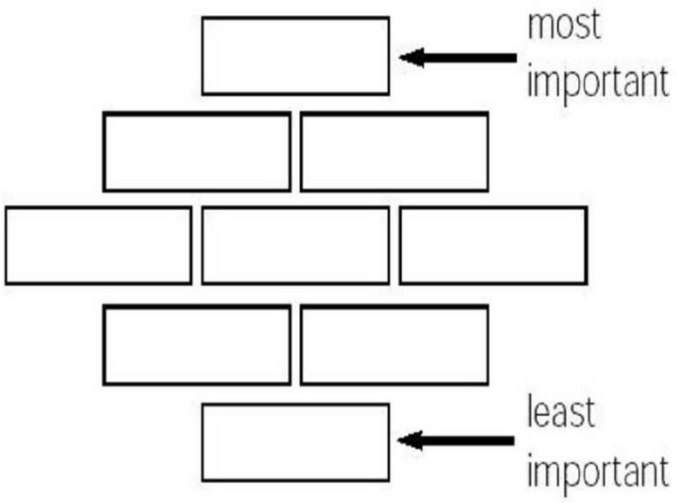


Figure 4: Diamond 9 (Source: https://hecticteachersite.worldpress.com)

In coming up with cards for sorting, the researcher was driven by literature themes that relate to research questions for this study. Literature was therefore used to come up with themes or ideas. Furthermore, the researcher conducted a pilot study with Mr. Z, who is a former geography teacher and subject advisor. The primary purpose of a pilot study was to determine the relevance of the card sorting technique, verify the relevance of the information in cards, and, most importantly, to improve the quality of the results for this study. An Addendum D for the nine cards with the actual concepts is provided at the end of this study. The second motivation for card sorting was the used diamond 9 technique, (Figure 4). Diamond 9 is a versatile activity that gets the participants to think about their own opinions and beliefs. It helps to prioritise information, clarify thoughts, and enhances the ability to focus, reason, and reflect on the information presented. As a result, the researcher came up with nine cards or pieces of information for sorting, from the most important to the least important (Figure 4).

Eight geography teachers were issued with nine cards, each containing information on the conceptualisation of place in geography, including three blank cards for them to write on if they wished to. The researcher then requested geography teachers to sort the cards, from the most to the least important. They were to rank cards from one to nine in the order of importance based on their conceptualisation of ‘place’ in geography. The card sorting activity was jointly done with interviews, asking questions, and giving reasons for card sorting. Therefore, the role of a researcher was to question, understand and analyse participants’ meaning. According to Dube (2018) card sorting generates data by offering participants cards to sort. As a result, data was generated through card sorting, was looking at what the teachers’ understanding of ‘place’

in geography. In addressing the ethical issues, the researcher assigned a pseudonym to each participant from the outset, and tracked their card sorting. This ensured anonymity and confidentiality throughout the research process.

4.6.3 Interviews

The researcher asks the participant a series of questions based on their knowledge of a particular subject matter related to the study objectives (Selena 2017). The researcher was able to use open-ended questions, as a result, in-depth information was collected. Additionally, through interviews participant explain their experiences, understanding, perceptions, and views of their world (Selena 2017). Three different types of interviews can be used to collect data which are structured, unstructured, and semi-structured interviews (Selena 2017). Accordingly, this study uses semi-structured interviews. Semi-structured interviews provide several advantages, such as getting varied responses through open-ended questions (McMillan and Schumacher 2014), allowing participants to respond based on their experience or understanding. Semi-structured interviews also increase comprehensiveness, structured choices, objective probing, follow-up, and clarification (Selena 2017). Semi-structured interviews allowed the researcher to investigate how teachers describe the role of 'place' in geography. In this study, the researcher recorded and jotted down the responses. It was also used to explore emerging ideas from card sorting and personal document analysis regarding how teachers describe the role of 'place' in geography and why teachers have a dissimilar conceptualisation of 'place' in geography. The researcher assigned a pseudonym to each participant. This was to ensure anonymity and confidentiality throughout the interviews and research process.

Interviews, on the other hand, have notable limitations. For example, interviews can be time-consuming, especially setting them up, interviewing, and analysing the information obtained from them. Another noteworthy limitation is that they are never anonymous. The potential for subconscious bias and potential inconsistencies always exists (Alshenqeeti 2014). Therefore, time was crucial during interviews, and the researcher allocated six days, averaging 1-2 hours per participant. The interview schedule for this study was as follows (Appendix: B):

Date	**Schedule**
28 February 2020, 2 March and 3 March 2020	Schedule number 1. Teachers A-D.
12 - 14 March 2020	Schedule number 2. Teachers E-H.

4.7 Data Collection Procedures

The researcher began with the official document analyses (CAPS for FET Geography Band) while waiting for ethical clearance and also to get insight on the concept of 'place'. Followed by dual card sorting and interviews, and lastly, official document analysis (Grade 12 examination papers). Concerning the interviews, the researcher prepared a series of relevant questions that arose from the literature and CAPS for FET Geography Band, as well as from card sorting. Conduction interviews after document analysis and card sorting were of great benefit because they permitted clarification of information that the researcher might have not understood. The research participants were eight FET Geography teachers from different schools in Gauteng, four from private schools, and four from public schools. Before collecting data, the researcher applied for permission to conduct the study from the Gauteng Department of Education, SGB, and school principals. The application included a description, ethics clearance, and interview questions. Permission was granted by the Gauteng Department of Education (Addendum: A). During the collection of data, participants were given a consent form and a letter of introduction. Confidentiality and anonymity were also maintained.

4.8 Data Presentation and Analysis

To strengthen this study, the researcher used both content and narrative analysis approaches. Content analysis is used to analyse documented information such as texts and responses from research participants (Bhatia 2018). Document analyses and card sorting were analysed through content analysis, with the purpose of classification, summarisation, and tabulation of information. Content from various sources, mainly interviews and observations are used for effective narrative analysis (Bhatia 2018). Consequently, in this study, interviews were analysed through narrative analysis. The main purpose was to reflect and present a narrative aspect by school geography teachers based on their different conceptualisation of the concept of 'place'. Narrative qualitative data analysis such as organising data, transcribing data into segments, coding data, describing data, categorising data and, developing patterns were used (Macmillan & Schumacher 2014). Hence, the above-mentioned stages were used to present and analyse the data for this study. Also, it should be noted that initially, the researcher wanted to use ATLAS-ti. However, the researcher opted to analyse the data manually. Physical attendance of ATLAS.ti trainings were not possible for the researcher. This was due to strict COVID-19 regulations, and as the results the ATLAS.ti training was conducted virtually. Consequently, the researcher found virtual training to be unsuitable, because software trainings are more practical. Another issue was the cost of ATLAS.ti licenses, which were relatively

expensive. The researcher had no choice but to use manual analyses, and also the fact that the researcher has used manual analyses in his previous studies. Moreover, manual analyses are easy to conduct and come at no additional expense. In addition, manual analyses have the advantage of allowing the researcher to gather detailed information, as well as identifying patterns among research participants.

According to Macmillan & Schumacher (2014), data organisation is a stage that follows once the data has been collected. In this study, the researcher then transcribed data into segments. Transcribing data into segments through putting data into a word processing package highlighted by Macmillan & Schumacher (2014) was applied in the study. Transcription techniques such as omitting non-verbal dimensions of interaction and data interpretation (Macmillan et al 2014) were used concurrently with transcribing data. The next step for the researcher was to code the data through looking for similar words or phrases mentioned by the interviewees (Macmillan & Schumacher 2014), at this stage, the researcher put phrases into categories. Macmillan & Schumacher (2014) further postulate that once the data is coded, it is at this point that a researcher should take a break from the study and let it lie and come back to it fresh. The break increases data anonymity and helps the researcher have an independent understanding of the coded data and ultimately relevant ideas of how to categorise data (Macmillan & Schumacher 2014). Hence, the researcher also took a short break before describing and categorising data.

Describing data means summarising the distribution and nature of the variables being researched. The information that was coded was tabulated into categorical data such as teaching experience. In a similar manner as Macmillan & Schumacher (2014), the researcher described the data by using percentages in order to summarise the information. The next stage was categorising data, which is grouping codes together into different categories. This stage is used to describe the meaning of similarly coded data as well as to give meaning to combined codes (Macmillan & Schumacher 2014).

Developing patterns simply means putting together relationships among categories. Which also means examining the data in as many ways as possible. The researcher then switches to a deductive mode of thought, bouncing back and forth between codes, categories, and preliminary patterns in quest of confirmation (Macmillan & Schumacher 2014). The researcher also used a similar method to categorise data and develop patterns.

Document analysis, card sorting, and interviews were used to collect data for this study to answer each of the research questions. Data gathered through document analysis was organised in the form of tables and analysed deductively by units to get a percentage. Card sorting was analysed using tables and graphs as well as categorising cards into high, middle or low priority. On the other hand, interviews were analysed through use of words, phrases, statements and tables. Furthermore, through the use of all the above-mentioned instruments, a Continuum of Theory Explicitness (Figure 1) was used to explore the direct and secondary references to the concept of 'place'.

4.9 Ethical Consideration

Research in education focuses mainly on human beings. In this study, the researcher focused on school geography teachers. Macmillan & Schumacher (2014) state that it is important for a researcher to safeguard the rights, respect, and wellbeing of all participants. The confidentiality and privacy of participants must also be respected (McMillan & Schumacher 2014). In this study, the researcher considered the following ethics: professional integrity, full disclosure, voluntary participation, no harm or risk to participants and privacy, which included issuing informed consent to participants.

Full disclosure emphasises that a researcher must be accountable and transparent on the rationale for the research (McMillan & Schumacher 2014:129). As a result, all participants were informed of the study's purpose bringing the concept of voluntary participation emphasised by McMillan & Schumacher (2014). Consequently, nobody was compelled to participate in this research. Furthermore, informed consent stresses that subjects must agree to participate with full knowledge of the study and full disclosure of any risks associated with the study (McMillan & Schumacher 2014). Consent forms were given to all participants, and they were empowered that they could withdraw from the research at any given time without comebacks.

No harm or risk to participants means that participation must never result in physical or mental discomfort, harm, or injury to the participants (McMillan & Schumacher 2014). It was the researcher's obligation to ensure that none of the participants were in danger at any point during the study. The other consideration was participants' privacy obtained through participants remaining anonymous. Professional integrity emphasises the importance of researchers being sensitive to issues such as beneficence, justice, respect of persons, protecting vulnerable

populations such as children, and social betterment (McMillan & Schumacher 2014). Therefore, privacy and professional integrity were respected in this study.

In addition, there was no plagiarism, falsification of data and misrepresentation of data, and biased writing. The researcher requested authorisation to conduct the study from the Gauteng Department of Education, as well as ethical clearance from the University of Pretoria Ethics Committee. The researcher applied, waited, and obtained ethical clearance from the University of Pretoria before conducting this study (Ethical clearance reference: EDU010/20). The researcher was granted permission from the Gauteng Department of Education authorising him to interview geography teachers in public schools around the province (Appendix: A). Since the researcher was dealing with people (teachers), issues of ethics were important. All the participants were anonymous; the researcher gave participants pseudonyms so that no one could know to whom the researcher was referring. Participants participation was made voluntary and all procedures that were used during card sorting and interviews were clearly stated. All the information about this study was outlined in the consent form. The consent form was given to participants before the researcher began working with them. They read it and understood the purpose of the study, after which they signed the consent form voluntarily to accept participating in the study (Appendix: C). Lastly, the data will be kept for a period of 15 years in the researcher's supervisor's office for a period of 15 years as a backup plan, the researcher also saved the data on his Google drive, with a protected password, to preserve confidentiality.

4.10 Trustworthiness

The degree to which explanations of phenomena match reality, meaningfulness, and truthfulness of findings and conclusions is referred to as credibility (Macmillan & Schumacher 2014) while dependability refers to the consistency of answers or responses from data collection instruments (Hassen 2015). In qualitative research, credibility and dependability are critical in any research findings.

The credibility and dependability of this research were through the use of the case study approach as it focuses on an in-depth analysis. Samples from the population and multiple data-gathering instruments were also used in the study to maintain credibility of results. Samples selected from the wider population of school geography teachers in Gauteng with diverse educational, social, and experiential backgrounds added to the credibility of the research

findings. The utilisation of wide and well-established data collection instruments, namely, document analysis, card sorting, and interviews, ensured that the study was more trustworthy. Lastly, data was analysed using a wide range of methods to ensure the credibility of the findings.

4.11 Conclusion

This section looked at the research issue, which then provided a rationale for choosing the qualitative method. A case study is a qualitative approach that was chosen, owing to its close association with the interpretivist paradigm. The population, sample, and sample technique were also discussed, mainly a sampling of eight geography FET teachers and the use of purposeful sampling. Data collection instruments using document analyses, card sorting, and interviews were outlined. It also gave an overview of how the data was presented and analysed. Lastly, the issues of reliability, validity, and ethical consideration for this study were also emphasised.

CHAPTER 5: THE NATURE OF 'PLACE' IN SCHOOL GEOGRAPHY

5.1 Introduction

This section presents data analysis, interpretation, and presenting findings for this qualitative study. According to Macmillan & Schumacher (2014: 395), qualitative data analysis is "primarily an inductive process of organising data into categories and identifying patterns and relationships among the categories". This chapter, therefore, analyses, interprets, summaries, and presents data in a manner that responds to the first secondary research question: What is the nature of 'place' in geography? Most importantly, the data was gathered using a qualitative tool, which was the analysis of the official document in the form of CAPS for Geography in the FET Band. The data from the other instruments will be presented in the next chapter.

5.2 Official Document Analysis

The official National curriculum document was used to explore the nature of 'place' in geography. The document analysed was the official South African Geography curriculum (Curriculum Assessment Policy Statement (CAPS) for Geography in the Further Education and Training Phase). It was used to explore the extent to which it makes a direct and secondary reference to the concept of place. In chapter three, the theoretical framework, the researcher has articulated that this study is grounded in the theory of concept formation. It should be noted that the concept formation emphasises that people interpret and conceptualise things in different ways. In this study, concept formation put forward the notion that school geography teachers interpret and conceptualise the concept of place in different ways. Figures 1 and 2 demonstrate the implicit theory and explicit theory. Therefore, a direct reference to the concept of place was guided by explicit theory, while secondary (indirect) reference to place was guided by implicit theory (Figures 1 and 2).

Firstly, the researcher scrutinised the Aims of Geography in the FET Band, Geography's Four Big Ideas, and Overview of Topics per Term that make direct reference to 'place'. An electronic search of CAPS for Geography in the FET Band document was completed to check any references to the word 'place' (direct referencing). Secondly, the researcher then studied the CAPS for Geography in the FET Band document, focusing on secondary referencing to 'place'. In other words, where the concept of 'place' is not explicitly stated.

5.3 Direct Reference to the Concept of Place

5.3.1 Aims of Geography FET Band

In this section, the researcher describes the extent to which the Aims of Geography Studies makes a direct reference. The CAPS Geography FET Band has nine aims that guide geography education and teaching, namely (DBE 2011: 9):

- "explaining and interpreting both physical and human geographical processes
- describing and explaining the dynamic interrelationship between the physical and human worlds
- developing knowledge about where **places** are, and the nature of a range of different **places** at different scales
- practising essential transferable skills – literacy, numeracy, oracy and graphicacy
- promoting the use of new technologies, such as Information Communication Technology (ICT) and Geographical Information Systems (GIS)
- developing a commitment towards sustainable development
- creating awareness and sensitivity to inequality in the world
- fostering empathy, tolerance and fairness; and
- making and justifying informed decisions and judgements about social and environmental issues".

It should be noted that only one of the nine aims makes direct reference to the concept of 'place', the third aim, "developing knowledge about where **places** are, and the nature of a range of different **places** at different scales" (DBE 2011:8). Therefore, the concept of place is not overly emphasised in the aims of the Geography FET Band, the ratio is 1/9 (11, 1%).

5.3.2 Geography's Four Big Ideas

This section examines Geography's Four Big Ideas. The document states that "Geography can be explored by applying a conceptual framework that embraces Geography's four Big ideas, namely: place, spatial processes, spatial distribution patterns, and human and environmental interaction" (DBE, 2011: 9). In the previous chapters, the researcher has argued that the concept of 'place' is 'big' and the most important concept of the four. In support of the argument, the International Charter on Geographical Education (2016) postulates that geography is the study of places. In addition, the International Charter on Geographical Education (2016) further adds that studying geography is essential because it teaches students and communities to appreciate

and respect different places, as well as why they are unique. The findings are that 'place' is considered as a core concept, in other words, considered on the same level as "spatial processes, spatial distribution patterns, and human and environmental interaction". The researcher believes that the concept of 'place' is vital, big, and central to Geography as a subject. Therefore, the CAPS Geography FET document should situate 'place' as a 'big' concept, then situate "spatial processes, spatial distribution patterns, and human and environmental interaction" as key concepts.

5.3.3 Overview of Geography Topics per Term

In this section, the researcher describes the extent to which Topics per Term makes a direct reference to the concept of 'place'. In the section, there are four direct references made to the concept of 'place'. The first reference is in Grade 10, under the topic Atmosphere, "factors that affect the temperature of different places around the world: latitude, altitude, ocean currents and distance from oceans" (DBE 2011: 21). The second reference is in Grade 11, under the topic Using Atlases (revision), "locating places on different maps, using degrees and minutes" (DBE 2011: 29). The same reference to the concept place in Grade 11 is repeated, under the same topic Using Atlases (revision), "locating places on different maps, using degrees and minutes" (DBE 2011: 35). The third reference in Grade 12, under the topic Urban Settlements, "classification of urban settlements according to function, such as central places, trade, and transport, break of bulk points, specialised cities, junction towns and gateway towns or gap towns" (DBE 2011: 45). The fourth and final reference is also in Grade 12, under the topic Urban Hierarchies, "the concepts of urban hierarchy, central place, threshold population, the sphere of influence and range of goods" (DBE 2011: 45).

In the Overview of Geography Grade 10, 23 sub-topics are listed (DBE, 2011: 13-14 and Table 1). Reference to the concept of 'place' is only made in 1 sub-topic: Heating of the atmosphere. The reference to the concept 'place' is inadequate with the ratio of 1/23 (4.3 %). Similarly, in the Overview of Geography Grade 11, 25 sub-topics are listed (DBE, 2011: 13-14 and Table 1). Reference to the concept 'place' is only made in 1 sub-topic, Using atlases (Revision). Likewise, the reference to the concept of 'place' is scant with a ratio of 1/25 (4 %). Correspondingly, in the Overview of Geography Grade 12, 25 sub-topics are listed (DBE, 2011: 13-14 and Table 1). Reference to the concept of 'place' is made twice in the sub-topics, urban settlements, and urban hierarchies. Equally, the reference to the concept 'place' is inadequate with a ratio of 2/25 (8 %). Overall, it is should be noted that the concept of 'place'

is not stressed in the Overview of Geography FET topics. The total number of sub-topics is 83, and the direct mentioning of ‘place’ is only made 4 times, equal to the ratio of 4/83 (4.8 %.).

5.3.4 Discussion

The researcher concludes that the concept of ‘place’ is presented in a fragmented manner rather than in an integrated manner. This is based on the analysis of the Geography FET CAPS document. Firstly, in the Aims of Geography, there is 11.1% - scant reference to the concept of ‘place’. Secondly, in Geography’s Four Big Ideas, the concept of ‘place’ is not positioned as a ‘big’ and most important concept of the four. Thirdly, in the Overview of Geography Topics per Term, there is 4.8%, inadequate referencing to the concept ‘place’. This situation impedes understanding of concepts; given that Fraser (2006) describes concepts as a lens through which a person makes meaning. In other words, concepts, like ‘place’ are not clearly outlined. Hence, it is important to look at concepts as either Explicit Theory (direct reference) and Implicit Theory (secondary reference). These findings suggest that the concept of ‘place’ is not expressed clearly, in other words in an implicit manner. The next section focuses on the secondary reference to the concept of ‘place’.

Table 1: An adapted Overview of Geography Content in the FET Band (DBE 2011: 13). Showing topics and sub-topics from Grade 10 to 12.

Term	Grade 10	Grade 11	Grade 12
1	**The atmosphere** • Composition and structure of the atmosphere • Heating of the atmosphere • Moisture in the atmosphere • Reading and interpreting synoptic weather maps	**The atmosphere** • The Earth's energy balance • Global air circulation • Africa's weather and climate • Drought and desertification	**Climate and weather** • Mid-latitude cyclones • Tropical cyclones • Subtropical anticyclones • Valley climates • Urban climates **Geomorphology** • Drainage systems in South Africa • Fluvial processes • Catchment and river management
2	**Geomorphology** • The structure of the Earth • Plate tectonics • Folding and faulting • Earthquakes • Volcanoes	**Geomorphology** • Topography associated with horizontally layered rocks • Topography associated with inclined/tilted rock strata • Topography associated with massive igneous rocks • Slopes • Mass movements and human responses	**Rural settlement** • Study of settlements • Rural settlements • Rural settlement issue **Urban settlement** • Urban settlements • Urban hierarchies • Urban structure and patterns • Urban settlement issues
3	**Population** • Population distribution and density • Population structure • Population growth • Population movements • HIV and AIDS	**Development Geography** • The concept of development • Frameworks for development • Trade and development • Development issues and challenges • Role of development aid	**Economic Geography of SA** • Structure of the economy • Agriculture • Mining • Secondary and tertiary sectors • Strategies for industrial development • Informal sector
4	**Water resources** • Water in the world • The world's oceans • Water management in South Africa • Floods	**Resources and sustainability** • Using resources • Soil and soil erosion • Conventional energy sources and their impact on the environment • Non-conventional energy sources • Energy management in South Africa	**Revision** • Climate and weather • Geomorphology • Settlement Geography • Economic Geography of SA • Geographical skills and technique
1-4	**Geographical skills and techniques** • Using atlases • Fieldwork and practical work • Mapwork skills • 1:50 000 topographic map • Geographical Information Systems (GIS)	**Geographical skills and techniques** • Aerial photographs and orthophoto maps • Map techniques • Fieldwork • Mapwork skills • Using atlases • Geographical Information Systems (GIS)	**Geographical skills and techniques** • Geographical Information Systems (GIS) • Mapwork techniques • Map use and map skills • Mapwork techniques

(Source: DBE 2011:13)

5.4 Secondary Reference to the Concept of Place

In analysing secondary reference (Implicit Theory) to the concept place, it is important to highlight the comprehensive meaning of a concept. From the literature review in chapter two and theoretical framework in chapter three, the researcher provided a comprehensive analysis of the concept. Fraser (2006) points out that concepts are subjects' interpretation(s) or ways of thinking and that people conceptualise things differently as well as interprets events differently. Fraser (2006) further adds that concepts are like a lens or a pair of glasses through which a person views the world and makes meaning of it. In summary, it is highly likely that geography teachers may interpret the concept of place differently. Moreover, the CAPS Geography FET curriculum may also make a secondary reference to the concept place. Therefore, looking at the secondary reference to the concept of place, six geography inquiry questions were used. These questions are provided by the International Charter on Geographical Education (1992: 5) and are as follows:

- "Where is it?
- What is it like?
- Why is it there?
- How did it happen? How is it changing?
- What impact does it have?
- How should it be managed for the mutual benefit of humanity and the natural environment?".

Since this study was focusing on the concept of 'place', further extended questions to guide a geographical enquiry about the place were used (Table 2). In addition to the geographical enquiry questions about place, it is also important to emphasise the geographic understating of 'place'. A place could be any plot of land on the Earth's surface that has been named and where people interact (Rusznyak 2017). The demarcated piece of land has specific characteristics and functions (Rusznyak 2017), examples include municipalities, provinces, and countries. In geography as a subject, geographers focus on exploring similarities that exist between places as well as how they differ from one another. The difference could be on the climate, the risk of hazard, the economy, and opportunities such as resources (Rusznyak 2017). This enables geographers to explore how human and physical elements interact in a particular place, as well as describe how the integration of physical and human features interact to give a place its distinct characteristics (Rusznyak 2017). The articulation on place above, and geographical

enquiry about the concept of place (Table 2) were used to identify a secondary reference to the concept place; in the Aims of Geography in the FET Band, Geography's Four Big Ideas, and Overview of Topics per Term.

Table 2: Geographical questions that explore implicity theory of 'place'

	Geographical questions that explore 'Place'
Where is it?	Where is this place?
What is it like?	What is located here? What isn't located here? How is the land used? What sort of place is it? When did it get here? What are characteristics of this place? What is significant about this place's characteristics?
Why is there?	Why did people settle here? What do people do at this place? What _____ located at this place?
How did it happen? How is it changing?	How did it come to be this way? How would this place be different if_____? Why is significant about this place's characteristics? How is this place similar to another place you know? How is this place changing? Why is it changing?
What impact does it have?	How is this place connected to other places? How does what is happening at this place affect my life? How do I affect this place?
How should it be managed for the mutual benefit of humanity and the natural environment?	What do you like about this place? If you could, what would you leave as it is or change about this place? Would you like to live there? Why or why not? Could this place be considered a heritage site? Why or why not?

(Source: Rusznyak 2017:52-53)

5.4.1 Aims of Geography FET Band

In this section, the researcher describes the extent to which the Aims of Geography FET Band makes a secondary reference to the concept place. Out of nine Aims of Geography FET Band, seven aims make a secondary reference to the concept place (Table 3). The secondary reference to the concept place is satisfactory with the ratio of 7/9 (77.8 %). In the next sub-section, the researcher provided a comprehensive analysis on each aim guided by geography enquiry questions.

Table 3: An adapted Geographical questions that explore 'place' (Aims of Geography FET Band)

	Geographical questions that explore 'Place'	**Aims of Geography FET Band**
Where is it?	Where is this place?	Aim 1, 2, 3, 5, 6, 7 and 9.
What is it like?	What is located here? What isn't located here? How is the land used? What sort of place is it? When did it get here? What are characteristics of this place? What is significant about this place's characteristics?	Aim 1, 2, 3, 5, 6, 7 and 9.
Why is there?	Why did people settle here? What do people do at this place? What _____ located at this place?	Aim 1, 2, 3, 5, 6, 7 and 9.
How did it happen? How is it changing?	How did it come to be this way? How would this place be different if_____? Why is significant about this place's characteristics? How is this place similar to another place you know? How is this place changing? Why is it changing?	Aim 1, 2, 3, 5, 6, 7 and 9.
What impact does it have?	How is this place connected to other places? How does what is happening at this place affect my life? How do I affect this place?	Aim 1, 2, 3, 5, 6, 7 and 9.
How should it be managed for the mutual benefit of humanity and the natural environment?	What do you like about this place? If you could, what would you leave as it is or change about this place? Would you like to live there? Why or why not? Could this place be considered a heritage site? Why or why not?	Aim 1, 2, 3, 5, 6, 7 and 9.

(Source: Adapted from Rusznyak 2017:52-53)

5.4.1.1 Aim one: "explaining and interpreting both physical and human geographical processes" (DBE 2011: 9)

To begin, it is necessary to clarify physical and human geographical processes. In the current education climate, geography focuses on studying changes in natural process as well as the interactions between human and physical features (Tang et al. 2012). Natural process changes are an example of physical geographical processes, while human-land systems are linked to human geographical processes. Tang et al. (2012) further add that physical and human geographical processes cannot be entirely isolated from each other; instead, they are becoming increasingly close at present. To balance this account, the researcher used a section of physical geography with mountains as an example. By nature, mountains are practical examples of the physical geographical process. Mountains are natural and form part of physical geography. Consequently, humans use mountains in several ways. The most common forms are settlements, recreational activities, and telecommunications.

The above articulation suggests the interaction between physical and human geographical processes. Furthermore, this articulation demonstrates a mountain as a location with meaning, the place. Martin et al. (2013) also maintain that the physical aspects of mountains are directly linked with our attitudes toward them. The human population in the mountain regions and the diversity of mountain agricultural activities are among practical examples of physical and human geographical processes (Martin et al. 2013). Therefore, the researcher maintains that aim one makes a secondary reference to the concept of place. Table 4 below is the comparison between the geographical questions and mountain geography.

Table 4: The comparsion between the geographical questions and mountain geography

Geographical questions	**Mountain geography**
Where is it?	Where is the mountain?
What is it like?	What is the mountain like?
Why is there?	Why is the mountain located there?
How did it happen? How is it changing?	How did the mountain happen? How is it changing?
What impact does it have?	What impact does the mountain have on the local communities?
How should it be controlled so that humanity and the natural environment benefit from it?	How is the mountain benefiting the local community?

5.4.1.2 Aim two: "describing and explaining the dynamic interrelationship between the physical and human worlds" (DBE 2011: 9)

Consequently, aim two is similar to aim number one. Both aims make a joint reference to physical and human processes. Aim two, on the other hand, refocuses on the interrelationship between physical and human geography. As already alluded to, physical and human geographical processes cannot be entirely isolated from each other. Therefore, for the same reasons given above in aim one, the researcher maintains that aim two makes a secondary reference to the concept of place.

5.4.1.3 Aim three: "developing knowledge about where places are, and the nature of a range of different places at different scales" (DBE 2011: 9)

Aim number three is the only aim of the nine aims that makes a direct reference to the concept place. The assumption is that this aim links with all geographical enquiry questions without any justification. Hence, the researcher maintains that aim three makes a direct and secondary reference to the concept of place.

5.4.1.4 Aim four: "practising essential transferable skills – literacy, numeracy, oracy and graphicacy" (DBE 2011: 9)

Aim four is one of the two aims that do not make secondary reference to the concept place. This aim is more towards the skills that are essential within geography as a subject. These skills are literacy, numeracy, oracy, and graphicacy. These are essential skills in educational geography, but they don't reveal the essence of the concept place. For these reasons, this aim restricts secondary reference to the concept place.

5.4.1.5 Aim five: "promoting the use of new technologies, such as Information Communication Technology (ICT) and Geographical Information Systems (GIS)" (DBE 2011: 9)

This aim is similar to aim four, as it promotes the use of advanced technologies, particularly the use of Geographical Information Systems (GIS). Firstly, it is vital to articulate what Geographical Information Systems (GIS) is. GIS is an abbreviation for Geographical Information Systems, a software program that captures, stores, manipulates and interprets data (Dilley et al. 2019a). Furthermore, GIS has descriptive information about places and can use that information to produce new maps or data (Dilley et al. 2019a). GIS is the tool that is used to link physical and human geographical processes. Based upon the articulation of aim one and

table 4, the researcher maintains that GIS is a tool that can be used to demonstrate the interdependence between physical and human geographical processes.

5.4.1.6 Aim six: "developing a commitment towards sustainable development" (DBE 2011: 9)

Sustainable means the ability to continue to do something without causing damage. Hence, sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs", as articulated in the 1987 Brundtland report. There are three key components of sustainability: namely social, environmental, and economic. These pillars must be balanced to achieve sustainable use of resources, or sustainable development. Aim six makes a secondary reference to the concept of place and links both physical and human geographical processes. For example, natural resources fall under physical processes (environmental), while exploitation of resources falls under human processes. To balance this account, the researcher located coal in South Africa. By nature, coal is a practical example of the physical geographical process, because it a natural resource. Consequently, coal is used by humans to generate electricity. However, coal is not a sustainable source of energy. Non-sustainable use of resources differs from place to place. Firstly, it depends on the availability of resources in a particular place, such as coal in South Africa. The foundation of aim six, "developing a commitment towards sustainable development", is that all non-sustainable activities occur in a particular place, which then makes a secondary reference to the concept of place. Furthermore, some places or cities are more sustainable compared to others. For example, some places or cities go greener by planting trees, parks, and green roofs. Wherever possible, renewable resources are used instead of non-renewable resources. This articulation demonstrates the sustainable development initiative of a particular place. Therefore, the researcher maintains that aim six makes a secondary reference to the concept of place. Below, Table 5, is the comparison between the geographical questions and sustainable cities.

Table 5: The comparion between the geographical questions and a sustainable city

Geographical questions	Sustainable city
Where is it?	Where is this city (place)?
What is it like?	What is the city like?
Why is there?	Why is the city located there?

How did it happen? How is it changing?	How is it changing?
What impact does it have?	What impact does the city have on the local communities?
How should it be controlled so that humanity and the natural environment benefit from it?	How is the city benefiting the local community?

5.4.1.7 Aim seven: "creating awareness and sensitivity to inequality in the world" (DBE 2011: 9)

Firstly, it is essential to elaborate on what inequality is. Inequality refers to the fact that different people have different living standards (Dilley et al. 2019b). For example, classifying countries or places as developed or developing. Concerning the concept of place, there is no way we can articulate inequality without comparing places. For example, comparing the levels of poverty and the availability of basic needs such as water between places. Therefore, the researcher maintains that aim seven makes a secondary reference to the concept of place. Hence, the geographical questions that explore 'place' link well with the above- mentioned key factors of inequality (International Charter on Geographical Education 1992: 5):

• "Where is it?
• What is it like?
• Why is there?
• How did it happen? How is it changing?
• What impact does it have?
• How should it be managed for the mutual benefit of humanity and the natural environment?"

5.4.1.8 Aim eight: "fostering empathy, tolerance and fairness" (DBE 2011: 9)

Similarly, aim four and eight do not make secondary references to place. Fostering empathy, tolerance and fairness are examples of thinking geographically as well as being important values. It is beyond doubt that these values contribute to the development of a student's ability to think geographically and apply fundamental geographic educational goals. However, aim eight does not reveal the essence of the concept of place. In the researcher's view, this aim does not make secondary reference to place.

5.4.1.9 Aim nine: "making and justifying informed decisions and judgements about social and environmental issues" (DBE 2011: 9)

Accordingly, aim nine is similar to aim number seven. Both aims make a reference to social issues since inequity is a component of social issues. Aim nine, on the other hand, is more concerned with environmental issues. Environment issues include components such as biodiversity loss, pollution, soil erosion, and deforestation (Dilley et al. 2019b). All the above-mentioned environmental issues are place-based, for example, soil erosion issues in Swartland, Western Cape. Therefore, the researcher maintains that aim nine makes a secondary reference to the concept of place. Hence, the geographical questions that explore 'place' link well with the social and environmental issues. Below is the comparison between the geographical questions and soil erosion at Swartland, in Western Cape.

Table 6: The comparison between the geographical question and soil erosion iat Swartland, in Western Cape

Geographical questions	**Soil erosion at Swartland, in Western Cape.**
Where is it?	Where is Swartland?
What is it like?	What is Swartland like?
Why is there?	Why there is soil erosion at Swartland?
How did it happen? How is it changing?	How did the soil erosion at Swartland happen? How is it changing?
What impact does it have?	What impact does the soil erosion have on the Swartland community?
How should it be controlled so that humanity and the natural environment benefit from it?	How should soil erosion at Swartland be managed?

5.4.2 Geography's Four Big Ideas

In chapter one, the introduction, the researcher has argued that the concept of 'place' is one of the foundational and important concepts of the four (Figure 5). In addition, other concepts; namely space, physical earth, and human-environment interaction are all interdependent on the concept of place.

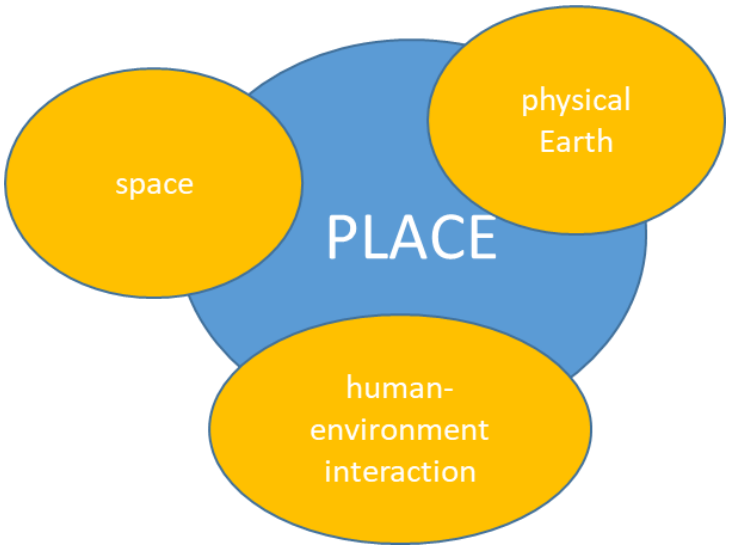


Figure 5: The interdependence of other concepts to that of place

5.4.2.1 Place vs Space

Bjelland et al. (2013) refer to space as an area in and around which all humans exist. Furthermore, space is a location, a location without a meaning, in other words a physical geographical space (The Cultural Courier 2019). Place, on the other hand, provides a space with a meaning well as a link to local cultures or social identity. Therefore, space is a location without a meaning, while a place is a location with a meaning.

For example, describing Durban as space;
Durban is one of South Africa's largest cities, located on the country's east coast in the province of Kwa-Zulu Natal. It is located on the Indian Ocean's shore. During the majority of the year, it has a hot and humid environment.

For example, describing Durban as a place;
Shaped by Zulu and Indian cultures, Durban is home to the Durban July Handicap, and its shoreline stretches from uShaka Marine World to the contemporary Moses Mabhida Stadium.

Durban has a dynamic, happy, and resilient attitude. It is known for being a welcoming environment where everyone is kind and the celebration never stops.

For these examples given above, the concept of place gives meaning to space. The researcher maintains that the concept of 'place' is a foundational and more important than space (Figure 5).

5.4.2.2 Place vs Physical Earth and Place vs Human-Environment Interaction

In the current geography climate, the place has physical and human characteristics that define it (Rosenberg 2019). In addition, a place describes the human and physical characteristics of a location as well as framework information about the location (Rosenberg 2019). So, in this consistent context, both the physical Earth and human-environment interaction are largely dependent on the concept of place.

The Earth is known to be the only place in the universe that sustains and supports life (Rosenberg 2019). In this case, the Earth is a location with a meaning, a place. In this way, human-environment interaction is the means by which humans interact with nature. For example, humans may set a farm next to the river to access water easier. This interaction and modification of the environment are place-based. As a result, human characteristics of places are derived from human thoughts and actions (Rosenberg 2019). As a result, there are interrelationships between people and their environment. Hence, humans rely on the natural surroundings for basic necessities such as water, food and shelter (Rosenberg 2019). For these reasons, the place gives meaning to both physical and human characteristics.

5.4.3 Overview of Geography Topic per Term

In this section, the researcher describes the extent to which the five sections make a secondary reference to the concept of place. These sections are from Grades 10-12, namely (Table 7);

1. The Atmosphere/Weather and Climate
2. Geomorphology
3. Population/Development Geography/Settlements
4. Water Resources/Resources and Sustainability/Economic Geography of South Africa
5. Geographical Skills and Techniques

The researcher maintains that all the above-mentioned sections make a secondary reference to the concept of place. Sections 1 and 2 are physical geography, while sections 3 and 4 are human geography. This demonstrates that secondary reference to the concept of place is covered in both physical and human geographies. This is attesting that place is a central concept to link the interrelationship between the physical and human processes. Therefore, this is in accordance with the researcher's argument that place is a 'big' and the most important concept. To balance this account, it is necessary to examine each section per grade. Each account was examined through the key aspects of the concept of place, showing that place can be applied to very large areas, such as countries, or very small areas such as cities (Fletcher 2019).

5.4.3.1 Grade 10

5.4.3.1.1 The Atmosphere

The direct reference to 'place' is evidenced under the topic Heating of Atmosphere, "factors that affect the temperature of different places around the world: latitude, altitude, ocean currents and distance from the oceans" (DBE 2011: 21a). This also implies the secondary reference to 'place'.

Moreover, the researcher has earlier maintained that place is what gives a space meaning. Space is a location without a meaning, while a place is a location with a meaning. The section of the atmosphere is more of a space. However, units are giving the atmosphere a meaning or secondary reference to place. For example, the heating of the atmosphere by the Earth, the greenhouse effect, the greenhouse's impact on people and the environment, factors influencing global temperature, global warming, and the impact of climate and climate change on Africa's environment and people (Dilley et al. 2019a). From the unit, heating of the atmosphere by the Earth, it is evidence that the sun's energy warms the Earth's surface. However, the heating of the Earth or insolation is unequally distributed as some places receive more heat energy (equatorial region), while others receive less (polar region). The above articulation further supports the secondary reference to the concept of 'place'.

Reading and interpreting synoptic weather maps strongly validates the secondary reference to the concept of place. According to Dilley et al. (2019a), meteorologists take daily weather measurements at the same time every day all over South Africa. Therefore, the concept place fits well as the measurements are taken all over South Africa, in different places. Dilley et al. (2019a) further add that synoptic weather maps are maps that display weather conditions for a particular place, time, and day.

5.4.3.1.2 Geomorphology

The geomorphology section in Grade 10 makes a solid secondary reference to the concept of 'place'. All the units, namely, the Earth's formation, oceanic crust, folding and faulting, natural disaster such as earthquakes, tsunami and volcanoes are all central to the concept of 'place'. For example, South Africa's geology is a sub-unit under the structure of the Earth. This sub-unit outlines that South Africa as a place has a variety of rocks that were formed over 3500 million years ago (Dilley et al. 2019a). For instance, Karoo sediment, Karoo sediment covered by Drakensberg basalt, and Cape Fold Mountains are the main rock types that occur over the surface (Dilley et al. 2019a). In that case, these main types of rocks influence the geology of different places within South Africa. Therefore, landforms associated with different types of rocks make a secondary reference to the concept of 'place'.

The unit on plate tectonics also makes a solid secondary reference to the concept of place. The sub-unit "the position of tectonic plates" outlines global tectonic plates and tectonic plate boundaries (Dilley et al. 2019a). This, in turn, demonstrates that there are different tectonic plates in different places. Other places such as South Africa are located far from tectonic boundaries, and in the same way, this makes a secondary reference to the concept of place. Lastly, the unit on the world's volcanic and earthquake zones (places) also makes a secondary reference to the concept of place. Hence, zones have a similar meaning to that of place.

5.4.3.1.3 Population

The researcher believes that the nature of human geography is strongly linked to the concept of place. To balance this account, it is necessary to examine five major sub-units under population, namely: population density and distribution, population dynamics, demographic change, migrations, and HIV and AIDS. The population section discusses the world's population, particularly comparing populations in various countries (Dilley et al. 2019a). The researcher articulated that place can be applied to very large areas, such as a country (The Cultural Courier 2019). For this reason, this section focuses on the number of people in various parts of the world, or rather, in several places. For example, Dilley et al. (2019a) postulate that most people live along the coastal areas and mainly in the North Hemisphere. Again, this makes a secondary reference to the concept of place.

Population structure focuses on population indicators such as the number of births, number of deaths, life span, and literacy rate. (Dilley et al. 2019a). The population indicators are used to compare the level of development in various countries or places. Population indicators vary

among countries. For these reasons, population structure also demonstrates secondary reference to the concept of place.

5.4.3.1.4 Water Resources

Similarly, to the population section, the water resource section makes a solid secondary reference to the concept of place. The sub-unit on ocean currents and their importance is a good example to demonstrate this. For example, consider the impact of ocean currents on South Africa's east and west coasts (Dilley et al. 2019a). The warm Agulhas and Mozambique currents have an impact on places along the east coast. Whereas, the cold Benguela current influences the west coast (Dilley et al. 2019a). As a result, these ocean currents influence South African climate, and coastal communities benefit from ocean resources such as fishing. For these reasons, a secondary reference to the concept of 'place' is clearly evident.

The unit on water management in South Africa also makes a secondary reference to the concept of place, hence South Africa is a place. The unit on floods is another good example because they occur anywhere and in different places. Furthermore, the impact of floods varies from place to place.

5.4.3.2 Grade 11

5.4.3.2.1 The Atmosphere

Firstly, under Grade 10 Atmosphere, the researcher has already articulated that reading and interpreting synoptic weather maps make a secondary reference to the concept of place. In this section, the researcher used three sub-topics, namely The weather and climate of Africa, El Niño and La Niña events as well as drought and desertification (Dilley et al. 2019b). These three sub-topics validate secondary reference to the concept of place. The researcher has already articulated that place is applied to large areas, such as countries, or very small areas such as a city (The Cultural Courier 2019). In this case, Africa is a place. Therefore, the unit of Africa's weather and climate makes a secondary reference to the concept of 'place' as it focuses on Africa. The El Niño and La Niña events and their impacts on Africa's climate also validate the secondary reference to the concept of place, hence Africa is place. In addition, the effects of El Niño and La Niña happenings affect several places within Africa.

The unit on drought and desertification also makes a secondary reference to the concept of place. A sub-unit on "areas (places) in Africa at risk of drought and desertification" clearly demonstrates this, hence Africa is a place. For example, the causes of drought and

desertification in different places are covered by various case studies. These case studies are place-based, for instance, a case study on the Rendille of Northern Kenya (Dilley et al. 2019b).

5.4.3.2.2 Geomorphology

The first unit is that of "characteristics and processes associated with the development of hilly landscapes and basaltic plateaus" (Dilley et al. 2019b). Hilly landscapes are layers of horizontal sedimentary rock with uniform resistance to erosion (Dilley et al. 2019b). As a result, the climate of an area influences the nature of the slopes in hilly landscapes (Dilley et al. 2019b). In different places, these hilly landscapes are used for settlement. For example, the Valley of a Thousand Hills near Durban (Dilley et al. 2019b). This example demonstrates how landscapes make a secondary reference to the concept of place.

The unit on slopes, mainly the overview of South Africa's topography also makes a secondary reference to the concept of place, hence South Africa is a place (Dilley et al. 2019b). The significance of slopes for human activities in various places is another good example to demonstrate secondary reference to the concept of place. In different places, people use slopes for settlement (build homes on slopes), agriculture (orchards and vineyards are found on slopes), recreation (slopes are popular activities for activities such as hiking), and communication (Dilley et al. 2019b). The above-mentioned human activities occur on various slopes, so they occur in various places.

The sub-unit on the effect of mass movements on humans, societies and the environment is another example, hence several case studies are place-based. For example, a mudslide in Taiwan and Rockslide in Cairo. Hence, Taiwan and Cairo are place examples.

5.4.3.2.3 Development Geography

Similarly, with the Grade 10 population, development geography strongly makes a secondary reference to the concept of place. This section begins by emphasising that countries are classified according to the level of development (Dilley et al. 2019b). In other words, countries are classified as developed or developing countries. The researcher has articulated that a country can be classified as a place. Therefore, this section classifies different places according to their level of economic development.

The use of Brandt's report in classifying the world into north and south is another example of a unit that makes a secondary reference to the concept of place. This implies that wealthy and industrialised places are mainly in North America and Europe (Dilley et al. 2019b). While, the south is referred as having fewer wealthy places, such as places in South America and Africa (Dilley et al. 2019b). Therefore, the classification of places by the Brandt report supports secondary reference to the concept of place. In addition, development indicators are used to compare the level of development between places.

Lastly, development geography focuses mainly on comparing different places. For example, development models, community-based development, and trade and development. This unit is all about comparing countries, in other words about comparing places. Furthermore, the use of case studies across this section is based on comparing places. The gender inequality index is also used to indicate the degree of equality or inequality between men and women in a country, in other words, in a place.

5.4.3.2.4 Resources and Sustainability

This section begins by emphasising the relationship between resources and economic development, which emphasises that towns, cities, and infrastructure are often developed where resources were available (Dilley et al. 2019b). In other words, urban places are often developed where resources were available. For example, urbanisation and industrial development on the Witwatersrand (place) in South Africa is continuing even though most of the gold mines have been closed (Dilley et al. 2019b). The above articulation clearly illustrates a secondary reference to the concept of place.

The section on soil and soil erosion also makes a secondary reference to the concept of place. An example of this is the causes of soil erosion in different places: ploughing downslopes where farmers damage their land by using land that is too steep (Dilley et al. 2019b). These types of soil erosion are place-based. The use of case studies on the effect of soil erosion is also place-based because it focuses on a particular place.

The section on conventional sources of energy and their environmental impact, also demonstrates secondary reference to the concept of place. For example, the production of electricity in South Africa shows that electricity is generated in different parts or places of South Africa. Furthermore, case studies on energy production are place-based. For example,

Paluel nuclear power station in France (Dilley et al. 2019b). Lastly, the following units make as a secondary reference to the concept of place (Dilley et al. 2019b), hence South Africa is a place:

- "South Africa's potential to meet long-term energy needs using conventional resources
- Solar energy: an example from South Africa and the world
- Wind energy: an example from South Africa and the world
- The future of non-conventional energy in South Africa
- Energy management in South Africa"

5.4.3.3 Grade 12

5.4.3.3.1 Weather and Climate

Accordingly, the concept of place applies to small areas. Secondly, the effect of mid-latitude cyclones and tropical cyclones focuses on a particular place. For example, the impact of tropical cyclones on human activities such as drowning, loss of homes, and disease outbreaks. According to the BBC (2019), the death toll from tropical cyclone Idai in Mozambique could be as high as 1000, with at least 122 deaths in Malawi. More than 1500 people were injured in Beira as a result of falling trees and debris from buildings, including zinc roofing. The above articulation on the impact of tropical cyclone Idai in a particular place namely; Mozambique, Malawi, and Beira demonstrate the secondary referencing to the concept of place.

The section on the impact of berg winds on human activities also makes secondary reference to the concept of place. For example, berg winds are associated with dry conditions, which means that veld fires affect both humans and animals (Esterhuysen et al. 2020). However, berg winds only affect areas or places that are on the western side or west coast of South Africa. Therefore, they only affect certain places, thus make a secondary reference to the concept of place.

5.4.3.3.2 Geomorphology

This section of geomorphology focuses on fluvial processes. Fluvial processes are related to rivers and streams as well as the deposits and landforms created by them (Esterhuysen et al. 2020). To demonstrate the secondary reference to place, the researcher used the sub-topic drainage basins and catchment management. Firstly, as the world's population grows, agriculture and industry expand, and cities become more densely populated, as a result, more freshwater is required (Esterhuysen et al. 2020). South Africa as a place, does not have a great

deal of water and is regarded as a water-scarce country (place). With a growing population in South Africa, agriculture and industry are expanding which means more and more water is needed. As a result, human activities affect the water that flows through a drainage basin. The higher the population, the higher the demand for the water resources of a country. The researcher has argued that place is applicable to large areas, for example country. The articulation above on water challenges in South Africa (as a place) demonstrates the secondary reference to the concept of place.

5.4.3.3.3 Settlements

The concept of place applies to a very small area such as the city or village (The Cultural Courier 2019), consequently, this particular section focuses on urban and rural settlements. Therefore, the researcher maintains that urban and rural settlements are places, rather than unique places. Furthermore, the settlement has two meanings; namely, a place where a group of people lives together and a process which is the action of settling (Esterhuysen et al. 2020). Without a doubt, this section strongly validates the secondary reference to the concept of place. Furthermore, a settlement is a place where a group of people lives, buildings are found, moreover where social and economic activities take place. This supports the researcher's earlier contention that a place is a location with a meaning. Lastly, this section is centred around the concept of place, the following sections sustain secondary reference to 'place':

- "Site and situation of a settlement
- Classification of settlements in size, pattern, and function
- Classification of rural settlements
- Rural-urban migration
- Rural development strategies
- Social justice issues rural areas, such as land reform
- Classification of urban settlements
- Functions of urban settlements
- Types of urban settlements
- Urban hierarchy
- Lower and higher-order centres
- Urban structure and patterns
- Urban morphology
- Models of urban structure
- Changing urban patterns and land use

- Urban settlement issues”

5.4.3.3.4 Economic Geography of South Africa

This particular section focuses on the Economic Geography of South Africa, the emphases are on South Africa as a place. Therefore, the concept of place applies to large areas, such as a country. Without a doubt, this section strongly validates the secondary reference to the concept of place.

5.4.3.4 Geographical Skills and Techniques (Grades 10 -12)

Geography is the study of places, and the dominant place-based teaching method is geographical skills and techniques. The following are place driven geographical skills and techniques topics (Table 1):

- “Using atlases
- Fieldwork and practical work
- Mapwork skills and techniques
- 1:50 000 Topographic map
- Aerial photographs and Orthophoto maps
- Geographical Information Systems”

Geographical skills and techniques as a place-based teaching method, teach and promote the language of maps so that a map reader understands what maps say as well as giving us information on how people relate to their home places (Dilley et al. 2019a). As a result, maps are used to locate places that could be small or large. They point at which line of latitude and longitude crosses each other on a map grid (Dilley et al. 2019a), allowing the users to locate different places. For instance, topographic maps, are maps at a scale large enough to show details surface features of a place (Dilley et al. 2019a): either physical features such as rivers and lakes, and cultural features such as roads. Photographs such as orthophoto maps, oblique photographs, and vertical aerial photographs also promote the place-based teaching method, since they show more detailed information about places (Dilley et al. 2019a). Accordingly, maps and photographs are graphic teaching methods of places.

Geographical Information Systems (GIS) is a computer program that also promotes a place-based teaching method. GIS data focuses on any information about things that exist and events that take place anywhere on Earth (Dilley et al. 2019a), meaning in different places. Dilley et

al. (2019a) outline that GIS layers contain data on the attributes of specific entities such as roads, population, contours, and rainfall. All these attributes exist in real places, which can be distinct geographically through locating their exact latitude and longitude (Dilley et al. 2019a). Lastly, using atlases covers all the aspects of the place-based teaching method. They contain maps, photographs, graphs, and notes about specific places (Dilley et al. 2019a). Without a doubt, geographical skills and techniques strongly make a secondary reference to the concept of place.

5.4.3.5 Discussion

The researcher concludes that the secondary reference to the concept of place is presented in a conformed manner. This is based on the detailed and justified analysis of the Geography FET CAPS document. A further instance of this is in the Aims of Geography, there is 77.8% solid secondary referencing to the concept place. Secondly, in the Overview of Geography Topics per Term, all topics (100%), either physical geography, human geography, and geographical skills and techniques; have a strong authentication of secondary referencing to the concept place (Table 7). The topics on human geography and geographical skills and techniques, as compared to physical geography, were the more substantial topics in validating secondary references to the concept of place.

5.5 Official Document Overview

The official document (CAPS for Geography in the Further Education and Training Phase) was used to investigate the nature of 'place' in geography. The nature of 'place' in school geography was investigated through Explicit Theory (a direct reference to the place concept), and Implicit Theory (indirect/secondary reference to the place concept). It should be noted that the nature of 'place' in geography is strongly validated by the secondary reference to the concept of place, as compared to direct reference to the concept of place. For example, in the Aims of Geography, there is 77.8% firm secondary referencing to the concept place, as compared to 11.1% scant direct referencing to the concept place. Furthermore, in the Overview of Geography Topics per Term, there is 100% solid validation secondary referencing to the concept place (Table 7), as compared to 4.8% scant direct referencing to the concept of place.

With concept formation, this is not surprising because concepts such as place are not clearly outlined. In other words, concepts are delineated in an implicit manner or a secondary mode. A potential threat is that school geography teachers may conceptualise concepts differently. In

this case, school geography teachers may have a dissimilar conceptualisation of ‘place’ in school geography. On the other hand, school geography teachers may not be able to implement geographic learning of ‘place’. In researcher’s view, foundational concepts such as place should be clearly outlined in curriculum documents, as well as clear configurations as to how they should be implemented. The next section is on the card sorting instrument, attempting to explore teachers’ understanding(s) of ‘place’ in school geography.

5.6 Conclusion

In this chapter, data was gathered through the official document the CAPS for Geography in the FET Band. The CAPS for the FET Geography Band document was analysed in relation to the direct and secondary reference to the concept of ‘place’ in geography. The CAPS for Geography in the FET Band document was used to address one secondary question posed by this study. This provided the necessary analysis on the nature of ‘place’ in school geography. The overall analyses put forward the notion that the nature of ‘place’ in geography is strongly confirmed through secondary referencing. The next chapter continues with data analyses, with the use of card sorting and interviews.

Table 7: An adapted Overview of Geography Content in the FET Band (DBE 2011:13). Showing topics and sub-topics from Grade 10 to 12

Term	Grade 10	Grade 11	Grade 12
1	**The atmosphere (Place)** • Composition and structure of the atmosphere • Heating of the atmosphere • Moisture in the atmosphere • Reading and interpreting synoptic weather maps	**The atmosphere (Place)** • The Earth's energy balance • Global air circulation • Africa's weather and climate • Drought and desertification	**Climate and weather (Place)** • Mid-latitude cyclones • Tropical cyclones • Subtropical anticyclones • Valley climates • Urban climates **Geomorphology (Place)** • Drainage systems in South Africa • Fluvial processes • Catchment and river management
2	**Geomorphology (Place)** • The structure of the Earth • Plate tectonics • Folding and faulting • Earthquakes • Volcanoes	**Geomorphology** (Place) • Topography associated with horizontally layered rocks • Topography associated with inclined/tilted rock strata • Topography associated with massive igneous rocks • Slopes • Mass movements and human responses	**Rural settlement (Place)** • Study of settlements • Rural settlements • Rural settlement issue **Urban settlement** (Place) • Urban settlements • Urban hierarchies • Urban structure and patterns • Urban settlement issues
3	**Population (Place)** • Population distribution and density • Population structure • Population growth • Population movements • HIV and AIDS	**Development Geography (Place)** • The concept of development • Frameworks for development • Trade and development • Development issues and challenges • Role of development aid	**Economic Geography of SA (Place)** • Structure of the economy • Agriculture • Mining • Secondary and tertiary sectors • Strategies for industrial development • Informal sector
4	**Water resources (Place)** • Water in the world • The world's oceans • Water management in South Africa • Floods	**Resources and sustainability (Place)** • Using resources • Soil and soil erosion • Conventional energy sources and their impact on the environment • Non-conventional energy sources • Energy management in South Africa	**Revision (Place)** • Climate and weather • Geomorphology • Settlement Geography • Economic Geography of SA • Geographical skills and technique
1-4	**Geographical skills and techniques (Place)** • Using atlases • Fieldwork and practical work • Mapwork skills • 1:50 000 topographic map • Geographical Information Systems (GIS)	**Geographical skills and techniques (Place)** • Aerial photographs and orthophoto maps • Map techniques • Fieldwork **and** Mapwork skills • Using atlases • Geographical Information Systems (GIS)	**Geographical skills and techniques (Place)** • Geographical Information Systems (GIS) • Mapwork techniques • Map use and map skills • Mapwork techniques

(Source: Adapted from DBE 2011:13)

CHAPTER 6: TEACHER'S UNDERSTANDING, DESCRIPTION AND IMPLEMENTATION OF 'PLACE' IN SCHOOL GEOGRAPHY

6.1 Introduction

This chapter discusses data analysis, interpretation, and findings presentation for card sorting and interviews. Similarly, to chapter five, this chapter, analyses, interprets, summaries, and presents data in a manner that answers the followings research questions:

- What are teachers' understanding(s) of 'place' in school geography? (card sorting)
- How do teachers describe the role of 'place' in school geography? (interview)
- How do teachers implement geographic learning of 'place'? (interview and examination papers)

6.2 Profiles of the Teacher Participants

This research study's sample included eight participants: four state school teachers and four independent school teachers. In relation to gender, two of the state school teachers were male and two were female, while three of the independent school teachers were male and one was female. In terms of race, two of the state school teachers were black, one was coloured, and one was white, while the independent school teachers included three white teachers and one black teacher. Two of the independent school teachers were originally from Zimbabwe, while the third was from Cyprus. All of the teachers were qualified geography teachers who complied with all SACE requirements. Teachers have received varying levels of teacher education and have had a wide range of teaching experiences. The study's teacher participants were referred to as Teachers A to H, and their identities were known only to the researcher. The following paragraphs depict the profile of each teacher participant based on the interview data.

6.2.1 Teacher A

Teacher A is a black male, teaches at a state school, and has 26 years of teaching experience. He studied at Mokapone College of Education, between 1991 and 1993, and at Pretoria Technical College (TUT) in 2004. He grew up in Limpopo and migrated to Gauteng for job opportunities. Teacher A has not travelled much. He has only travelled between the provinces of Limpopo, Gauteng, and Kwa-Zulu Natal. It emerged from the interview that Teacher A considers the concept of 'place' in school geography to be the biggest of the geography's core four concepts.

6.2.2 Teacher B

Teacher B is a black male, who teaches at a state school, and has 3 years of teaching experience. He studied BEd at the University of Pretoria between 2012 and 2015. He grew up in Gauteng, East Rand in Daveyton. Teacher B has not travelled much. He has only travelled between the provinces of KwaZulu-Natal, Gauteng, and North West. It emerged from the interview that Teacher B considers the concept of 'place' in school geography be the biggest concept of the four.

6.2.3 Teacher C

Teacher C is a coloured female, who was a teacher at a state school for 8 years and has spent 10 years as a school geography facilitator. Overall, teacher C has 18 years' experience within school geography sector. She studied at the teaching college (didn't name the teaching college). She grew up in Gauteng, around Johannesburg. Teacher C is well-travelled. She has been to all provinces in South Africa. It emerged from the interview that Teacher C considers the concept of 'place' in school geography to be the biggest concept of the four.

6.2.4 Teacher D

Teacher D is a white female, who teaches at a state school, and has 35 years of teaching experience. She studied at the teaching college (didn't name the teaching college). She grew up in Gauteng, West Rand in the Roodepoort area. Teacher D is well-travelled. She has been to all provinces in South Africa, Asia, and SADC counties such as Zimbabwe, Malawi, Mozambique, and Namibia. It emerged from the interview that Teacher D considers the concept of 'place' in school geography as the is the big concept of the four.

6.2.5 Teacher E

Teacher E is a white male, who teaches at an independent school, and has 21 years of teaching experience. He studied at one of the universities in Johannesburg (didn't name the university). He grew up in Europe, in Cyprus, then migrated to South Africa, Gauteng Province. Teacher E is well-travelled. He has been to all provinces in South Africa, African countries, Europe and Asia. It emerged from the interview that Teacher E considers the concept of 'place' in school geography to be the biggest concept of the four.

6.2.6 Teacher F

Teacher F is a black male, teaches at an independent school, and has 14 years of teaching experience. He studied at one of the colleges in Zimbabwe (didn't name the college). He grew up in Zimbabwe's, Bulawayo Province then migrated to South Africa's, Gauteng Province. Teacher F has travelled to most provinces in South Africa and Zimbabwe. It emerged from the interview that Teacher F considers the concept of 'place' and space in school geography as the two joint biggest concepts of the four.

6.2.7 Teacher G

Teacher G, a white male, teaches at an independent school, and has 21 years of teaching experience. He studied at the University of Natal, now known as the University of KwaZulu-Natal (UKZN). He grew up in Kwa-Zulu Natal, Durban then migrated to Gauteng Province. Teacher G is well-travelled. He has been to almost all provinces in South Africa, to England and Germany. It emerged from the interview that Teacher G considers the concept of 'place' in school geography as the biggest concept of the four.

6.2.8 Teacher H

Teacher H, a white female, teaches at an independent school, and has 29 years of teaching experience. She studied at Rhodes University. She grew up in Zimbabwe then migrated to South Africa, Gauteng Province. Teacher H is well-travelled. She has been to almost all provinces in South Africa, to several continents namely: Africa, Asia, Europe, and North America. It emerged from the interview that Teacher G considers the concept of 'place' in school geography as the biggest concept of the four.

6.2.9 Overview of the Teacher Participants

Purposeful sampling was used in this study. Eight geography teachers from Gauteng Province schools who teach geography at the FET level were chosen. To obtain more complex and multifaceted knowledge, the selected teachers come from a variety of educational, social, and teaching experiential backgrounds. From the information given, it is clear that the participant teachers were well qualified FET school geography teachers and had a diversity of educational and social experiential background. There were a variety of teaching experiences. Most have many years of teaching experience, and only one teacher was new to the teaching field, with 3 years of experience.

Most of the school geography teachers are well-travelled, either around South Africa, within Africa, or globally. With five of the participants indicating that they have travelled outside South Africa, particularly teachers from independent schools. This is significant in this study, as it focuses on the concept of 'place'. Moving from one place to another or travelling between places enables a traveller to see different places and also to understand why places are different. This understanding is not automatic, but it is influenced by the fact that places differ from one another. Regarding this study, which focuses on the importance of 'place' in school geography, and particularly as a big concept. The study found that seven participants were of the view that the concept of 'place' is 'big' and the 'most' important concept in school geography. While one participant considers 'place' and space as both 'big' and important concepts in school geography. These findings are similar to the researcher's view that the concept of 'place' is 'big' and the most important concept in school geography. Most importantly, the findings are also similar to the literature that the researcher presented in chapter two.

6.3 Card Sorting

The researcher clarified in chapter four, that he issued participants with nine cards to sort, as well as three blank cards in case they wanted to add other ideas. This was to explore teachers' understanding(s) of 'place' in school geography, guided by the Theory Sketch (Figures 1 and 2). In addition to card sorting technique, the diamond 9 method was used. It is a strategy that priorities nine ideas or pieces of information into what each participant considers highest to lowest importance. However, all eight participants opted only to use the nine cards that the researcher issued. The nine cards contained content from the literature on the conceptualisation of the concept of 'place' in school geography. As mentioned in chapter four, a pilot study was also conducted prior, to trial the card's content. Card sorting content was an important segment for the card sorting method. Each card content was assigned a card number for easy analysis using excel. In no particular order of importance, the following card's content was as follows (Table 8):

Table 8: Card sorting content

Card No.	Card content
1.	School Geography is deliberately or unintentionally dependant on **PLACE**. Human, Physical and Environmental Geography are all centred around the **CONCEPT OF PLACE**.
2.	The **CONCEPT OF PLACE** enables students to understand and evaluate how past human actions affect the present world and influence the future.
3.	The significance of **PLACE/CONCEPT OF PLACE** is an important aspect of School Geography (as a specialised subject knowledge). For example, mapwork has always been a common method for students to locate and identify **PLACES**. The introduction of Geographic Information Systems (GIS) in Geography Education also makes **PLACE** an important concept.
4.	**PLACE** is a priority for the discipline of Geography, especially in the midst of a changing and globalising world. The **CONCEPT OF PLACE** encourages new ways of questioning and being in the world, and therefore in School Geography, **PLACE** matters the most.
5.	The **CONCEPT OF PLACE** promotes geographical thinking, important values and attitudes such as sustainable/fair use of resources for the benefit of all, respect for the rights of all people, a sense of fairness and equality.
6.	Generally, Geography is the study of **PLACES** and Geography is about **PLACES**. Geography topics namely Atmosphere/Climatology, Geomorphology, Settlements, Development and Resources/Sustainability and Map-work are all centred around the **CONCEPT OF PLACE**.
7.	The **CONCEPT OF PLACE** encourages diversity and uniqueness. People have multiple identities which relate to **PLACES** and that each **PLACE** can be seen in accordance with its particular uniqueness.
8.	**PLACE** is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth and human-environment interaction are all interconnected with the **CONCEPT OF PLACE**.
9.	**PLACE** is a critical concept because it focuses attention on analysing how economic and political decisions impact a particular **PLACE.** Place-based learning serves as a transformative educational tool to address the legacies of apartheid. Place-based education is also vital in dealing with current spatial and political challenges facing a democratic South Africa.

Participants were asked to rank cards in order of importance from most important to least important (Figure 5). Following each ranking order, participants were required to explain their ranking order through the use of interviews. To facilitate analysis, the researcher divided their rankings into five categories: “very high priority, high priority, middling priority, low priority, and very low priority” (Figure 6). This means that, in the case of nine ranked views, each category had to be assigned points. Very high priority, for example, was assigned 5 points as the most important, while very low priority was assigned 1 point as the least important. Table 9 shows the points for each category:

Table 9: Points per category

Category	Points	Card No.
Very high priority (1)	**5**	
High priority (2)	**4**	
Middling priority (3)	**3**	
Low priority (2)	**2**	
Very low priority (1)	**1**	

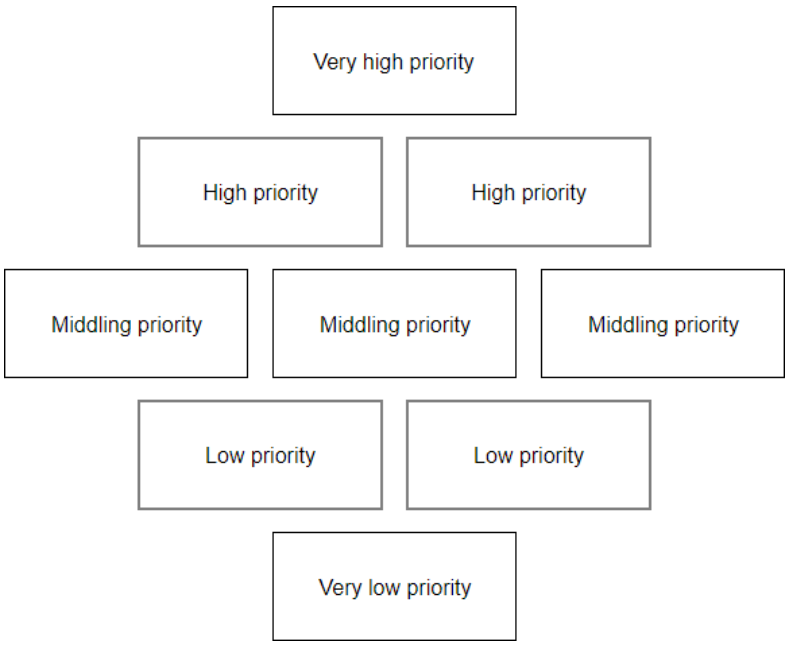


Figure 6: Diamond 9 with five categories (Source: Visual Paradigm Online: 2021)

The section that follows indicates how the participants ranked their points of view. Participants were asked to rank cards, from the most important to the least important (Figure 4). Following each ranking order, participants were required to explain their ranking order through the use of interviews. The researcher issued all participants with nine cards to sort, from the most important to the least important. The researcher explained and asked the participants to use the diamond 9 method (Figure 4 and 6). Thereafter, Teacher A was able to read, sort, and rank the cards in the order of importance (Figure 7).

6.3.1 Card Sorting by Teacher A

Teacher A's card sorting revealed that card no. 3 was the most important card. Therefore, Teacher A posited that ***"The significance of PLACE/CONCEPT OF PLACE is an important aspect of School Geography (as a specialised subject knowledge). For example, mapwork***

has always been a common method for students to locate and identify PLACES. The introduction of Geographic Information Systems (GIS) in Geography Education also makes PLACE an important concept" as the most important content on understanding the role of 'place' in school geography (Table 10 and Figure 7).

In addition, Teacher A placed cards nos. 8 and 7 as a joint high priority on the understanding role of 'place' in school geography (Table 10 and Figure 7). Implying that, ***"PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE"***, as well as ***"The CONCEPT OF PLACE encourages diversity and uniqueness. People have multiple identities which relate to PLACES and that each PLACE can be seen in accordance with its particular uniqueness".***

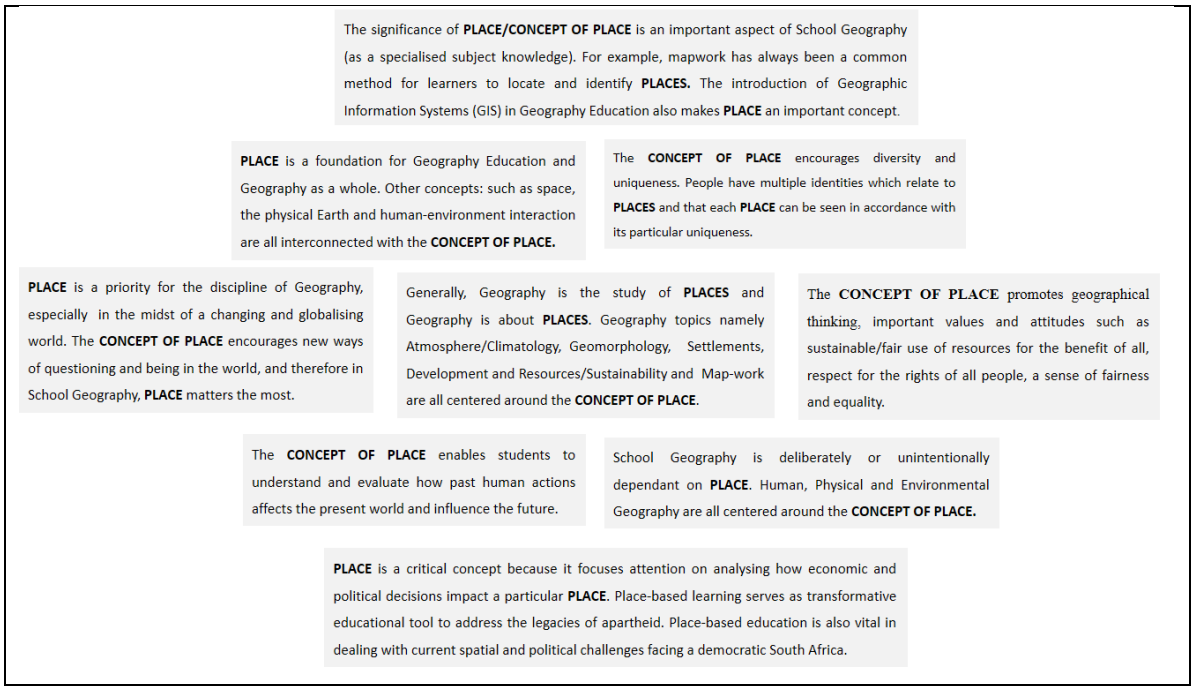


Figure 7: Teacher A's card sorting

Table 10: Teacher A's ranking views

Category	Points	Card Number
Very high priority (1)	**5**	Card No. 3
High priority (2)	**4**	Card No. 8 Card No. 7
Middling priority (3)	**3**	Card No. 4

		Card No. 6 Card No 5
Low priority (2)	**2**	Card No. 2 Card No. 1
Very low priority (1)	**1**	Card No. 9

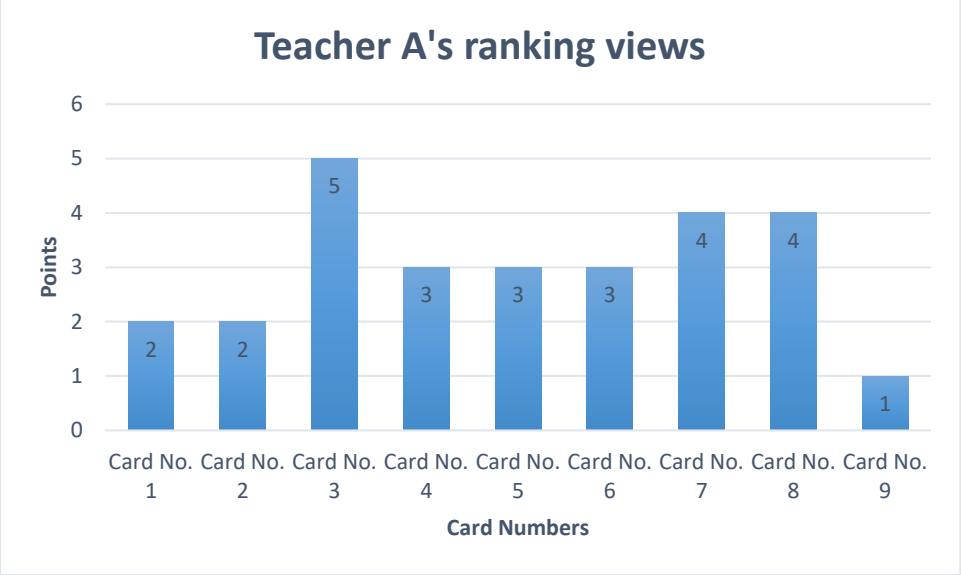


Figure 8: Teacher A's ranking views

Table 10 and Figure 8 shows how Teacher A understands the role of 'place' in school geography. In chapter one, the researcher pointed out that it is not clear to what extent teachers understand the concept of 'place'. Furthermore, the researcher also argued that teachers may conceptualise the concept of place differently. This was the first attempt by the researcher to understand the extent to which teachers understand the concept of 'place'. Also, to explore the earlier claim by the researcher that teachers have a dissimilar understanding of the concept of 'place'. The next section by other teachers will provide an insight on understanding the role of 'place' in school geography, mainly on similarities and differences.

6.3.2 Card Sorting by Teacher B

Teacher B placed card no. 8 as the most important content on understanding the role of 'place' in school geography. Card no. 8 states that ***"PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE"*** (Table 11 and Figure 9).

Furthermore, Teacher B placed cards nos. 6 and 3 as a high priority on understanding the role of 'place' in school geography (Table 11 and Figure 11). Card no. 6 states that "***Generally, Geography is the study of PLACES and Geography is about PLACES. Geography topics namely Atmosphere/Climatology, Geomorphology, Settlements, Development and Resources/Sustainability, and Map-work are all centred around the CONCEPT OF PLACE".*** Card no. 3 states that ***'The significance of PLACE/CONCEPT OF PLACE is an important aspect of School Geography (as a specialised subject knowledge). For example, mapwork has always been a common method for students to locate and identify PLACES. The introduction of Geographic Information Systems (GIS) in Geography Education also makes PLACE an important concept".***

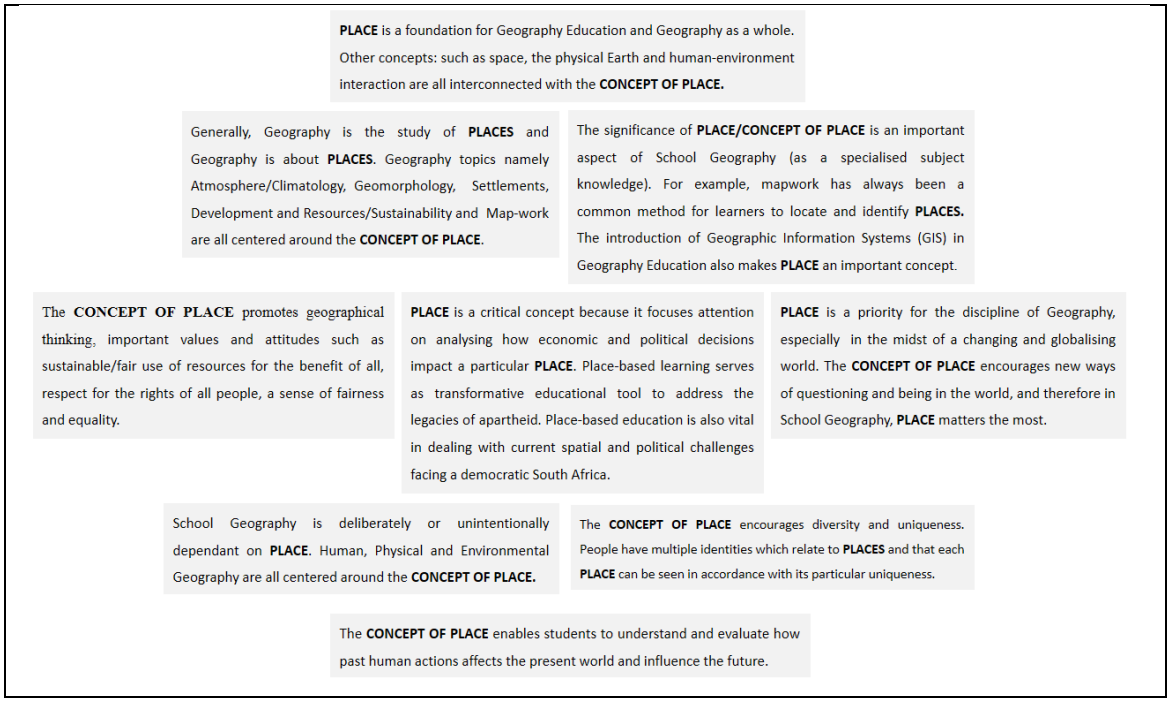


Figure 9: Teacher B's card sorting

Table 11: Teacher B's ranking views

Category	Points	Card Number
Very high priority (1)	**5**	Card No. 8
High priority (2)	**4**	Card No. 6 Card No. 3
Middling priority (3)	**3**	Card No. 5 Card No. 9

		Card No. 4
Low priority (2)	**2**	Card No. 1 Card No. 7
Very low priority (1)	**1**	Card No. 2

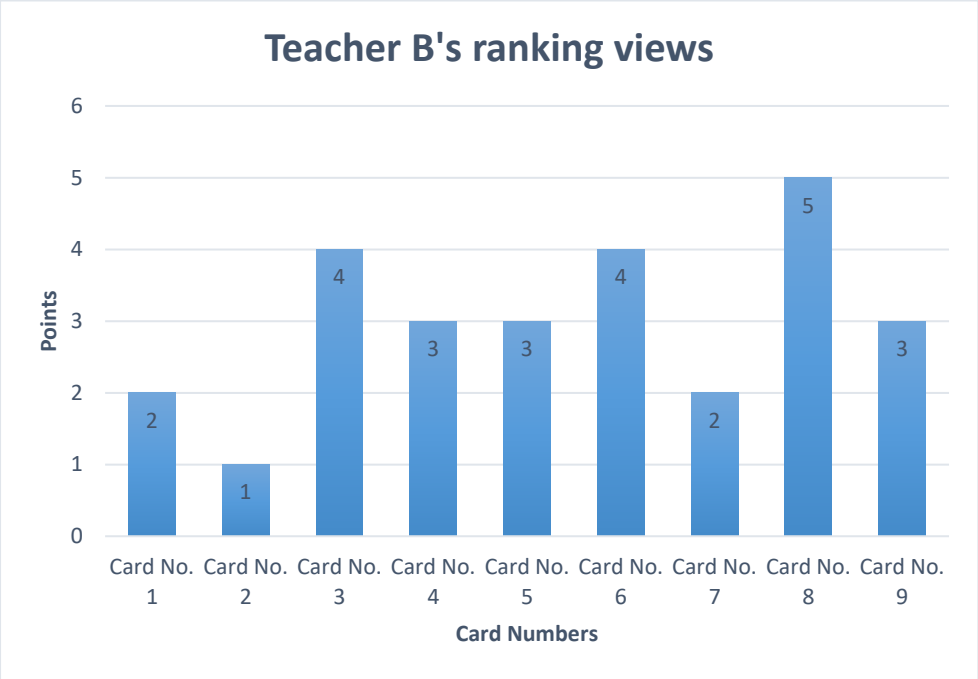


Figure 10: Teacher B's ranking views

Table 11 and Figure 10 illustrate how Teacher B understands the role of 'place' in school geography. There were connections and variances between Teacher A and Teacher B. Card nos. 8 and 3 both appear in Teacher A's and Teacher B's high ranking order, as either very high priority and high priority (Tables 10 and 11). In terms of variances, Teacher A had card no. 7 as a high priority, while Teacher had card no. 6 as a high priority. This may suggest that teachers have a dissimilar understanding of the role of 'place' in school geography. Overall, Teacher B's strongly support the researcher's earlier claim that PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE.

6.3.3 Card Sorting by Teacher C

After the researcher gave Teacher C the same instructions as Teacher A and Teacher B, she then ranked the cards in the order of importance (Figure 11). Similarly, with Teacher B,

Teacher C placed card no. 8 as the most important content on understanding the role of 'place' in school geography. Card no. 8 states that ***"PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE"*** (Table 12 and Figure 11).

In addition, Teacher C placed cards nos. 4 and 6 as a joint high priority on the understanding role of 'place' in school geography (Table 12 and Figure 11). Indicating that, ***"PLACE is a priority for the discipline of Geography, especially in the midst of a changing and globalising world. The CONCEPT OF PLACE encourages new ways of questioning and being in the world, and therefore in School Geography, PLACE matters the most."***, as well as ***"Generally, Geography is the study of PLACES and Geography is about PLACES. Geography topics namely Atmosphere/Climatology, Geomorphology, Settlements, Development and Resources/Sustainability, and Map-work are all centred around the CONCEPT OF PLACE".***

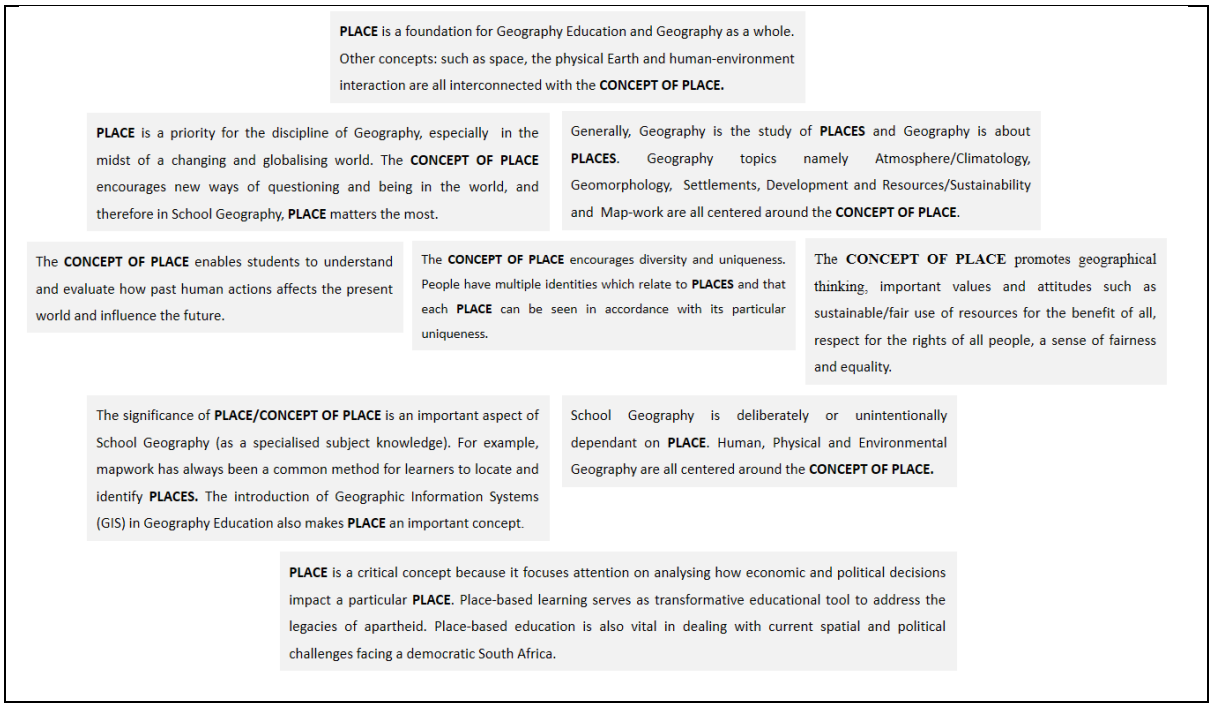


Figure 11: Teacher C's card sorting

Table 12: Teacher C's ranking views

Category	Points	Card Number
Very high priority (1)	**5**	Card No. 8
High priority (2)	**4**	Card No. 4

		Card No. 6
Middling priority (3)	**3**	Card No. 2 Card No. 7 Card No. 5
Low priority (2)	**2**	Card No. 3 Card No. 1
Very low priority (1)	**1**	Card No. 9

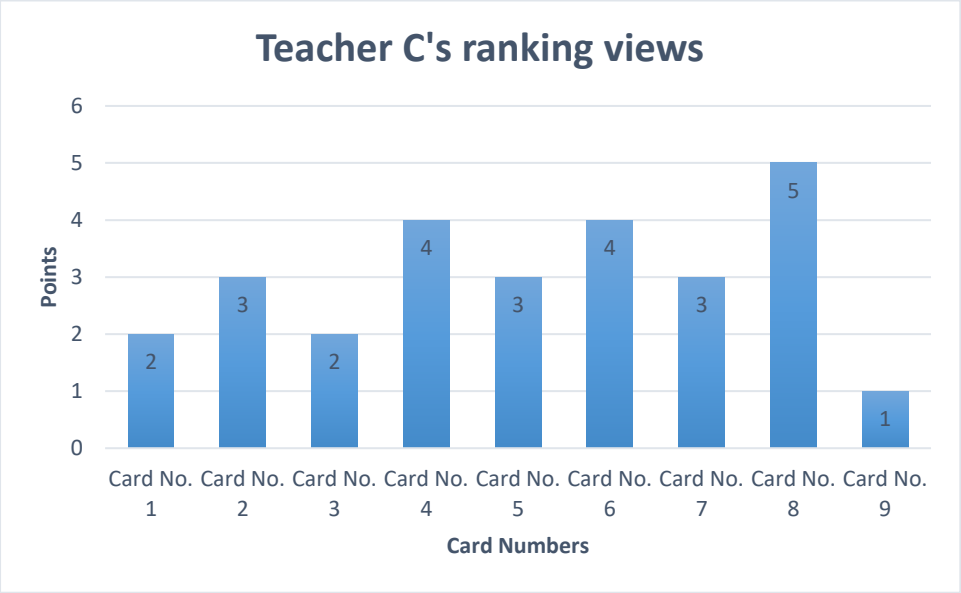


Figure 12: Teacher C's ranking views

Table 12 and Figure 12 display the mode Teacher C sorted the cards that the researcher issued her. The most notable point is that she also placed card no. 8 as the most important card in understanding the role of 'place' in school geography. Moreover, there was a notable connection between Teacher B and Teacher C. Card nos. 8 and 6 both appear in Teacher B's and Teacher C's high ranking order, as either very high priority and high priority (Tables 11 and 12). In terms of variances, Teacher B had card no. 3 as a high priority, while Teacher C had card no. 4 as high priority. This may indicate that teachers' perspectives on the role of 'place' in school geography differ. Significantly, Teacher C's ranking order backs up the researcher's earlier assertion that PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE.

6.3.4 Card Sorting by Teacher D

Teacher D was able to read the cards, arrange them, and rate them in order of importance (Figure 14). Similarly, with Teacher B and Teacher C, Teacher D positioned card no. 8 as the most important content on understanding the role of 'place' in school geography. Card no. 8 states that ***"PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE"*** (Table 13 and Figure 13).

In addition, Teacher D placed cards nos. 4 and 5 as a joint high priority on the understanding role of 'place' in school geography (Table 13 and Figure 13). Implying that, "***PLACE is a priority for the discipline of Geography, especially in the midst of a changing and globalising world. The CONCEPT OF PLACE encourages new ways of questioning and being in the world, and therefore in School Geography, PLACE matters the most",*** as well as ***"The CONCEPT OF PLACE promotes geographical thinking, important values, and attitudes such as sustainable/fair use of resources for the benefit of all, respect for the rights of all people, a sense of fairness and equality***".

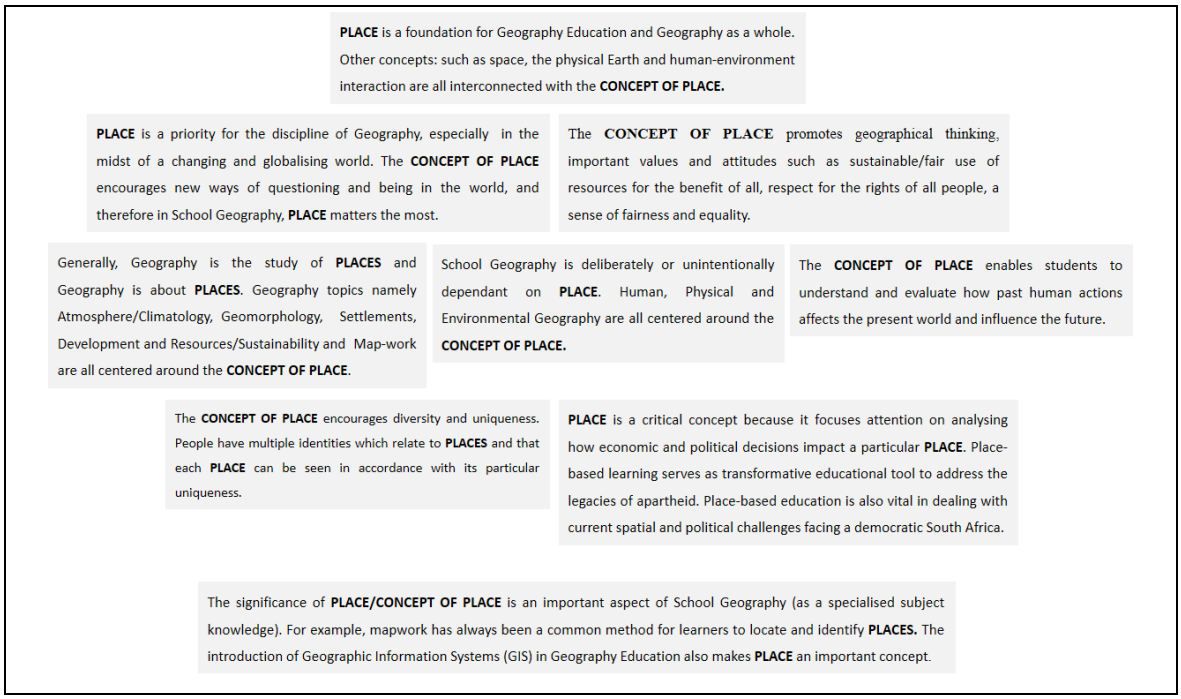


Figure 13: Teacher D's card sorting

Table 13: Teacher D's ranking views

Category	Points	Card Number
Very high priority (1)	**5**	Card No. 8
High priority (2)	**4**	Card No. 4 Card No. 5
Middling priority (3)	**3**	Card No. 6 Card No. 1 Card No. 2
Low priority (2)	**2**	Card No. 7 Card No. 9
Very low priority (1)	**1**	Card No. 3

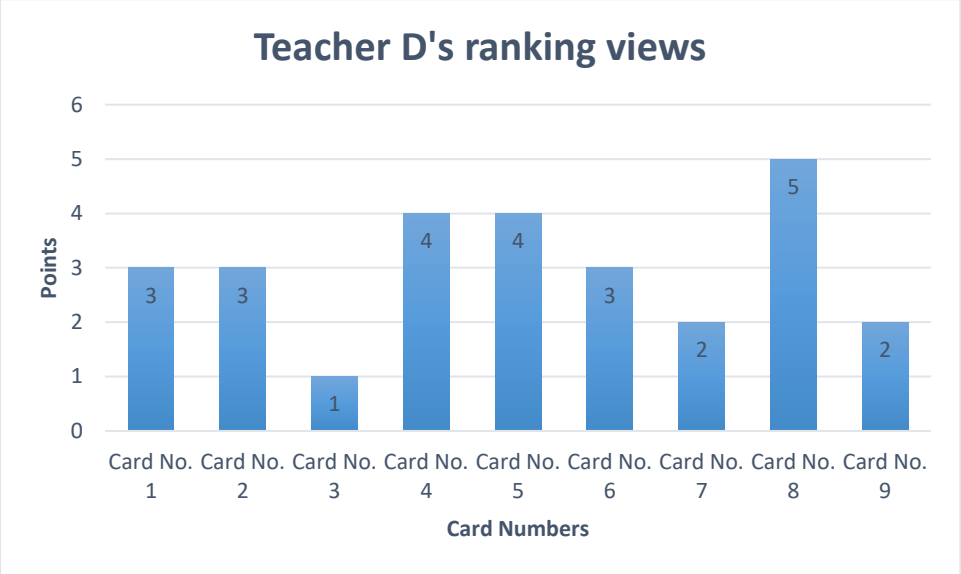


Figure 14: Teacher D's ranking views

Teacher D arranged the cards she received from the researcher, the model is shown in Table 13 and Figure 14. The most noteworthy point is that she ranked card no. 8 as the most critical in understanding the role of 'place' in school geography. Furthermore, there was a clear connection between Teacher B, Teacher C, and Teacher D as they have all placed card no. 8 as a very high priority. Additionally, there was a notable link between Teacher C and Teacher D. Card nos. 8 and 4 both appear in Teacher C's and Teacher D's high ranking order, as either very high priority and high priority (Tables 12 and 13). In terms of variances, Teacher C had card no. 6 as a high priority, while Teacher D had card no. 5 as a high priority. This may mean

that teachers have different viewpoints on the role of 'place' in school geography. Teacher D's rating order, in particular, supports the researcher's earlier claim that PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE.

6.3.5 Card Sorting by Teacher E

Unlike Teacher B, Teacher C, and Teacher D, Teacher E positioned card no. 5 as the most important content on understanding the role of 'place' in school geography. Card no. 5 postulates that ***"The CONCEPT OF PLACE promotes geographical thinking, important values, and attitudes such as sustainable/fair use of resources for the benefit of all, respect for the rights of all people, a sense of fairness and equality"*** (Table 14 and Figure 15).

In addition, Teacher E placed cards nos. 9 and 4 as a joint high priority on the understanding role of 'place' in school geography (Table 14 and Figure 15). Indicating that, **"*PLACE is a critical concept because it focuses attention on analysing how economic and political decisions impact a particular PLACE. Place-based learning serves as transformative educational tool to address the legacies of apartheid. Place-based education is also vital in dealing with current spatial and political challenges facing a democratic South Africa",*** as well as ***"PLACE is a priority for the discipline of Geography, especially in the midst of a changing and globalising world. The CONCEPT OF PLACE encourages new ways of questioning and being in the world, and therefore in School Geography, PLACE matters the most."***.

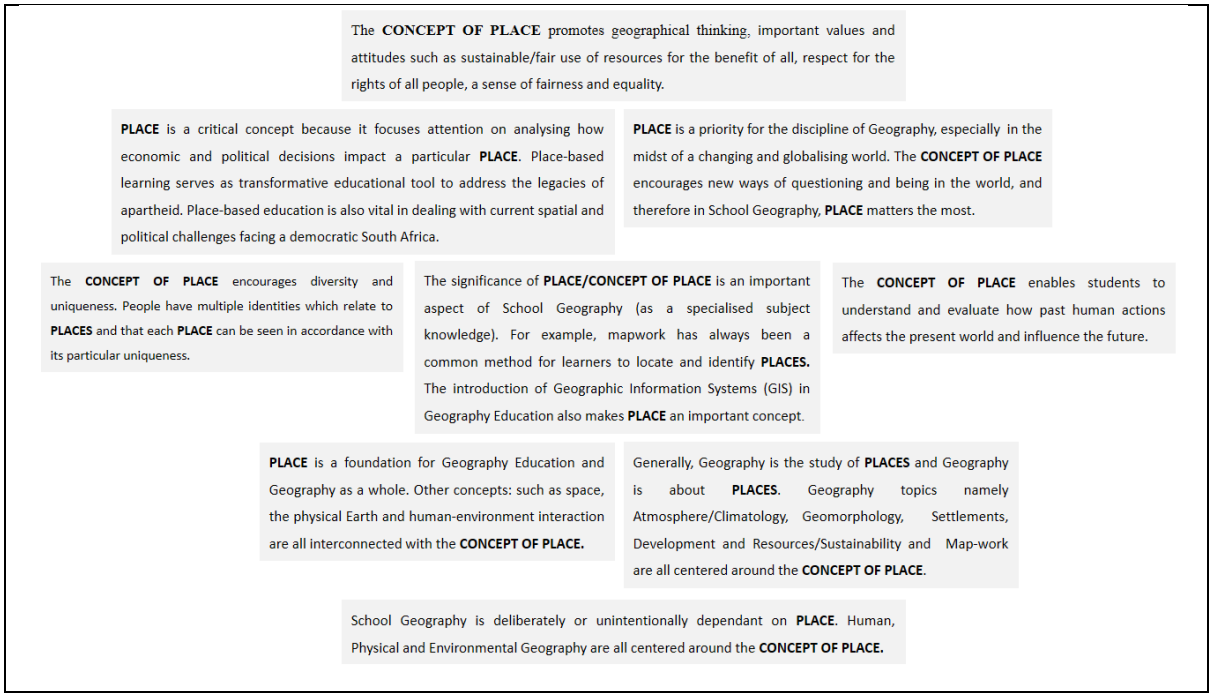


Figure 15: Teacher E's card sorting

Table 14: Teacher E's ranking views

Category	Points	Card Number
Very high priority (1)	**5**	Card No. 5
High priority (2)	**4**	Card No. 9 Card No. 4
Middling priority (3)	**3**	Card No. 7 Card No. 3 Card No. 2
Low priority (2)	**2**	Card No. 8 Card No. 6
Very low priority (1)	**1**	Card No. 1

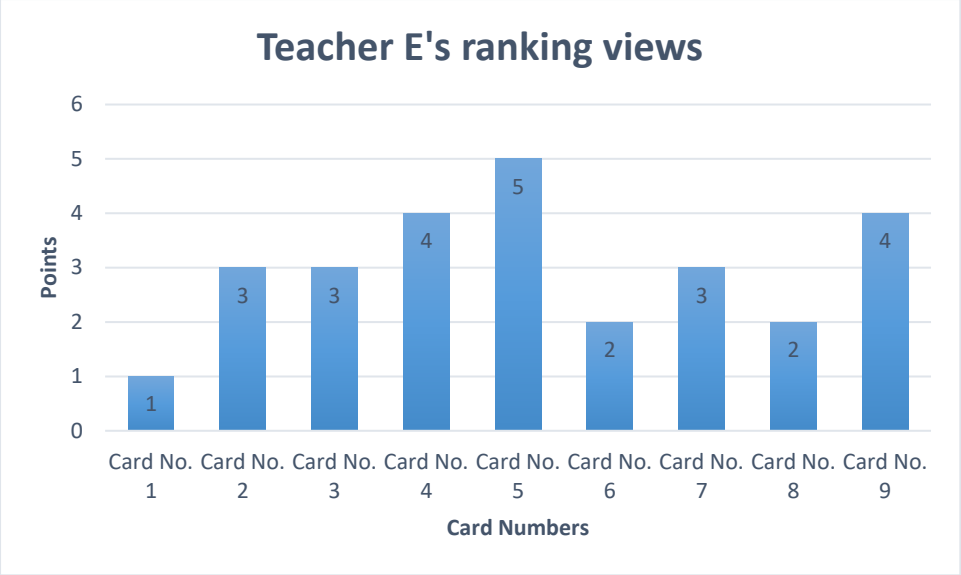


Figure 16: Teacher E's ranking views

Table 14 and Figure 16 demonstrate how Teacher E sorted the cards that the researcher issued him. The most notable point is that he placed card no. 5 as the most important card in understanding the role of 'place' in school geography. Other notable details are that; Teacher A's ranking order was unique compared to the previous participants. For, example Teacher E placed card no. 9 as a high priority. Previous participants have constantly placed card no. 9, as either middling priority, low priority, or very low priority. Placing of both card nos. 5 and 9 suggest that Teacher E has a different view on understanding the role of 'place' in school geography. It's worth noting that Teacher E is the only participants that was born and raised in Europe, in Cyprus. The researcher believes that his conceptual differences in interpreting the role of 'place' in school geography are influenced by his birthplace. Overall, Teacher E's ranking order backs up the researcher's earlier assertion that teachers have varying perspectives on the role of 'place' in school geography.

6.3.6 Card Sorting by Teacher F

Teacher F was able to read the cards, arrange them, and rate them in order of importance (Figure 18). Interestingly, Teacher F placed card no. 6 as the most important card on understanding the role of 'place' in school geography. Accordingly, card no. 6 states that ***"Generally, Geography is the study of PLACES and Geography is about PLACES. Geography topics namely Atmosphere/Climatology, Geomorphology, Settlements, Development and Resources/Sustainability and Map-work are all centred around the CONCEPT OF PLACE"*** (Table 15 and Figure 17).

Additionally, Teacher F positioned cards nos. 9 and 5 as a high priority (Table 15 and Figure 17). Card no. 9 states that ***"PLACE is a critical concept because it focuses attention on analysing how economic and political decisions impact a particular PLACE. Place-based learning serves as transformative educational tool to address the legacies of apartheid. Place-based education is also vital in dealing with current spatial and political challenges facing a democratic South Africa".*** Whereas card no. 5 states that, ***"The CONCEPT OF PLACE promotes geographical thinking, important values, and attitudes such as sustainable/fair use of resources for the benefit of all, respect for the rights of all people, a sense of fairness and equality".***

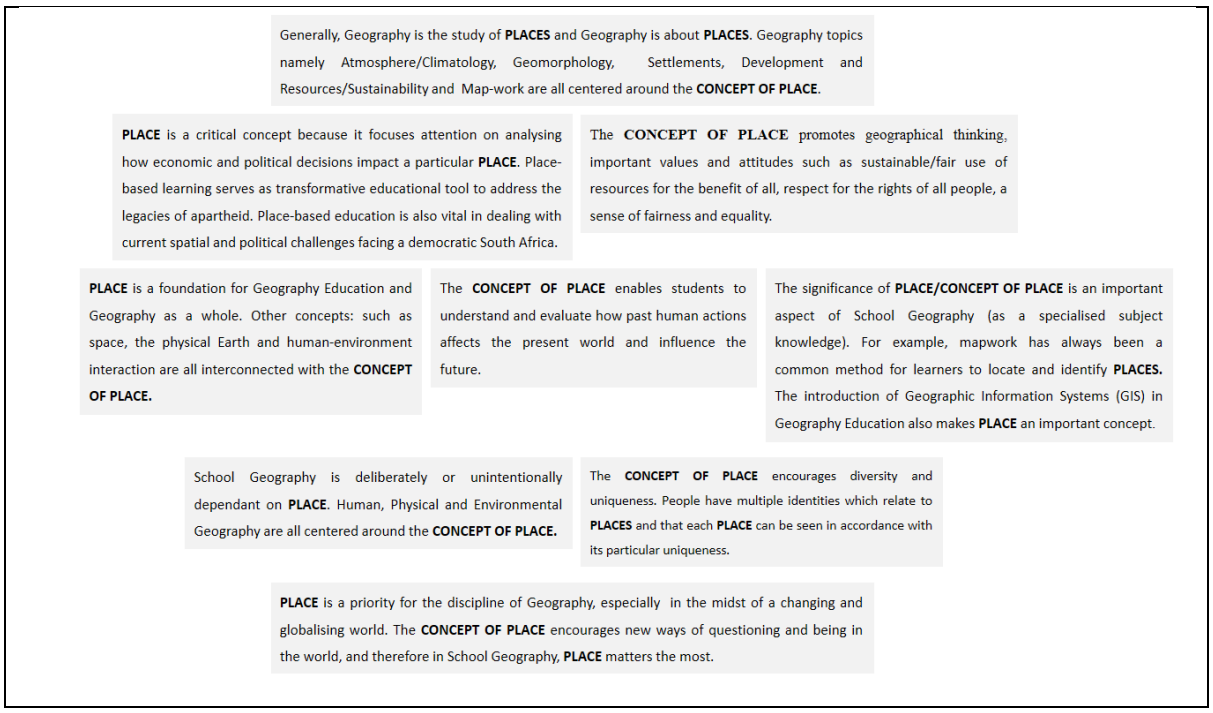


Figure 17: Teacher F's card sorting

Table 15: Teacher F's ranking views

Category	Points	Card Number
Very high priority (1)	**5**	Card No. 6
High priority (2)	**4**	Card No. 9 Card No. 5
Middling priority (3)	**3**	Card No. 8 Card No. 2 Card No. 3

Low priority (2)	**2**	Card No. 1 Card No. 7
Very low priority (1)	**1**	Card No. 4

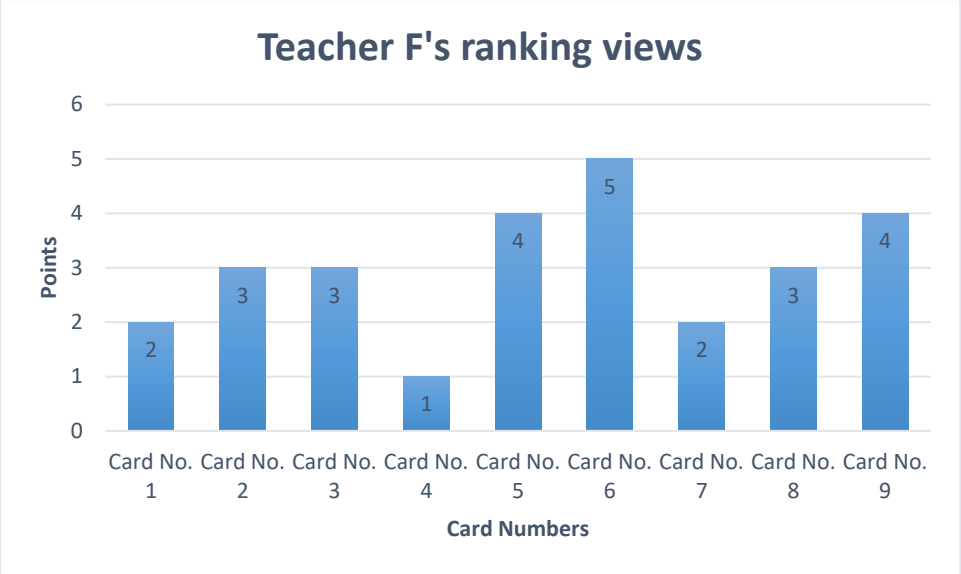


Figure 18: Teacher F's ranking views

Teacher F sorted the cards in the manner shown in Table 15 and Figure 18. He placed card no. 6 as the most important card in understanding the role of 'place' in school geography: the first participant to place card no. 6 as a very high priority. However, Teacher B and Teacher C had previously placed card no. 6 as a high priority. This strongly suggests similar reasoning between Teacher F, Teacher B, and Teacher C. Furthermore, Teacher F's ranking order was very similar to Teacher E's ranking other. Both Teacher E and Teacher F places card nos. 5 and 9, as either very high priority or high priority (Figures 16 and 18). This suggests that Teacher E and Teacher F share a similar viewpoint on the role of 'place' in school geography. Looking at Teacher B, Teacher C, and Teacher D ranking order, versus Teachers E and F ranking order, they equally support the researcher's' earlier statement that teachers have differing perspectives on the role of 'place' in school geography.

6.3.7 Card Sorting by Teacher G

The researcher gave Teacher G nine cards for sorting. Teacher G was able to read the cards and organise them in order of importance (Figure 19). Correspondingly, with Teacher A, Teacher G also put card no. 3 as the most important card on understanding the role of 'place'

in school geography. Card no. 3 postulate that ***"The significance of PLACE/CONCEPT OF PLACE is an important aspect of School Geography (as a specialised subject knowledge). For example, mapwork has always been a common method for students to locate and identify PLACES. The introduction of Geographic Information Systems (GIS) in Geography Education also makes PLACE an important concept"*** (Table 16 and Figure 19).

Moreover, Teacher G placed cards nos. 8 and 9 as a joint high priority on the understanding role of 'place' in school geography (Table 16 and Figure 19). Indicating that, ***"PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE",*** as well as ***"PLACE is a critical concept because it focuses attention on analysing how economic and political decisions impact a particular PLACE. Place-based learning serves as transformative educational tool to address the legacies of apartheid. Place-based education is also vital in dealing with current spatial and political challenges facing a democratic South Africa".***

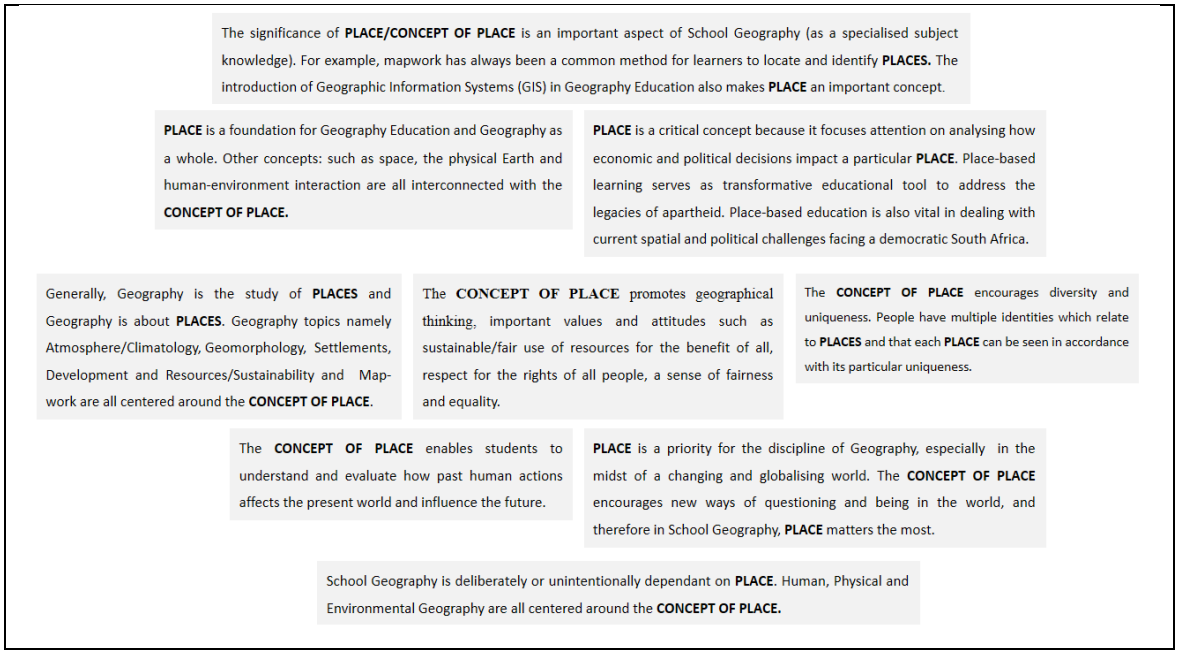


Figure 19: Teacher G's card sorting

Table 16: Teacher G's ranking views

Category	Points	Card Number
Very high priority (1)	**5**	Card No. 3
High priority (2)	**4**	Card No. 8 Card No. 9
Middling priority (3)	**3**	Card No. 6 Card No. 5 Card No. 7
Low priority (2)	**2**	Card No. 2 Card No. 4
Very low priority (1)	**1**	Card No. 1

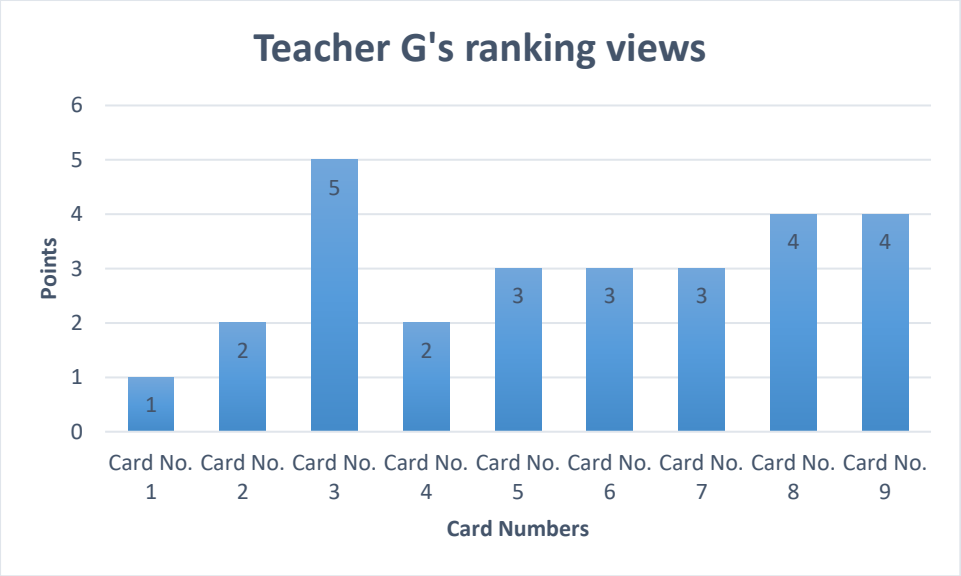


Figure 20: Teacher G's ranking views

Table 16 and Figure 20 display the mode Teacher G sorted the cards that the researcher issued him. Similarly, with Teacher A, Teacher G also placed card no. 3 as the most important card in understanding the role of 'place' in school geography. Furthermore, there was a clear connection between Teacher A and Teacher G. Teacher A and Teacher G both had card nos. 3 and 8 in their high ranking order, as either very high priority and high priority (Tables 10 and 16). This strongly indicates that Teacher A and Teacher G have a similar perspective on the role of 'place' in school geography.

6.3.8 Card Sorting by Teacher H

Teacher H rated the cards in order of importance after the researcher gave her the same directions as other participants (Figure 22). Teacher H, in turn, ranked card no. 8 as the most appropriate card for understanding the role of 'place' in school geography. It should be noted that Teacher H's very high priority ranking order, is similar to that of Teacher B, Teacher C, and Teacher D. Card no. 8 states that ***"PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE".*** (Table 17 and Figure 21).

Furthermore, Teacher H placed cards nos. 1 and 6 as a high priority on understanding the role of 'place' in school geography (Table 17 and Figure 21). Card no. 1 states that "***School Geography is deliberately or unintentionally dependant on PLACE. Human, Physical and Environmental Geography are all centred around the CONCEPT OF PLACE.".***

Card no. 6 states that ***"Generally, Geography is the study of PLACES and Geography is about PLACES. Geography topics namely Atmosphere/Climatology, Geomorphology, Settlements, Development and Resources/Sustainability, and Map-work are all centred around the CONCEPT OF PLACE.".***

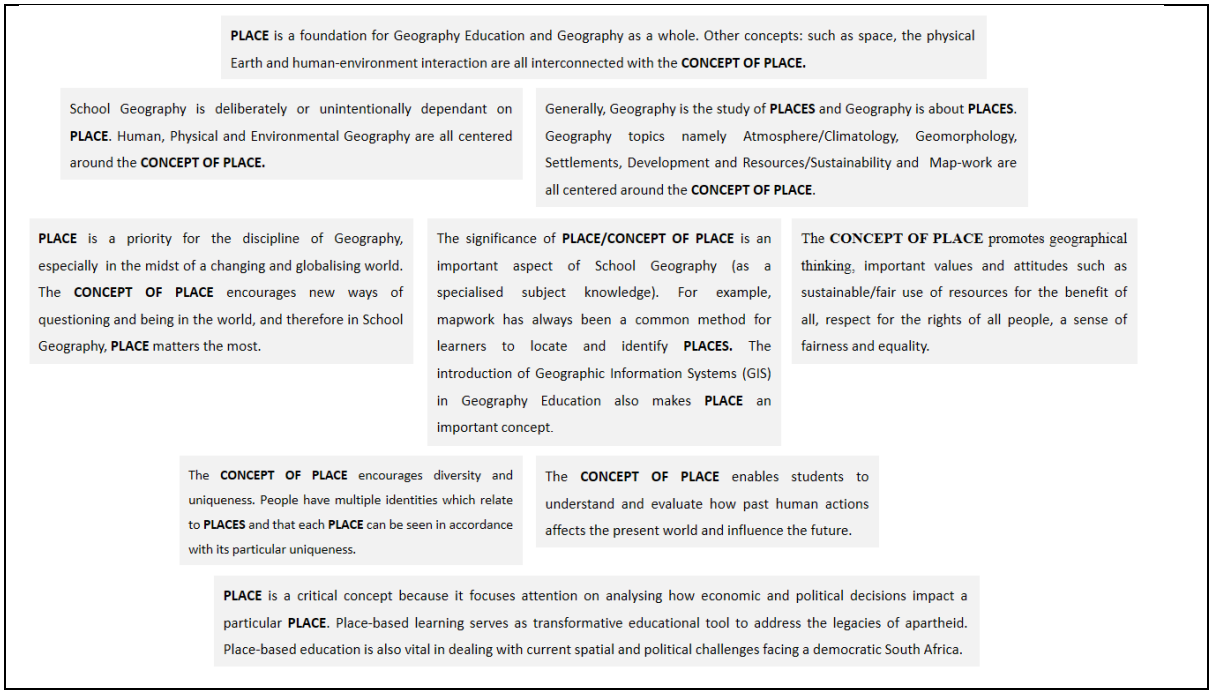


Figure 21: Teacher H's card sorting

Table 17: Teacher H's ranking views

Category	Points	Card Number
Very high priority (1)	**5**	Card No. 8
High priority (2)	**4**	Card No. 1 Card No. 6
Middling priority (3)	**3**	Card No. 4 Card No. 3 Card No. 5
Low priority (2)	**2**	Card No. 7 Card No. 2
Very low priority (1)	**1**	Card No. 9

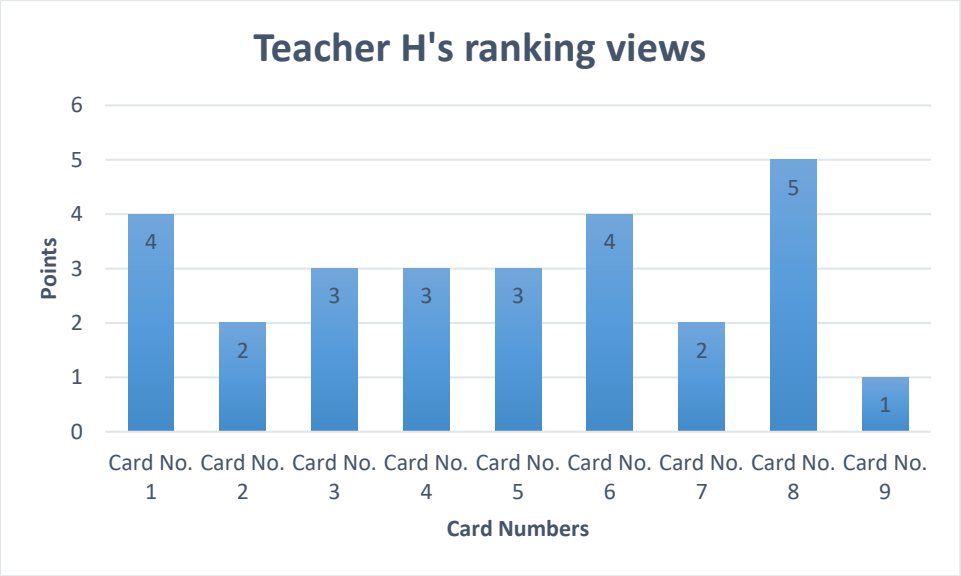


Figure 22: Teacher H's ranking views

Table 17 and Figure 22 demonstrate how Teacher H arranged the cards she got from the researcher. The fact that Teacher H rated card no. 8 as the most important card is noteworthy. Hence, Teacher B, Teacher C, and Teacher D all placed card no. 8 as a very high priority. Furthermore, there was a strong connection between Teacher B, Teacher C, and Teacher H, as they all ranked card no. 6 as a high priority (Tables 11, 12, 13, and 17). This strongly suggests that Teacher B, Teacher C, Teacher D, and Teacher G share a common view of the role of 'place' in school geography (Figures 11,13, 15, and 23). Most importantly, four out of eight participants (Teacher B, Teacher C, Teacher D, and Teacher H), strongly support the researcher's claim that PLACE is a foundation for Geography Education and Geography as a

whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE.

6.3.9 Card Sorting Overview

Firstly, it is evident that school geography teachers have a diverse understanding of the role of 'place' in school geography. For example, Teacher E who was born and raised in Europe, had a different perspective on the role of 'place' in school geography than the other participants. Therefore, the researcher believes that a teacher's (participant's) background, such as where they grew up, where they received their teaching qualification, social status, whether they teach in a state or independent school, and their travel experience, influences how they conceptualise 'place' and, consequently, how they understand the role of 'place' in school geography.

Accordingly, the overall ranking of cards demonstrates this (Table 18 and Figure 23). Through card sorting analyses it was evident that a category 'very high priority was inconsistent across participants. It should be noted that card nos. 3, 8, 5, and 6 all appeared as very high priority cards. Another example is that there was inconsistency among participants when it came to very low priority cards. Furthermore, it was notable that some participants had a similar ranking order, especially with the very high priority and high priority. Teacher A and Teacher G both had card no. 3 as a very high priority, as well as card no. 8 as high priority (Figures 7 and 19). On the other side, Teacher B, Teacher C, Teacher D, and Teacher H, all had card no. 8 as a very high priority (Tables 11, 12, 13, and 17). In addition, Teacher B, Teacher C, and Teacher H all had card no. 6 as a high priority card (Tables 11, 12, and 17). While Teacher E and Teacher F had a similar ranking order, hence card nos. 5 and 9 appeared to have either very high priority or high priority (Figures 16 and 18). This reflects that some participants had a similar view on the understanding of 'place' in school geography. The grouping is as follows:

- Teacher A and Teacher G.
- Teacher B, Teacher C, Teacher D, and Teacher H.
- Teacher E and Teacher F.

The information yielded, strongly supports the researcher's earlier claim that school geography teachers have a different perspective on the role of 'place' in school geography. Overall, card nos. 8, 5 and 6 (Table 18 and Figure 23) were rated as high on understanding the role of 'place' in school geography. The next section is on the interviews, attempting to explore how do teachers describe the role of 'place' in school geography, as well as probing how teachers implement geographic learning of 'place'.

Table 18: Teacher's overview ranking views

Category	Points	Card Number	Percentage %
Very high priority (1)	33	Card No. 8	**83%**
High priority (2)	28	Card No. 5	**70%**
	28	Card No. 6	**70%**
Middling priority (3)	26	Card No. 3	**65%**
	24	Card No. 4	**60%**
	21	Card No. 7	**53%**
Low priority (2)	20	Card No. 9	**50%**
	19	Card No. 2	**48%**
Very low priority (1)	17	Card No. 1	**42%**

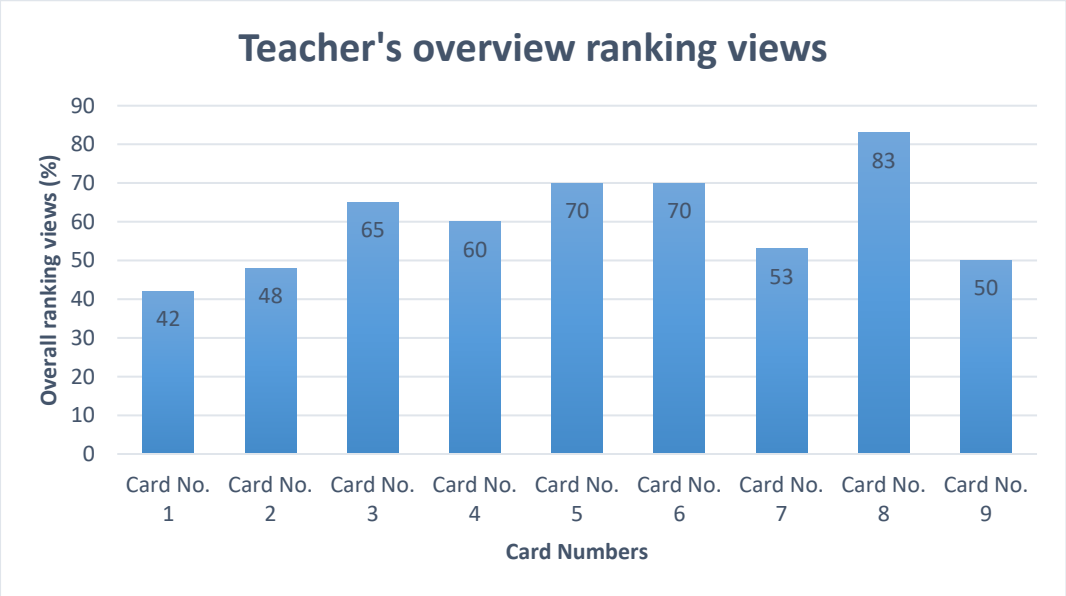


Figure 23: Teacher's overview ranking views

6.4 Interviews

This section sought to explore how teachers describe the role of 'place' in school geography as well as how teachers implement geographic learning of 'place'. It presents and analyses the results obtained in this study from the semi-structured interviews against the background of the theoretical framework. Therefore, interview analyses were guided by Theory Sketch, Implicit Theory, and Explicit Theory (Figure 2). Questions were probed in a completely open-ended format and in combination with follow-up questions such as why, how, and to provide examples. This study indicates that school geography teachers have a dissimilar conceptualisation of 'place' in school geography by factors that emerged as themes during the coding and the thematic analysis process. Four important themes that emerged in terms of the researcher's judgment are indicated as follows:

- **'Place' is 'big' and the most important concept of the four.**
- **Justification on why 'place' is 'big' and the most important concept of the four.**
- **The role of 'place' in school geography (sub-themes):**
  -What is 'place'?

  - What does 'place' mean to different people?

  -Understanding the geographical meaning of the concept 'place'.
- **Implementation of geographical teaching and learning of 'place'.**

6.4.1 Theme 1: 'Place' is 'big' and the Most Important Concept of the Four

The researcher raised a closed question to the school geography teachers. The question was "Do you agree or disagree that 'place' is the most or big concept of the four?". School geography teachers responded as follows:

Teacher A: ***"Agree"***

Teacher B: ***"Agree"***

Teacher C: ***"Agree"***

Teacher D: ***"Agree"***

Teacher E: ***"Agree"***

Teacher F: ***"Agree"*** and ***"Disagree"*** **(*"consider both place and space as big concepts")***

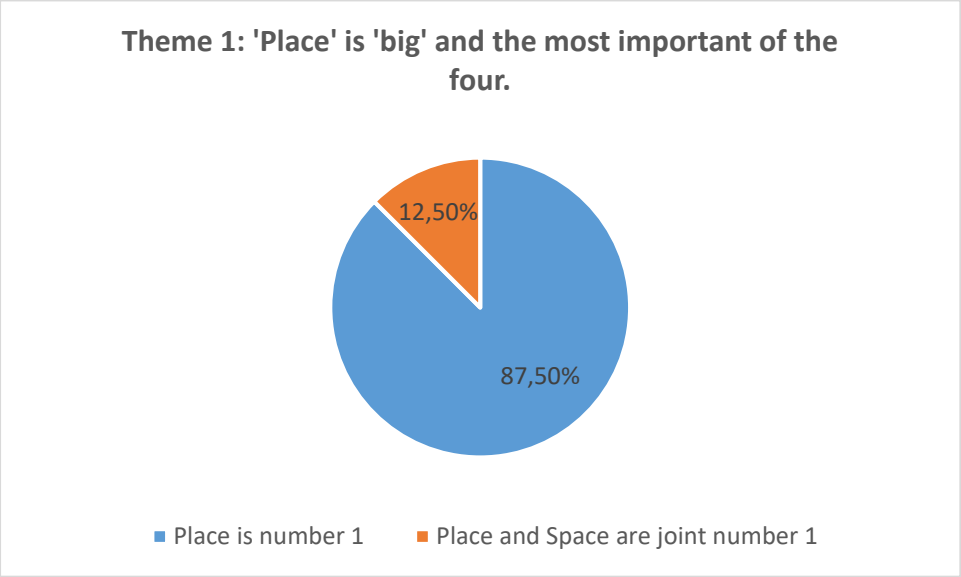
Teacher G: ***"Agree"***

Teacher H: ***"Agree"***

Table 19: Theme 1

Theme	Categories
'Place' is 'big' and the most important concept of the four.	Place is number 1.
	Place and space are joint number 1.

Figure 24: Theme 1



The overall views from the school geography teachers suggested that the concept of place is 'big' and the most important concept of the four in school geography. 87.5% participants supported the researcher's notion that the concept of 'place' is 'big' the most important concept of the four, while 12.5% believed that both 'place' and space are both important (Table 19 and Figure 24). This is conforming to Castree's (2009) articulation that the concept of place is big and significant in geography as a discipline. In a similar manner, Major (2010) maintains that place is a concept that lies at the core of school geography and is the key concept in the school geography curriculum. It should be noted that this finding was similar to those of card sorting. Card 8 states that *"PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE*". On the other hand, these findings differed from those of document analysis, in which the concept of 'place' is not listed as a 'big' concept in the CAPS Geography in the FET Band document. The next theme looks at the main explanations given by the school geography teachers on why 'place' is 'big' and the most

important concept of the four, as well as the justification by teacher F on why he considers both place and space as 'big' and the most important concepts.

6.4.2 Theme 2: Justification on why 'place' is 'big' and the Most Important Concept of the Four

Theme 2 was established as a follow-up question or justification from theme 1. In other words, the researcher used an open-ended approach to probe why 'place' is the most concept of the four, as well as why both place and space are 'big' and the most important concepts. School geography teachers responded as follows:

Teacher A: ***"Humans only interact in place, not in space."***
"Place is very important, for example the Grade 11 topic on region Monsoons."

Teacher B: ***"Everything occurs in places."***
Teacher C: ***"When you look at the geomorphological phenomenon, it always 'where', for example locating water bodies is always 'where'. "***

Teacher D: ***"Place is central, when I teach Grade 8s, introducing geography in high school. I always emphases on the understanding of places. There is an interrelation between humans and the environment. We influence the environment and in return the environment also influence us."***

Teacher E: ***"If you want to understand human and physical environment interaction, you have to go microscale, meaning the entire Earth, in other words a place on Earth."***
"Example: the occurrence of tropical cyclones in different places."

Teacher F: ***"Geography goes beyond the place, for example, you can't locate the atmosphere."***
"Oceans are places; they have co-ordinates."

Teacher G: ***"Place focuses on the interaction between people and the environment.t"***

Teacher H: ***"Place is the starting point in geography. If I teach a section on less economically developed countries, I start by looking at the characteristics that determine why a country is less technologically developed, without realising that I go to place first."***

"Place and time are closely linked. Place is not static. If I'm doing geological stuff, I will say go back millions of years, a place didn't look like it looks like now. If you go forward a million years, it going to have changed. What are the dynamics that change these places from what it was, to what is going to be? So I emphasise the continuously changing processes of places."

Based on the above justification on why 'place' is 'big' and the most important concept of the four, the researcher formulated categories for theme 2 (Table 20).

Table 20: Theme 2

Theme	**Categories**
Justification on why 'place' is 'big' and the most important concept of the four.	Place is the starting point in geography.
	Place and time are closely linked.
	Geography is about understanding places on Earth.
	Place focuses on the interaction between people and the environment.
	Oceans can be regarded as places, example topic on Monsoons and occurrence of tropical cyclones in different places.
	Place interconnects other concepts.

Firstly, it worth noting an important point that was raised by Teacher H that **"*place and time are closely linked*". ** This confirmed the uniqueness and relevance of school geography and that its contents continue to address contemporary mainly the continuously changing processes of places. However, it should be noted that most of the participants claimed that place is a very important concept in school geography. School geography teachers generally believed that without place there is no school geography and geography as a discipline. As teacher participants emphasised:

Teacher H: ***"Place is the starting point in geography."***

Teacher E: ***"Geography is about understanding places on Earth."***

The above articulation is similar to the researcher's argument in chapter one that geography is the study of places and in school geography, the concept of place matters the most. This is also

supported by various geography scholars. For example, Rusznyak (2017) also maintains that geography is broadly defined as a science that explicates the character of places. Other teacher participants were specific and single out that everything occurs on places. For example, in Grade 10 to 12 topics; geographical skills and techniques strongly validated that everything occurs in places. Furthermore, participants gave other notable examples such as the occurrence of tropical cyclones in different places (Grade 12 content), as well as the regional climate case study on India Monsoons (Grade 11 content). Lastly, in the same manner, as the researcher's earlier argument in chapter one, two of the participants indicated that place interconnects other concepts. This is a vital statement in support of the concept of place as a big and the most important of the four concepts, and interconnects other concepts; namely space, the physical Earth, and human-environment interaction (DBE 2011).

6.4.3 Theme 3: The Role of 'place' in School Geography

One sub-theme what is 'place' (6.4.3.1) was identified that describes how school geography teachers describe 'place'. Another sub-theme (6.4.3.2) addressing additional information on what 'place' means to different people. The last sub-theme (6.4.3.3) helped to understand the geographical meaning of the concept 'place' by school geography teachers.

6.4.3.1 What is 'place'? (sub-theme)

In this sub-theme school geography teachers came up with similar ideas concerning the meaning of place. The researcher noted that most school geography teachers mentioned either the term "location" or "co-ordinates". However, two categories were identified; namely location with a meaning and physical location where people interact (Table 21).

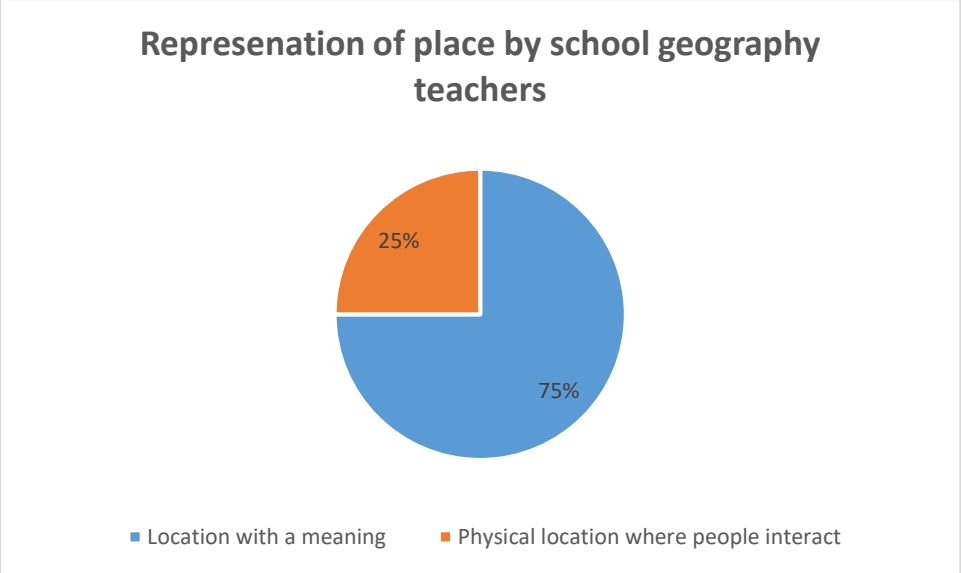
Table 21: Theme 3.1

Theme	Categories
The role of 'place' in school geography: What is 'place'?	Location with a meaning.
	Physical location where people interact.

As articulated above, school geography teachers suggested two ways of describing place, firstly as a "location with a meaning" and secondly as a "physical location where people interact". 75% of the participants supported the notion of place as a location with a meaning, while 25% of the participants supported the notion of place as a physical location where people interact (Figure 25). School geography teachers affirmed to what the researcher discussion in chapter

two, that a place is primarily a location with distinct features where people interact. Thus, it is possible to conclude that school geography teachers describe place as physical location with a meaning and where people interact.

Figure 25: Representation of place by school geography teachers



6.4.3.2 What does 'place' mean to different people? (sub-theme)

Table 22: Theme 3.2

Theme	Categories
The role of 'place' in school geography: What does 'place' mean to different people?	People have different experiences to places.
	Place matter because it where people interact.
	Place determine people behaviour.

The views of school geography teachers revealed that people have different experiences with places. In other words, our understanding of place is not the same. In the sub-theme above, school geography teachers referred to the place as a physical location with meaning and where people interact. Therefore, the interaction of people within a place is not the same, and those the meaning. An example is a school environment as a place. Students meaning of school would be of learning, while teachers meaning would be of teaching. Furthermore, Agnew (2011) also refers to a place as the terrestrial surface that is unique and cannot be exchanged. As teacher participants emphasised:

Teacher A, C and G: ***"People have different experiences to place."***

Teacher B: "***Our understanding of place is not the same because we view places differently, for example, others view place in a geographical manner."***

Teacher D: ***"Everyone has their perception of places. You have your perception of places. It is influenced by your own experience, your history with the place."***

In addition, school geography teachers affirmed that place matters because it where people interact, as a result, place determines people's behaviour and shapes their characters. As teacher participants emphasised:

Teacher E: ***"It a matter of interest, place matter because it where people interact."***

Teacher F: ***"People have different meanings to places, as results place determine people's behaviour."***

Teacher F: ***"It based on how people interact with a particular place."***

For example, the behaviour and characters of people from different land-use zones are unique. The behaviour and character of people from urban and rural areas are unique. Therefore, place plays an important role in social behaviour within various communities. It should be noted that the researcher believes that school geography teachers' differing perceptions of 'place' influence how they implement geographical teaching and learning of 'place'.

6.4.3.3 Understanding the geographical meaning of the concept 'place' (sub-theme)

Table 23: Theme 3.3

Theme	**Categories**
The role of 'place' in school geography: Understanding the geographical meaning of the concept 'place'.	People and physical environment interaction.
	Geographical location.
	Include both human and physical features.
	Earth surface.

According to the participant school geography teachers, the geographical meaning of the concept 'place' includes both human and physical features. In other words, it includes both human and physical geography. For example, human geography includes topics such as settlement and the economic geography of South Africa, while physical geography comprises

topics such as climate and geomorphology. School geography teachers added that the geographical meaning of the concept 'place' embraces the interaction of people and the physical environment. For example, a Grade 11 topic on slopes, the significance of slopes for human activities namely settlement and agriculture. In Grade 12, a topic on site and situation of settlement link direct with people and physical environment interaction. Many factors influence the choice of a site, for example, the availability of resources such as water and fertile soil. Another example, a Grade 10 topic on volcanoes, the positive impact of volcanoes on people and the environment, such as volcanic ash act as a fertiliser for the soil.

School geography teachers also described the geographical meaning of the concept 'place' as geographical location. This is relevant as it fits directly to the Grades 10 to 12 topic on geographical skills and techniques; namely using atlases, aerial photographs, orthophoto maps, topographic maps, and Geographical Information Systems (GIS). The geographical skills and techniques topics are all centred around a geographical or specific location. Moreover, school geography teachers also described the geographical meaning of the concept 'place' as earth surface. In other words, the study of earth features such as terrestrial surface, slopes, landforms, rivers, and oceans. For example, in Grade 12 a topic on tropical cyclones, mid-latitude cyclones, and valley climates. In Grade 10, topics on plate tectonics, South Africa's geology, and earthquakes. In Grade 11, topics on the development of hilly landscape, basaltic plateaus, canyon, and Karoo landscapes. In addition, a topic on synoptic charts from Grades 10 to 12 is another good example of relating a geographical meaning of the concept 'place' as earth surface. All the above mentioned aspects by school geography teachers, have a solid relationship with the geographical meaning of the concept 'place'.

6.4.4 Implementation of Geographical Teaching and Learning of 'place'

6.4.4.1 Implementation of Geographical Teaching and Learning of 'place' by Teachers

Table 24: Theme 4

Theme	Category
Implementation of geographical teaching and learning of 'place'.	Based on the topic during teaching and learning.
	Settlement.
	Fluvial geomorphology.
	Monsoons.

	Microclimate: valley and urban heat islands climates
	Mapwork.
	Development.
	Climatology.
	Economic geography.
	Population.

School geography teachers were questioned on how they implement geographical teaching and learning of 'place'. According to school geography teachers, they implement geographical teaching and learning of 'place' according to the topic there are covering. Most importantly, school geography teachers consider mapwork as the fundamental topic in implementing geographical teaching and learning of 'place'. For example, in this topic school geography teachers can teach the technique of locating different places, scrutinise climate conditions within places, identify different landforms, examine different settlements and economic sectors. Therefore, through the teaching of mapwork, school geography teachers can cover the concept of place in all topics, in other words, in both human and physical geography. Furthermore, school geography teachers identified the topics mentioned in Table 25 as key in the implementation of geographical teaching and learning of 'place'. Based on these findings, it was evidence that geographical teaching and learning of 'place' includes all three components of 'place', namely location, locale and sense of place. Another similar factor from the findings was that the suggested topics covered both human and physical geography, this is indicated in Table 25.

Table 25: School geography topics

Category	**Human/Physical Geography**
Settlement	Human Geography
Fluvial geomorphology	Physical Geography
Monsoons	Physical Geography
Microclimate: valley and urban heat islands climates	Physical Geography
Mapwork	Human/Physical Geography
Development	Human Geography
Climatology	Physical Geography
Economic geography	Human Geography
Population	Human Geography

A notable factor was that most of the topics are in Grade 12 content as compared to Grades 10 and 11 (Table 26). This was key as it led to the researcher scrutinising Grade 12 papers from different examination boards; namely DBE and IEB. DBE representing state schools, while IEB representing independent schools. The findings on the Grade 12 examination papers are discussed briefly in the next section and thus incorporated into the discussion of findings.

Table 26: School geography topics by grades

Category	Grade
Settlement	Grade 12
Fluvial geomorphology	Grade 12
Monsoons	Grade 11
Microclimate: valley and urban heat islands climates	Grade 12
Mapwork	Grades 10, 11 and 12
Development	Grade 11
Climatology	Grade 12
Economic geography	Grade 12
Population	Grade 10

6.4.4.2 Implementation of Geographical Learning of 'place' in Grade 12 Content

The study further revealed that more implementation of geographical learning of 'place' is mainly found in Grade 12 content, in topics such as settlement, microclimate, climatology and economic geography. This promoted the research to scrutinise the 2019 DBE Grade 12 Geography NSC Examination Paper 1 and 2019 IEB Grade 12 Geography NSC Examination Paper 1, to further explore the implementation of geographical learning of 'place'. 2019 Examination papers were written before Covid-19, therefore the standard of both papers was not compromised. On the other hand, the researcher opted not to scrutinise either DBE and IEB Grade 12 Geography National Senior Certificate Examination Paper 2. By nature, Paper 2 examination papers concentrate on geographical skills and techniques and therefore are in an explicit (location) manner. For example, DBE 2019 Paper 2 concentrated on an extract from map 2731BC Pongola and orthophoto map 2731 BC 13 Pongola. On the other hand, the IEB 2019 Paper 2 concentrated from an extract from map 2929 CB, 2929CD, 2929DA and 2929DC Underberg and aerial photograph 2929CD Cobham. As a result, in analysing both DBE and

IEB Paper 1 Examination papers, the researcher opted to focus on the implicit manner (implicit = locale and sense of place) of place.

6.4.4.2.1 Implementation of Geographical Learning of 'place' in DBE and IEB Examination Paper 1

Similarly, to previous examination papers, the 2019 DBE Grade 12 Geography (NSC) Examination Paper 1 comprises both Physical and Human geography and consists of 225 marks. The paper is divided into Sections A and B. Section A deals with Physical Geography, covering Weather, Climate and Geomorphology (Questions 1 and 2). Section B deals with Human Geography, covering Rural and Urban Settlement and the Economic Geography of South Africa (Questions 3 and 4). Each section has two questions with a mark allocation of 75 marks, and students are given a choice to answer three questions, which is equivalent to 225 marks. In this study, the researcher opted to analyse all four questions, equivalent to 300 marks. Table 27 below represents the findings.

Table 27: Question related to implicit manner of 'place' in DBE NSC Examination Paper 1

	Question 1 (75 marks)	**Question 2 (75 marks)**	**Question 3 (75 marks)**	**Question 4 (75 marks)**
Number of questions related to implicit manner of 'place'	26	30	68	67
% of questions related to implicit manner of 'place'	35%	40%	91%	89%

Total % of questions related to implicit manner of 'place'= **64%**

The 2019 IEB Grade 12 Geography NSC Paper 1 also comprises both Physical and Human geography and but consists of 200 marks. The paper is divided into Question 1, Question 2 and Question 3. Question 1 deals with Integrated Questions, while Question 2 deals with Physical Geography, covering Weather, Climate and Geomorphology. Question 3 deals with Human Geography, covering Rural and Urban Settlement and the Economic Geography of South Africa. Question 1 has a mark allocation of 100 marks, while Questions 2 and 3 respectively have a mark allocation of 50 each. All three questions are compulsory. Table 28 below represents the findings.

Table 28: Questions related to implicit manner of 'place' in IEB Examination Paper 1

	Question 1 (100 marks)	**Question 2 (50 marks)**	**Question 3 (50 marks)**
Number of questions related to implicit manner of 'place'	77	30	45
% of questions related to implicit manner of 'place'	77%	60%	90%

Total % of questions related to implicit manner of 'place'= **76%**

6.4.4.2.2 Contrast Implementation of Geographical Learning of 'place' in DBE and IEB Examination Paper 1

The study reveals that indeed there is implementation of geographical learning of 'place' in an implicit manner, or that rather in a locale and sense of location manner. This was evidence in both 2019 DBE (Table 27) and IEB (Table 28) Paper 1 Examination papers. For example, a total percentage of questions related to implicit manner of 'place' was 64% in DBE paper. In a similar manner in IEB paper, a total percentage of questions related to implicit manner of 'place' was 76%. It should be noted that there is a greater implementation of geographical learning of 'place' in an implicit manner in IEB examination paper, when equated to DBE paper. This may further suggest that teachers in independent schools are better implementers of geographical learning of 'place' as compare to teachers in state schools. Although there is evidence on the implementation of geographical learning of 'place' in both DBE and IEB, the researcher believes that questions relating to implicit manner of 'place' can be improved further. In chapter eight, the researcher makes a recommendation on how this can be improved.

Concerning human and physical geography, teachers suggested that the implementation of geographical learning of 'place' in an implicit manner, hence it is covered in both human and physical geography. The findings from this study were similar, as there was evident of both human and physical geography in both DBE and IEB Examination papers (Table 29). Similarly, to what school geography teachers submitted, data from the DBE and IEB Examination papers also presented a greater geographical implementation of 'place' in human geography, as compared to physical geography (Table 29). An example of this in DBE examination paper is 56% of geographical implementation of 'place' in human geography, as equated to 26% in physical geography. Whereas an example of this in IEB examination paper

is 95% of geographical implementation of 'place' in human geography, as equated to 35% in physical geography.

Table 29: Physical and Human Geography: % of questions related to implicit manner of 'place' in DBE and IEB NSC Examination Paper 1

	DBE	IEB
Physical Geography: % of questions related to implicit manner of 'place'	26%	35%
Human Geography: % of questions related to implicit manner of 'place'	56%	95%

Based on the analyses of both DBE and IEB Paper 1 Examination papers, one may conclude that there is satisfactory implementation of geographical learning of 'place' in an implicit manner, or rather in locale and sense of place manner. Additionally, based on the nature of both DBE and IEB Paper 2 Examination papers, the researcher believes that there is integrated implementation of geographical learning of 'place' in an explicit manner, or location manner. It is worth noting that, when compared to DBE papers, IEB examination papers cover a greater implementation of geographical learning of 'place', particularly in human geography (Table 29). However, in both DBE and IEB examination papers there is a very low implementation of geographical learning of 'place' in physical geography (Table 29). The researcher views the above aforementioned issues as underachievement. Hence, in chapter eight, the researcher makes a recommendation on how this low rating can be improved.

6.4.5 Interview Overview

The overall themes demonstrated that school geography teachers have a dissimilar conceptualisation of the role of 'place' in school geography. School geography teachers described the role of 'place' in school geography differently including how teachers implement geographic learning of 'place'. However, the researcher noted that there was an interrelation with how school geography teachers conceptualise the role of 'place' in school geography. An instance of this is the articulation by one participant that "place is the starting point in geography', while another participant supports this narrative by maintaining that "geography is about understanding places on Earth". The interview analyses further showed that there is a strong relationship between people and places, as participants pointed out that people have

different experiences with places. Lastly, there was consensus on the implementation of geographical learning of 'place' in Grade 12 content, particularly in human geography topics, as well as Grade 12 topics. However, it was also evidence from the DBE and IEB examination papers that implementation of geographical learning of 'place' in Grade 12 content is dissimilar. The researcher discussed this in detail in the preceding section and further made several recommendations in chapter eight.

6.5 Conclusion

The card sorting and interview data were used to answer three secondary questions raised by this study. This provided the necessary analysis on teacher's understanding, description and implementation of 'place' in school geography. This chapter started by providing profiles of the school geography participants, including whether they teach in a state or independent school, and their teaching experience. There was an apparent relationship between teachers understanding of 'place' and their prior education training and experience, social standing and school context in they teach. The overall response from the participants put forward the notion that the concept of 'place' is 'big' and is the most important concept in South Africa's school geography curriculum. In other words, the concept of 'place' lies at the heart of school geography. Except for one teacher, who suggested that 'place' and space are both important concepts. In response to the aforementioned suggestion, Fletcher (2019) emphasises that teachers must be made aware that 'place' is what gives a space meaning or personality and more importantly is connected to cultural and personal identities, whereas space is the location, or physical space in geography. In accordance with the theoretical framework that was discussed in chapter three, the following chapter summaries the findings.

CHAPTER 7: DISCUSSION OF FINDINGS

7.1 Introduction

This chapter presents a discussion of findings with the goal of addressing the research problem mentioned in the first chapter, the introduction. Most significantly, this chapter seeks to answer all of the research questions, while also comparing the findings to the issues raised in the literature review and the theoretical framework. The two previous chapters, chapters five and six are closely linked to this chapter. Both chapters five and six concentrated on analysing and interpreting the data for this research study which was designed to engage the primary research question: *What are teachers' conceptualisation(s) of 'place' in school geography?* In chapter five, the researcher dealt with the first secondary research question (SRQ1): *What is the nature of 'place' in school geography?* The analysis was done by means of scrutinising the CAPS Geography in the FET Band document. In chapter six, the researcher dealt with the three secondary research questions:

SRQ2: *What are teachers' understanding(s) of 'place' in school geography?*

SRQ3: *How do teachers describe the role of 'place' in school geography?*

SRQ4: *How do teachers implement geographic learning of 'place'?*

Teachers' understanding(s) of 'place' in school geography (SRQ2) was completed through utilising card sorting, diamond 9 and ranking order. While teachers' description and implementation of 'place' in school geography (SRQ3 and SRQ4) were done by means of open coding.

7.2 Discussion of Findings in Relation to the Continuum of Theory Explicitness

According to chapter three, the discussion of findings was steered by the theory of concept formation. Concept formation emphasises that concepts should be evaluated based on the Continuum of Theory Explicitness (Figure 1). Continuum of Theory Explicitness makes provision of Implicit Theory, Theory Sketch and Explicit Theory (Figures 1 and 2). Therefore, in discussing the findings the researcher used all three elements of Continuum of Theory Explicitness (Figures 1 and 2). Furthermore, in discussing the findings, the researcher added three components of place: location, locale and a sense of place as discussed in chapter three. The researcher discussed the findings in the following manner:

(SRQ1): *What is the nature of 'place' in school geography?*

The SRQ1 explores the nature of 'place' in school geography. The word 'nature', which connotes the character of 'place' was chosen. This implies that 'place' has a variety of distinguishing characteristics. Accordingly, the character of 'place' has multiple meanings, and its nature can be either direct or indirect. To put it another way, the nature of 'place' can be presented both explicitly and implicitly.

- Implicit Theory = indirect/secondary referencing
- Explicit Theory = direct referencing

SRQ2: What are teachers' understanding(s) of 'place' in school geography?

The SRQ2 explores the understanding of 'place' by school geography teachers. The keyword 'understanding' simply refers to the act of attempting to comprehend something. In this context, the ability of school geography teachers to comprehend the concept of 'place'. Therefore, comprehending something cannot be direct and indirect, but rather rely on an individual's entire understanding. Hence, a theory sketch is more suited in dealing with the understating of 'place' in school geography.

- Theory Sketch = Epistemic and Constitutive Connections

SRQ3: How do teachers describe the role of 'place' in school geography?

SRQ3 explores various ways in which teachers describe the role of 'place' in school geography. In the literature review, the researcher emphasised three components of 'place', namely; location, locale and sense of place. Therefore, 'place' can be described as a location, locale or sense of place. Location is more precise as it concentrates on a particular location, in other words is more direct and in an explicit manner. On the other hand, locale and sense of place are concerned with the physical and social relationships that exist between people and places, and hence are more indirect and implicit.

- Implicit Theory= locale and sense of place
- Explicit Theory = location

SRQ4: How do teachers implement geographic learning of 'place'?

SRQ 3 and 4, are similar, as they respectively focus on the description and implementation of 'place' in school geography. As a results, the reasons provided in SRQ3, were also adopted in

SRQ4.

- Implicit Theory = locale and sense of place
- Explicit = location

Furthermore, the analyses of 2019 DBE Grade 12 Geography National Senior Certificate Examination (NSC) Paper 1 and 2019 IEB Grade 12 Geography National Senior Certificate (NSC) Examination Paper 1 were used as additions in discussing findings concerning the secondary research question four (SRQ4). The secondary research question four (SRQ 4) probes *how do teachers implement geographic learning of 'place'*. Therefore, it was vital for the researcher to use both state (DBE) and independent (IEB) examination bodies, hence teacher participants were both from state and independent schools. Lastly, as a deduction from all four secondary research questions, the researcher further added the secondary researcher question five (SRQ5): *Why teachers have a dissimilar conceptualisation of 'place' in school geography?* In line with this, this chapter discusses findings under the following headings: the nature of 'place' in school geography, teachers' understanding(s) of 'place' in school geography, teachers' description on the role of 'place' in school geography, implementation of geographic learning of 'place' and accounts on why teachers have a dissimilar conceptualisation of 'place' in school geography.

7.3 The Nature of 'place' in School Geography

The Geography CAPS for Geography in the FET Band provided a comprehensive analysis on the nature of 'place' in school geography. The most common example is on the Aims of Geography in the FET Band, the study found 11.1% direct reference (Explicit) to the concept of 'place', as compared to 77.8% secondary reference (Implicit) to the concept of 'place'. In chapter two, the literature review, the researcher outlined that the concept of powerful knowledge doesn't not provide a clear framework on how it should be implemented. In other words, there are no guidelines on how school geography teachers should teach it (Lambert et al. 2016). Similary, Maude (2018) further adds that there are no guidelines as to how the concept of powerful knowledge helps teachers in making decisions about what to teach. Interestingly, the findings of this study are similar those expressed by the researcher in chapters one and two, and they are also consistent with Maude's (2018) study. The dominant secondary reference (Implicit) to the concept of 'place' clearly suggests that there is no clear framework on how it should be implemented. Accordingly, the researcher postulates that the nature of 'place' in school does not guide school geography teachers on how to teach it.

The second most common reported example is on the Overview of Topics per Term. The study established a 4.8% direct reference (Explicit) to the concept of 'place', as compared to 77.8% secondary reference (Implicit) to the concept of 'place'. With reference to Grade 11, an example of secondary referencing (Implicit) is made under the topic Africa's Weather and Climate, *"Africa's climate regions*" (DBE 2011: 30). On the other hand, amongst other scant direct referencing (Explicit) examples are made under the topic Using Atlases (revision), *"locating places on different maps, using degrees and minutes"* (DBE 2011: 29).

This study found that the nature of 'place' in school geography is confirmed through secondary (indirect) referencing as compared to the direct fragmented manner. These findings were considered to be similar to the Aims of Geography in the FET Band. The researcher has already stated that the concept of powerful knowledge lacks a clear framework for implementation. The findings affirmed that secondary referencing is closely associated to the Implicit Theory, while direct referencing is fairly associated to the Explicit Theory. Therefore, data from this study suggests that the nature of 'place' in school geography is unquestionably in an Implicit Theory manner. In other words, the nature of 'place' in school geography is not clearly defined.

To conclude, these findings are similar to what the researcher articulated in chapter two, that concepts such as 'place' are expressed in an implicit or indirect manner. Implying that the concept of 'place' is not clearly defined in the CAPS for FET Geography Band document. As a result of this, school geography teachers are likely to conceptualise the concept of 'place' in a dissimilar manner. The researcher recommends that the concept of 'place' needs to be unpacked in the CAPS for FET Geography Band document so that subsidiary concepts on which it rests and which give it form, are made visible.

7.4 Teachers' Understanding(s) of 'place' in School Geography

Theory Sketch was used to examine teachers' understanding(s) of 'place' in school geography. Theory Sketch stresses the Epistemic and Constitutive Connections (Figure 1). This means that knowledge or information provided by participants must be captured as it is. Furthermore, in chapter three the theoretical framework, the researcher stated that concepts are subjects' interpretation(s) or ways of thinking, implying that people conceptualise things differently (Fraser 2006). In the same vein, the researcher believes that school geography teachers understand or conceptualise the concept of 'place' differently. In chapter two, the researcher pointed out that there is no single explanation for the concept of 'place'. Without a doubt, the

term ‘understanding teachers’ relate well with the Theory Sketch. The outcomes from the card sorting postulated card nos. 8, 5, and 6 as the most important cards on understanding the role of ‘place’ in school geography (Table 18 and Figure 24). These cards state:

- Card no. 8 rated at 83% *“PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE.”*
- Card no. 5 rated at 70% *“The CONCEPT OF PLACE promotes geographical thinking, important values, and attitudes such as sustainable/fair use of resources for the benefit of all, respect for the rights of all people, a sense of fairness and equality.”*
- Card no. 6 rated at 70% *“Generally, Geography is the study of PLACES and Geography is about PLACES. Geography topics namely Atmosphere/Climatology, Geomorphology, Settlements, Development and Resources/Sustainability, and Map-work are all centred around the CONCEPT OF PLACE.”*

The same interaction regarding card no. 5, is supported by researcher’s earlier claim in chapter one, under motivation for this study. The researcher suggested that geography values contribute to the development of students, to think geographically, and apply fundamental geographic educational goals. While card no. 6 was strongly emphasised in the introduction, that geography is the study of places and geography is about places.

Lastly, in chapter one and two, the researcher argued that the concept of ‘place’ is one of the foundational and important concepts in geography. After all, geography is the study of places and geography is all about places. Furthermore, the researcher stated that the concept of ‘place’ is a foundation of geography’s identity, and that educational geography and geography would not exist without it. Supported by the overall ranking views of card no. 8, at 83% *“PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth, and human-environment interaction are all interconnected with the CONCEPT OF PLACE”* clearly supports the researcher’s earlier argument. Hence, the researcher maintains that ‘place’ is one of the foundational and most important concepts in geography.

7.5 Teachers Description on the Role of ‘place’ in School Geography

In describing the role of ‘place’ in school geography it was vital for the researcher to analyse teachers thoughtful on what is place. This study revealed that place is a location with a meaning

and importantly a physical location where people interact. What this suggests is that place was described in accordance with Explicit Theory and Implicit Theory, as well as three components of place, as cited below:

- Location (Explicit)
- Location with a meaning, or sense of place (Implicit)
- Physical location where people interact, or locale (Implicit)

Similarly, to the discussion above, this study indicates that geographical meaning of the concept of 'place' is both Implicit Theory and Explicit Theory manner, as mentioned below:

- People and physical environment interaction (Implicit = sense of place).
- Geographical location (Explicit = location).
- Includes both human and physical features (Implicit = locale)
- Earth surface (Implicit = locale and sense of place)

The overall findings on the role of 'place' in school geography indicates the advancement of three components of place, namely: location, locale and sense of place. This is vital in answering important geographical place driven questions, such as where is it located, what is it like there and what is the relationship between human and their environment. Furthermore, the Implicit and Explicit nature of place is significant in geography and as this enables geographers to explore both physical and human features as well as the interrelation between these features. To conclude, the study found that school geography described the role of 'place' in school geography in relation to three components of 'place'. As a result, maintaining 'place' as a:

- Place as location (particular point on the earth surface).
- Sense of place (people's feelings about the place such as group identity).
- Place as locale (scale for people's daily activities).

7.6 Implementation of Geographic Learning of 'place'

7.6.1 Implementation of Geographic Learning of 'place' by School Geography Teachers

The study found that implementation of geographical learning of 'place' is covered in all key units of school geography, namely; human geography, physical geography and geographical skills and techniques, as well as across FET Band from Grades 10 to 12. Therefore, this suggests that implementation of geographical learning of 'place' is both Explicit and Implicit manner. For example, geographical skills and techniques are explicit (location) manner. While

topics such as development, settlement, economic geography and microclimate are implicit (locale and sense of place) manner. However, it is worth noting that geographical skills and techniques (mapwork) and various units in human geography are the dominant topics when it comes to geographical learning of 'place'.

7.7 The Main Findings of the Study

The intention of this study was to explore teachers' conceptualisation(s) of 'place' in school geography. The study suggested that the concept of 'place' is 'big' and the most important concept in South African's school geography curriculum. However, the study gave an indication that teachers conceptualisation of 'place' in school in geography are ambiguous: primarily due the nature of 'place' in the CAPS for FET Geography Band that doesn't provide a clear framework on how it should be implement. The researcher contends that foundational concepts such as place, must be unpacked clearly, particularly because they serve as connectors between key concepts. Additionally, big concepts serve as content containers and are at the heart of disciplines. In this case, the concept of 'place' is at the heart of geography as a discipline.

Lastly, the articulation above by the researcher provided several reasons for teachers' varying interpretations of 'place' in school geography. This study illustrates the apparent relationship between teachers' conceptualisation of the concept of 'place' in school geography and their individual ideals, educational training, social standing, working environments and teaching experience. Another notable aspect is that school geography teachers implement geographical learning of 'place' in different ways, particular due to differences in the examination bodies. With respect to existing literature, the findings of this study are similar to what the researcher raised in chapters one and two, and also aligns with other international research findings. The wider problem is that concepts are not well defined, and as a result, geography teachers lack a sufficient conceptual understanding of concepts

To conclude, the concept of 'place' is a priority for the discipline of geography, especially in the changing and globalising world (Larsen & Harrington 2018). However, geographers face a dilemma as to how to conceptualise 'place' within the discipline. Primarily because concepts are open to more than one interpretation (Dumont & Wilson 1967), just like the concept of 'place' in geography. Problems also arise with public usage of the same term because the meaning may vary, which affects responses and understandings of a concept (Lane et al. 2019).

CHAPTER 8: CONCLUDING THE STUDY

8.1 Introduction

The previous chapter presented findings on the conceptualisation of 'place' in geography, by school geography teachers. This final chapter presents a summary of the study, suggestions for future research as well as recommendations for the study, limitations of the study and lastly self-reflection by the researcher.

8.2 Summary of the Study

The main purpose of this research study was to explore teachers' conceptualisation(s) of 'place' in geography. The study posed the following secondary research questions in order to address the primary research question:

- What is the nature of 'place' in school geography?
- What is the teachers' understanding(s) of 'place' in school geography?
- How do teachers describe the role of 'place' in school geography?
- How do teachers implement geographic learning of 'place'?
- Why do teachers have a dissimilar conceptualisation of 'place' in school geography?

After the data was analysed, the results revealed that school geography teachers have a dissimilar conceptualisation of 'place' in school geography. This is mainly owing to the nature of 'place' in school geography that is an implicitly manner, as well as dissimilar and contrasting understanding, description, and implementation in school geography, as either implicit and explicit means. The study revealed that place was mostly considered as a physical setting within which social, economic, cultural, personal and political interactions take place. Moreover, with more implicit reference to place, little has been done to assist teachers in acquiring a thorough understanding of what entails the concept of 'place' in school geography. One can thus recommend ongoing professional developments that can assist teachers to acquire a deeper understanding of the concept of 'place'.

Overall, this study was divided into eight chapters. Chapter one introduced the study and gave an overview of the whole study, and therefore the issue to be investigated was explored. This was followed by the rationale and motivation, which then helped in stating the research questions. Chapter two reviewed relevant literature and provided a brief overview concerning

school geography concepts, mainly the concept of 'place' as well as detailed information on geography as a subject and discipline.

Chapter three dealt with the theoretical framework, and this study was grounded in concept formation. The theoretical framework provided the basic approach that was used to analyse the data and to draw conclusions. The following chapter was chapter four, the research design and methodology. This chapter commenced with elaborating on the research paradigm, the interpretivist approach. The chapter further described the design and the approach of the study, namely, the qualitative approach and case study method. Population, sampling, and sampling techniques were explained; hence the study employed a purposeful sampling technique. Furthermore, this chapter directed various data-gathering instruments employed in the study, namely, document analysis (official documents), card sorting, interviews, and document analysis (summative assessments). The chapter also dealt with data presentation, analysis, trustworthiness, and ethical considerations.

Chapters five and six presented data analysis, interpretation, and presentation of findings. Chapter five analysed the official document, CAPS for Geography FET Band, while chapter six analysed cards and interviews. The following chapter was seven, the discussion of findings. The chapter summarised the findings concerning the five secondary research questions and forwarded the main findings of the study. Finally, the last chapter, chapter eight, concluded the study. The chapter forwarded the suggestions and recommendations of the study. The chapter ended with the researcher's presentation of the limitations as well as the researcher's self-reflection.

8.3 Future Research

There are possibilities for similar research to be conducted within school geography, particularly on subject understanding and conceptualisations of the other key concepts. To be more precise, the researcher suggests the following future researchers:

- Understand teachers' conceptualisations of key concepts in school geography. Among key concepts that can be investigated are space, the physical Earth, and human-environment interaction. For example, the CAPS for Geography FET Band doesn't provide a clear framework for how key concepts should be implemented and linked to one another. Hence, other studies may explore the interrelationship between 'big'

concepts such as place, and key concepts such as space, physical Earth, and human-environment interaction.

- Investigate teacher's conceptualisation of three components of 'place' (location, locale and sense of place) in school geography. There is little, if any, study on the teachers' understanding of three components of 'place' in school geography. Previous research has mostly concentrated on the significance of 'place' as a concept, rather than the essential ingredients of 'place'. Therefore, school geography teachers must be well-versed in these three components of 'place', including the ability to teach and incorporate them in formal assessments.

- Further study might go on to examine teachers' understanding of three categories of subject knowledge, namely, pure, school and pedagogic. Walshe (2007) states that it is important to outline the differences between these categories of subject knowledge clearly. As Walshe (2007:102) points out, "within the growing body of literature on the nature of pedagogical knowledge, there are many references to 'subject knowledge,' but there is often little commonality as to what this actually means".

- Investigate teachers' strategies on geographical values and the techniques used to promote geographical thinking. In chapter two, the literature review, the researcher pointed out that, in comparison to concepts and subject knowledge, the geography of education at the classroom level has received less attention.

- Investigate the geographical implementation of other key concepts or subject knowledge in examination bodies, namely DBE and IEB. For example, this study found that there is a greater implementation of geographical learning of 'place' in the IEB examination paper, as compared to DBE paper. Similarly, depending on the examination body, the implementation of other key concepts and subject knowledge may differ. As a result, the study could explore the implications that are associated with these differences.

8.4 Recommendations

The study discovered that school geography teachers have a dissimilar conceptualisation of 'place' in school geography. The study further revealed that there is a dissimilarities implementation of geographical learning of 'place' by school geography teachers, including dissimilar in DBE and IEB examination papers. Therefore, the researcher recommends the following for Curriculum Developers and DBE, Teachers, Umalusi and Institutions of Higher Learning:

- Curriculum Developers and DBE

The study revealed that the concept 'place' is not clearly defined in CAPS for Geography in the FET Band, in other words by means of secondary referencing. As a result, school geography teachers have a dissimilar conceptualising of the concept 'place'. Therefore, it is vital for the CAPS for Geography in the FET Band to link the concepts and curriculum topics, and to provide a solid method for how concepts should be implemented in teaching and assessments. The study also revealed that independent schools (IEB schools) have a better implementation of geographical learning of 'place'. Platforms for them to share their experiences with state schools must be established.

The Department of Basic Education should organise professional development seminars that are concept-driven. Importantly, a better understanding is needed by education authorities in order to equip teachers better. Amongst issues that these professional development seminars should address, is the lack of place-driven questions in examination papers, particularly in fluvial geomorphology. There is a great need for case studies and source analysis questions within physical geography. Furthermore, blooms taxonomy should add a section on how big and key concepts are incorporated, including a detailed report from moderators. The Department of Basic Education can collaborate these professional development seminars with vibrant geography teachers' associations, such as the Southern African Geography Teachers' Association (SAGTA), which over the years have conducted informative and productive seminars.

- Teachers

In line with the articulation above the study recommends that school geography teachers be familiar with concepts, especially the concept of 'place'. As mentioned in the previous chapter, the CAPS for Geography in the FET Band should itemise the concept 'place' big. In this way

school geography teachers will be mindful that the concept of 'place' is central in linking with other concepts and is the most important aspect of school geography. Secondly, the CAPS for Geography in the FET Band should establish a clear framework for implementing and teaching the concepts of 'place', as well as other key concepts. As a result, teaching-learning and assessments will promote place-based learning.

- Umalusi

Umalusi is the Council for Quality Assurance in General and Further Education and Training, meaning that it oversees both Grade 12 DBE and IEB examination papers. Therefore, Umalusi should ensure that there is adequate and even implementation of 'place' in Grade 12 DBE and IEB examination papers.

- Institutions of Higher Learning

The curriculum in the institutions of higher learning should promote geography teaching concepts, particularly the concept of 'place', and therefore adopt a place-based teaching approach. More attention should be placed on the Postgraduate Certificate in Education (PGCE), as it has turned to focus more on teaching skills and subject content.

8.5 Limitations

The challenge with concepts such as 'place' is that these are not clearly defined, and they have dissimilar interpretations. In school geography, there are no guidelines for how concepts should be taught and how they should be integrated into various school geography curricula. This study was based in Gauteng Province, with eight participants. With a broader population and sampling, the findings would have revealed a greater conceptualisation of 'place' in school geography.

Obtaining ethics clearance was a challenge and affected the scheduled period for data collection. As a result, some participants were no longer interested in participating in this study. Some limitations to this study included that this study was conducted prior to and during the period of COVID-19, including lockdown restrictions. Consequently, the implications were various challenges concerning collecting data and suitable interaction with participants. Although the researcher was able to collect data before the lockdown restrictions physically, follow-up interviews were not. As a result, follow-up interviews were done via emails as well

as using telephone discussions, which proved to be effective in the end. The MEd and PhD cohorts were of great benefit to the researcher, but there were also cancelled due to COVID-19 restrictions. This further limited researcher's interaction with other students and other lecturers. Virtual support sessions were organised but the researcher preferred physical interaction. Another limitation was to get newly qualified teachers as participants in this study. In most schools, newly qualified teachers are teaching lower grades.

Lastly, the researcher has not been able to share the research findings with the participant teachers due to strictly COVID-19 regulations in several schools. The researcher will share key findings with participants once the study is completed. In addition, the researcher intends to publish papers summarising key findings, which will be shared with participants.

8.6 Self-Reflection

The researcher commenced this study by attending cohorts and support sessions offered by the university. These support sessions proved to be valuable, as they gave the researcher an opportunity to understand the research structure as well as to provide interaction with other students and lecturers. The interaction and support from the researcher's co-supervisor was also valuable, as this provided a solid foundation for this study. Initially, the researcher wanted to investigate active learning as a teaching method, but after these interactions, the researcher opted to conduct this study, mainly because the researcher is a geographer and a school geography teacher. This study was more relevant since it concentrated on educational geography rather than the original topic, which was about a general teaching method.

To begin with, chapter one was quite challenging, particularly in terms of writing technique and research terminology. It improved with chapters two and three. However, chapter three made less sense to the researcher at that moment, until the researcher began to analyse data and discussing findings. In comparison to chapters one, two, and three, the researcher enjoyed writing chapter four. Presenting and the feedback from the research proposal was positive and encouraging. As a result, the researcher was motivated. Furthermore, it was encouraging to see that the study was making progress, such as receiving ethics clearance and title registration.

The researcher enjoyed collecting data, the interaction with participants, getting to know them, and moving from one school to another school was a great experience. Analysing data from one participant to another, comparing data from participants was relatively interesting. On the

other hand, the researcher observed the inequality that exists within the education system in South Africa. Some schools were established and had more advanced infrastructure compared to other schools. This was largely evidenced between state and independent schools. Independent schools were well advanced and had better infrastructure. The researcher is of the view that this has an impact on the teaching and conceptualisation of the concept of 'place', since independent school geography teachers are more likely to teach and conceptualise the concept of 'place' better.

This research has fundamentally shaped the researcher's professional and personal development. For example, the researcher may now effectively analyse students' progression as well as key areas and topics in which they struggle. On a personal level, the researcher has strengthened his research and analysis skills, as well as his overall comprehension of information. When comparing the beginning of this study, with the conclusion of this study, indeed the researcher has grown academically. The researcher has enriched writing, analysing and overall research skills. Moreover, the researcher has also improved his teaching and assessment skills. The emphasis has largely shifted towards placed-based teaching and assessing. Indeed, this has enriched the teaching and learning of 'place' in the researcher's classroom. Given an opportunity to conduct this study again, the researcher would incorporate classroom observation as another data collection instrument. A further instance of this would be to observe how school geography teachers implement geographical learning of 'place'. Another addition would be to interview students to explore their conceptualisation of 'place' in school geography. Finally, the researcher is grateful to have conducted this study. The researcher has grown and benefited significantly from this research study. The researcher is looking forward to future researcher studies.

REFERENCES

Agnew, J. 2011. Space and Place, *in Handbook of Geographical Knowledge*, edited by Agnew, J and Livingstone, D. London: Sage.

Al Riyami, T. 2015. Main approaches to educational research. *International Journal of Innovation and Research in Educational Sciences*, vol.2, no.5, pp. 412-416.

Alshenqeeti, A. 2014. Interviewing as a Data Collection Method: A Critical Review. *English Linguistics Research*, vol.3, no.1, pp. 39-45.

Anderson, C. 2010. Presenting and Evaluating Qualitative Research. *American Journal of Pharmaceutical Education*, vol.74, no.8, pp.1-6.

Badenhorst, C. 2007. *Research Writing: Breaking the Barriers*. Pretoria: Van Schaik.

Bak, N. 2003. *Completing your thesis*. Cape Town: Van Schaik.

Beylevel, M. 2017. *The dynamics of active learning as a strategy in a private higher education institution*, Doctoral Thesis, University of Pretoria.

Bhatia, M. 2018. *Your Guide to Qualitative and Quantitative Data Analysis Methods*. Retrieved September 21, 2019, from https://humansofdata.atlan.com/2018/09/qualitative-quantitative-data-analysis-methods.

Biddulph, M. & Lambert, D. 2017. Making progress in school geography: Issues, challenges and enduring questions. In O.M. Solair, M.Solem., and R. Boehm (Eds.), *Learning Progressions in Geography Education*, pp. 35-53. Springer: Cham.

Biggam, J. 2008. *Succeeding with Your Master's Dissertation: a step-by-step handbook*. New York: Open University Press.

Bjelland, M.D., Montello, D.R., Fellmann, J,D., Getis, A. & Getis, J. 2013. *Human Geography: Landscapes of Human Activities*. New York: McGraw-Hill.

Bonwell, C. & Eison, J. 1991. *Active Learning: Creating Excitement in the Classroom*. Washington: The George Washington University.

Bowen, G. A. 2009. Document analysis as a qualitative research method. *Qualitative research journal*, vol. 9 (2), no. 27, pp. 27-40.

Bradbeer, J., Healey, M. & Kneale, P. 2004. Undergraduate geographers' understandings of geography, learning and teaching: a phenomenographic study. *Journal of Geography in Higher Education*, vol.28, no.1, pp.17-34.

Brooks, C. 2006. Geographical knowledge and teaching geography. *International Research in Geographical & Environmental Education*, vol.15, no4, pp.353-369.

Brooks, C. 2010. Why geography teachers' subject expertise matters. *Geography*, vol.95, no.3, pp.143-148.

Brooks, C. 2013. How do we understand conceptual development in school geography? *Debates in geography education*, pp.75-88.

Brooks, C. 2017. How do we understand conceptual development in school geography? In: Jones, M and Lambert, D, (eds.) *Debates in Geography Education*, 2nd Edition, (pp. 75-88). Routledge: London.

Butzow, D. 2019. Using Sense of Place in the Classroom. *The Geography Teacher*, vol.16, no.1, pp.10-14.

Canadian Council for Geographic Education. 2020. *Top 10 Reasons to Study Geography*. Retrieved August 03, 2020, from http://www.cangeoeducation.ca/resources/ why_geography

Campbell, C. J. 2016. Space, place and scale: Human geography and spatial history in past and present. *Past and Present*, vol.239, no.1, pp.23-45.

Castree, N. 2009. Place: Connections and Boundaries in an Interdependent World, in *Key Concepts in Geography.* Second Edition, edited by Clifford, N.J, Holloway, S.L., Rice, S.P & Valentine, G. London: Sage.

Catling, S. 2017. Not nearly enough geography! University provision for England's pre-service primary teachers, *Journal of Geography in Higher Education*, vol.41, no.3, pp.434-458.

Catling, S. 2021. Reflecting on knowledge and primary geography. In M. Fargher, D. Mitchell and E. Till (Eds.), *Recontextualising Geography in Education*, pp.55-70. Springer: Cham.

Clifford, N.J., Holloway, S.L., Rice, S.P. & Valentine, G. 2009. Place: *Key Concepts in Geography.* Second Edition. London: Sage.

Copper, K., Chiles, M., Clemens, R., Flint, D., Crossley, P, Bircher, R. & Guiness, P. 2016. *GCSE (9-1) Geography specification B: Investigating Geographical Issues*. London: Pearson Education Limited.

Cresswell, J.W. 2003. *Research Design Qualitative, Quantitative and Mixed Methods Approaches*. London: Sage Publications.

Cresswell, T. 2004. *Place: A Short Introduction.* Oxford: Blackwell.

Creswell, J.W. 2007. *Qualitative Inquiry and Research design: Choosing among five approaches.* Second edition. London: SAGE Publications.

Cresswell, T. 2008. Place: encountering geography as philosophy. *Geography*, vol.93, no.3, pp.132-139.

Cresswell, T. 2009. Place. *International Encyclopedia of Human Geography*, vol.8, pp.169-177.

Cresswell, T. 2014. Place. In *Sage Handbook of Human Geography*. Edited by R. Lee, N. Castree, V. Lawson, A. Paasi, C. Philo, S. Roberts, S. Radcliffe & C. Withers. Vol. 1. Los Angeles: Sage.

DBE. 2011. *Curriculum and assessment policy statement (CAPS) Grades 10-12: Geography*. Retrieved January 14, 2019, from http:// www.education.gov.za.

DBE. 2019. Grade 12 Geography NSC Examination Paper 1. Retrieved July 07, 2020, from https://www.education.gov.za/Curriculum/NationalSeniorCertificate(NSC)Examinations/NSCPastExaminationpapers.aspx.

Dilley, L., Earle, J., Keats, G., Nxele, A.A. & Ravenscroft, G. 2019. *Focus Geography Grade 10.* Johannesburg: Maskew Miller Longman.

Dilley, L., Earle, J., Keats, G., Ravenscroft, G & Nxele, A. 2019. *Focus Geography Grade 11*. Johannesburg: Maskew Miller Longman.

Dong-min, L. 2018.Toward a Typology of Changes in Primary Teachers' Awareness of Geography Based on Receiving Graduate Education, *Journal of Geography*, vol.117, no.5, pp1-13.

Dube, M.C. 2018. *The views of selected South African History teachers on school history as specialised subject knowledge*, Doctoral Thesis, University of KwaZulu-Natal.

Dumont, R.G. & Wilson, W.J. 1967. Aspects of concept formation, explication, and theory construction in sociology. *American Sociological Review*, 985-995.

Esterhuysen, P., Thompson, S., Preston, D., Dibben, C. & Masuku, V. 2020. *Shuters Top Class Geography Grade 12*. Pietermaritzburg: Shuter & Shooter.

Fletcher, M.F. 2019. *Everyday Anthropology: Space vs. Place*. Retrieved March 03, 2021, from https://theculturalcourier.home.blog/2019/02/22/everyday-anthropology-space-vs-place/.

Frances, S. 2010. Illustrating Values in Geography Education Through an Examination of Research. *International Research in Geographical and Environmental Education*, vol.7, no.2, pp.162-167.

Fraser, H. 2006. Phonological Concepts and Concept Formation: Metatheory, Theory and Application. International Journal of English Studies, vol. 6, no.2, pp. 55-75.

Geographical Association. 2009. Retrieved April, 29, 2019, from https://www.geography.org.uk/write/MediaUploads/Support%20and%20guidance/GA_ADV.

Gregory, K. 2009. Place: The Management of Sustainable Physical Environments, in *Key Concepts in Geography*. Second Edition, edited by Clifford, N.J, Holloway, S.L., Rice, S.P & Valentine, G. London: Sage.

Grant, C. & Osanloo, A. 2014. Understanding, Selecting, and Integrating a Theoretical Framework in Dissertation Research: Creating the Blueprint for Your "House". *Administrative Issues Journal: Connecting Education, Practice, and Research*, vol.4, no.2, pp.12-26.

Griffin, C. 2004. The advantages and limitation of qualitative research in psychology and education. *Scientific Annals of the Psychological Society of Northern Greece*, vol.2, pp.3-15.

Gruenewald, D. A. 2003. The best of both worlds: A critical pedagogy of place. *Educational researcher*, vol.32, no.4, pp.3-12.

Hanson, S. & Moser, S. 2003. Reflections on a discipline-wide project: developing active learning modules on the human dimensions of global change, *Journal of Geography in Higher Education*, vol.27, no.1, pp.17-38.

Harte, W. & Reitano, P. 2015. Pre-service geography teachers' confidence in geographical subject matter knowledge and teaching geographical skills. *International Research in Geographical and Environmental Education*, vol.24, no.3, pp.223-236.

Hassen, M.A. 2015. *Strategies in the teaching of geography in higher education preparatory secondary schools of Ethiopia*, Doctoral Thesis, University of South Africa.

Hectic Teacher Ideas and Resources. 2020. Retrieved February 10, 2020, from https://hecticteachersite.wordpress.com.

Hodkinson, P. & Hodkinson, H. 2001. *The strengths and limitations of case study research*. Paper presented to the Learning and Skills Development Agency Conference. Making an impact on Policy and Practice, Cambridge, 5-7 December 2001.

Holt-Jensen, A. 2018. Geography, History and Concepts. 5th Edition. Sage: Los Angeles.

Hopwood, N. 2008. Values in geographic education: the challenge of attending to learners' perspectives. *Oxford Review of Education*, vol.34, no.5, pp.589–608.

IEB. 2019. *National Senior Certificate Handbook: Implementation: Grade 12*. IEB Copyright.

IEB. 2019. Grade 12 Geography NSC Examination Paper 1. Retrieved July 07, 2020, from https://www.ieb.co.za/pages/pastiebpaperslibrary.

Imenda, S. 2014. Is There a Conceptual Difference between Theoretical and Conceptual Frameworks? *Journal of Social Sciences*, vol.38, no.2, pp.185-195.

International Geographical Union – Commission on Geographical Education. 1992. *International Charter on Geographical Education*. Retrieved April 20, 2020, from http://www.igu-cge.org/1992-charter/

International Geographical Union – Commission on Geographical Education. 2016. *International Charter on Geographical Education*. Retrieved April 20, 2020, from http://www.igu-cge.org/2016-charter/

Israel, A. L. 2012. Putting Geography Education into Place: What Geography Educators Can Learn from Place-Based Education, and Vice Versa. *Journal of Geography*, vol.111, no.2, pp.76-81.

Jankell, L.D., Sandahl, J & Örbring, D. 2021. Organising concepts in geography education: a model. *Geography* Vol 106 Part 2 Summer. 2021 https://doi.org/10.1080/00167487.2021.1919406 .

Jackson, P. 2006. Thinking geographically. *Geography London*, vol.91, no.3, pp.199-204.

Janis, J. 2017. Acquiring Powerful Thinking Through Geographical Key Concepts, in *The Power of Geographical Thinking*, edited by Brooks, C., Butt, G. & Fargher, M. Springer.

Lambert, D.M., Graves, N. and Slater, F. 2016. Geography as powerful knowledge. *International Research in Geographical and Environmental Education*, vol.25, no.4, pp.189-194.

Lane, R. 2009. Articulating the pedagogical content knowledge of accomplished geography teachers. *Geographical Education*, vol.22, pp.40.

Lane, R., Carter, J. & Bourke, T. 2019. Concepts, Conceptualization, and Conceptions in Geography. *Journal of Geography*, vol.118, no.1, pp.11-20.

Larsen, T. & Harrington, J., Jr. 2018. Developing a learning progression for place. *Journal of Geography*, vol.117, no.3, pp.100-118.

Le Grange, G. and Ontong, K. 2018. Towards an Integrated School Geography Curriculum: The Role of Place-based Education. *Journal for the Study of the Arts and Humanities in Southern Africa Special Edition, Alternation Special Edition*, vol.21, pp.12-36.

Lohman, A. 2011. *Geographic Literacy, Objectives, and Active Learning in Geography*, Unpublished MA thesis, United States Military Academy.

Mack, L 2010. The philosophical underpinnings of educational research. *Polyglossia*, vol.19, pp.5-11.

Macmillan, J.H. & Schumacher, S. 2014. *Research in Education – Evidence-based Inquiry*. 7th Edition. International Edition. Boston: Pearson Education.

Madikizela-Madiya, N. 2018. Space and place for Geography teaching and learning in the 21st century, in *Teaching and Learning History and Geography in the South African Classroom*, edited by van Eeden, E.S. & Pieter Warnich, P. Pretoria: Publisher Van Schaik Publishers.

Massey, D. 1991. *A global sense of place*. Marxism Today, pp.24-29.

Marcello, J. 2009. A Human Geography Teaching Note: Debating Immigration from Mexico. *The Geography Teacher*, vol.6, no.1, pp.38-39.

Martin, F. 2008. Knowledge bases for effective teaching: Beginning teachers' development as teachers of primary geography. *International Research in Geographical and Environmental Education*, vol.17, no.1, pp.13-39.

Martin, F.P., Alton, C.B., Donald, A.F., Thomas, K., Larry W.P., Martin F.P., Alton C.B. & Donald, A.F. 2013. *Mountain Geography: Physical and Human Dimensions.* London: University of California Press.

Maude, A. 2009. Re-centring Geography: A School-based Perspective on the Nature of the Discipline. *Geographical Research,* vol.47, no.4, pp.368-379.

Maude, A. 2015. What is powerful knowledge and can it be found in the Australian geography curriculum? *Geographical Education,* vol.28, p.18-26.

Maude, A. 2018. Geography and powerful knowledge: A contribution to the debate. *International Research in Geographical and Environmental Education*, vol.27, no.4, pp.179-190.

Maude, A. 2021. Recontextualisation: Selecting and Expressing Geography's 'Big ideas'. In M. Fargher, D. Mitchell and E. Till (Eds.), *Recontextualising Geography in Education*, pp.25-41. Springer: Cham.

Morley, L. 2016. *Card Sorting in Design Research (101).* Retrieved August 03, 2020, from https://medium.com/@lauramorley/card-sorting-in-design-research-101-d42262293f88.

Mukhari, S. S. 2016. *Teachers' experience of information and communication technology use for teaching and learning in urban schools*, Doctoral Thesis, University of South Africa.

Ontong, K and Le Grange, L. 2015. The Need for Place based education in South African schools: The Case of Greenfields primary. *Perspectives in Education*, vol.33, no.3, pp.05-20.

Petty, G. 2009. *Teaching Today*. United Kingdom: Nelson Thomas Ltd.

Puttick, S. 2012. Geography teachers' conceptions of knowledge. *Teaching Geography*, vol.37, no.2, pp.73.

Puttick, S. 2015. *Geography teachers' subject knowledge: an ethnographic study of three secondary school geography departments*. Worcester: Worcester collage.

Paul, C. L. 2008. A Modified Delphi Approach to a New Card Sorting Methodology. *Journal of Usability Studies*, vol. 4, no.1, pp. 7-30.

Reid, R.E. 2019. Intercultural Learning and Place-Based Pedagogy: Is There a Connection? *New Directions for Teaching and Learning*, no.157, pp.77-90.

Rusznyak, L. 2017. 'What is this curriculum doing to my subject?' using geographical questions to interpret the CAPS curriculum. *Journal of Geography Education for Southern Africa (JoGESA)*, vol.2, no.1, pp. 45-65.

Roberts, M. 2010. Where's the geography? Reflections on being an external examiner. *Teaching Geography*, vol.35, no.3, pp. 112-113.

Rosenberg, M. 2019. The 5 Themes of Geography. Retrieved April 27, 2021, from https://www.thoughtco.com/five-themes-of-geography-1435624.

Sauvé, L. 1996. Environmental Education and Sustainable Development: A Further Appraisal, *Canadian Journal of Environmental Education*, vol.1, pp.1-33.

Scheyvens, R., Griffin, A. L., Jocoy, C. L., Liu, Y. & Bradford, M. 2008. Experimenting with active learning in geography: Dispelling the myths that perpetuate resistance. *Journal of Geography in Higher Education*, vol.32, no.1, pp.51-69.

Selena, M.F. 2017. *A Qualitative Inquiry of Students' and Teachers' Perceptions on Feedback in Three Queensland Secondary Schools*, Doctoral Thesis, Queensland University of Technology.

Smit, B. 2010. Doing research in comparative education, in *Themes in South African education for the comparative educationist,* edited by Lemmer, E.M. & Van Wyk, J.N. South Africa: Pearson Education.

Sleek, S. 2018. The Bias Beneath: Two Decades of Measuring Implicit Associations. *Association for Psychologic Science*. Retrieved March 03, 2020, from https://www.psychologicalscience.org/observer/the-bias-beneath-two-decades-of-measuring-implicit-association.

Tang, Z., Zhang, J. & Liu, W. Wood, P. 2012. Differences between physical and human process simulation in geography: Empirical analysis of two cases. *Journal of Geographical Sciences,* vol.22, no.3, pp.497-508.

Taylor, L. 2008. Key concepts and medium term planning. *Geography Association*, vol.33, no.2, pp.50-54.

Thanh, N. C and Thanh, T. 2015. The interconnection between interpretivist paradigm and qualitative methods in Education. *American Journal of Educational Science,* vol.1, no.2, pp.24-27.

Tuna, F. 2012. 'Students' Perspectives on Active Learning in Geography: A Case study of level of interest and usage in Turkey', *European Journal of Educational Studies*, vol.4, no.2, pp.163-175.

van der Merwe, C. D. 1998. *Has Geography lost its 'place and space' in Secondary Education?* Education Practice, Issue 1.

Van Otten, G. & Bellafiore, D. 2018. *The Personality of Places and a Sense of Place*. Retrieved November 07, 2019, from https://www.e-education.psu.edu/geog597i_02/node/730.

Visual Paradigm Online. 2021. Learning Skill: What is Diamond Ranking Strategy? Retrieved April 06, 2021, from ://online.visual-paradigm.com/knowledge/brainstorming/what-is-diamond-ranking-strategy/.

Walshe, N. 2007. Understanding Teachers' Conceptualisations of Geography. *International Research in Geographical & Environmental Education*, vol.16, no.2, pp.97-119.

Wood, P. 2009. Locating place in school geography-experiences from the pilot GCSE. *International Research in Geographical & Environmental Education, v*ol.18, no.1, pp.5-18.

Woolfolk, A. 2014. *Educational Psychology. UNISA CUSTOM EDITION*. Boston: Pearson Education.

Young, M. 2008. From constructivism to realism in the sociology of the curriculum. *Review of Research in Education*, vol.*32*, pp.1-32.

Young, M. 2010. *Educational policies for a knowledge society: reflections from a sociology of knowledge perspective*. Keynote Lecture held at the GOETE (Governance of Educational Trajectories in Europe) kick-off meeting, Tubingen, 29 January. Retrieved September 28, 2021, from http://www.goete.eu/news/events/101-reflection-keynote-lecture-at-the-goete-kick-off-meeting-by-michael-young.

Zulu, S.I. 2018. *Exploring Grade 10 rural physical science teachers' perceptions and usage of everyday words in Acornhoek science classrooms, Mpumalanga Province*, Masters' Dissertation, University of the Witwatersrand.

LIST OF APPENDICES

APPENDIX A: DBE RESEARCH APPROVAL LETTER

GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

8/4/4/1/2

GDE RESEARCH APPROVAL LETTER

Date:	**18 February 2020**
Validity of Research Approval:	**04 February 2020 – 30 September 2020** **2019/399**
Name of Researcher:	**Njapha S.C**
Address of Researcher:	**2217 B Landman Street**
	Brakpan North
	1541
Telephone Number:	**076 440 5080**
Email address:	**njaphasc@gmail.com**
Research Topic:	**Understanding Teachers' conceptualization of place in School Geography**
Type of qualification	**MEd**
Number and type of schools:	**Four Secondary Schools**
District/s/HO	**Johannesburg North, Johannesburg South and Johannesburg East**

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

18/02/2020

1

Making education a societal priority

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

1. *Letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.*
2. *The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.*
3. *A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.*
4. *A letter / document that outline the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.*
5. *The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.*
6. *Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.*
7. *Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.*
8. *Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.*
9. *It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.*
10. *The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.*
11. *The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.*
12. *On completion of the study the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.*
13. *The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.*
14. *Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.*

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

.....

Mr Gumani Mukatuni
Acting CES: Education Research and Knowledge Management

DATE: 18/02/2020

Making education a societal priority

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

APPENDIX B: INTERVIEW SCHEDULE

Interview Schedule

Date	Schedule
28 February 2020, 2 March and 3 March 2020 (3 days).	Schedule number 1. Teacher A-D.
12-14 March 2020 (3 days).	Schedule number 2. Teacher E-H.

Eight teachers will be interviewed guided by the schedule below. Each interview will be between 1 to 2 hours. I believe it will possible to conduct interviews within six days. Exact locations and time will be confirmed upon the finalisation of research participants.

Sizwe Njapha (Investigator)
Investigator's signature _____ Date _____

Dr. Clinton van der Merwe (Supervisor)
Supervisor's signature _____ Date _____

APPENDIX C: CONSENT FORM

Clinton D. van der Merwe, PhD
Senior Lecturer: Geography Education
clinton.vandermerwe@up.ac.za
Tel: +27 12 420 5566
Aldoel Building; Room 1-101
Groenkloof Campus

The purpose of this study is to explore ways in which teachers conceptualise the concept of 'place' in school geography. This would provide insight on how much geography teachers understand the concept of 'place' in school geography and this will provide an opportunity to investigate how school geography teachers describe the role of 'place' in school geography. This will be helpful in coming up with strategies on how teachers facilitate and implement geographic learning of 'place', by looking at teaching strategy, methods and students' work within the geographic learning of place. Lastly, the nature of place in geography will be explored through document analysis.

STUDY PROCEDURES

The procedure will involve two sessions and each session will be between one to two hours. The first session will be a card sorting activity and an interview. The second session will be personal document analysis such as lesson plans/notes, followed by an interview. All the interactions will be conducted in English, and recorded in written notes or audio tape.

RISKS

You may decline to answer any or all questions and you may terminate your involvement at any time if you choose.

CONFIDENTIALITY

Your responses to this survey will be anonymous. Please do not write any identifying information on your survey. For the purposes of this research study, your comments will not be anonymous. Every effort will be made by the researcher to preserve your confidentiality including the following:

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

Clinton D. van der Merwe, PhD
Senior Lecturer: Geography Education
clinton.vandermerwe@up.ac.za
Tel: +27 12 420 5566
Aldoel Building; Room 1-101
Groenkloof Campus

- Assigning code names/numbers for participants that will be used on all research notes and documents.
- Keeping notes, interview transcriptions, and any other identifying participant information in a locked file cabinet in the personal possession of the researcher.

CONTACT INFORMATION

If you have questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the researcher whose contact information is provided on the first page.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you are still free to withdraw at any time and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

DISSEMINATION OF RESULTS

We request your permission to use your data, confidentially and anonymously, for writing up findings for this study. We also would like to request your permission to use your data, confidentially and anonymously, for further research purposes, as the data sets are the intellectual property of the University of Pretoria. Further research may include secondary

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

Clinton D. van der Merwe, PhD
Senior Lecturer: Geography Education
clinton.vandermerwe@up.ac.za
Tel: +27 12 420 5566
Aldoel Building; Room 1-101
Groenkloof Campus

data analysis and using the data for teaching purposes. The confidentiality and privacy applicable to this study will be binding on future research studies.

CONSENT

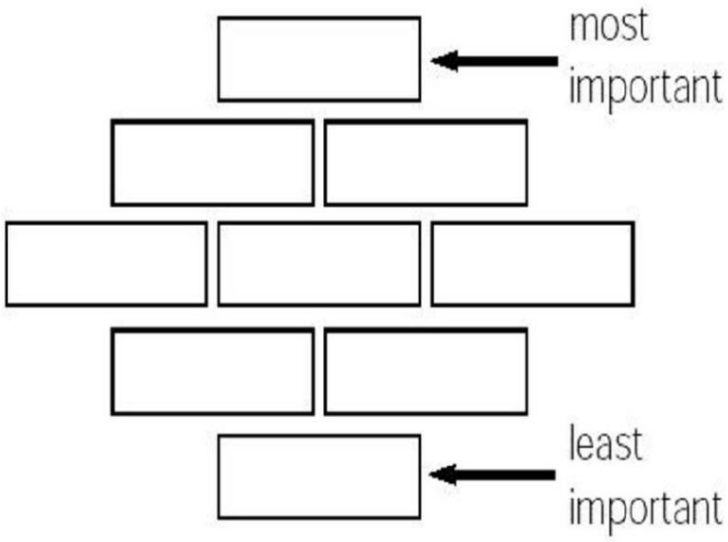
I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

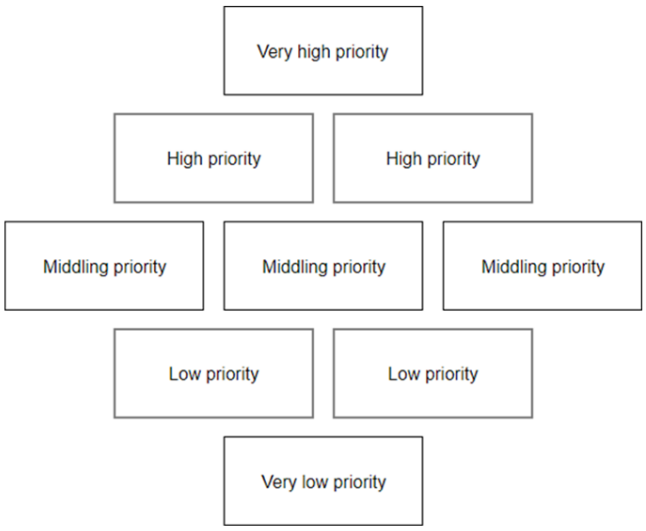
Sizwe Njapha (Investigator)
Investigator's signature _____ Date _____

Dr. Clinton van der Merwe (Supervisor)
Supervisor's signature _____ Date _____

Investigator's signature _____ Date _____

APPENDIX D: CARD SORTING





School Geography is deliberately or unintentionally dependant on **PLACE**. Human, Physical and Environmental Geography are all centered around the **CONCEPT OF PLACE.**

The **CONCEPT OF PLACE** enables students to understand and evaluate how past human actions affects the present world and influence the future.

The significance of **PLACE/CONCEPT OF PLACE** is an important aspect of School Geography (as a specialised subject knowledge). For example, mapwork has always been a common method for learners to locate and identify **PLACES.** The introduction of Geographic Information Systems (GIS) in Geography Education also makes **PLACE** an important concept.

PLACE is a priority for the discipline of Geography, especially in the midst of a changing and globalising world. The **CONCEPT OF PLACE** encourages new ways of questioning and being in the world, and therefore in School Geography, **PLACE** matters the most.

The **CONCEPT OF PLACE** promotes geographical thinking, important values and attitudes such as sustainable/fair use of resources for the benefit of all, respect for the rights of all people, a sense of fairness and equality.

Generally, Geography is the study of **PLACES** and Geography is about **PLACES**. Geography topics namely Atmosphere/Climatology, Geomorphology, Settlements, Development and Resources/Sustainability and Map-work are all centered around the **CONCEPT OF PLACE**.

The **CONCEPT OF PLACE** encourages diversity and uniqueness. People have multiple identities which relate to **PLACES** and that each **PLACE** can be seen in accordance with its particular uniqueness.

PLACE is a foundation for Geography Education and Geography as a whole. Other concepts: such as space, the physical Earth and human-environment interaction are all interconnected with the **CONCEPT OF PLACE.**

PLACE is a critical concept because it focuses attention on analysing how economic and political decisions impact a particular **PLACE**. Place-based learning serves as transformative educational tool to address the legacies of apartheid. Place-based education is also vital in dealing with current spatial and political challenges facing a democratic South Africa.

APPENDIX E: INTERVIEW QUESTIONS

Date: _____/2020 Time: _____

Participant name: _____

School: _____

Participant description (teaching experience, demographic, gender, background, etc.)

_____

_____

_____

_____

Do you agree/disagree that Place is the most/big concept of the four?

_____

_____

_____

_____

_____

_____

_____

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

Clinton D. van der Merwe, PhD
Senior Lecturer: Geography Education
clinton.vandermerwe@up.ac.za
Tel: +27 12 420 5566
Aldoel Building; Room 1-101
Groenkloof Campus

What is Place and what does it mean to different people? Why does place matter?

_____

_____

_____

_____

_____

What is and your understanding of geographical concept of place?

_____

_____

_____

_____

_____

How do you implement geographic learning of place?

_____

_____

_____

_____

_____

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

Clinton D. van der Merwe, PhD
Senior Lecturer: Geography Education
clinton.vandermerwe@up.ac.za
Tel: +27 12 420 5566
Aldoel Building; Room 1-101
Groenkloof Campus

Card sorting

Reasons for the most important

_____

_____

_____

_____

_____

_____

_____

_____

Reasons for the least important

_____

_____

_____

_____

_____

_____

_____

_____

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

Clinton D. van der Merwe, PhD
Senior Lecturer: Geography Education
clinton.vandermerwe@up.ac.za
Tel: +27 12 420 5566
Aldoel Building; Room 1-101
Groenkloof Campus

Additional note

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

Clinton D. van der Merwe, PhD
Senior Lecturer: Geography Education
clinton.vandermerwe@up.ac.za
Tel: +27 12 420 5566
Aldoel Building; Room 1-101
Groenkloof Campus

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Sizwe Njapha (Investigator)

Investigator's signature _____ Date _____

Dr. Clinton van der Merwe (Supervisor)

Supervisor's signature _____ Date _____

APPENDIX F: TURNITIN CERTIFICATE

03/12/2021, 15:38 Turnitin Originality Report

Turnitin Originality Report

MEd Dissertation by Sizwe Njapha

From All Chapters (Humanities Education 2021 _144190_1)

Processed on 03-Dec-2021 09:53 SAST
ID: 1719178286
Word Count: 48160

Similarity Index: 7%

Similarity by Source

Internet Sources:	7%
Publications:	2%
Student Papers:	N/A

sources: Dr CD van der Merwe, 3/12/2021

1 < 1% match ()
Zendah, Kelises. "Examining teachers' role in the promotion of child-friendly environments in Zimbabwean secondary schools : implications for teacher professional development", Faculty of Education, 2017

2 < 1% match ()
Nkabinde, Aaron Phillip. "Exploring the pedagogical content knowledge of Economic and Management Sciences educators in teaching Financial Literacy in secondary schools of Ekurhuleni North District", 2021

3 < 1% match ()
Ntuli, Cynthia Hlalowasa Sivangele. "An evaluation of the effectiveness of the integrated tutor model in open and distance learning: a case of Unisa", 2020

4 < 1% match ()
Zisanhi, Daniel. "Towards quality science education through quality assurance in Johannesburg South district : South Africa", 2018

5 < 1% match ()
Asseling, Charlaine Louvenale. "Intermediate phase teachers' views and experiences in teaching learners with learning disabilities in reading at one mainstream school in Gauteng", 2021

6 < 1% match ()
Sias, Edgar. "Implementation of the performance management system in the Ministry of Foreign Affairs and International Cooperation of the Botswana public service", 2014

7 < 1% match ()
Anyanwu, Raymond Ndubisi. "An assessment of climate change science literacy and climate change pedagogical literacy of geography teachers in the Western Cape", Stellenbosch : Stellenbosch University, 2015

8 < 1% match ()
Tlgare, Michael Togara. "Perceptions of school management teams on information and communication technology integration in township and rural secondary schools in KwaZulu-Natal", 2020

9 < 1% match ()
Mautsana, Nomawonga Veronica. "Reimagining sexuality education: Xhosa secondary school teachers from township schools talk about Xhosa culture and sexuality education", Faculty of Education, 2019

10 < 1% match ()
Hassan, Shaik Mohammad. "Lesson study as a management strategy to improve performance in space, shape and orientation in mathematical literacy at technical and vocational education and training colleges", 2020

11 < 1% match ()
Swanepoel, Daryl Wade. "Assessing public value from the Department of Small Business Development's export promotion programme", Stellenbosch : Stellenbosch University

12 < 1% match ()
Pyle, Desmond Mark. "An evaluation of case study teaching materials on hazards: based on the current aims of geographical education", Faculty of Education, Education

13 < 1% match ()
Magaga, Peter. "A wellness model for teachers in learner support for learners with hearing impairment", 2017

14 < 1% match ()
Chen, Michelle Sitong. "Achieving holistic sustainability in Chinese and New Zealand business partnerships : an integrative approach : a thesis presented in partial fulfilment of the

https://api.turnitin.com/newreport_printview.asp?eq=1&eb=1&esm=10&oid=1719178286&sid=0&n=0&m=0&svr=57&r=42.84214392937293&lang=en_us 1/70