



**EXPLORING LEARNERS' PERCEPTIONS ON LEARNING
GEOGRAPHY THROUGH FIELDWORK APPROACH: A CASE
OF THREE HIGH SCHOOLS IN MASERU**

By

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CERTIFICATION

This is to certify that this dissertation has been read and approved as having met the requirements of the Faculty of Education at the National University of Lesotho, for the award of Master of Arts in Education.

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DECLARATION

I declare that all the information in this dissertation is my original work. It has not been submitted to any university or institution of higher learning for any qualification before. The references used in this work have been shown and acknowledged.

Reitumetse Ramone

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DEDICATION

I dedicate this work to my late mother, Makhoboso Ramone, who gave me all the love needed from a mother to a child. I would not have the spirit to push harder in life if it was not of the memories I carry every day of her love and support. May her good soul rest in peace.

ABSTRACT

Fieldwork approach is regarded as being central to the teaching and learning of Geography worldwide. It was adopted in the discipline of Geography because of its direct experience and exposure to learners. Despite widespread support for this approach in Geography teaching and learning in Lesotho and around the world, research has shown that it may not provide epistemological access to all learners; that factors such as teachers' competency, parental support, and learner attitudes determine whether the approach is favourable to the learners or not. Most importantly, it is argued that the effectiveness of fieldwork depends on how learners perceive it. For example, it has been discovered that learners who have unfavourable attitudes towards fieldwork and do not recognise its worth for their education and development do not gain anything from its use. On the contrary, it has been discovered that the approach makes the learning process easy for learners who have positive perceptions towards it. Of major concern is that little has been heard about learners' perceptions on fieldwork, or about the reasons for their liking or disliking fieldwork approach in Geography teaching and learning in Lesotho. As a result, the researcher thought it would be interesting to explore learners' perceptions on learning Geography through fieldwork approach in Lesotho secondary schools. This is a qualitative case study which employed open-ended questionnaires and interviews to generate data. It was affirmed by learners that fieldwork is essential for developing observation abilities and other generic skills in Geography. Also, it was revealed that fieldwork develops learners' cognitive understanding of the subject matter of Geography. The findings, however, indicate that some Geography teachers place a high value on information and communication technology (ICT) and textbooks. Furthermore, learners suggested that challenges that include time constraints and insufficient monitoring limit the effectiveness of fieldwork. From the results, it is recommended that Geography teachers should not use ICT to replace fieldwork but should be included as an instructional technique to improve safety and easy preparation of fieldwork. It is also suggested that class sizes should be limited to enable easier monitoring and accessing of learners during fieldwork.

Key words: Fieldwork approaches, learners' perceptions, Geography.

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CHAPTER ONE

BACKGROUND TO THE STUDY

1.1 Background

Geography is a secondary school subject that aims at helping learners understand their immediate environment as well as that of the universe (Demirkaya, 2017). This cannot happen in a rigidly planned classroom where the teacher and the textbook are the only sources of information, but can only be achieved through the usage of appropriate approaches of teaching (Shakil et al., 2011). For this reason, modern school Geography incorporates a wide range of teaching approaches which are directly suited to achieve the aims of the subject, involve learners and perceive them to be the most valuable assets (Mkhise, 2019). Project, laboratory and fieldwork approaches are examples of such approaches; they emphasise increased activity of learners and greater control over the learning experience, resulting in more effective learning (Kyriacou, 1991). Furthermore, Selmes (2014) suggests that of the many participatory approaches suited to the teaching of Geography, fieldwork is accepted as the most worthwhile.

Even though fieldwork is not new to school Geography, Kent (2000) indicates that the shift in its emphasis from a descriptive teacher-centred approach to an interpretative learner-centred approach makes it stand the test of time. In the view of Gold (1991), the term fieldwork refers to educational activities conducted in a field setting outside the normal classroom environment. Therefore, geographical fieldwork encompasses all geographical work done outside the classroom (Kent, 2000). Fieldwork as a teaching approach has been defined as a science of selecting, observing, evaluating and reporting information in a specific area (Mohammed, 2016).

Furthermore, fieldwork approach is regarded as being central to the teaching and learning of Geography. Actually, it is as rooted to the subject Geography as clinical practice is to medicine (Tenha, 2019). Moreover, Kent (2000) postulates that the natural environment and fieldwork is the geographic laboratory where young learners experience first-hand information of the landscape, places, people and other issues that arise within geographical dimensions; this means

that for a geographer, the laboratory is the world outside. Therefore, teaching Geography without fieldwork affects the interaction of learners and the environment.

Building on the same idea, Scott et al. (2012) explains that the value of fieldwork in geographical education for the interpretation and understanding of the various components of the landscape and their interaction is widely accepted. Correspondingly, Preston (2016) states that fieldwork provides concrete experiences, sharpens geographical skills, develops interest and may foster a critical attitude which is the symbol of the mature educated person (Mills, 1981). Furthermore, Kent (2000) states that without fieldwork or field research, the theory could easily and quickly become dull and unrewarding.

Besides, research shows that fieldwork eliminates abstract thinking; which is the bookish approach (textbooks) and encourages practical activities among learners (Thomas & Munge, 2015). In corroboration, Knapp (2000) explains that learning in a hands-on setting is one of the best ways to reinforce topics learnt in the classroom to integrate academic and experiential learning. This implies that learners grasp the meaning of concepts better when they supplement a theoretical lesson taught with a practical experience.

Furthermore, the importance of fieldwork has been recognised from both an international and regional standpoint. From the international perspective, Yang et al. (2013) conducted a study in China and discovered that fieldwork provides learners with a deepened understanding of issues, cognitive and affective benefits, transferable skills and knowledge, social skills, demonstration and memorable experience. Similarly, Ballang and Ababio (2021) explored the significance of fieldwork on the quality of Geography teaching and learning in senior high schools in Ghana, and discovered that the approach is vital in Geography teaching and learning.

Likewise, in the context of Geography teaching and learning in Lesotho, fieldwork is held in high regard and indicated as an essential approach in the syllabi. More importantly, the significance of fieldwork approach in Geography teaching and learning in Lesotho is reflected dominantly on the Grade 9, 10 and 11 syllabuses. For instance, it is stated in the Grade 9 Geography syllabus that the syllabus utilises field studies to concretise the link between the subject matter of Geography and the approaches of investigation associated with it (MOET, 2009). Again, it is stated in the Grade 10 Geography syllabus that consideration should be given

to actual field exercises where enquiry skills may be used to obtain different types of data (MOET, 2009). Overall, it is apparent that fieldwork as a teaching strategy is an appropriate vehicle that not only provides learners with an opportunity for practice, but also helps Geography as a subject achieve its objectives.

1.2 Statement of the problem

Although there is support for fieldwork in Geography teaching and learning in Lesotho, and all over the world, research has shown that the approach may not enable epistemological access for all learners. In the view of Simasiku (2012), factors such as teachers' competency, the level of parental support, and the attitudes of learners themselves decide whether the approach is favourable to the learners or not. Most importantly, Simasiku (2012) makes the crucial argument that the effectiveness of fieldwork depends on how learners perceive it.

Furthermore, Goulder and Scott (2012) investigated learners' perception of Geography fieldwork in the United Kingdom and found that some learners hold negative opinions of fieldwork and do not recognise its value for their learning and development. Therefore, such learners do not gain anything from its use. Contrarily, a study conducted in Zimbabwe by Tenha (2019), which was investigating learners' perceptions towards fieldwork in the teaching and learning of Geography in secondary schools, revealed that the majority of learners have positive perceptions towards the approach and agree that fieldwork makes the learning process easy.

Of major concern is that little is heard about learners' perceptions on fieldwork, or the reasons for their liking or disliking fieldwork approach in Geography teaching and learning in Lesotho, as the only study the researcher is aware of on fieldwork is by Kwirirai (2014), which investigated Geography teachers' perceptions, and use of fieldwork in schools in Maseru. Therefore, it would be interesting to investigate learners' perceptions on learning Geography through fieldwork approach because learners themselves play an important role in shaping their own learning, through factors such as their interest, attitude and preferences, yet there is lack of systematic knowledge on that in the context of Lesotho. Therefore, this study explored learners' perceptions on learning Geography through fieldwork approach in Geography teaching and learning in selected secondary schools in Maseru

1.3 Purpose of the study

There is a great need for research into learners' perceptions on fieldwork method. Therefore, the aim of this study was to explore Geography learners' perceptions of fieldwork. To be precise, the study aimed to shed light on the views of learners on learning Geography through fieldwork, their attitude towards the approach, and the challenges they encounter.

1.4 Research objectives

The objectives of this study are outlined in the sub-sections below.

1.4.1 Main research objective

- Explore learners' perceptions on learning Geography through fieldwork.

1.4.2 Specific objectives

- Explore learners' views on learning Geography through fieldwork.
- Explore learners' attitudes on learning Geography through fieldwork method.
- Investigates learners' experiences with fieldwork.

1.5 Research questions

To achieve the overall objectives of this research, the study was guided by the following questions:

1.5.1 Main research question

- What are learners' perceptions on learning Geography through fieldwork?

1.5.2 Specific questions

- What are the learners' views on learning Geography through fieldwork?
- What are the learners' attitudes on learning Geography through fieldwork method?
- What are the learners' experiences with fieldwork?

1.6 Significance of the study

Research studies on teaching approaches in Geography teaching and learning are hardly ever conducted in Lesotho. Therefore, this study may be significant for the Lesotho education system in that it has uncovered Geography learners' perceptions on fieldwork. In addition, the findings of the study might hopefully inform Geography teachers about the opportunities and challenges being experienced by Geography learners when learning Geography through fieldwork approach, which may in turn make the school principals and teachers aware of the kind of support they should provide to the learners. Again, the study may possibly form the basis for further research that may potentially enrich learners' experiences when learning Geography through fieldwork.

1.7 Chapter summary

This chapter has outlined the background to the study, statement of the problem, research objectives, research questions and the significance of the study.

1.8 Structure of the dissertation

Chapter One

This chapter provided a brief overview of the research study. It also provided the background to the study, the statement of the problem and purpose. Furthermore, it presented the research objectives and the key research questions which informed this research. Also, the outline of chapters is presented.

Chapter Two

The first part of this chapter focuses on the relevant concepts pertaining to the study or topic and conceptualises them. It also establishes the interconnections among them. The second section of this chapter introduces the teaching approaches in Geography, and discusses fieldwork as a teaching approach in Geography. Furthermore, the section explores the principles, the values, the types and the strategies of geographical fieldwork as a learner-centred approach for the teaching of Geography in schools. More importantly, previous studies on learners' views, attitudes and experiences on geographical fieldwork as a mode of teaching and learning are reviewed.

Chapter Three

This chapter discusses the methodology procedures and choices that guided the research. It explains and justifies methodological decisions with regard to the research paradigm, research approach, design, population and sampling and approaches of data generation. Also, a description of the steps involved in data analysis has been discussed. Finally, it highlights issues of trustworthiness and ethical considerations that were followed by the researcher.

Chapter Four

Chapter Four presents the analysis and interpretation of the data generated through questionnaires and interviews. The data is organised according to the three research questions that guided the study.

Chapter Five

Chapter Five discusses the findings which are organised into themes derived from the research questions.

Chapter Six

This chapter comprises the summary of the findings of the study. It also provides the recommendations, limitations of the study, areas for further research and the final remarks.

CHAPTER TWO

CONCEPTUAL AND LITERATURE REVIEW

2.1 Conceptual review

This first section of the chapter focuses on the relevant concepts pertaining to the study or topic and establishes the interconnections among them. This emphasis on conceptualisation is supported by Miles and Huberman (1994) in their influential book "Qualitative Data Analysis" where they suggest that novice researchers should allocate a significant amount of time during the initial stages of their research to identify and conceptualise their concepts, using both graphic and narrative representations.

2.1.1 Fieldwork approach

Fieldwork is the process of observing and collecting data about people, cultures and natural environments (Baird, 2017). In addition, Hanson and Graves (2016) state that fieldwork is conducted in the world of our everyday surroundings rather than in the semi controlled environments like a lab or a classroom.

Fieldwork as a teaching approach has been documented as beneficial because it enables learners to examine the way scientific theories interact with the real world (Hanson, 2015). Again, Hanson & Graves (2016) indicate that fieldwork as an approach is important in both the social and natural sciences. In social sciences such as economics and history, fieldwork focuses on people, culture and society, while in natural sciences like biology and chemistry; it focuses on the physical characteristics of nature and natural environments. This research study explored learners' perceptions on fieldwork, and the reasons for their liking or disliking fieldwork approach in Geography teaching and learning. The following section describes learners' perceptions.

2.1.2 Learners' perceptions

In the view of McDonald (2011), perceptions denote the way an individual views the world. In addition, Shao and Shang (2020) explain that humans are created differently; each individual has a different perception. Therefore, there exists a difference between individuals' perceptions. In this context, the study focuses on learners' perceptions, which are described as the process of

preferential treatment of learners towards the information they get from an object (Pelayo et al., 2017). In this context, it is learning Geography through fieldwork.

It is important to understand learners' perceptions of how they perceive learning Geography through geographic fieldwork because those perceptions affect their willingness to participate actively in fieldwork. Furthermore, learners are the main and most important resource in the teaching and learning process, hence knowing their perceptions allows teachers to change what the learners dislike and improve on what they like, whether it is about how to teach or how to deliver material to the learners (Pelayo et al., 2017). More importantly, perception is a broad term which encompasses views, attitudes, experiences, motivation and interests which are described below.

2.1.3 Learners' views

A learner's view is defined as a belief or judgment based on experience from learners' time spent in school (Ware, 2020). In this context, it is their beliefs or judgments based on experiences of learning Geography through fieldwork approach.

2.1.4 Learners' attitude

A learner's attitude is defined as their tendency to respond in a certain way towards something, which can range from positive to negative or good to bad (Getie, 2020), which in this context is learning Geography through fieldwork approach.

2.1.5 Learners' experiences

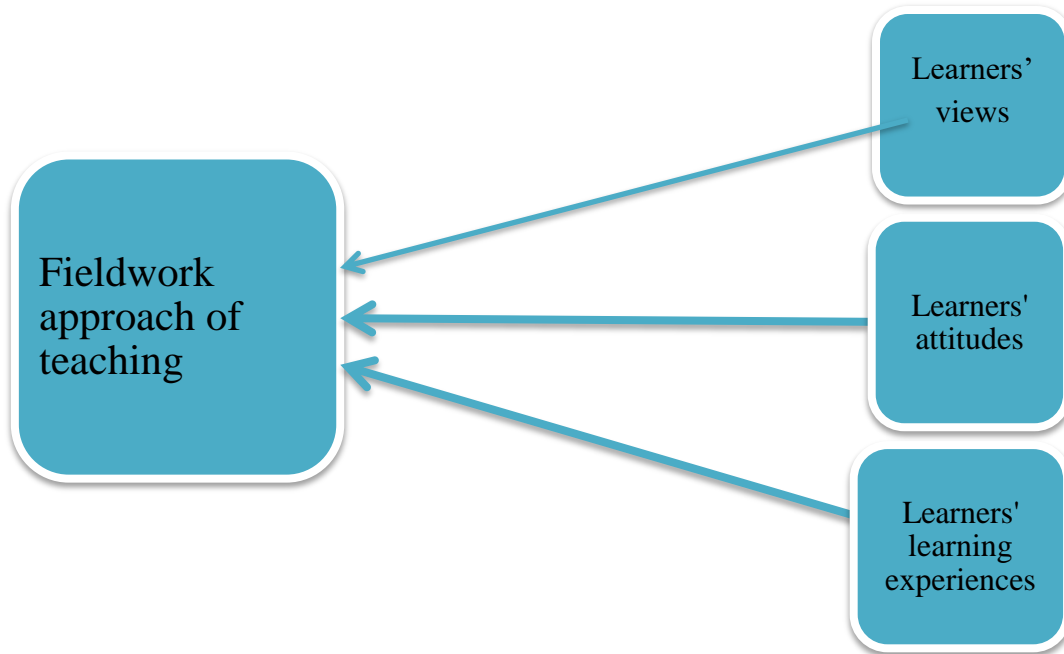
Learners' experiences are defined as how they perceive interactions, encounters and activities that they undergo during the process of learning (Wong, 2015). In this context, it is how they perceive interaction with fieldwork approach. Learners' challenges are things that are difficult or unpleasant (Wong, 2015).

2.1.6 Conceptual framework

A conceptual framework is best summarised by Miles & Huberman (1994), as a system of concepts, assumptions and beliefs that support and guide the research plan. Specifically, the conceptual framework lays out the key factors, constructs or variables and presumes relationships among them (Miles & Huberman, 1994). Therefore, Figure 1 below depicts a

logical structure of connected concepts that help provide a picture or visual display of how ideas in a study relate to one another.

Figure1: A logical structure of connected concepts



The model shows the relationship that was hypothesised to exist among concepts. It indicates that the aim was to explore learners' views, opinions, attitudes and learning experiences towards fieldwork as a teaching approach.

2.2 LITERATURE REVIEW

The second section of this chapter introduces the approaches for teaching Geography, and discusses fieldwork as a teaching approach in Geography. Furthermore, the section explores the principles, values, types and strategies of geographical fieldwork as a learner-centred approach for the teaching of Geography in schools. More importantly, previous studies on learners' views, attitudes and experiences on geographical fieldwork as a mode of teaching and learning are reviewed.

2.2.1 Teaching approaches in Geography

In the past, Geography was generally taught using a traditional teacher-centred approach, in which the teacher's primary responsibility is to teach, while learners take notes and are tested on the information (Mukwa & Otieno, 1988). In the opinion of Thungu (2008), teacher-centred is the most boring approach to teaching because knowledge is conveyed from teacher to learners and the teacher is in control of all actions, explaining and showing while the learners' only activity is to listen to the teacher. This implies that the learners' participation is limited. Contrarily, modern school Geography comprises a wide range of teaching approaches that effectively and adequately teach Geography. Popular techniques for teaching Geography include project, laboratory and fieldwork methods, which put emphasis on greater engagement of the learners and their better control over the learning experience, resulting in more effective learning (Ockhuizen, 2018).

2.2.1.1. Project approach

Benjamin & Nato (2014) describe project approach as a unit of activity carried out by learners in a natural and life-like manner and with a sense of purpose to achieve a definite, attractive and seemingly reachable goal. Along similar lines, Malusu & Wachira (2008) add that the project approach is planned and carried out in a natural life-like manner by the learners and the teacher. In this approach, learners are given a topic to investigate, which can be chosen by the teacher or by the learners depending on the desired topic. Furthermore, the project approach is built on the ideas of learning by doing and it encourages the maximum amount of purposeful activity on the part of the learners (Benjamin and Nato, 2014). Building on the same idea, January (1996) maintains that this approach is learner-centred because learners use their own creativity to gather and analyse information for their projects. For instance, if they were to learn about prevention of soil erosion, they would be taken out to the places affected by soil erosion to build silt traps that will help in the prevention of soil erosion.

2.2.1.2 Laboratory approach

Fitriani et al. (2021) state that the laboratory approach necessitates specialised equipment as well as a special laboratory or an ordinary room that can be turned into a special room to serve as a laboratory. Additionally, Mikanjuola & Sidiq (2013) explain that the laboratory approach is similar to the project approach in that problems need to be solved through conducting experiments. The laboratory approach includes observations in the lab, data analysis and interpretation which encourages learner involvement and emphasises the effectiveness of learner-centred teaching and learning in the Geography laboratory (Hamidu et al., 2014). For example, maximum and minimum thermometers may be examined and readings are obtained through them.

2. 2.1.2 Fieldwork approach of teaching

Gitau (2008) defines fieldwork approach as a discipline of choosing, perceiving, assessing and reporting evidence in a specific area. Similarly, Baird (2017) defines ‘the field’ in the context of teaching and learning as any place where supervised learning can take place through first-hand experience, outside the constraints of the four-wall classroom setting. It can be outside the classroom within the school yard or a long trip that can take a day or two, meaning that the school ground can also serve as a place where fieldwork can be carried out. This is contrary to the misconception that most secondary school teachers have that fieldwork is only effective when the study is taken to a far area (Benjamin & Nato, 2014), which has made fieldwork to be used only by a few schools and can only be used once or twice in the entire secondary school life of a learner.

In addition, Lai (1999) explains that the term fieldwork is used in disciplines and subject areas such as Geography, Biology and environmental studies to mean educational activities which usually include observation, survey and research of phenomena and processes outside the classroom and laboratory settings. Moreover, the natural environment is often an important component of field study (Benjamin & Nato, 2014). However, in Geography and social studies, such fieldwork can also take place in built-up environments such as urban and industrial areas (Lai, 1999), or visits to museums, zoos, science centres and nature education centres (Lock, 1998). More importantly, it is said that fieldwork includes field teaching, field trips, field research and field camps (ibid).

Additionally, it involves the direct use of the environment as a source of physical information (Lai, 1999). Additionally, the approach provides learners with the opportunity to test ideas and concepts from the literature against the real world of the field, and apply approaches and techniques of data collection and observation, as well as work effectively in groups with one's peers (Dummer et al., 2008). In other words, Geography fieldwork as a teaching approach contributes to the teaching of other key skills, including communication and numerical skills.

In addition, Kinder (2018) reveals that the acquisition of real geographical knowledge takes place in the field, due to the interaction of physical, mental and emotional experiences. In the view of Hall (2014), the capacity of fieldwork to integrate diverse educational goals is what renders it a potentially powerful approach to instruction. Besides its definition and benefits as a teaching approach, fieldwork has principles, which are discussed in the following sections.

2.3 Principles of fieldwork

Lai (1999) explains that fieldwork emphasises the importance of two basic principles. The first is that of activity, whereby learners learn best by doing something, and the second is the principle of observation and perception. However, Ngcamu (2019) indicates that fieldwork has other principles apart from these two, which are principle of environmental teaching, principle of exploration and discovery and principle of example.

2.3.1 Principle of active participation (activity)

In the view of Fraser et al. (1990), the principle of active participation emphasises that teaching and learning will only be effective if learners are given the chance to participate actively in the teaching and learning events. Furthermore, this implies that the learners should not only be mentally engaged, but also be given the opportunity to become physically involved during teaching. Building on the same idea, Mwiila (2019) states that the principle of activity deliberately provides a breakaway from the learner's passive listening role in the learning situation.

2.3.2 The principle of observation and perception

The principle of observation and perception emphasises that learners should be taken out of a normal classroom situation to the field with the purpose of seeing or observing (Ngcamu, 2000). Furthermore, it emphasises that learners must go and explore their world so that through observation, they are able to analyse and explain the landscape. Kinder (2018) supports this idea by stressing that learning Geography through observation is important because it involves discovery learning, as learners are required to discover certain concepts and phenomena read from the textbooks.

Over and above everything else, it is explained that concepts learned through fieldwork cannot be easily forgotten by learners as they do with concepts prescribed to them theoretically (Mwiila, 2019). In summary, the principle of observation maintains that information received through observation and experimentation is easily appreciated and will not be forgotten soon after examinations.

2.3.3 Principle of environmental teaching

The principle of environmental teaching emphasises that learners should be helped to make meaning of their immediate environment, which according to Fang et al., (2022) means the locality, town, city or village where the child spends his youth. It further implies the relationship of the child to all aspects of life surrounding him, for example, other people, institutions such as the church, family and so on (Fang et al., 2022). As a result, when determining the purpose, content and approaches of teaching, schools must consider the specific nature and demands of the communities and environment in order to develop young people who are capable of taking their rightful places in the communities in an efficient and responsible manner as fully developed individuals (Cliffe, 2017). Since Geography is the study of the person and his environment, I believe that the principle of environmental teaching could be successfully achieved through this subject. Fieldwork in particular, helps learners to make meaning of their immediate environment.

2.3.4 Principle of exploration and discovery

The principle exploration and discovery states that by getting learners involved in fieldwork, they are made to explore their world and learn to make judgments, deductions and conclusions about what they see or observe (Tanner & Whittle, 2015). Furthermore, Roberts (2013) reveals that it is a characteristic of all normal children to want to be actively involved in the exploration

and investigation of things in their life, explain them and experience them for themselves. Therefore, through fieldwork, the teacher must help this process by stimulating and directing the learners' interest.

2.3.5 Principle of example

The primary goal of fieldwork is to present or unlock reality for the learners (Lai, 1999). Therefore, Cliffe (2017) encourages Geography teachers to try to unlock reality for learners by offering examples that create a valid representative structure of the contents in the form of pictures and models. In the case of fieldwork, representative structure implies the observed phenomena. This means that learners should be taken on field trips to witness real-world landscapes and phenomena such as industry and cities. A study by Ngcamu (2000) suggests that the example is part of how the human being understands the reality that surrounds them and that of the entire world. Following the principles, fieldwork is characterised by values.

2.4 Values of fieldwork approach

In the view of Tenha (2019), fieldwork is as ingrained in the subject Geography as chemical practice is in medicine. As a result, fieldwork as a technique of teaching Geography is not an option, but a requirement. Besides, the current education policy in Lesotho encourages the use of learner-centred approaches which encourage learners to participate in their learning and to think creatively. Therefore, fieldwork approach is the best approach that can support the learner to think creatively (Baird, 2017). More importantly, the approach entails an appreciation of values: social and personal development, promotes self-responsible learning, bridges the gap between theoretical ideas and real life experiences, promotes cognitive skills as well as promotes holistic thinking (Toro, 2019).

2.4.1 Social and personal development

Fieldwork has been described as having the potential to contribute widely to learners' personal and social development, because it enables them to develop their understanding of different perspectives on social, political or ecological issues (Job, 1999). The end result is that learners are able to clarify and justify their own values while learning to acknowledge and respect other people's values (Kinder, 2018).

Additionally, Kinder (2018) observed that the challenges provided by fieldwork approach help to build learners 'confidence and resilience, as well as develop soft skills, such as leadership teamwork, communication skills and a greater belief in personal worth. Also, the approach breaks down barriers between learners and their peers and between learners and staff (Hall, 2002). Of great significance, fieldwork approach aids in the development of more favourable attitudes towards the defence of the ecosystem (Scott et al, 2012). Consequently, communities benefit from having learners who are active and critical citizens, who are able to conserve their environment.

2.4.2 Teaching geographic vocabulary

An essential role of fieldwork is to turn words into experiences to demonstrate to learners the things which words describe (Webster, 1980). In the view of Ngcamu (2019), learners have always learned and used some words without having the slightest knowledge of what they mean, particularly, learners who come from culturally deprived backgrounds with no books and other teaching resources. For instance, in the study by Ngcamu (2019), it is revealed that some learners believe that the word "gorge" mean a dark hollow place where gangsters hide. As a result, it is advised that teachers take advantage of every opportunity to take learners out into the field and ask them to describe what they see and to name landscape features (Bailey, 1987).

2.4.3 Fieldwork promotes self-responsible learning

In the view of Ruan et al. (2021), fieldwork approach offers learning in a new environment compared to the boredom of the classroom, which leads to some learners losing interest in a lesson. According to Ruan et al. (2021), during fieldwork, the learners have a chance to go the extra step and acquire as much information as they want. Moreover, it is clarified that fieldwork approach provides challenges that allow for more individual learning, while classroom teaching is often generalised and many times neglects the slowest learners in the group (ibid). Overall, fieldwork approach, especially if inquiry driven, promises to develop learners' 21st century competencies, cultivating them to become confident and to be self-directed learners (Tenha, 2019).

2.4.4 Fieldwork bridges the gap between theoretical ideas and real life experiences

Fieldwork approach is described as the ultimate teaching technique to aid the teacher to clarify, establish and connect accurate concepts and interpretations vividly and meaningfully to learners'

understanding (Job, 1999). Thomas and Munge (2015) hold a similar notion that fieldwork eliminates abstract thinking; which is regarded as the bookish approach (textbooks) and encourages practical activities among learners. The end result is that learners are able to connect concepts and principles to the real world. In summary, fieldwork is the best and most immediate means of bringing two aspects of Geography together.

In other words, fieldwork is the laboratory of Geography where learners experiment first-hand the landscapes, places, people and other related issues. More importantly, the approach is appropriate to assist in attainment of the aims of the Geography syllabus in Lesotho, such as promoting a sensitive awareness of the environment, providing opportunities to foster and build upon learners' natural curiosity about their own and other people's social and physical environments, as well as developing an understanding of the interrelationships between the natural and the human environment by bridging the gap between theoretical ideas and real life experiences (MOET, 2009).

2.4.5 Fieldwork promotes cognitive skills

In educational psychology, various learning theories have been proposed to inform educators on learners' development and knowledge construction. Among them is Bandura (1986) and Vygotsky (1962), both of which assert the importance of external factors, specifically culture, education and environment in cognitive development (Vygotsky, 1962; Bandura, 1986). Both theorists advocate for greater learner participation, the presence of a supportive environment and more skilled individuals to promote cognitive development (Vygotsky, 1962; Bandura, 1986). In my own opinion, fieldwork approach meets all the principles of these theories, hence, supports cognitive development.

Also, the value of fieldwork approach in supporting cognitive development is echoed in Kern & Carpenter's (1986) study with college learners in the United States, which found that learners who participated in a field-oriented class performed better in subject-oriented tasks that required higher order thinking skills, compared to those engaged only in classroom-based learning. Additionally, MacKenzie and White's (1982) compared classroom learning and fieldwork approach, and the findings revealed that learners involved in fieldwork could better retain knowledge and relate memorable episodes with Geography knowledge learnt. Such learners therefore, showed improvement in cognition.

Correspondingly, Kinder (2018) observed that fieldwork approach pushes many children towards higher order of cognitive skills, and saw a strong link between higher achievement in Geography in schools and higher profile for fieldwork in the curriculum. Overall, fieldwork approach has a close relationship with performance in the teaching and learning of Geography, increases permanence in learning, and facilitates the acquisition of cognitive skills (Job et al., 1999), as well as allows learners to improve their skills to analyse concepts (Simmons & Fisher, 2016).

2.4.6 Fieldwork promotes holistic thinking

For convenience, the school education is divided into different school subjects. However, Ngcamu (2000) advises that knowledge should be viewed holistically, that is, as an all-embracing whole. Therefore, wherever possible, learners should be taught and encouraged to think of education or knowledge from a holistic approach. This is particularly important in regard to studies of the environment, because humans live in one environment, with its geographical, biological, historical, social and political components, and learners should be encouraged to think of their surrounding in this way (Ngcamu, 2000). For this reason, as far as fieldwork is concerned, teachers should look for opportunities that integrate selected information from subjects such as Geography, Biology Agriculture and so on, to help create holistic pictures of the environment.

2.4.7 Fieldwork equips learners with geographic skills

Fieldwork exposes students to real research (Hall et al., 2002), which promotes the development of a wide range of skills, including inquiry skills such as observation, data collection, data analysis, map work, and investigative skills (Job et al., 1999). Furthermore, students may be able to practise and apply technical skills, including ICT skills (Job et al., 1999). Overall, this demonstrates that fieldwork assists learners in developing a variety of geographic skills.

2.4.8 Career Exploration and Pathways

In the opinion of Kipsaat (2016), fieldwork reveals potential career paths in Geography-related fields by introducing students to a wide range of professions that require geographical knowledge and skills, such as urban planning, environmental management, cartography, tourism, and others. Correspondingly, Kulas (2017) indicates that fieldwork can assist students in exploring their interests, connecting with professionals, and making informed decisions about

their future career paths. It can be induced that fieldwork exposes learners to various career options they may have for their future.

2.5 Types of field activities

There are a number of types of field activities available in the field, characterised by different forms and levels of learners and staff involvement (Kent et al., 1997). It is also clarified that field activities can be placed somewhere on two scales: between observation and participation; and also between dependency and autonomy (Kent et al., 1997). Additionally, it is said that the different field activities are observational fieldwork activity, participatory fieldwork activity, as well as learner practitioner and participant observation.

2.5.1 Observational fieldwork

Observational fieldwork is the simplest and most traditional type of field activity, and is normally referred to as the look and see field visit (Kent et al., 1997). For this reason, learners often describe this type of activity as boring since they are not deeply engaged in the fieldwork process (Brown, 1969). Additionally, during observational fieldwork if unprompted, learners often miss key features (Kent et al., 1997). Nonetheless, it is argued that carefully directed observational fieldwork can be a useful learning method, as it allows learners to make some observations independently and to follow upon, in an informal way, issues that they find interesting (Balci, 2012).

2.5.2 Participatory fieldwork

Participatory fieldwork activity advises that learners be organised into groups (Kent et al., 1997). It engages learners' attention and deepens the learning experiences (Benedicto, 2002) because all learners take part in the field activities. However, extensive preparation is often necessary to ensure a satisfactory outcome and it is more time consuming than observational fieldwork (Lane, 2018). Also, it is difficult to supervise adequately for health and safety reasons, if not academic reasons (Boud & Feletti, 1991).

2.5.3 Learner-practitioner and participant observation

This type of activity requires learners to be physically involved with the social group under study (Kent et al., 1997). In human Geography, individual learners join social groups and participate in their lifestyle. In physical Geography, learners can take on the role of environmental manager or

consultant, where it becomes known as learner-practitioner activity (Kent et al., 1997). Even so, supervision is important because the teacher has to ensure that there is collaboration among learners and the target population, and also ensures that the right information is generated from the target population. Over and above everything else, the teacher has to see to it that the culture of the population under study is respected.

2.6 Types of fieldwork

Kent et al. (1997) reports that fieldwork can be categorised into various types depending on the degree of teacher and learners' involvement, which ranges from traditional teacher-led field trips to more learner-centred inquiry-based field projects and self-discovery. Even so, among the different types of fieldwork, learner-centred activities and inquiry-driven fieldwork have been recognised as the most effective in facilitating deep learning, because learners play a more active role in making sense of knowledge (De Vries et al., 2011).

Building on the idea of fieldwork types, the Education and Bereau (2007) indicates that geographical fieldwork can be classified into three broad types, the first of which is a guided tour type of fieldwork that entails teachers taking learners to a field site and inform them about the characteristics of the features in the site. Therefore, teachers' preparation before this type of fieldwork is of great significance as they should know as much about the site as possible (Education and Bereau, 2007). The second type is true experimental fieldwork, and is the type of fieldwork which is conducted to find answers for some geographical problems which have not been researched by other people previously, and is learner-centred and inquiry-driven (Education and Bereau, 2007). Overall, true experimental type of fieldwork requires learners to find answers for geographical problems because no answers are available before the fieldwork.

The last type of fieldwork is pseudo-experimental fieldwork, and the name pseudo means it is pretended and not real (Education and Bureau, 2007). It differs from the true experimental fieldwork in that measurements on some known outcomes are carried out, so it only provides training on data collection skills (ibid). Furthermore, (Job, 1999) clarifies that different approaches may be used to conduct these types of fieldwork. The following sections discuss fieldwork approaches.

2.7 Fieldwork approaches

Job (1999) classified fieldwork strategies or approaches into five different categories: field excursion, field research based on hypothesis testing, geographical enquiry, discovery fieldwork and sensory fieldwork.

2.7.1 Field excursions

Field excursion was once seen as the traditional approach to fieldwork and has also been described as ‘the guided tour’ Lenon & Cleves (1994). Field excursions are led by an expert, perhaps the teacher, whose role is to impart knowledge and understanding to the learners (Lenon & Cleves, 1994). For example, understanding the geomorphological processes at work in a landscape might be tackled very effectively by using the expertise of the teacher, with learners being asked to notice subtle evidence they might otherwise have missed.

Even so, critics of this approach point out the low degree of engagement and autonomy amongst learners, and its unsuitability for younger learners (Eden et al., 2019). In addition, this approach which is referred to as the ‘walk and talk’ approach also makes the assumption that an explanation provided by the teacher promotes understanding in the mind of the learner, and that complex knowledge and understanding can be ‘transmitted’ relatively easily through teacher exposition (Eden et al., 2019).

2.7.2 Field research based on hypothesis testing

Lambert & Reiss (2016) state that field research based on hypothesis testing is a very common approach in schools where the teacher, sometimes in collaboration with students, sets up one or more hypotheses to be tested and decides the data to be collected during the fieldwork, and the focus tends to be on developing skills in data collection techniques, mainly quantitative data, and the presentation and analysis of real data.

2.7.3 Geographical enquiry

In the view of Lambert & Reiss (2016), geographical enquiry establishes an overarching question as the starting point and this drives the fieldwork. Furthermore, Lambert & Reiss (2016) describe geographical enquiry as the fieldwork approach whereby learners are encouraged to identify or construct a geographical question, issue or problem for fieldwork investigation. These questions, issues or problems may be identified from learners’ own field experiences in the past (Arcodia et

al., 2014). They then gather appropriate data at the site and interpret it in order to answer the question or find solutions for the problem or issue and in the end, the teachers should evaluate the whole investigation and encourage learners to apply their findings to other situations (ibid). Significantly, it is explained that such an enquiry approach is especially suitable to those learners who are able to work semi-independently (Lambert & Reiss, 2016).

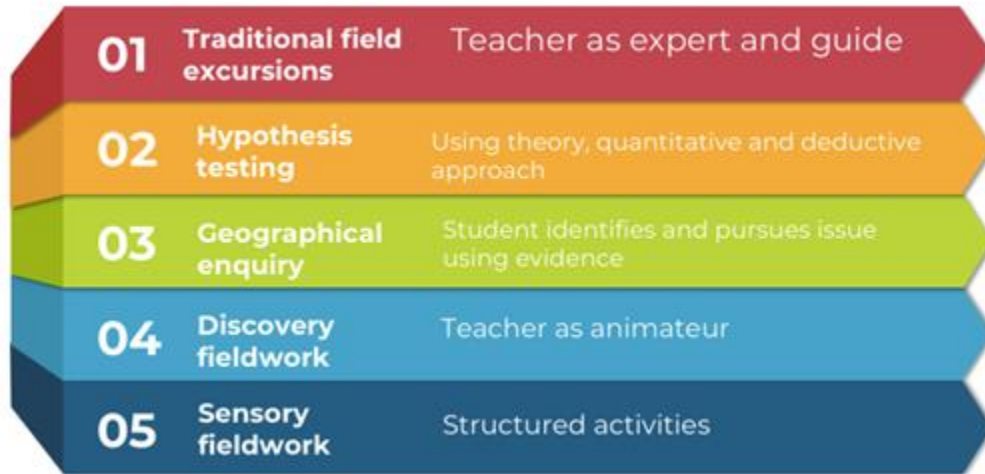
2.7.4 Discovery fieldwork

Lambert & Reiss (2016) indicate that the final two approaches are qualitative approaches, and are concerned with developing learners' appreciation and respect for nature and the environment, and a sense of place. Discovery fieldwork is an entirely open-ended approach whereby learners are encouraged to identify their interests freely in a landscape, and are not guided by teachers (Job, 1996). Based on their interests, perceptions and preferences, they can develop and extend their investigative work, such as developing the focus and methodology of their own investigations (Job, 1996). Also, whenever learners have questions about the fieldwork, teachers will not give direct answers to them (Lai, 1999). Instead, further questions will be raised to stimulate learners' deeper thinking by teachers as they act as facilitators. The end result is that learners' self-confidence and self-motivation are strengthened as they are the ones to control the whole process of learning.

2.7.5. Sensory fieldwork

Sensory fieldwork, sometimes known as earth education, encourages understanding of the natural environment by involving all the senses and seeks a more emotional response from learners than from field observation (Lambert & Reiss, 2016). Building on the same idea, Widdowson (2017) states that it requires learners to connect with their sense of smell, touch, sight and hearing and even taste. Therefore, sensory approaches can effect a deep emotional response to environments. Also, Biddulph et al. (2021) clarify that this approach began in natural and often remote environments as a way of reconnecting people and nature. However, it is just as applicable in urban environments as a means of investigation. Figure 2 summarises the five approaches as identified by identified by Job (1999).

Figure 2: Five approaches of fieldwork



Source: (Job, 1999)

2.8. Empirical review

2.8.1 Learners' views on fieldwork approach

It has been acknowledged that learners' views and satisfaction are important to determine the quality of learning (Naaj et al., 2012). Therefore, several studies have been conducted to examine learners' views regarding fieldwork method. For example, Yang et al. (2013) conducted a study which explored learners' views of fieldwork from an international perspective by reviewing learners' fieldwork reports and administering a questionnaire to 337 junior secondary school learners in China. The study found that learners have positive views about fieldwork. The study established that learners find fieldwork to be interesting and have a positive view of fieldwork activities. Learners expressed that they enjoy field activities (Yang et al., 2013). Furthermore, learners perceive fieldwork to encompass a range of educational, personal, socio-cultural, spatial aspects and they explain that they feel safe in the field and believe they are making good use of their time there.

Also, from a regional perspective, a study conducted in Zimbabwe by Tenha (2019), which assessed the effectiveness of fieldwork in geographical education at the ordinary level in secondary schools, revealed that learners concur that fieldwork facilitates the learning process. Learners stated that it is due to fieldwork that their level of awareness and appreciation of the environment has increased (Tenha, 2019). Additionally, learners mentioned that, following

fieldwork, they appreciate landforms like rivers and mountains and are aware of measures to be adopted to minimise river siltation and deforestation through fieldwork (Tenha, 2019).

Moreover, learners stated that fieldwork provides them with an opportunity to get first-hand information from the physical and social environment and noted that they witnessed the mining methods, farming approaches and the settlements patterns at first-hand (Tenha, 2019). More importantly, learners stipulated that first-hand information from the environment lasts for a longer time in their memories as compared to second hand information from the teachers and textbooks (ibid).

Besides that, Dema and Chalermnirundom (2019) report on the perceived effectiveness of fieldwork approach in helping learners learn geographic concepts from the perspective of learners and explain that learners feel that it provides a refreshing change of pace, enlarges their view, builds up their confidence and relates theory to actuality. Furthermore, learners state that learning Geography through fieldwork is different from classroom learning, and that majority of them do not enjoy Geography lessons when taught using traditional methods because they are largely teacher-centred and restricted to the four walls of the classroom. Therefore, learners consider the fieldwork approach as a fun and an interesting strategy.

Furthermore, Dema and Chalermnirundom (2019) explain that learners express their passion and energy in learning Geography through fieldwork because different activities are included to teach a topic, providing a platform to involve all learners regardless of gender, age, or learning style. Again, learners learned that Geography is far from being a boring subject, and mentioned that learning Geography through fieldwork is enjoyable and interesting because it stimulates their interest through practical experiences. This finding is consistent with the assertion made by Hoisington, Savleski, and Decosta (2010) that the field increases learners' interest in their studies.

More importantly, learners say that visiting workplaces gives them a variety of opportunities, like the chance to interact with experts and professionals, which helps them become aware of their career options (Dema & Chalermnirundom, 2019). This ultimately affects learners' career options and raises their interest and attitudes towards occupations related to the workplace. This is in line with Partyka's (2016) explanation that exposure to various occupations and work

environments can help determine learners' future. Accordingly, Kulas (2017) in his article "What are the benefits of field trip" states that children learn about various jobs, ideas and opportunities when they venture outside of their immediate communities. Therefore, fieldwork can spark a child's interest in trying new things and pursuing previously unthinkable dreams.

Moreover, learners comment about their environmental awareness and attitude and say the knowledge they have gained has altered how they feel and think about the environment (Dema, 2019). As a result, they are inspired to engage in environmental conservation-related activities and feel a genuine sense of obligation to positively impact their community by setting an example and guiding it towards a better environment. This supports Ferderbar's (2013) claim that fieldwork experiences lead to positive behavioural and attitude changes related to the environment. It also aligns with Cappadocia (2010) who believes that fieldwork enhances learners' environmental awareness, attitudes and behaviours. Additionally, it concurs with Stromholt's (2015) advice to engage learners in solving problems from the real world by exposing them to these problems.

Furthermore, Simasiku (2012) looked at how fieldwork approach contributes to the learning of Geography amongst senior secondary school learners in Namibia, and the study found that fieldwork helps learners learn by enabling them to develop contextual knowledge and understanding of the geographical issues that are being researched, encouraging social interaction and group cohesion amongst learners, and improving their decision-making abilities for problem solving (Simasiku, 2012).

In summary, learners' views on fieldwork approach are that it is enjoyable and helps them develop socialization, leadership, presentation, and other skills that increase their interest in learning Geography. They also acquire speaking, listening, presentation, writing and reasoning skills that they can use in their lives. This is in line with The Joint Admission Board (JAB) (2002), which explains the connection between Geography as a subject and the type of people employers want, and underscores that employers want people with good communication skills, who can work in a team and are able to collect data and analyse their work. In the view of JAB (2002), this can be achieved by exposing learners to fieldwork as an approach which enables learners to work in groups. Therefore, learners develop social skills and attitudes among themselves, which is the key aim of fieldwork (ibid).

In the context of Lesotho, there is limited research on learners' views on learning Geography through fieldwork approach, either from the discipline of Geography or Biology. As a result, to my knowledge, this study is the first to explore learners' perceptions on learning Geography through the fieldwork method.

2.8.3 Learners' attitudes on learning Geography through fieldwork method

A learner's attitude is defined as their tendency to respond in a certain way towards something, which can range from positive to negative or good to bad (Tai, 2022). The sections that follow review learners' attitudes towards learning Geography through the fieldwork method.

The results of Gayford's (1985) study, which examines biology learners' attitudes towards fieldwork, show that learners are very interested in it. Accordingly, Meral (2019) notes that learners would rather engage in fieldwork tasks than sit through a teacher's instruction. Learners also show that they do not lose interest during fieldwork activities, and are always prepared to carry them out. More importantly, learners' attitudes confirm that they believe time spent in the field is not a wasted time, and that field study activities help them develop valuable skills, and feel they learned more about biological topics in the field (Meral, 2019).

In addition, learners emphasise that they prefer studying Geography through fieldwork because it excites them to learn information that might be applicable to real-world scenarios, which in turn improves their attitude and learning interest towards the subject (Dema & Chalermnirundom, 2019). Consequently, the majority of learners express enthusiasm for continuing to participate in fieldwork activities in the future. In summary, learners' attitudes towards learning Geography have changed as they begin to recognise that Geography is not limited to books and the teacher's lecture (ibid).

In the context of Geography, Anikwese & Kaduna (1995) investigates the attitudes of Nigerian Geography teachers and their learners towards fieldwork in Geography, and learners' responses indicate that the majority of them view field studies in Geography favourably. However, learners in rural secondary schools are significantly more positive towards geographical fieldwork than their counterparts in urban areas (Anikwese & Kaduna, 1995).

2.8.4 Learners' experiences with fieldwork method

Many learners offered their personal, embodied understandings of their lived experiences of fieldwork approach in the previous studies conducted. These personal aspects of fieldwork comprised feelings, bodily experiences and individual experiences. For example, Geography learners share their experiences and attest that fieldwork enables them to be more active, well-engaged, and attentive (Dema and Chalermnirundom, 2019). Additionally, learners commented that they experienced unity and cooperation during fieldwork because they collaborate as a team to frame questions, present findings, and share opinions in the team in order to produce a successful outcome, which helps them to unite and cooperate with each other (Dema, 2018). Overall, fieldwork gives them the chance to realise the advantages of cooperating as a team, even in future tasks.

Again, the experiences of learners from the study highlight that fieldwork approach increases their curiosity and motivates them to conduct more research (Dema & Chalermnirundom, 2019). Additionally, learners experience good relationships between themselves and their teachers, as they are free from pressure of being asked to present or answer a question (Dema & Chalermnirundom, 2019). Again, learners feel close to their teacher and get to know more about them, thus, feel free to ask questions (ibid).

Correspondingly, Biddulph & Adey (2004) observe that most learners commonly associate fieldwork approach with fun, seeing and doing things first-hand and encountering new experiences as well as visiting somewhere new. Altogether, learners' individual experiences are generally seen as enjoyable. In addition, fieldwork is regarded by learners as a learner-centred activity. In particular, 15 learners at Rishley School note that they would dislike a lack of choice or control during fieldwork (Biddulph & Adey, 2004).

Of major concern is that research has shown that while most learners give the fieldwork method a relatively high value, there are those who reveal that certain factors such as teacher dominance in the field and a lack of parental support have a negative impact on their fieldwork experiences (Firomumwe, 2019). Furthermore, learners reveal that they have seen and experienced the problem of wild behaviour among other learners, as some took the opportunity to engage in forbidden affairs which, unfortunately, in some cases involve the teachers, particularly the young male teachers. This also fuels negative attitudes towards the fieldwork approach (Firomumwe,

2019). Equally important, lack of safety is one of the challenges highlighted by the learners (Tenha, 2019). Owing to these negative experiences, learners develop negative perceptions towards fieldwork method.

2.9 Chapter summary

This chapter reviewed concepts related to fieldwork. Fieldwork was introduced and discussed as a teaching method in Geography. Furthermore, the chapter investigated the principles, values, types and strategies of geographical fieldwork as a learner-centred approach to Geography teaching in schools. More importantly, an empirical literature review has been conducted on previous studies on learners' perceptions, opinions, attitudes and experiences with geographical fieldwork as a mode of teaching and learning.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the methodology procedures and choices that guided the research. It explains and justifies methodological decisions with regard to research paradigm, research approach, design, population and sampling as well as methods of data generation. It also highlights issues of trustworthiness and ethical considerations that were followed. Finally, a description of the steps involved in data analysis is discussed.

3.2 Research paradigm

In the view of Kivunja and Kuyini (2017), a research paradigm is the philosophical framework upon which the research is established. It offers a framework of assumptions and understandings on which the theories and approaches of the research study may be built upon (Creswell, 2018), and is made up of ontology, epistemology, and research approaches (Kivunja & Kuyini, 2017).

Research paradigms, in the opinion of Creswell (2018), are significant because they shape the philosophical underpinnings of a research project and have an impact on how various schools of thought, such as the sciences versus the humanities, conduct their research. There are many common examples of research paradigms; positivism, pragmatism and interpretivism (Creswell, 2018). However, this study was conducted through the lens of the interpretivism paradigm and allowed the researcher to understand the subjective perception of learners because interpretivism paradigm is founded on the view that reality is not objective but constructed and interpreted by humans through their own set of values and therefore rejects the notion of value free research (Darke et al., 1998).

In addition, in the view of Pham (2018), interpretivism paradigm uses qualitative research approaches that focus on individuals' beliefs, motivations and reasoning. Furthermore, interpretivism paradigm holds that attention should be paid to what people say, do and feel as well as how they interpret the phenomena being researched (Kuvunja & Kuyini, 2017). For these

reasons, the study paid attention to learners' perceptions of fieldwork approach in Geography teaching and learning.

3.3 Research approach

The distinction between quantitative and qualitative research methodologies is covered in a wide spectrum of literature (Macmillan & Schumacher, 2010; Creswell et al., 2011; Bell, 2005). As a result, the researcher must decide which approach to use based on the phenomenon under investigation. This study has been situated within the qualitative research approach. Qualitative research is defined by Johnson & Christensen (2004) as any kind of research that yields findings not arrived at by means of statistical procedures or other means of quantification. In its simplest form, it is a research approach that is concerned with collecting and making sense of words instead of numbers.

As I explored learners' perceptions on learning Geography through fieldwork approach, I was interested in the views, experiences and feelings of individuals and I hoped to get detailed data from the participants in order to produce subjective data on individuals' perceptions (Hancock, 2002). Thus, the core notion of qualitative research that reality is subjective was justified. The indication is explained by Kielmann et al. (2011) and Cropley (2021) that every human being builds an individual, personal picture of the world based on his/her encounters with the external world, and qualitative approach seeks to tell the story from the participants' perceptions in their own words. Besides that, one of the main benefits of the qualitative approach is the richness and depth of explorations and descriptions it may produce; this is made possible by the insider role the researcher plays as they become the tool used to collect and analyse data (Yoon & Uliassi, 2022).

Moreover, qualitative approach makes use of human participants to gather data in order to understand what is happening (Creswell, 2018). Additionally, qualitative approach allows participants to express themselves openly with no limitation (Aspers et al., 2019). As a result, learners were free to voice their perceptions in an open manner. In summary, the decision to utilise a qualitative approach for this study was influenced by its nature and goals, especially the idea that qualitative inquiry focuses on how people comprehend and perceive the world. In general, the qualitative approach was therefore considered suitable for this study.

3.4 Research design

The qualitative research, according to Creswell (2018), consists of five research designs: the grounded theory, the ethnography, the phenomenology, the case study and the narrative study. I found it appropriate to use a case study design for this research after carefully considering other research designs. In the view of Yin (2013), “a case study is as an empirical enquiry that investigates a phenomenon within its real life context, when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used” (p.2).

In addition, Maree (2011) indicates that a case study can give a voice to a group that is typically marginalised. In this case, the researcher understood that fieldwork as a teaching approach is held in high regard and implemented in Geography teaching and learning in Lesotho. It is also believed that theoretically, the approach ought to give a positive outcome. However, it was not clearly evident as to what challenges and opportunities learners encounter because literature shows that most studies conducted focus on the perceptions of teachers, and learners’ perceptions are taken for granted yet successful implementation of any teaching and learning approach is basically dependent on them because they play a role in shaping their own learning, through factors such as their interest, attitude and preferences. As a result, the study resorted to the case study because it deliberately intended to find out the challenges that these learners encounter, and it was appropriate as it assisted in getting insights into their perceptions.

Also, the researcher in a case study can use multiple data generation techniques (Bell, 2005; Maree, 2011). Given this strength of a case study approach, this study benefited from the use of multiple data generation techniques, such as questionnaires and interviews in order to obtain comprehensive data. In addition, a case study design can be qualitative or quantitative (Porta & Keating, 2008). As a result, this study employed a qualitative case study. This type of case study was chosen because of its ability to generate rich and in-depth data from participants in their natural settings (Mohajan, 2018).

Additionally, this study made use of multiple case studies, which includes two or more cases to investigate the same phenomena (Creswell, 2013). For this study, a multiple-case study approach was chosen over a single-case design because the results of multiple case studies are often

compelling and more likely to lend themselves to valid generalization (Fraenkel & Wallen, 2019). Furthermore, evidence from multiple cases is frequently regarded as more persuasive, and the overall study is thus regarded as more robust in terms of evidence (Yin, 2014).

Owing to these reasons, data was generated from three secondary schools as three cases, which enabled access to gaining deeper insight of learners' perceptions at a range of different sites. Over and above everything else, the researcher believed that the study objectives would be achieved and answers to the research questions would be obtained within the working environment, which are the schools. More importantly, a case study provided an opportunity to be more focused and intense with the participants, as Hollweck (2016) describes them to be.

3.5 Population and sampling / selection of research participants

In research, population is the entire group or whole unit of individuals having similar characteristics to which the results of the investigation can be inferred (Krieger, 2012). The population for this study consisted of 15 Grade 11 Geography learners who were purposively chosen from three high schools in Maseru. Samples in qualitative research are small (Creswell, 2018) because the approaches used are time and labour intensive. Therefore, there was no need for a large number of participants.

Purposive sampling is a sampling technique used by qualitative researchers to recruit participants who can provide in-depth and detailed information about the phenomenon under investigation (Creswell, 2018). Therefore, purposive sampling was selected because it involves focusing on a specific type of groups of people who can provide relevant information. In addition, Babbie (2001) explains that purposive sampling is essential in selection based on the researcher's knowledge of the population, its elements and the nature of the research aims. For these reasons, Grade 11 learners were selected because they were considered by the researcher to be the relevant group with regard to the data required for the study. They have encountered a variety of topics that allow for diverse use of fieldwork approach in learning Geography. Therefore, they had attributes to provide relevant information for this research. Consequently, this aligns with Mertens' (2020) assertion that researchers within the interpretive paradigm tend to use a purposive approach to sampling, but also allowed me to focus on the right learners to provide relevant information to the study.

With regard to sampling of schools, I employed convenience sampling to select three secondary schools in Maseru urban. Convenience sampling is defined by Stratton (2021) as sampling of subjects for reasons of convenience, such as easy to recruit, near at hand and likely to respond. Given this definition, it is crucial to mention that the aforementioned number and location of sample sites was done in consideration that some schools do not offer Geography. As a result, the use of convenience sampling was done on the basis of the sample sites that were within my reach. I also chose schools which were convenient in terms of cheaper travel expenses. The three schools are all in the same area and not too far from one another. This made it easier and convenient for me to visit the schools and conduct the research. Furthermore, I live in the area and am familiar with the schools, which made it convenient for me in terms of travel costs and ability to do the research. Moreover, the schools are easily accessible through public transport. Overall, the schools were conveniently chosen. Below is the profile of the schools, which are identified as School 1, School 2 and School 3 for reasons of confidentiality.

School 1

School 1 is a public school located 7 kilometers from the Phuthiatsana River. This school became operational in 2007 and currently has 990 learners and 30 teachers. Each classroom at the school has a large number of learners ranging from 54 to 62. Learners at this school must choose between Geography, Biology and History.

School 2

School 2 is also a public school also situated not far from the Phuthiatsana River. The school was founded in 2010 and currently has 693 enrolled learners and 29 teachers. Learners have to choose between Geography, History and Literature in English.

School 3

School 3 is a private school at the centre of the village. The majority of learners are from middle class families. This school's average class size is 32 students, which is smaller than the class sizes mentioned in the above schools. The school has its own library and computer laboratory with internet access for the learners.

Table 1 below presents the profiles of the learners who participated in this study, and are labeled with letters A to O for reasons of confidentiality.

Table 1: Profile of learners who participated in this study

Name of school	Learners	Age	Gender
School 1 (urban)	A	17	Female
	B	17	Female
	C	16	Female
	D	17	Female
	E	17	Male
School 2 (urban)	F	17	Male
	G	17	Male
	H	17	Female
	I	17	Female
	J	17	Female
School 3 (urban)	K	17	Female
	L	16	Male
	M	17	Male
	N	17	Female
	O	17	Female

3.6 Data collection methods and instruments

Qualitative researchers often use multiple forms of data in any single study in order to answer their research questions. In the view of Leedy and Ormrod (2015), selecting data generation techniques is very important, and they indicate that most qualitative studies rely heavily on observations, interviews, or both, as a source of data. As a result, this study employed open-ended questionnaires and one-on-one semi-structured interviews.

3.6.1 Open-ended questionnaires

The first data generation instrument that was used in this study is a questionnaire. A questionnaire is a research tool that is used to gather data in the form of a written list of

questions, and is normally self-administered, meaning that respondents fill it out on their own (Neuert et al., 2021).

This study made use of open-ended questionnaires, which are the opposite of closed-ended questions that typically require a simple, brief response such as yes or no (Ahn, 2017). In addition, in the opinion of Desai (2019), open-ended questions do not point people in a particular direction; rather, they invite people to tell their stories in their own words. For these reasons, I gave learners an open-ended questionnaire at each of the three schools to fill up in my presence. Even so, it was essential to test the instrument before conducting the actual research as this would make it possible to identify any shortcomings with it. In formulating the questions, it was essential to avoid ambiguity and imprecision, assumptions, double questions, presumptive questions, hypothetical questions and offensive questions (Bell, 2005). It was appropriate therefore that the questionnaires were clear and straightforward, without leading the participants to give answers that they might think the researcher was looking for.

I tested the questionnaire to see if I would receive usable and reliable data by doing a pilot study with three Grade 11 Geography learners who attend different schools from the ones where the research was conducted. This means that they were not part of the participants of this study. I learned that the questions were indeed adequate to address the research questions, therefore no adjustments were made.

Following that, a questionnaire was then given to participants at the three schools and they filled it out in my presence after appointments had been made. This type of questionnaires gave the learners the freedom and space to answer in as much detail as they liked, and helped to gather information, and increase understanding. Even though open-ended questionnaires were appropriate because they allowed learners to share their opinions in their own words, they had a disadvantage. Some of the responses from learners were vague and difficult to understand, while some sections of the questionnaire answered were incomplete. Therefore, conducting one-on-one semi-structured interviews was appropriate afterwards because the shortcomings of the questionnaire were then attended to.

3.6.3 One-on-one semi-structured interview

Punch (2005) states that interviews can be classified into three main types: fully structured interviews, semi-structured interviews and unstructured interviews. This study made use of semi-structured interviews. Semi-structured interviews are used by qualitative researchers, and are characterised by increasing level of flexibility and lack of structure (Cohen & Crabtree, 2006). This type of interview consists of a list of questions to ask and a good idea of what topics will be discussed, but the conversation is flexible and likely to change between participants (Cohen & Crabtree, 2006). As a result, I formulated a list of questions as a guide to the interaction between the researcher and the participant (Basit, 2010), which were meant to probe further and obtain more clarification on responses in cases where respondents did not provide clear answers on the questionnaire.

Just like with the questionnaire, the interview was piloted and a recording device was also used in the pilot study to ensure that the equipment would work well during the actual data generation process. This is because the outcomes of the pilot study should give an indication of what outcomes I can expect and to also ascertain if my data collection tools need adjustment (Bell, 2005).

Following a pilot study, face-to-face semi-structured interviews with all the participants were conducted. This type of interview allowed the interviewer to probe for clarification of responses in cases where the respondent did not give a clear response on the questionnaire (Bell, 2005). Therefore, I was able to probe further on the views, attitudes and the challenges learners encounter and develop a much deeper understanding of the participants' responses by exploring contradictions within them because of their flexible nature (Cohen & Crabtree, 2006).

All interviews were audio recorded with the permission of the learners to allow the researcher to have reference during the time of transcription. Recording an interview is of significance as it allowed me to check the wording of statements of interest that I quoted during the analysis. It also helped to keep eye contact during the interview process as the interview was a one-on-one conversation. It is conversation rule for the listener to keep eye contact to show the speaker that one is paying attention, and to make sure that whatever I wrote was accurate (Bell, 2005). All the interview sessions lasted approximately 30 minutes, and were all conducted at the learners' schools.

All interviews were conducted during the lunch hours in a separate room where privacy was maintained. Even though the main questions were asked in English, I encouraged the respondents to speak in their native tongue to further relax the interview setting. In order to keep the conversation going, I would also code switch accordingly when the respondents spoke more Sesotho than English.

3.8 Procedure for data collection

Data generation requires planning, which includes drawing out a step-by-step sequence of procedure (Burns and Groove, 2011). First, permission to collect data from the participating secondary schools was obtained through introduction letters from the National University of Lesotho. The letters introduced the researcher and requested permission to collect data from the principals of the participating schools.

I visited schools to meet with the principals and deliver introduction letters. During these meetings, I explained the purpose and steps of my research. This was done to establish a good relationship and build trust. Also, the aim was to ensure that the principals understood and supported the research goals. After talking with the principals, I allowed them time to inform the teachers of the relevant classes.

Later, I returned with consent forms and explained the objectives and procedures for the research to the teachers and the Grade 11 Geography learners, including discussing with the learners what would be expected of them should they decide to participate in the study. The learners who agreed to participate had to get their parents' or legal guardians' approval before they could take part, and all guardians/parents who permitted their children to participate in the study had to provide a letter confirming their approval. The researcher only allowed learners to engage in the study once their parents/legal guardians had granted them permission to participate through a letter which the researcher had written and had to be signed and returned back to her.

Afterwards, appointments were set, and subsequently, open-ended questionnaires were given to the learners to fill up in my presence and it started with biographical information like age and gender. After going through the questionnaires, and identifying areas to probe for further clarification, appointments for interviews were set, and interviews were held within the natural

settings - in the learners' schools, but where privacy was maintained. This was to avoid distractions and interruptions.

During the interviews, the researcher probed on most questions with the aim to understand better, which led to participants discussing more issues that were relevant. Even so, the challenge encountered was that with some questions that the researcher found probing important, most participants were not able to explain further, which made the question seem as if it was a Yes or No type. As the process of each interview was taking place, I was audio recording data with the learners' permission and jotting some of the points on a notepad at the same time, which later provided me with a verbatim account of the interviews. The recordings were safely kept and used later for transcriptions.

3.9. Procedure for data analysis

When the data collection procedure was completed, it was my role as the researcher to make sense of the raw data generated by analysing and interpreting it so that it could be accessible to the readers. Data analysis is an organised and systematic search for meaning (Amos, 2002). It is the process of reducing large amounts of data to make sense of them (Richmond, 2006). In the view of Babbie (2001), qualitative data analysis refers to all forms of analysis of data collected using qualitative techniques. There are a number of techniques that are commonly used in analysing qualitative data. These include grounded theory, content analysis, narrative analysis and thematic analysis (Bryman, 2016). However, this case study was framed within the thematic analysis model established by Braun and Clarke (2006), which suggests six phases of data analysis (Creswell, 2018).

The initial step towards the analysis of data is familiarisation with the data. In this step, I firstly familiarised myself with both the questionnaire and interview data. Following this, I transcribed the audio recording from the interviews which had been recorded with a mobile phone. Transcription is a process in which recorded interviews from the participants are portrayed in a written manner (Braun and Clarke, 2006). These interviews were transcribed manually, and it was advantageous to the researcher as it was less costly in terms of getting a professional transcriber. Also, the transcription process immersed the researcher more into the data, as she repeatedly listened to the recordings while jotting down all that had been said in response to each question.

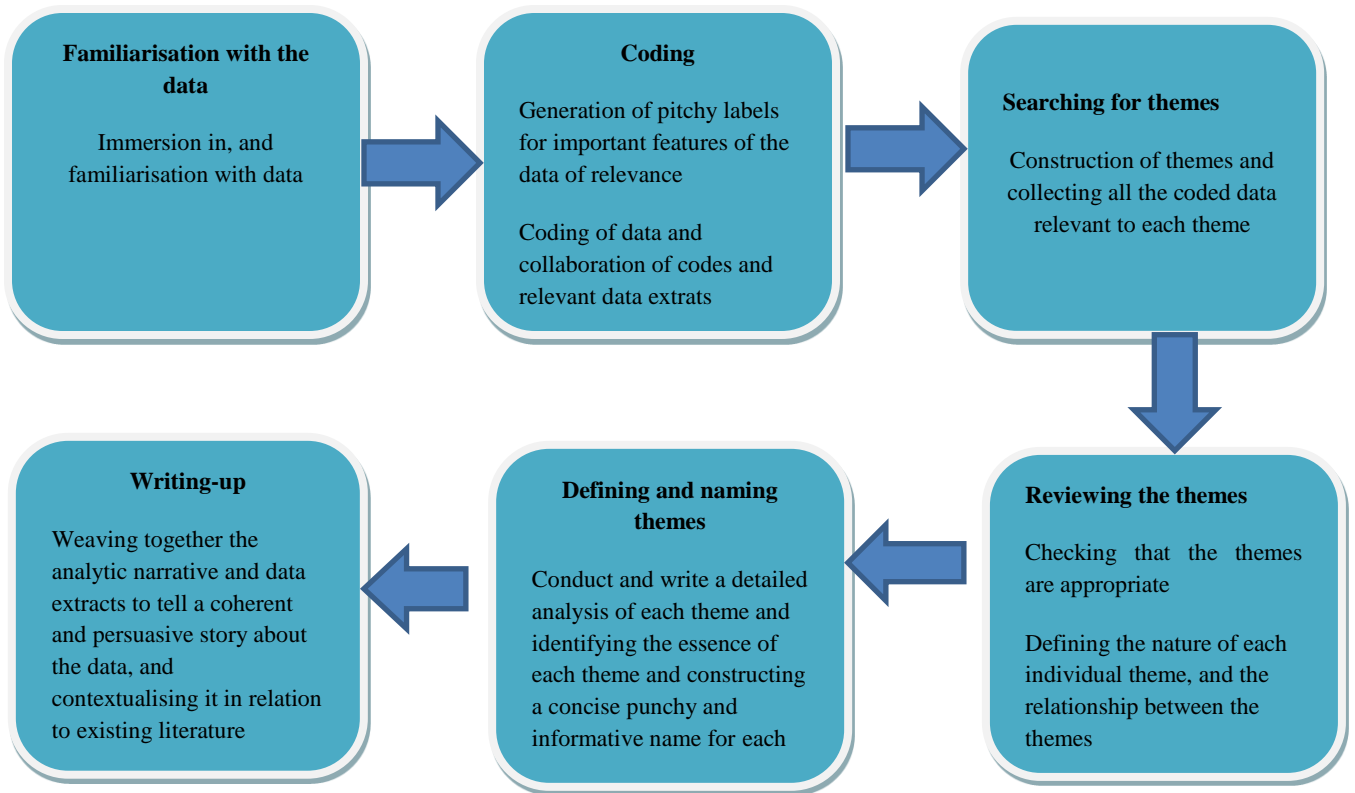
The second phase is coding, which entails creating short labels for important features of the data which are of relevance to the research questions guiding the analysis (Braun, & Clarke, 2013). In light of this, the researcher re-read the data in order to identify the emerging concepts. Thereafter, the researcher coded every data item and ended this phase by merging all their codes and relevant data extracts. This stage was followed by searching for themes.

In the view of Vaismoradi & Snelgrove (2019), theme is the main product of data analysis that yields practical results in the field of study, and is used and understood as a topic that organises a group of repetitive ideas and enables the researcher to answer the research question (Vaismoradi & Snelgrove, 2019). The creation of themes is essential because it assisted the researcher to explain the findings fully, because themes aid in breaking the data into categories. With the creation of themes, I began with the initialisation phase where I read and re-read the transcripts to get the general understanding of data and the main issues on learners' perceptions towards fieldwork as a teaching approach. Following this, themes were created, and the researcher presented data that corresponded with the themes. Afterwards, the data was interpreted and quoted to the participants to further describe their perceptions.

Furthermore, the researcher began to define and named themes as the fifth stage of analysis. Braun and Clarke (2006) advocate that at this stage, the researcher should select well-focused themes that capture the essence of the study and research questions. Finally, the report write-up began.

Figure 3 below depicts a summary of the six phases of thematic analysis that were followed in the analysis of data.

Figure 3: Six phases of thematic analysis



3.10 Trustworthiness

In a qualitative research study, it is important to assess accuracy. In the view of Stahl (2020), trustworthiness refers to the measure of the quality of research. In addition, Connelly (2016) indicates that four ways can be used to demonstrate the trustworthiness of qualitative research: credibility, transferability, dependability and conformability.

3.10.1 Credibility

Credibility in qualitative research refers to one of the primary indicators of whether or not the original data from participants is trustworthy (Cope, 2014). In addition, Stahl & King (2020) stipulates that for data to be credible, the findings must reflect that they happened the way the researcher says they did. Therefore, to ensure credibility in this study, after transcribing the data, I returned the data transcripts to the respondents so that they could confirm that what I had written was indeed what they stated. This practice was consistent with Cope's

(2014) assertion that in order to confirm credibility in a qualitative study, information from participants should be verified in relation to the accuracy of the generated data. Nonetheless, this could be risky considering that some participants could have withdrawn some statements they had initially made during the interview (Basit, 2010). Thankfully, this was not the case.

3.10.2 Dependability

Dependability, as described by Bradshaw et al. (2017), is the degree to which a research project may produce the same findings or results when repeated in contexts that are similar and with the same participants, and using the same research methods. In a similar vein, Stahl (2020) indicates that for a study to be dependable, its methodology must allow for auditing and that given similar conditions and circumstances, another researcher would probably come up with nearly the same findings. In order to ensure dependability, I recorded the procedures and as many steps as possible so that others might follow them, as suggested by Yin (2009).

3.10.3 Transferability

The extent to which the findings of this current research study can apply or transfer beyond the setting of the project being researched is referred to as transferability (Houghton et al., 2013). Therefore, to address transferability, I provided adequate details of the research context because Wahyuni (2012) asserts that transferability is achieved by providing a detailed description of the settings studied to provide the reader with rich information to compare the applicability of the findings to other settings that they know to help them decide whether the current environment is similar to another situation with which he or she is familiar, and whether the findings can be reasonably be applied to the other setting (Gunawan, 2015).

3.10.4 Confirmability

Confirmability is the final trustworthiness criterion that a qualitative researcher must establish (Stahl, 2020). In the view of Nowell et al. (2017), this criterion refers to the degree of certainty that the findings of the research study are based on the participants' narratives and words rather than potential researcher biases. Confirmability exists to ensure that participants shape the findings rather than a qualitative researcher (Nowell et al., 2017). As a result, I employed a number of techniques to establish the confirmability of the study's findings. For example, when analysing data, I made sure that the presentation and discussion of the findings accurately represented and reflected the learners' perceptions of learning Geography through fieldwork, and

I did so in a variety of ways, including spending time reading transcriptions made from audio-tape recordings and also allowing learners to confirm their statements to ensure transparency. Table 2 below provides a summary of the four criterion in establishing trustworthiness as established by Lincoln and Cuba (1985).

Table 2: Summary of trustworthiness

Criterion in establishing Trustworthiness	Description
Credibility (in preference to internal validity)	Belief in the accuracy of findings drawn from the research plan, participants and the context.
Transferability (in preference to external validity/generalisability)	The extent to which the results can be used and adapted to different situations or settings.
Dependability (in preference to reliability)	The reliability and ability to reproduce the results consistently using the same participants or in a comparable environment.
Confirmability (in preference to objectivity)	The level of objectivity or the degree to which research outcomes are influenced by participants' input rather than being skewed by research bias, motivations, or preferences.

Source: (Lincoln and Cuba, 1985)

Furthermore, I ensured triangulation, which is described by Bans-Akutey & Tiimub (2021) as the use of two or more approaches in data generation in studying the same phenomena. In this case, the study employed questionnaires, and one-on-one semi-structured interviews as a strategy to enhance triangulation.

3.11 Ethical considerations

Ethical considerations in research are a set of principles that guide the research design and practices, and include voluntary participation, informed consent, anonymity, confidentiality, potential for harm and results communication (Fleming & Segwaard, 2018). More importantly, a fundamental ethical principle in any methodology that a researcher considers should be to ‘not

harm' (Simons, 2009). In this study, the participants were protected from any harm that includes hurting or inflicting pain, inducing stress in participants, and lowering participants' self-esteem.

Again, participation was also voluntary as advocated by Van Wijk, & Harrison (2013). Therefore, no learners were forced to participate in this study. Also, they were made aware that their participation was totally voluntary and they could withdraw at any stage of the study if they decided to. Also, the learners' rights were safeguarded by omitting their names, as well as the names of the schools when reporting the findings. False names have been used instead of their real names because it is necessary to protect their identities (Ryen, 2004). Moreover, any identifying information that might reveal the participants or the schools was eliminated in writing this report. Also, the details of the interviews have not been discussed anywhere other than for the purposes relating to this study.

Building on the idea of ethics, Fleming & Zeeqward (2018) suggest that researchers should seek ethics clearance from the institution's ethics committee before conducting their research. Therefore, before conducting the study, approval was granted by the National University of Lesotho through introduction letters. More importantly, all the raw data was maintained on a password-protected laptop that only I have access to up until the data can be disposed of.

3.10 Chapter summary

This methodology chapter has outlined the research approach and design that were suitable for this study. The chapter has discussed the sampling method, instruments that have been used to generate data for the study, as well as data analysis approach. It further explained the factors that were considered in order to ensure trustworthiness for the qualitative study. Finally, ethical considerations adopted by this case study have been included as part of the chapter.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

The purpose of this study is to explore learners' perceptions on learning Geography through fieldwork. This chapter presents and analyses the data drawn from questionnaires and interviews with learners. The analysis is organised into the following sections reflecting the research questions listed in Chapter One: learners' views on learning Geography through fieldwork approach; learners' attitudes towards learning Geography through fieldwork approach; and learners' experiences of learning Geography through fieldwork.

4.2 Learners' views on learning Geography through fieldwork approach

Fieldwork in the context of Geography teaching and learning in Lesotho is held in high regard as it occupies a central position in the LGCSE Geography syllabus. In order to explore the views of the learners on learning Geography through fieldwork approach, a set of questionnaire items were prepared, focusing on the following themes: how they learn Geography in their schools, their views on learning Geography outdoors, learners' views on whether or not fieldwork helps them understand what has been taught in class, the environmental knowledge and values that they have learned during fieldwork, the skills that they have learned from fieldwork activities, the places they have visited during their Geography lessons that motivated their career paths, as well as whether fieldwork makes learning Geography enjoyable.

4.2.1 How learners learn Geography in their schools

Learners were asked to explain how they learn Geography in their schools and they explained that they learn the subject in a variety of ways, including indirect and direct methods involving fieldwork. For instance, Learner A said:

We learn Geography through textbooks, researching on the internet, and sometimes going out of the school campus to observe or gather some information.

For Learner F, the explanation was as follows:

We are taught Geography in classes and sometimes we go for outside tour whereby we learn more on what we are taught in class

Similarly, Learner K stated that they are taught the subject in a variety of ways. Her response was as follows:

In different ways they teach us with pictures that are related to Geography and they teach us using textbooks and then they explain for us.

All the above explanations are similar in that learners explain that they are taught Geography in a variety of ways, including the use of textbooks, the internet, and going out to the field. However, two learners from the same school, Learner M and N stated that they rely heavily on their teachers and the textbooks only in their Geography lessons. For example, Learner L noted:

We learn Geography using textbooks. We are not allowed to use our phones for researches and there is no Wi-Fi in our school so it is not easy for us to learn more about Geography.

In a similar vein, Learner M stated:

In my school Geography is learned through textbooks only.

Drawing from these views, the implication is that some learners have never been exposed to fieldwork and other inquiry learning methods. Nonetheless, there is evidence from the data that fieldwork is used to some extent as per the responses of Learners A and F above.

4.2.2. Learners' responses on whether or not they learn Geography through fieldwork

When learners were asked if their teachers at times take them out of the classroom to learn Geography and to narrate the incidences when fieldwork was used, they generally admitted that indeed their teachers sometimes take them out of the classroom for learning Geography. Learner B wrote:

Yes, the teacher sometimes does.

She elaborated on her response by noting:

We went to Phuthiatsana River to see river meanders. Moreover, went to Botha-Bothe to learn more about hydro power production (Muela hydro power station), to learn how electricity is produced using water.

Learner D gave a comparable answer to Learner B and stated:

Yes, the teacher sometimes does, we were going to learn about river processes and some river features and we were taught about meanders and so on.

Similarly, Learner G noted:

We visited the weather station at the Moshoeshoe 1 International Airport to observe how different weather instruments are used.

The answers given above suggest that learners are taken for fieldwork to various places to learn Geography. However, learners like L and M, who are in the same school, and have been attending that school since Grade 9, stated that they are solely taught through textbooks. They confirmed their earlier responses by stating that they are never taught using fieldwork approach, so they have no incidences to narrate on. Learner M wrote:

No, they never take us out, we are only told about the things we learn about, and we never visit places which have those things. Our teacher says it is unsafe.

Similarly, Learner L stated that he had never been taught Geography outside of the four walls of the classroom; therefore, he had no incident to recount. In his own words, he stated:

No we are not taken out, so there is no incidence to tell about fieldwork for Geography.

One explanation for the different responses of learners from the same schools is that those who reported to have experienced fieldwork may have transferred from other schools, as all learners who had attended the school in question since Grade 8 concurred that they had never been exposed to fieldwork. In spite of these varying views, most learners acknowledged that they do go for fieldwork and recounted a number of incidents when they were taken out of the classroom for fieldwork.

4.2.3 Fieldwork as an extension of classroom learning

With regard to whether fieldwork helps learners understand what has been taught in class, all participants agreed that fieldwork does play a role in assisting them understand what has been taught in class. For example, Learner A wrote:

Yes, it does improve understanding of what is being taught in class. We all have different capacities; for example, certain learners can grasp topics effectively when they are taught in class, whilst others, such as me, understand more when they see what they have been taught about.

Similarly, Learner D mentioned that being able to observe things when conducting fieldwork is critical to helping them understand geographic topics better. She explained:

Fieldwork helps me understand what I have learned in class because it brings what I have learned in class to reality. For example, we went on a field trip to investigate the nature and importance of craft industries, as well as the reasons for their development in Lesotho, and I gained a better understanding of the topic.

Furthermore, both Learners I and H also explained that seeing things they have been taught about in class helps them understand them better. For instance, Learner H wrote:

We understand the things we have been taught better because we can see them with our own eyes.

Learner I's response was similar to that of H:

Fieldwork does help me understand because sometimes in class I don't understand or have a clear picture of what the teacher is saying, but on fieldwork I am able to comprehend and see what I was taught.

However, another learner, Learner M, who had not participated in fieldwork, was unsure whether fieldwork would enhance his understanding of concepts. As a result, he provided a hesitant response and claimed that he could understand geographic concepts just as well without actually going to the field. So he thought fieldwork would have a very little impact or none in helping him understand better. He wrote:

I have not participated in any fieldwork, but reading the books and watching videos is incredibly helpful because it assists us to understand what our teacher is saying. Therefore, I do not believe fieldwork would be all that helpful.

Overall, it can be inferred from learners' responses, with the exception of Learner M, that fieldwork helps learners understand what they have learned in class.

4.2.4 Knowledge acquisition

Apart from being viewed as an extension of classroom learning, fieldwork exposes learners to new knowledge, and the themes that emerged are general knowledge and geographic knowledge and value.

4.2.4.1 General knowledge

Learners were asked to explain what they have learned from fieldwork, and their responses suggest that fieldwork helps in learning complex geographical reality and developing new subject knowledge. Learner K's response was as follows:

I learned while visiting the Muela hydro power station that the Muela hydro power plant is Lesotho's primary source of electricity. Also, that there is shortage of electricity in the country so much that it requires energy imports from neighbouring countries to meet its demand.

Furthermore, Learner G noted that they have learned a lot about the water sector in Lesotho through fieldwork. She wrote:

I learned that water is one of Lesotho's most valuable natural resources, and a sector that contributes a lot to the country's economy as the country sells water to its neighbour South Africa. Therefore, we have to ensure the continued sustainable development of Lesotho's water resources through a planned long-term approach to water resources.

Learner K wrote that she found out through fieldwork that Lesotho's economy is built on subsistence farming and small-scale industries.

4.2.4.2 Environmental knowledge and values

Besides gaining new general knowledge, they have also acquired valuable knowledge about the environment through fieldwork. Learner A noted:

I learned about the vulnerability of the environment if it is not well taken care of, and subjected to deforestation, desertification, wild land fires, as well as land, water and air pollution.

Similarly, Learner B responded and revealed that she has discovered that the environment is constantly changing. She wrote:

I have learned that the environment is always changing as a result of both natural and human processes. As a result, we must become increasingly aware of the problems that surround it.

Learner K's response was as follows:

I have discovered that different environments support different types of organisms based on the resources available.

Inferring from the answers given above, learners have learned valuable information about the environment through fieldwork. However, Learners M and N, who have not been to any fieldwork, asserted that they have not learned anything about the environment through fieldwork. Learner M noted:

I have never participated in any fieldwork; therefore, I cannot say that I have learned anything about the environment through it.

According to the replies above, there is a lot that learners have learned and acquired from fieldwork, whether it is learning about the environment, or their country. Furthermore, after exploring what learners learned about the environment, it was important to explore the individual and shared community or societal beliefs about how it should be viewed and treated by humans. Learner E responded:

I have learned that rivers should not be dumped with various wastes such as household waste, and that it is very important to check that the wastes are treated properly before

discharging into the rivers. Oil spills from the heavy industries should not be allowed to get discharged into the rivers.

Learner G noted:

I learned that various dead bodies and animal carcasses should not be thrown into the rivers because it makes the river water very dirty.

In addition, learners highlighted that they learned how precious the environment is and how fragile it can be when not properly taken care of. Learner A noted:

I have learned that deforestation yields bad results such as destroying the flora and fauna, and leads to an increase in carbon dioxide. Therefore, we should plant more trees.

Moreover, learners indicated that during a field trip to find the role of stakeholders in sustainable use of water, they learned that water is a basic necessity which they should conserve. Learner O noted:

Consuming less water keeps more in our environments

Correspondingly Learner D noted:

I learned that the most practical solution to conserving water is reusing and recycling water.

With the exception of Learner M, who stated that he had not been taken on any fieldwork and thus gained no environmental values, it can be inferred from the learners' responses above that they have gained environmental knowledge that has altered their way of thinking and feeling about the environment, and has inspired them to engage in environmental conservation activities.

4.2.5 Fieldwork and development of skills

Learners were asked to mention and elaborate on the skills they have acquired from fieldwork, and they mentioned a number of skills. From analysis of their responses, both geographical and soft skills emerged.

4.2.5.1 Geographical skills

The questionnaire data from learners provided evidence of how a geographical fieldwork gives learners the opportunity to develop a range of subject-specific skills such as identification skills, observation skills, research skills and enquiry skills.

Learner C, for example, noted:

Identification skills because I have to learn to identify a lot of things like stages of a river and their characteristics.

Moreover, Learner I stated:

I acquired observation skills because I was able to notice, analyse, and explain certain things. For example, when we visited the weather station, we were given directions to observe how various weather instruments are used. Also, critical thinking skills as we must think clearly and make reasoned judgments about what we observe.

In a similar vein, Learner O reported that she acquires research skills through fieldwork. She explained:

I learn how to conduct my own research. Following a field trip to investigate the nature and importance of craft industries, and reasons for their development in Lesotho, we were assigned to do a mini-research to find reasons why many Basotho fail to start their own industries. Therefore, I acquire research skills through fieldwork.

4.2.5.2 Soft skills

In addition to geographical skills, the general view among the respondents was that fieldwork also encourages the development of soft skills such as self-reliance skills, communication and interpersonal skills. For instance, Learner E's response to the skills that she acquires during fieldwork was as follows:

Self-reliance skills; I learned personal responsibility for my own learning because there are practical activities to carry out as an individual. Apart from that, communication skills because at times we are assigned tasks as a group, so I had to learn to work with my classmates so that we could listen to each other's ideas as well as be able to clarify

and justify my own ideas whilst learning to acknowledge and respect the ideas of other learners.

Another interesting skill acquired through fieldwork is self-independence skill; learners became emotionally engaged as a result of geographical fieldwork. The learners' responses provide evidence that they become emotionally engaged during the fieldwork learning activities. For instance, Learner B wrote:

I learned that some people do not have access to clean water and are not as privileged as we are.

Correspondingly, Learner F noted:

What I like about this fieldwork is that it was an eye opener, meaning that if one wants to be successful in a certain career, they need education.

Learner D wrote:

Learning Geography through fieldwork has taught me to help other people in the community who are very needy, because what you have in life is more than enough compared to other needy people. I also learned to appreciate what I have in life because it is more than enough.

All these responses bear evidence that fieldwork helps learners develop a variety of geographic skills, such as identification, observation, critical thinking, and research as well as soft skills such as self-reliance and communication skills. Moreover, through self-independence skills, they are able to understand themselves more, as well as develop more empathy and understanding for others. Also, they are able to understand how their actions affect both themselves and other people.

4.2.6 Career options

Subsequent to being informed about the skills that learners acquire during fieldwork, they were asked to list the places they visited during Geography lessons that motivated their career paths. Muela Hydro Power Station was the place mentioned most frequently as a number of learners claimed that visiting the hydro power station had immensely motivated their career paths.

Learner D, among them, stated that the hydro power motivated her dream of being in power processing. She wrote:

I took a field trip to Muela hydro power station. After seeing a hydropower engineer performing his job, I have an interest to become one.

In line with Learner D' opinion, Learner E responded thus:

A field trip to Muela Dam inspired my career choice and fueled my goal to work in the LHWP in the next five years.

Learner H also noted that her visit to Muela influenced her career path. She revealed:

I did not know what career I wanted until I visited Muela, and now I want to be an assistant manager of a hydro power station.

According to the responses above, it is apparent that a field trip to the Muela Hydro Power Station inspired learners to pursue a variety of professional options, which include hydro-power engineering and hydro-power assistant manager. Furthermore, some learners reported that visiting a weather station at Moshoeshoe 1 had greatly influenced their career options.

Learner B provided the following response:

We went to a weather station at Moshoeshoe 1 to learn how different weather instruments are used, and I was pleased to see a meteorologist; a person who reports and forecasts the weather, which inspired me to pursue a career as one.

In accordance with Learner B, Learner O also noted:

When I saw a meteorologist at the weather station, it inspired my desire of becoming a meteorologist and captured my heart.

Additionally, Learners I and J maintained that their profession choices were influenced by a trip to the agriculture sector to investigate the agricultural systems in Lesotho. After visiting Bophelong Farm, Learner I was pleased and had grown interest in a career in agriculture. He noted:

I initially found the idea of a career in agriculture hilarious and thought it is all mud and grass. However, now that I understand the importance of agriculture in my country's economy. I want to become an agronomist and work with farmers to ensure that the crops they plant are healthy and provide as much yield as possible.

Learner J's response was as follows:

My desire to become a well-known expert who will come up with solutions for declining soil fertility in the same way that Professor Machobane did with The Machobane Farming System (MFS)—Mantsa Tlala, or "expeller of hunger" in Sesotho was sparked by a field trip to Mehloli ea Lintle farm in Maputsoe to investigate agricultural systems in Lesotho. Consequently, I wish to pursue a career in soil science.

In light of these responses, it appears that a field trip to the agriculture sector to investigate the agricultural systems in Lesotho influenced the career choices of the learners. Furthermore, Learners A and D stated that they had a field trip to the industries, which influenced their career paths. Learner A responded to this by noting:

We went on a field trip to learn about the nature and importance of craft industries, as well as the reasons for their development in Lesotho, and I learned that craft industries are important for attracting tourists. More importantly, I discovered my passion for the tourism industry after seeing a large number of travelers there. As a result, I would like to work as a tour guide.

Learner D visited Thetsane Industrial Estate, as opposed to Learner A, who visited craft industries and her response is as follows:

We visited Thetsane industrial area to investigate the problems caused by development and growth of industries in Lesotho, and realised that the industrial area could have been located at the out skirts of Maseru because of the air and water pollution it causes. For this reason, it motivated and rekindled my love for studying urban and regional planning so that I can be able to help plan and develop long- and short-term plans to ensure the best use of land for a specific space.

The indication from the above responses is that learners are exposed to various career options they may have for their future through field trips to workplaces, which raise awareness about the various career options available by providing them with numerous opportunities to interact with experts and professionals. This ultimately influenced learners' career options and increased their interest in and attitudes toward certain professions.

4.2.7 Fieldwork makes learning Geography enjoyable

The learners further pointed out that fieldwork approach makes learning Geography enjoyable. The common view among the learners was that fieldwork learning is different from classroom learning, which most of them do not enjoy. In order to underline her point more clearly, Learner G asserted that studying Geography through fieldwork is a breath of fresh air. Her view is captured in the following excerpt:

Fieldwork makes learning Geography enjoyable because learning inside the classroom tends to be boring so going for fieldwork is a breath of fresh air.

Additionally, Learner F noted:

Definitely! Fieldwork makes learning Geography enjoyable because learning outside is refreshing and cool.

Furthermore, learners indicated that what makes learning Geography through fieldwork enjoyable is that they are given the opportunity to actively participate in the teaching and learning events because the activities are primarily learner-centred in the field as opposed to the classroom. Learner I supported his point of view this way:

Yes! Learning Geography through fieldwork is enjoyable because we are mostly in charge of carrying out the activities ourselves.

Learner C's response is similar to Learner I's in that it emphasises that they do not simply sit around listening to the teacher but employ a variety of senses. He stated:

It is enjoyable because we use many senses such as sight, touch and smell.

Drawing from these responses jointly, it is clear that learners prefer a teaching and learning context which does not only engage them mentally, but also allows them to become physically

involved. Thus, learners prefer a method that reduces the passive listening role in the learning situation. Along with the importance of direct observation, Learner B said that learning Geography through fieldwork becomes enjoyable as they are able to see some things happening. She wrote:

It makes learning Geography enjoyable because we witness some of the things as they occur, such as when we went out to observe clouds, and suddenly noticed white puffy clouds accumulating.

Furthermore, learning Geography through fieldwork excites learners because they acquire information that could be related to real life situations. Learner E wrote:

Fieldwork makes learning Geography enjoyable because the topics taught in Geography are based on real life and things that we can see, so fieldwork makes such topics to be interesting and clear.

4.3. Learners' attitudes on learning Geography through fieldwork

This section presents the findings from the questionnaire concerning learners' attitudes on learning Geography through fieldwork approach. It displays the answers to the questions that sought to explore how learners see fieldwork, what they have learned from fieldwork and what they have learned about the environment from fieldwork.

4.3.1 Learners' opinions on liking or disliking fieldwork

When learners were asked whether they liked or disliked fieldwork and why, all the 15 who completed the questionnaire said they like fieldwork because it connects the theory to practical. For instance, Learner D stated:

I like fieldwork because it allows me to study something that I can observe for myself without having to rely on my teacher.

For further clarification, she noted that she understands better when she observes what the teacher is talking about, which in turn helps her while writing the exam because she is able to make her own examples understanding what she is talking about.

Along the same lines, Learner I said:

I do like fieldwork because it allows us to explore and put into practice the theories we learn in the classroom. For example, we were able to identify the stages of a river and their characteristics when we went to Phuthiatsana River.

Moreover, from the response of Learner J, it is implied that fieldwork helps to achieve more objectives. Therefore, it helps learners for further understanding. In fact, in his exact words, Learner J said:

I do like fieldwork because it helps us discover additional features, some of which belong to other topics.

These views suggest that learners like fieldwork because it bridges the gap between theory and practice and deepens their understanding of topics. Furthermore, Learner K also mentioned that he likes fieldwork because it is both educational and fun. He stated:

I like fieldwork because it is not only fun, but also educational, and our minds tend to remember things we saw better than things we only read about.

Along with the responses of learners who have participated in fieldwork, the responses of those who have not participated in any fieldwork, as they claimed, also seem to indicate that they do like the approach. Learner M explained: *“I have not been to any fieldwork, but I would have liked it.”*

Similarly, the response of Learner N discloses that he also likes the approach. He stated:

I haven't been to fieldwork but obviously I would like it because I think it is a fun activity and not going to be another boring school day but rather something new which would raise my interest in the things that I am going to learn.

Overall, the implication is that learners do like fieldwork approach because it bridges the gap between the theory and practical and helps them understand better. Also, they consider the approach to be fun and they learn more concepts.

4.3.2 How learners feel when they are learning Geography outside the classroom

In connection to the preceding questions that attempted to explore whether they like or dislike the approach, it is also important to explore how they feel when they are learning Geography outdoors. When learners were asked how they feel when they are learning Geography outside the classroom, they asserted that they feel excited. For example, Learner E put her answer as follows:

I become extremely happy because I make sense of what I am being taught and able to see things when they occur, like clouds.

In the same way, Learner H also expressed that learning outside the classroom becomes exciting for him. He said:

Learning outside the classroom is the best feeling ever because I get to see some of the things which I have been taught and this makes me believe that I am actually being taught what is there.

The above responses correspond with the response of Learner J who holds the view that learning in the classroom all the time is boring. The learner said:

I feel happy when I am learning in a different environment because sometimes being in a classroom is tiring.

Apart from being excited, learners reported feeling comfortable when learning outside of the four walls of the classroom. Learner F confidently said:

I feel comfortable and I understand better than in class because most of the time I am able to see what my teacher is teaching about. For example, if the teacher is teaching about river processes I am able to see the river.

Both Learners C and I stated that they feel more free and comfortable outside of the classroom. Learner I, in particular, stated:

I feel excited because when we are out, our teacher doesn't punish us or make us uncomfortable.

Correspondingly, with the positive responses of learners who have the experience of learning in the field, the response of Learner N who has never been taken to fieldwork showed that he would feel comfortable and relaxed during fieldwork. He said:

I haven't been taught outside the classroom but I think it is exciting and refreshing.

4.3.3 Learners' beliefs about fieldwork

Learners were asked how they perceive fieldwork whether they believe it as important or a waste of time and they affirmed that fieldwork is important not a waste. In their responses, Learners K and I emphasised that it is important due to the practical components it offers. Learner K noted:

It is important not a waste of time because as I previously noted, it provides practical knowledge, so we gain practice and skills from it.

In the same way, Learner I noted:

Fieldwork is important because we get to engage in practical, which allows us to understand Geography concepts even better than when we are only told in the classrooms.

Furthermore, Learners I and F acknowledged that they value fieldwork approach because it is more comfortable and interesting. Learner F responded as follows:

It is important because many of us are feel more comfortable outside the class and we tend to understand more than in class.

Learner I noted:

It is necessary because staying in class all day is tiresome. I wish learners could go to the field every two days in a week.

Overall, learners' attitudes regarding fieldwork appear to be positive; their attitudes suggest that they believe time spent in the field is not wasted time. Nonetheless, Learner M, who has not participated in any fieldwork, noted that even though he has not participated in any fieldwork, he believes it would be a waste of time. He noted:

I have not been taken to any fieldwork, but I believe it would be a waste of time and money to go anywhere, as well as a risk because of the many accidents out there.

Regardless, Learner N, who has also not participated in any fieldwork, responded positively:

Unfortunately, I have not participated in any fieldwork, but I think it is important because one would actually feel like they are part of the learning, and do not only depend on the teacher.

4.4 Learners experiences of fieldwork

Learners were asked questions which explored their personal and lived experiences when learning Geography through fieldwork approach; whether it helps them learn with other classmates, the activities that they did, and those that were done by the teacher, as well as the most memorable activities.

4.4.1. Positive relationships

When learners were asked if fieldwork helps them work with their classmates, they affirmed that fieldwork helps to break down barriers between them and their classmates, as well as between them and their teachers. Learner E wrote:

It does help me to work with other classmates because in most cases we are assigned into groups while in the field. For instance, we were assigned into groups of 10 and instructed to work together when we took a field trip to Thaba-Bosiu as one of the tourist areas to study its growth and development, showing the issues of sustainability it faces and evaluate the impacts of tourism on its environment, society and economy. So we worked together as a group to do all the work as well as writing a report thereafter.

Similarly, Learner B wrote:

Fieldwork helps me work with other class mates because it requires oneness and other things such as observing information needs people to work together to observe some specific information. For example, during our visit to Phuthiatsana River to identify stages of a river and their characteristics, we were assigned in groups to observe and discuss factors affecting erosional, transportation and depositional processes of a river.

In agreement with both Learners E and B, Learner G wrote:

Yes, fieldwork does help me to work with other fellow learners because most of the time we get to discuss what we saw in the field afterwards and share even the smallest details that one might have missed so we get to aid one another to understand even better.

Moreover, learners said that field trips helped them to build friendship with their classmates, and increase their circle of friends, as well as establishing a comfortable environment that encourages learning from each other. Learner K noted:

There are a few learners in my class whom I do not regularly talk with, but I connected with them on field trips because we were in the same group. As a result, they became my friends and we had a lot of fun.

Despite the fact that Learners M and N have not participated in any fieldwork, their comments in this case demonstrate that they, too, believe that fieldwork fosters unity and cooperation. Learner M responded:

I have not participated in any fieldwork, but I believe fieldwork would promote unity and cooperation because some of the activities would need us to cooperate and work together to reach a common goal as learners.

Learner N noted:

I'm not sure, but I believe it does.

Reflecting on these responses, it seems fieldwork promotes unity and cooperation among learners as they work as a team to frame questions and present findings. Also, they have to share their opinions in the team to come up with a successful result which helps them to unite and cooperate with each other. More importantly, fieldwork gives them the opportunity to realise the benefits of working as a team in times to come.

Apart from fostering unity and cooperation among learners, the approach fosters positive student-teacher relationships as learners asserted that unlike in the classroom where they are sometimes forced to participate, they are free from the pressure of being asked to present or answer a question in the field. Learner O noted:

In the classroom I am scared to ask questions, but in the field I am able to ask questions.

In a same manner, Learner I responded:

In the classroom, the teacher can easily beat us with a stick, but on fieldwork, the likelihood of a teacher beating us is very low.

In light of this answer, it appears that learners feel more connected to their teachers and get to know them better in the field, and are more likely to ask questions. Additionally, learners revealed that the interaction with the people living in their community not only answered their questions but also developed and strengthened positive relations and a sense of belonging.

We were able to form a relationship with the community through the fieldwork. (Learner B)

Overall, fieldwork promotes cooperation and unity among learners, among learners and their teachers, as well as among learners and the community.

4.4.2 Learning engagement

This subsection presents learners' responses on their experiences on learning Geography through fieldwork. It focuses on what they did and what the teacher did during fieldwork. It was essential to explore whether the majority of the activities are carried out by learners or teachers. The responses from the learners revealed that they perform the majority of the tasks. For instance, Learner A responded:

During our field trip to Phuthiatsana River, when we arrived, the teacher instructed us to identify the stage that we believed the river to be in, and we identified that it is at the lower course of the river where deposition occurs. After that, we divided into groups of five to carefully observe and analyse the causes of deposition at the location that we said it occurred so we observed the volume of the river and saw that it was greatest, the speed flowed the fastest also. We recognised that the nature of the load was fine sediments and muds. The teacher moved around our groups, facilitating our discussions.

Similarly, Learner I from school 2 provided the following response in regard to the activities performed by learners and the teacher during a field trip to the river:

When we arrived at the river, the teacher reminded us about the river landforms found in the higher, middle and lower stages. Following that, we were divided into groups of four and instructed to identify river landforms that we could see. Following that, each group had to present to the rest of the class the landforms they had identified, such as a broader valley, meanders, and oxbow lakes, while the teacher directed the presentations.

According to the replies above, the vast majority of the activities were carried out by learners during a field trip to the river. Furthermore, Learners B and O provided an account of activities, they as learners performed at a weather station. Learner B noted:

When we went to a weather station at Moshoeshoe I to learn how different weather instruments are used, we observed carefully, listened to the guide, asked questions and took notes.

Learner O provided the following response:

When the tour guide finished teaching us at the Moshoeshoe I weather station, our teacher made us mention the instruments that are kept inside the Stevenson screen and those that are kept outside the Stevenson screen.

In the same way, Learners G noted that they were given the opportunity to be directly involved and take the readings. She noted:

We were made to use a thermometer to take the temperature readings ourselves.

Besides that, Learner D noted the activities carried out by learners when they visited Thaba-Bosiu cultural village.

We were tour guided and informed about the history of Thaba-Bosiu and the traditional lifestyle of the Basotho people during our visit to Thaba-Bosiu cultural village as a tourist attraction place, and our role was to listen attentively and jot down notes. After that, we were ordered to investigate the effects of tourism on the destination's society, so we had to ask and talk with a few community members we encountered.

Building on the same idea of visiting tourist attraction places and the activities learners carried out, Learner responded F:

We visited Kruger National Park, the largest and oldest national park in South Africa as a tourist attraction place. When we got there, we were guided by a tour guide who was awesome and very knowledgeable of all animals, and he made sure we had a great time. So we saw elephants, zebras and giraffes. Afterwards, the teacher and we discussed advantages and disadvantages of the tourist industry on areas that receive tourists.

Even though the majority of activities are performed by learners during fieldwork, it is revealed from their responses that at times they are subjected to being passive during fieldwork. For instance, it is hinted from Learners H and E's responses who visited the Muela Hydro Power Station that they performed no activities as learners. Learner H wrote:

We went to the Muela hydropower station and were guided through the six processes of power production as we wrote notes.

Learner E noted:

We did not do anything at the Muela power station but listened and took notes.

Besides that, Learner A's response showed that even though they did no activities during their visit to the Morija Iponeleng Crafts Company, they were allowed to participate to a certain extent which interested them. She wrote:

We were listening, took notes, and asked many questions.

The indication from the above answer is that when learners are allowed to ask questions, they become totally focused on the task and pay full attention to explanations from resource people. Learner D gave a comparable answer to Learner A which demonstrated that they were happy to be allowed participation to a certain extent when they visited Thetsane industrial area. She noted:

We listened to the resource people, and I got the opportunity to share my views and took part in asking questions to the resource people at the site.

Overall, it appears from all the replies above that Learners sometimes get the opportunity to engage in a variety of activities during fieldwork, which encourages them to be active, fully engaged and attentive during fieldwork. Also, sometimes they are permitted to participate in fieldwork to a certain extent, and on other times they are not allowed participation during fieldwork.

4.4.3 Learners' most memorable activities during fieldwork experience

After learning about the learners' experiences with fieldwork with regard to building unity and collaboration, as well as the activities they and their teachers performed in the field, they were asked to describe the most memorable activity they participated in during fieldwork. Regarding this, Learner H noted that the most memorable activity for her was listening to the professionals at the Muela hydro power plant. She wrote:

The most memorable experience was listening to the experts at the Muela hydro power station.

Similarly, Learner A who visited a craft industry, noted:

I got the opportunity to speak with artisans and see their works in pottery, weaving, and handmade jewelry.

For Learners B and I, the activities that they remember the most had hands-on components. For instance, Learner B' most memorable activity was taking a thermometer reading at a weather station. She wrote:

Taking the reading at a weather station.

Learner I noted:

The most memorable activity is the one we did as a group in which we closely observed and analysed the reasons why deposition occurs at a specific location in a river.

According to the answers given above, communicating with experts and doing hands-on tasks are the activities that learners remember the most. Furthermore, responses from learners who have visited tourist attraction places indicate that viewing and walking are the most memorable

activities for them. For example, Learner K wrote that her favourite activity at Kruger National Park was watching the wild animals. She noted:

The most memorable activity I had when visiting Kruger National Park was watching different wild animals, which peaked my interest and made me want to visit more parks.

Comparable to Learner K, Learner B gave the following response:

A walk among the wild animals in Kruger National Park was an incredible experience and activity, and the team looked after us so well.

Similarly, Learner C, who has visited Thaba-Bosiu cultural village, noted that walking around the traditional village with a guide was the most memorable activity.

4.5 Interview data

A questionnaire was used as a primary source of data in order to answer the research questions. To supplement and triangulate the data, interviews were conducted. The purpose was to probe further on the views, attitudes and the challenges learners encounter. Moreover, the purpose of the interviews was to obtain more clarification on responses in cases where respondents did not provide clear answers on the questionnaire.

4.6 Learners' views on learning Geography through fieldwork

Following consideration of the questionnaire data, I further explored the views of learners through interviews and asked a question that sought information on their views regarding safety while learning Geography through fieldwork. Furthermore, this section presents the findings of the interviews with learners regarding their views that were not stipulated on the questionnaires; whether they prefer learning Geography through fieldwork approach rather than listening to a teacher in the classroom, whether the approach gives them a chance to develop problem-solving skills, whether or not they would recommend learning Geography through fieldwork, if they encounter the challenge of insufficient time while learning Geography through it, and how well they are monitored during fieldwork.

4.6.1 Learners' views on safety while undertaking fieldwork activities

The questionnaire data hinted that some learners have not been taken for fieldwork because their teacher regards safety as a concern while teaching learners through fieldwork approach since the approach may be coupled with accidents either along the way or at the place of learning. For this reason, it was important to explore the perceptions of learners who had been taught through fieldwork about their safety when learning Geography through fieldwork. To answer this question, I interviewed learners and enquired whether they feel safe or unsafe while learning Geography through fieldwork and they indicated that they always feel safe. For instance, Learner A said:

I have never felt unsafe in the field because my teacher is always around and looking after us to ensure our safety, even the buses chosen are the ones with a good reputation.

She went on to elaborate on why she always feels safe, saying:

Apart from that, before we start any fieldwork, our teacher gives us ground rules to go by, such as not to wander off, and not to touch anything we are not supposed to, so I believe that is why I always feel safe.

Learner B also shared the same sentiment: *“Well, I never felt like my life is in danger when I am learning Geography through fieldwork.”* Similarly, when Learner M, who has never been taken out to learn Geography through fieldwork, was asked if he would feel safe he said that he would feel safe as long as they are taken care of. He said: *“I think I would feel safe, because I trust that my teacher would ensure that I am safe.”*

This suggests that learners always feel safe when learning Geography through fieldwork approach. This is probably because their teachers generally observe safety precautions when conducting fieldwork.

4.6.2 Problem-solving abilities

Geography as a subject intends for learners to develop problem-solving abilities, and fieldwork as an approach which encourages learners to think critically and solve problems in a real world context, is particularly suited to assist the subject in accomplishing this goal (Simasiku, 2020). As a result, it was important to explore the opinions of learners on whether fieldwork gives them the opportunity to develop problem-solving skills, especially because learners did not mention problem-solving abilities on a questionnaire. The common response from learners to this question is that fieldwork gives them the opportunity to develop problem-solving skills. When Learner B responded, she stated:

Yes, I agree that sometimes we learn how to solve problems such as the problem of water misuse.

She continued to say her answer with enthusiasm, stating:

I now put numerous water-saving measures into practice at home, and I have also taught my family how to do the same.

In accordance with Learner B, Learner D stated that fieldwork has provided him with problem-solving skills. He stated:

Yes, I am now capable of solving and preventing pollution problems by advising others on what to do and what not to do. Even the issues that arise in my immediate surroundings are now manageable for me.

Reflecting from the learners' statements jointly, it is clear that fieldwork gives learners a chance to develop problem-solving skills.

4.6.3 Learners' reasons for preference of fieldwork

As a concluding question, the researcher asked the participants, all of whom were Grade 11 learners, if they would suggest the use of fieldwork approach to teach Geography. Learner O asserted: "*Yes, I recommend employing fieldwork approach.*" I probed and asked her why she recommends the approach to be used, and she responded:

Because some topics like the river, weathering are understood more when are learned outside. It could also help a teacher if they are having trouble transferring the knowledge.

Additionally, Learner K indicated that most of the topics taught in Geography are unfamiliar to them, and the fieldwork approach helps to simplify such topics. She clarified:

Yes, madam I do recommend fieldwork approach because it offers the experience of most of the things that are unfamiliar to us.

Despite the fact that some learners had not been taught through the fieldwork approach, they recommend it:

I have never been taken on fieldwork, but I do recommend it to be used because I believe that if I had been taken to see and experience these things that I only read about, I would have a greater understanding of them. (Learner M)

Another learner participant added:

Even though I have never been taught Geography through fieldwork I think it is the best way to teach because we will understand some of the topics better. (Learner N)

4.7 Perceived challenges associated with fieldwork

The data revealed that some learners encountered certain challenges while learning Geography through fieldwork. The following three sub-themes emerged from this theme: time constraint, lack of monitoring and ineffective group work.

4.7.1 Time constraint

Literature shows that in spite of the numerous benefits of fieldwork as a teaching approach, it faces the challenge of insufficient time (Kwirirai, 2014). The responses of the learners revealed that one of the problems they face when learning Geography through fieldwork is lack of time. Both Learner K and Learner O felt that the time spent in the field was insufficient and wished they had more time. When Learner K was asked to elaborate, she stated:

Time was not sufficient while asking questions as we outnumbered the resource persons, and I was not happy as I did not get the opportunity to ask all of my questions.

Learner O voiced similar grievances about insufficient time, and said:

At Muela hydro power, we were separated into two groups, I was in the second group and I felt like we were not given enough time. Additionally, the tour guide was unable to reach everyone.

These comments suggest that learners are dissatisfied with the little time spent on fieldwork because it prevents them from properly grasping knowledge as it does not allow them to obtain thorough information from resource people.

4.7.2 Lack of monitoring

Monitoring learners' progress is crucial for a successful fieldwork. During fieldwork, the teachers should assume the role of a guide by monitoring, probing, giving feedback and supporting where and when needed (Simasiku, 2012). In contrast, the interview data suggests that learners felt that they were not adequately monitored during fieldwork. Learner J explained:

We were a large group, so not everyone could see, and the teacher could not attend to everyone, so I became reluctant to ask questions about areas he had already addressed because it would have seemed as if I was not paying attention.

This comment reflects that the learner felt the need to increase the number of teachers because one teacher cannot adequately guide every student. This suggests that fieldwork does not work out well with large classes.

Additionally, Learner H said that his classmates created noise in the tunnel while on a field trip to the Muela hydro power facility because they were not closely monitored. He stated:

Some learners were not listening during the question and answer session at Muela; instead, they were talking, snapping photos, and focusing on other things because no one was watching us.

To Learner F, the teacher and tour guides attempted to monitor and access all of them, but they were simply too many. She stated:

You know madam, our teacher and the resource people would be trying their best to reach all of us, but we are many.

Overall, the learners' statements indicate that they do not feel adequately monitored during fieldwork.

4.7.3 Ineffective group work

The questionnaire data revealed that learners have experienced challenges while working in groups. In this sub-section, the analysis presents challenges experienced by learners while working in groups when learning Geography through fieldwork approach. Despite the fact that working in groups in the field has been shown to strengthen communication and teamwork skills, most learners have negative experiences about working in groups in the field and complain of unequal contribution. Learner K said:

You know madam, the group which I was a part of at Phuthiatsana just took the activities which we were supposed to do lightly, so were not equally committed.

In line with Learner K' answer, Learner O gave the following comment: “*While some learners are focused, others are playing.*” On this matter, Learner E said she does not like working in groups in the field because she is not allowed to select her own group mates, which results in working with members who are not as dedicated as she is. She said:

I hate working in groups in the field because I am never allowed to select my group mates, which means that I and perhaps a few other motivated students would have no choice but to do all the work or let those who do not want to do the work drag us down.

Based on the above responses, working in groups while learning Geography through fieldwork disappoints learners because some members do not pay attention to the activities being done and are not equally committed to the tasks at hand.

4.8 Learners' attitudes on learning Geography through fieldwork

This section provides the findings from the interviews with learners concerning their attitude on learning Geography through fieldwork approach. It presents the answers to the question that probed whether learners prefer learning Geography through fieldwork approach rather than listening to a teacher in the classroom.

4.8.1 Learners prefer learning Geography through fieldwork approach rather than listening to a teacher in the classroom

The questionnaire data suggested that fieldwork is preferred by learners over traditional classroom instruction. Therefore, it was crucial to ask more questions and establish for certain if they preferred learning Geography through fieldwork over learning in the class. To address this question in this sub-section, I interviewed the learners and followed up for more information. The majority of learners agreed confidently that they prefer learning Geography through fieldwork, and gave affirmative responses like *"going out in the field"* (Learner B), *"learning out"* (Learner C) and *"definitely learning Geography through fieldwork"* (Learner J).

In a similar vein, two learners, M and N, who had not participated in fieldwork, stated that they also favour learning Geography through fieldwork approach over classroom instruction. As Learner M responded, she nodded her head in agreement and said: *"I would prefer learning Geography through fieldwork."* The researcher probed by asking *"Does that mean you wish you had been taken to fieldwork?"* He continued by saying:

Yes, I wish I had been taught some of the topics through fieldwork.

Learning from their responses, learners prefer learning Geography through fieldwork over listening to a teacher in the classroom.

4.9. Learners' involvements with fieldwork

In line with the questionnaire findings, this section delves deeper into learners' personal, lived experiences of learning Geography through fieldwork approach. The sub-themes that emerged from this theme are geographic vocabulary, experiential learning, self-confidence, gaining additional information, and the role of learners in decision-making.

4.9.1 Geographic vocabulary

Even though the questionnaire data revealed that learners acquire knowledge through fieldwork, it is worth noting that it did not highlight the geographic vocabulary acquired through fieldwork, hence the interviews clarified it. In accordance with the literature, one of the most important roles of the fieldwork approach is to transform words into experiences that demonstrate to learners the things that words describe (Savleski & DeCosta, 2010). As a result, it was necessary to explore if indeed fieldwork improves learners' understanding of geographical terms. In this regard, Learner B confidently said that learning Geography through fieldwork improves her understanding of geographical terms. She commented:

Umm! Let me say that I have learned and used some words without having the slightest knowledge of what they mean for a long time, but after seeing in the field what they actually mean, I understood them more.

She continued to say:

For instance, before visiting the river, I thought the word meander referred to a circle in the river. However, after seeing a river meandering, I realised what the word really meant.

Adding to that, Learner A said that after seeing geographic features in the field, she is able to describe them using her own words. Thus, she understands them better. She stated:

I understand the terms better because I can say them using my own words like water power to refer to hydroelectricity.

Based on the above responses of learners believe the fieldwork approach helps them to improve their understanding of geographical terms.

4.9.2 Experiential learning

In the questionnaire, learners indicated that fieldwork is an extension of classroom learning, and that they acquire new knowledge through fieldwork. However, they did not indicate that direct experience on topics studied in class (experiential learning) makes it easier to understand them, but mentioned it only during the interviews. As I probed further, Learner F responded as follows:

Things become clearer to me after seeing and experiencing how they are done. For example, I understood more clearly how a thermometer works after taking my own readings at a weather station.

Learner K explained why she understands better through experience by saying:

More knowledge is gained through practical experiences.

Similarly, Learner M, who had never been taught through the fieldwork approach but has instead been taught through the internet, expressed his preference for fieldwork over ICT learning stating that he believes information obtained through fieldwork is more real than learning from the internet. He stated:

We google and see blurry images but if I were taken to the field, I believe I would see real things that are more accurate than Google.

These remarks reveal that learners regard learning Geography through fieldwork as experiential learning in which they actively engage in the real world that provides hands on experiences.

Furthermore, the interactions with resource people who provided real information captivated the learners' interest and encouraged them to make further inquiry. Learner I said:

The conversation we had with the resource people allowed us to ask as much as we needed to ask, and were not like the ones we usually see on television.

In contrast, when another learner, Learner N, who also has not been to any fieldwork was asked if he thought fieldwork would have any effectiveness in helping him learn Geography concepts, he explained that he did not think it would have any effectiveness. He said:

Not necessarily.

As I tried to understand him more, I probed and asked why he thought fieldwork would not have any effectiveness in helping him learn Geography concepts, and he explained that even with the aid of the pictures only, which he is currently taught through, he is able to understand. He said:

Ahem! As long as I have pictures, I am able to understand, I do not necessary have to go for fieldwork to understand concepts more.

4.9.3 Self-confidence

The questionnaire findings suggested that learners are hesitant to ask questions among themselves and to their teachers owing to their low self-confidence while learning in the classroom, but are more confident to do so while learning Geography through fieldwork. So it was important to further probe if and why they were more confident while learning Geography through fieldwork. To answer this question in this sub-section, I interviewed learners and followed up on their opinions, and Learner H asserted:

During our class lesson, we learn through books and we do not talk much whereas when learning Geography through fieldwork, we exchange ideas and information and help each other. So, I feel more confident and talk easily.

In an attempt to find out if the confidence lingered even after fieldwork, I asked her if she only felt confident for a brief period of time while in the field. She responded by saying:

Even after fieldwork, my confidence remained.

Furthermore, Learner E said that even shy learners like herself feel more confident while learning Geography through fieldwork. She explained:

I feel extremely shy to ask my teacher questions in class, so I keep my doubts to myself, but I was able to ask questions to resource people during fieldwork.

Based on the replies above, the fieldwork approach boosts learners' self-confidence.

4.9.4 Gaining additional information

As indicated by the questionnaire results, fieldwork is viewed as an extension of classroom learning, and learners gain new knowledge. They had not, however, stipulated that they learn a lot more than they had anticipated learning. Through interviews, learners stipulated that they

gain additional information when they are learning Geography through fieldwork. Learners E and J said they were able to acquire extra information and knowledge from the field which they had not intended to cover. When Learner E was asked in what sense, she responded:

For instance, we went to Semonkong to see the water fall, and while traveling, we came across gorges and learned more about them.

Furthermore, Learner J explained that learning Geography through fieldwork has improved her knowledge of other topics. She said:

I have gained lots of knowledge from learning Geography through fieldwork, and came across different types of rocks which I have never seen.

The implication here is that learners obtain additional knowledge while learning Geography through fieldwork.

4.9.5 Role of learners in decision-making

Research has shown that giving learners choices leads to increased engagement and empowerment (Mati, 2016). However, data from the questionnaire revealed that learners are not allowed opportunities to actively make decisions and choices. For this reason, it was important to explore learners' experiences about a fieldwork experience in which they had opportunities to actively make decisions and choices. Similarly, the interview data revealed that learners are not allowed opportunities to actively make decisions and choices while learning Geography through fieldwork. Learner L gave the following response:

The teacher dictates what we do, at what time.

When I probed if she wished she was allowed freedom, she said:

Yes, because I would ask about other things which I need clarity on.

Learner F feels the time is limited while learning Geography through fieldwork, and eventually gets bored. She put it as follows:

I love being part of the action, so if I am being restricted to touch and feel and do certain things, I get bored.

Learner C however said they are allowed freedom to a limited extent. She stated:

The majority of the decisions were made by us. For example, we wanted to go inside the river at Phuthiatsana. That was our decision and we were allowed. Also we wanted to cross the river, which is only when our teacher declined and said it was dangerous. She even allowed us to take pictures.

Given these learners' views and experiences, it can be inferred that they need to be given options, and the opportunity to make decisions, which will ultimately boost their engagement and motivation

4.10 Conclusion

This chapter was intended to present and analyse the data obtained from the learners through interviews and questionnaires. The interviews were conducted to triangulate the data obtained from the questionnaires, providing clarity to some of the questionnaire responses and complementing them. More importantly, the aim was to probe further on the opinions, attitudes and the challenges learners encounter, and obtain more clarification.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

The objective of this study was to explore learners' perceptions on learning Geography through fieldwork approach. Specifically, the study set out to explore the views of Grade 11 Geography learners on learning Geography through fieldwork, their opinions on the effectiveness of fieldwork in helping them learn Geography concepts, their attitudes towards learning through fieldwork method, along with their experiences with fieldwork in three secondary schools in Maseru. Chapter Four presented and analysed the data from both questionnaires and interviews with the 15 participating learners from the three schools. This chapter discusses and interprets the data presented in Chapter Four, which arose from the four research questions, in an effort to provide answers to them. Furthermore, the findings are juxtaposed with the literature reviewed in Chapter Two. Also, this discussion of findings is guided by the research questions and organised into themes generated from them as outlined below:

- What are the learners' views on learning Geography through fieldwork?
- What are the learners' attitudes on learning Geography through fieldwork method?
- What are the learners' experiences with fieldwork?

5.2 What are the learners' views on learning Geography through fieldwork?

In trying to find out how learners learn Geography in secondary schools in Lesotho, a variety of approaches emerged. The findings of this study reveal that learners are taught Geography in a variety of ways in Lesotho secondary schools including the use of textbooks, the internet, and going out in the field. In line with these findings, (Bilal, 2002) contends that Geography teachers need to adopt and adapt different teaching strategies to address and promote variations in the learning styles of their learners. However, just as Ling (1993) found out thirty years ago that fieldwork is not a common approach in teaching Geography in Taiwan, there are two learners who stated that they rely heavily on their teachers and the textbooks only in their Geography classes. The implication is that while a few teachers solely utilise textbooks in their lessons, majority of the teachers teach Geography in a variety of ways, including fieldwork.

With regard to the effectiveness of fieldwork, the current study has revealed that the application of geographical fieldwork as a teaching approach helps learners understand what they have learned in class more because they are able to observe geographical phenomena. These findings are consistent with those of Fiomumwe (2019) who argued that knowledge gained through observation is easily appropriated and will not be quickly lost. Therefore, it can be assumed that the fieldwork approach is effective in assisting learners in understanding Geography concepts.

Furthermore, the data demonstrates that in addition to being an extension of classroom learning, fieldwork allows learners to acquire new knowledge, both general and environmental knowledge. In relation to what the learners have learned about the environment through fieldwork, different answers were given, but overall the findings show that learners learn valuable information about the environment through fieldwork. These findings reveal that by teaching learners through fieldwork, teachers adhere to the principle of environmental teaching, which emphasises that learners should be helped to make meaning of their immediate environment as advocated by Stromholt (2015). Also, considering the findings of this study, it can be deduced that fieldwork does not only expand learners' learning and experiences by providing them with hands-on experiences but it also increases their knowledge and understanding of the world in which they live (Preston, 2016).

Besides environmental knowledge, learners claimed that through fieldwork, they develop positive environmental values relating to conservation. The findings indicate that with the exception of learners who have not been taken for any fieldwork, learners have acquired environmental values that altered their way of thinking and feeling about the environment, and their participation in fieldwork activities has motivated them to participate in environmental conservation activities such as pollution control and waste management. Based on these results, it can be argued that teaching learners through fieldwork instills environmental values and increases their knowledge of and willingness to protect the environment. These findings are consistent with Ferderbar's (2013) assertion that fieldwork experiences develop positive and greater pro environmental attitudes and behavioural change.

Moreover, this study has revealed that fieldwork assists learners in developing a number of geographic skills, including identification, observation, critical thinking and research skills. Also, soft skills such as self-awareness and interpersonal skills are acquired through fieldwork. Tenha

(2019) investigated the effectiveness of fieldwork in the teaching and learning of Geography at Rurairi Secondary School in Zimbabwe and also found out that fieldwork develops numerous skills that are useful in learners' lives and exhibits gains in learners' knowledge beyond classroom learning, improving their observation, research, social and communication skills. To this end, the findings of the current study corroborate previous research in supporting the assertion that the fieldwork approach provides learners with a wide range of skills (Firomumwe, 2019).

Concerning the places that learners have visited which motivated their career path, the study revealed that they have visited various places during Geography lessons, which motivated their career paths and exposed them to various career options they may have for their future. The findings reveal that field trips to important development sites such as the Muela Hydro Power Station create awareness on career options available to the learners by providing them with numerous opportunities to interact with experts and professionals. This ultimately affects learners' career options and intensifies their interest and attitudes towards certain professions. These findings resonate with what Kulas (2017) stated in his article, "What are the benefits of fieldwork?" that children learn about different professions, ideas and opportunities when they travel outside of their own neighborhoods. Thus, the evidence suggests that learning through fieldwork can awaken the desire in a child to try new things and pursue previously unconsidered dreams. Also, fieldwork can introduce children to job opportunities and can spark new interest and passions.

Further to this, the results of the present study reveal that fieldwork approach gives learners a chance to develop problem-solving abilities, which helps them to respond to the challenges the world is facing. Such challenges as illustrated by the data include pollution, deforestation and land degradation, which are considered in Lesotho as some of the serious environmental sustainability issues (Raselimo, 2010). Thus, the findings of the current study complement what Leydon & Turner (2013) asserted in their study that fieldwork offers opportunities for learners to investigate and comprehend complex geographic problems which cannot be replicated in a classroom.

In addition to acquisition of geographical skills highlighted earlier in this section, fieldwork also makes learning Geography enjoyable. The learners in this study reported that learning through

fieldwork is different from classroom learning, which most of them do not enjoy. They further claimed that fieldwork gives them the opportunity to actively and freely participate in the teaching and learning activities. The findings of Mundilarto & Pamulasari (2017) also attest to the fact that fieldwork provides new learning experience in a relaxed atmosphere and engages learners in enjoyable outdoor activities.

While learning Geography through fieldwork is perceived as an approach that has the potential to help learners, there are practical constraints such as limited school time-table space, lack of resources, and large class sizes which may interfere with the proper functioning of fieldwork (Dema, 2019). Accordingly, the findings of this study show that learners are unsatisfied with the little time allotted for fieldwork since it interferes with their ability to fully understand what they are learning because they are unable to ask resource people for in-depth information. Besides time constraint, the findings depicted that a large class size can interfere with the proper functioning of fieldwork as it becomes difficult to give each learner the individual attention they need. For example, learners complained that the tour guide was unable to reach all of them at the hydropower station. Given these observations, it could be argued that not only do learners need adequate time when learning through fieldwork to talk to the resource people, but also more individualised attention which cannot be offered in large classes.

In addition to time constraint, weak monitoring of fieldwork learning activities by teachers emerged as an impediment. While Lynch (2015) states that monitoring learners' progress is crucial for a successful fieldwork, and that during fieldwork the teachers should assume the role of a guide by monitoring, probing, giving feedback and supporting where and when needed, the findings highlight that learners do not feel appropriately monitored during fieldwork. As literature shows, lack of proper monitoring of fieldwork activities jeopardizes the effectiveness of fieldwork itself (Dema & Chalermnirundorn, 2019).

The Namibian Geography syllabus (Ministry of Education, 2010) underscores the importance of monitoring fieldwork activities, and stipulates that teachers should encourage cooperative and collaborative learning. Similarly, the Grade 10 and 11 Geography syllabuses in Lesotho intends for learners to develop the skills to work effectively in teams to observe, collect and record geographical data (MOET, 2009). This present study has uncovered that, although group work improves cooperation and collaboration among learners, it also disappoints other learners

because not all members pay attention to the activities being done and are equally committed to the tasks at hand, especially when there is no proper monitoring. This contradicts the purpose of group work which is for learners to draw upon, connect and analyse their knowledge and experiences through self-discovery and interaction with other learners (Vavrus et al., 2011).

5.3 What are the learners' attitudes towards learning Geography through fieldwork?

The success of a teaching approach such as fieldwork depends on, among others, the attitudes of learners towards it (Tenha, 2019). In the context of this study, the findings point to a positive learners' attitude towards fieldwork, as they generally perceive it as important and not a waste of time. In this way the study corroborates the findings of Anikweze & Kaduna (1995), who investigated the attitudes of Nigerian Geography teachers and their learners, and found out that the majority of them had a positive attitude towards fieldwork in Geography. Furthermore, in the current study, it is worth mentioning that even the attitude of learners who reported they had never been taught using the fieldwork approach appears to be positive. Given this, the implication is that learners have favourable attitudes towards fieldwork approach, really enjoy the activities, and are always prepared to carry them out.

Regarding whether or not learners prefer learning Geography through fieldwork, the participants reported similar findings to Thinley (2016) that they prefer learning Geography through fieldwork rather than listening to a teacher in the classroom. They further mentioned that they do not like traditional teaching methods that involve the direct flow of information from the teacher. Moreover, the findings show that learners prefer fieldwork as it gives them the opportunity to connect the text with the real world rather than learning in the classroom where they simply read or listen to the teacher. It can therefore be concluded that learners' attitudes towards learning Geography through fieldwork are generally positive.

5.4 What are learners' experiences with fieldwork?

In relation to the experiences that learners have with learning Geography through the fieldwork approach, the findings indicate that learners have experienced promotion of unity and cooperation among them as they work as a team to frame questions and present findings. For instance, Learner K mentioned that there are a few learners in her class with whom she does not regularly talk, but she connected with them during field trips because they were in the same group. As a result, they became friends and had a lot of fun while learning Geography through

fieldwork. Also, the findings indicate that learners have experienced sharing of opinions in teams to come up with a successful result, and that helps them to unite and cooperate with each other. These experiences validate the assertion made by Tenha (2019) that fieldwork promotes collaborative learning which is enhanced when groups of learners contribute information to form a bigger picture of their enquiry, as well as the claim by Hall et al. (2002) that fieldwork helps break down barriers between learners and their peers.

Apart from encouraging unity and cooperation among the learners, this study revealed that learners had good student-teacher relationships while learning through fieldwork. They reported that it was a nice experience for them to interact with their teachers in a relaxed and non-threatening environment. Additionally, this study reveals that learners' experiences of interactions with the people living in their community not only answers their questions but also develops and strengthens positive relations and a sense of belonging. These findings corroborate those of Pyke (2015) that fieldwork provides hands-on experiences that build understanding, develop skills and enrich positive learning relationships with peers, teachers and community. Overall, the findings suggested that the experiences of socially oriented activities carried out during fieldwork with teachers, classmates and the local community developed positive relationships. Therefore, it seems reasonable to agree with Job (1999) that fieldwork has the ability to significantly contribute to learners' personal and social growth.

Fieldwork approach is one of the learner-centred approaches as explained in Chapter One. To ensure that fieldwork is learner-centred, Weimer (2013) recommends that field activities should give learners control and responsibility. Matching with Weimer's recommendation, the experiences of learners in this study reveal that they receive the opportunity to engage in a variety of activities during fieldwork, like during their field trip to Phuthiatsana River where they observed the volume of the river while the teacher only moved around their groups, facilitating their discussions. Furthermore, the findings reveal that at times, learners are only allowed to participate in fieldwork to a limited extent, like where they observed carefully, listened to the guide, asked questions and took notes at the weather station, while during other times they are not allowed to participate in fieldwork at all, but merely listen and take notes as most of the activities are teacher-centred

Furthermore, the findings show that learners' most memorable experiences are those where they were doing hands-on tasks. In fact, Learner B indicated that taking the reading at a weather station was her most memorable experience. More significantly, the findings of the study reveal that learners who are given an opportunity to engage in a variety of activities become more active and attentive during fieldwork. Therefore, this finding aligns with Fraser & Loubser's (1990) principle of active participation which emphasises that teaching and learning becomes effective only if learners are given the chance to participate actively in the teaching and learning events. These findings suggest that fieldwork that provides a wide range of activities increases learners' interest and becomes more effective.

Additionally, the findings from the questionnaire and interviews reveal that learners have experienced experiential learning through fieldwork. They indicated that from their experiences, fieldwork approach offers them direct experience on topics studied in class. They mentioned topics such as river processes, hydroelectric power production, industries and tourism, which they find easier to understand when taught using fieldwork. These findings support those of a study by Nabor et al. (2015) who described fieldwork as a type of experiential learning that gets learners into a new mode of learning away from the normal classroom, and seems to adhere to experiential learning theory of Kolb (1984) which states that learning should come from one's experience. Presumably, it is through fieldwork that learners learn by doing, which ultimately results in learning concretely, abstractly, reflectively and actively.

Moreover, the experiences of learners indicate that they gain additional information while learning through fieldwork approach as they have the opportunity to inquire, explore and learn in a real-life situation which helps them to gain extra knowledge and information. This implies that teaching Geography through fieldwork approach is effective, and learners are able to learn more and understand better.

Furthermore, the findings reveal that although Ockhuizen (2018) recommends that learners be allowed to make decisions on field activities, and that teachers be in a position to find out what each learner wants and needs to know, in the case of this study, learners were not allowed opportunities to actively make decisions and choices while learning through fieldwork. The findings reveal that learners felt constrained while learning through fieldwork, and eventually got bored. This implies that power sharing, as advocated by Weimer (2002), was minimal in the case

of this study, as most of the time the teachers determined the direction of field activities. Therefore, the presumption from this is that it is difficult for teachers to let go of complete control in the teaching and learning events and share their power with learners (Weimer, 2013). In light of these findings, it can be deduced that besides a few negative experiences, altogether, learners' individual experiences are generally seen as enjoyable.

5.5 Summary

This chapter discussed the findings from exploring learners' perceptions on learning Geography through fieldwork approach, their opinions on the effectiveness of fieldwork in helping them learn Geography concepts, their attitudes towards learning through fieldwork, along with their experiences with fieldwork in three secondary schools in Maseru. Based on the findings of this study, it can be concluded that while fieldwork is an extension of classroom learning, and equips learners with valuable skills, factors such as the limited time allocated for fieldwork and lack of monitoring affect its effectiveness.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter summarises the research findings in relation to the research questions and objectives of the study. The chapter begins by providing a summary of the key findings. Also, recommendations based on the findings will be made. The limitations of the study will be reflected upon and the chapter will conclude with suggestions for further research.

6.2. Summary of the research findings

In accordance with the findings presented in Chapters 4 and 5, learners are taught Geography in a variety of ways in Lesotho secondary schools. These include fieldwork and classroom-based methods such as the use of textbooks, exposition by the teacher and sometimes use of the internet.

Furthermore, the results of the study reveal that fieldwork interestingly and excitedly makes teaching and learning understandable to students. They expressed that it aids them to observe, discover and gain meaningful information on topics taught in the classroom. It was further revealed that that fieldwork makes learners to easily connect concepts and theories in Geography, implying that the approach plays an important role in the teaching and learning of Geography. Besides that, the findings reveal that teaching and learning through fieldwork instills environmental values among the learners and increases their knowledge of and willingness to protect the environment.

In addition, the study has revealed that fieldwork assists learners in developing a number of geographic skills, including identification, observation, critical thinking and research. Also, the approach develops soft skills such as self-confidence, self-independence and interpersonal skills. Additionally, the findings reveal that learners visit various places during Geography lessons, which motivate their career paths and expose them to various career options they may have for their future. Additionally, fieldwork fosters unity and collaboration and boosts learners' confidence as they exhibited high levels of confidence during fieldwork.

Moreover, the findings highlight that learners who have been taught by fieldwork have favourable attitudes toward the approach, really enjoy the activities, and are always prepared to carry them out, while the attitudes of learners who have no experience of fieldwork are negative. Furthermore, the findings reveal that learners prefer learning Geography through fieldwork rather than listening to a teacher in the classroom.

While learning Geography through fieldwork is perceived as an approach that has the potential to help learners, a few challenges are encountered. These include time constraints, weak monitoring and ineffective group work. More significantly, the findings revealed that learners are not allowed opportunities to actively make decisions and choices while learning through fieldwork. Therefore, they feel constrained and eventually get bored.

6.3 Recommendations

On the basis of the findings of this study, the following recommendations are made:

1. The findings suggest that Geography teachers should not use Information and Communication Technology (ICT) to replace fieldwork. ICT should be integrated as an instructional methodology and should enhance safety and easy preparation of fieldwork, hence it should not be a tool used to substitute fieldwork.
2. It is important for Geography teachers to desist from solely depending on the use of textbooks in explaining environmental and earth features whilst the earth is present.
3. To facilitate effective implementation of fieldwork that enables monitoring and accessing all learners, teachers should consider collaborative work among themselves for effective supervision of fieldwork activities.
4. Finally, the role of the teacher should only be to create a conducive environment that can enable learners to assimilate and accommodate new concepts. As a result, fieldwork should be more learner-centred; learners should be allowed to participate decision-making during fieldwork.

6.4 Limitations of the study

The purpose of this study was to explore learners' perceptions on learning Geography through fieldwork approach focusing on a limited number of secondary schools in Maseru urban. Thus, the findings generated from this small sample of schools with specific geographical locations cannot be generalised to other secondary schools located in the rural areas. Another limitation is that the researcher relied only on questionnaire and interviews as instruments of collecting data and ran out of time for observations which could have provided valuable findings as well.

6.5 Areas for further research

This study calls for the use of focus groups to explore both learners and teachers' perceptions towards fieldwork approach with the aim to elicit more information from them. Additionally, the study should make use of field observations so that the researcher is able to see and understand what participants are doing and compare it with what they say. Furthermore, the study should be carried out as an action research, which will allow the researcher to gather data over a prolonged period of time while acting as a participant-investigator.

6.6 Final remarks

This study became an eye opener with regard to fieldwork as a teaching approach. Though carrying it out was not easy, it was worth dedicating my effort and time for its success. The knowledge that I gained about fieldwork as a teaching approach as I worked on this research made me realise how little I knew about the approach. The findings reveal that learners view fieldwork as important, and prefer it over traditional classroom learning. However, the findings also reveal that learners encounter challenges when learning through fieldwork approach. My sincere hope is that this study will make a little contribution to improving fieldwork as a teaching approach, as well as inspire further research on Geography teaching approaches.

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APPENDICES

Appendix A: Learners' questionnaire guide

School.....

Date.....

Introduction

My name is Reitumetse Ramone, a Masters student in the department of Education at NUL. I am working on the research project which its purpose is to explore learners' perceptions on learning through fieldwork approach, their opinions, attitudes, and experiences on geographical fieldwork as a mode of teaching and learning. The interviews will be audio recorded. Under no circumstances will your identities be included in the report. All the information and recordings will be safely kept on the researchers' laptop but will be deleted immediately after the completion of this study. The interviews will take approximately 45- 60 minutes.

Learners Biographic Details

Gender (F/ M)

Age.....

Research questions

Learners views on learning Geography through fieldwork approach

1. Tell me how you learn Geography in schools
2. Does your teacher sometimes take you out of the classroom for learning Geography? If yes, tell me an incident when you went on a fieldwork for Geography lessons.
3. Does fieldwork help you understand what has been taught in class? Explain your answer
4. in a few lines, explain what you learn from fieldwork, and it teaches you about the environment
5. Which environmental values have you learned during fieldwork?
6. What skills do you learn from fieldwork activities?
7. Among the places you have visited, which one motivated your career path, and why?

8. Does fieldwork make learning Geography enjoyable? Elaborate

Learners' attitudes on learning Geography through fieldwork

9. Do you like or dislike fieldwork? And why

10. Explain how you feel when you are learning Geography outside the classroom. Give reasons for your answer

11. How do you see fieldwork? Is it important or a waste of time? Explain your choice of answer.

Learners' experiences with fieldwork

12. How do you think fieldwork promotes collaborative learning?

13. While in the field, what is it that you did? And what did the teacher do?

14. Explain the most memorable activity during fieldwork experience.

Appendix B: Letter of introduction 1

THE NATIONAL UNIVERSITY OF LESOTHO

Telephone: +266 22340601
+266 52213632
+266 52213639
Fax : +266 22340000
Website: <http://www.nul.ls>



P.O. Roma 180
Lesotho
Southern Africa

FACULTY OF EDUCATION

15th May 2023

The Principal
Phuthiatsana High School
Maseru

Dear Principal

A letter of introduction to undertake research

This letter serves to introduce **Reitumetse Ramone** – a Masters student in the Faculty of Education at the National University of Lesotho (NUL). She is undertaking research on *“Exploring learners’ perceptions on learning geography through fieldwork.”* The study requires her to interview the relevant participants and possibly observe lessons at Phuthiatsana High School. Other data collection methods may also be used as the study dictates. Kindly accord the student the necessary assistance to enable her to conduct this study which has the potential to generate useful data and information in the field of education.

Your cooperation and assistance are most highly appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mahao'.

Mahao Mahao, PhD
Head - Department of Language and Social Education
Faculty of Education, National University of Lesotho

Appendix C: Letter of introduction 2

THE NATIONAL UNIVERSITY OF LESOTHO

Telephone: +266 22340601
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P.O. Roma 180
Lesotho
Southern Africa

FACULTY OF EDUCATION

15th May 2023

The Principal
Masowe High School
Maseru

Dear Principal

A letter of introduction to undertake research

This letter serves to introduce **Reitumetse Ramone** – a Masters student in the Faculty of Education at the National University of Lesotho (NUL). She is undertaking research on *“Exploring learners’ perceptions on learning geography through fieldwork.”* The study requires her to interview the relevant participants and possibly observe lessons at Masowe High School. Other data collection methods may also be used as the study dictates. Kindly accord the student the necessary assistance to enable her to conduct this study which has the potential to generate useful data and information in the field of education.

Your cooperation and assistance are most highly appreciated.

Sincerely,

A handwritten signature in black ink, appearing to be 'Mahao Mahao', written over a horizontal line.

Mahao Mahao, PhD
Head - Department of Language and Social Education
Faculty of Education, National University of Lesotho

Appendix C: Letter of introduction 3

THE NATIONAL UNIVERSITY OF LESOTHO

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P.O. Roma 180
Lesotho
Southern Africa

FACULTY OF EDUCATION

15th May 2023

The Principal
Star Classic High
Maseru

Dear Principal

A letter of introduction to undertake research

This letter serves to introduce **Reitumetse Ramone** – a Masters student in the Faculty of Education at the National University of Lesotho (NUL). She is undertaking research on *“Exploring learners’ perceptions on learning geography through fieldwork.”* The study requires her to interview the relevant participants and possibly observe lessons at Masowe High School. Other data collection methods may also be used as the study dictates. Kindly accord the student the necessary assistance to enable her to conduct this study which has the potential to generate useful data and information in the field of education.

Your cooperation and assistance are most highly appreciated.

Sincerely,

A handwritten signature in black ink, appearing to be 'Mahao', is written on a white rectangular background.

Mahao Mahao, PhD
Head - Department of Language and Social Education
Faculty of Education, National University of Lesotho