

**Impact of code switching in Lesotho Geography Education: Learners' and Teachers'
Perspective**



**NATIONAL UNIVERSITY
OF LESOTHO**

**A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR AWARD OF
DEGREE OF MASTER OF ARTS IN EDUCATION (MA ED)**

**IN THE FACULTY OF EDUCATION, DEPARTMENT OF LANGUAGES AND SOCIAL
EDUCATION (LASED)**



**NATIONAL UNIVERSITY
OF LESOTHO**


**BY
THABANG KHALEMA (201702984)**

**SUPERVISOR:
PROF. MOHAEKA G. RASELIMO**

AUGUST 2023

DECLARATION

I, Thabang Khalema (Student ID: 201702984), affirm that the research titled "Impact of Code Switching in Lesotho Geography Education: Perspectives of Learners and Teachers" is my original work. I have independently authored this work under the guidance of my supervisor, with the exception of duly acknowledged published materials incorporated in this study. All sources referred to in this research have been properly cited within the text and listed as complete references. Furthermore, I confirm that this work has not been previously submitted, in part or in full, to any academic institution for the purpose of obtaining a degree or any other professional qualification. As such, I accept full accountability for the content presented in this work.

Signature: 

ETHICS STATEMENT

I, Thabang Khalema, declare that this study is conducted in accordance with ethical guidelines. I have adhered to all the necessary research ethical considerations as stipulated by the National University of Lesotho. These principles include ensuring voluntary participation in the study. Furthermore, proper attribution has been given to ideas and concepts that are not of my own origination. This has been done in a form of in-text citations and reference list. The procedures for data generation and analysis were carried out with ethical standards in mind.

CERTIFICATION

This is to confirm that this thesis has been thoroughly reviewed and deemed to meet all the necessary criteria set forth by the Faculty of Education, National University of Lesotho, for the conferral of the degree of Master of Arts in Education (MA Ed).

SUPERVISOR: PROF MOHAEKA. G. RASELIMO

HEAD OF DEPARTMENT: DR. M. MAKUMANE

DEAN OF FACULTY OF EDUCATION: PROF. A. MOSIA

SUPERVISOR'S STATEMENT

I **Mohaeka G. Raselimo** confirms that this thesis has been submitted following my approval.

Signature: _____

DEDICATION

This study is dedicated to my Mother. I express my gratitude for your unwavering belief in me and your consistent words of encouragement. Furthermore, I extend my heartfelt appreciation to you for the financial support that has made this academic journey possible. While words may fall short, please know that I am deeply thankful, Mom.

ACKNOWLEDGEMENTS

- Firstly, I wish to extend my heartfelt gratitude to God Almighty. With the wisdom and strength granted by God, I was able to successfully complete this study. As echoed in 1 Samuel 7:12, "...Thus far the Lord has helped us."
- Additionally, I would like to express profound appreciation to my supervisor, Professor M. G. Raselimo, for his invaluable guidance and thought-provoking insights throughout the entirety of my thesis journey. From the commencement to the conclusion of my work, his dedicated mentorship was evident as he generously dedicated his time to review my drafts, consistently believing in my potential. Despite his demanding schedule, he always made time for my drafts, and his contributions are deeply cherished.
- Furthermore, I must acknowledge Dr. T. W. Mataka for his consistent guidance on matters related to academic writing and research. His support was so impactful that one might think he was a co-supervisor.
- I am also deeply thankful to all my family members whose encouraging words provided a continuous source of motivation that carried me through this study.
- A special acknowledgment goes to my Mother, whose unwavering presence during challenging times has been a constant source of strength. I extend my gratitude for her unwavering prayers for the successful completion of my study.

- Additionally, I want to express my heartfelt gratitude to my beloved girlfriend, Itumeleng Ruth Lekhotso, who is soon to be my wife. Her unwavering support and encouraging words have been instrumental in propelling me towards the finish line.
- I extend sincere gratitude to Mr. Lepola Leoto and his wife, Rev. ‘Matlhohonolofatso Leoto, for their significant financial support. The inception of my academic journey was daunting and seemingly insurmountable, but their assistance meant a great deal and is highly valued.
- Moreover, it is essential to acknowledge my colleague, Thamae Lipolelo. Our collaboration and mutual support served as a scaffolding that carried us through sleepless nights, helping each other to overcome challenges that could have deterred us in the initial stages.
- Furthermore, I offer sincere thanks to the three Geography teachers from schools A and B, where I generated data. Their selfless collaboration and support, even in the midst of their busy schedules, were integral to the successful completion of my study. I am equally grateful to the principals of these schools for granting me permission to conduct research on their premises, an act of support that I deeply value.
- Lastly, I extend my special appreciation to the grade 10 learners from schools A and B who participated in this study. I extend my best wishes to them in their academic pursuits.



ABSTRACT

A solid grasp of the language employed as the medium of instruction in teaching and learning is imperative for learners. It stands as a crucial element in fostering learners' comprehension of the subject matter, occupying a central position. Prior studies have revealed that learners' limited command or proficiency in this language constitutes one of the factors influencing their performance in Geography. In this context, the present study delved into the impact of code switching in the domain of Lesotho's Geography education, drawing insights from both learners' and teachers' viewpoints.

The primary objective of this study was to bridge the existing knowledge gap in Geography education by examining the repercussions of code switching in the context of Lesotho, where research in this domain is noticeably scarce. The theoretical underpinning of this research draws from Gibson's Theory of Perception, Hoffman's Theory of Code Switching, and the Cultural Historical Activity Theory (CHAT). Employing a pragmatic constructivist approach, this study employed a mixed-method research methodology through an explanatory sequential design.

The findings of this investigation indicate that code switching within Geography education contributes to enhancing learners' comprehension of Geographical content by bolstering their proficiency in utilising subject-specific terminology. Additionally, it exerts a positive influence on their academic performance. However, a potential downside is observed as heavy reliance on code switching might lead to a diminished grasp of specialised Geographical terminology, potentially resulting in challenges while responding to examination questions. Consequently, while the strategic use of code switching between English and Sesotho holds pedagogical significance in the instructional process of Geography, an over-reliance should be avoided.

This study suggests that the Lesotho Education Language Policy (LELP) could benefit from revision to elucidate the role of the mother tongue in the pedagogical context. Further, consideration could be given to modifying the policy such that English is introduced as the medium of instruction from grade 1, departing from the current practice of initiating this transition from grade 4.

As a prospect for future research, an in-depth exploration into private schools could offer a more comprehensive and refined understanding of the impact of code switching on Lesotho's Geography education.

Keywords: *Geography, Code Switching, Impact, Perception, Academic Performance and English language proficiency.*



**NATIONAL UNIVERSITY
OF LESOTHO**

Table of Contents

DECLARATION.....	i
ETHICS STATEMENT	i
CERTIFICATION.....	i
SUPERVISOR’S STATEMENT	ii
DEDICATION.....	ii
ACKNOWLEDGEMENTS	ii
ABSTRACT.....	iv
LIST OF TABLES	x
LIST OF FIGURES	x
1. CHAPTER ONE: INTRODUCTION OF THE STUDY.....	1
1.1. Introduction.....	1
1.2. Motivation.....	1
1.3. Background to the study.....	2
1.4. Problem Statement.....	4
1.5. The Aim of the Study	5
1.6. Research objectives.....	6
1.7. Research Questions.....	6
1.8. Significance of the study	6
1.8.1. Expected Beneficiaries of the Study	7
1.8.2. Possible contribution for future research	8
1.9. Operational Definition of key terms.....	8
1.9.1. Geography as a subject.....	8
1.9.2. Code switching.....	9
1.9.3. Impact	9
1.9.4. Perception	9

1.9.5.	Proficiency in English language.....	9
1.9.6.	Academic Performance.....	9
1.10.	Thesis outline	9
1.11.	Conclusion	10
2.	CHAPTER TWO: LITERATURE REVIEW	11
2.1.	Introduction.....	11
2.2.	Theoretical Framework.....	11
2.3.	Description of code Switching.....	16
2.3.1.	Types of code switching	17
2.3.2.	Types of code switching frequently use by teachers in instructional processes.....	18
2.4.	Reasons for the use of code switching in teaching and learning.....	19
2.5.	Impact of code switching in teaching and learning processes.....	21
2.5.1.	Benefits of code switching in teaching and learning activities	21
2.5.2.	Demerits of using codeswitching in teaching and learning processes.....	22
2.6.	Empirical Review	24
2.7.	Research Gap	26
2.8.	Conclusion	27
3.	CHAPTER THREE: METHODOLOGY	28
3.1.	Introduction.....	28
3.2.	Research Paradigm or Orientation	28
3.3.	Research Approach.....	30
3.3.1.	Research Design	31
3.4.	Scope and Delimitation of the study.....	34
3.5.	Positionality statement.....	35
3.6.	Population.....	36
3.6.1.	Sample.....	37

3.7.	Sampling Technique	37
3.8.	Data Generation Methods and Instruments	37
3.8.1.	Structured Classroom Observation.....	38
3.8.2.	Focus-group interviews.....	40
3.8.3.	In-depth Interviews.....	41
3.9.	Ensuring Rigour: Validity, Trustworthiness and Reliability.....	42
3.10.	Procedures for data generation	43
3.11.	Methods of Data Analysis.....	44
3.11.1.	Thematic Analysis Approach.....	44
3.11.2.	Inductive and Deductive Coding.....	45
3.11.3.	Verbatim Quotations	46
3.12.	Ethical Issues or Considerations.....	47
3.12.1.	Informed Consent	48
3.12.2.	Confidentiality and Anonymity	48
3.12.3.	Voluntary Participation.....	49
3.12.4.	Academic Fraud and Plagiarism	49
3.12.5.	Audio Taping.....	49
3.13.	Conclusion	50
4.	CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION.....	51
4.1.	Introduction.....	51
4.2.	Biographic Information of the research participants in this study	52
4.2.1.	Language.....	52
4.2.2.	Gender.....	53
4.2.3.	Age.....	53
4.2.4.	Qualification	53
4.2.5.	Areas of specialisation	53

4.2.6.	Teaching experience.....	53
4.3.	Geography learners' and teachers' perceptions on the use of code switching	54
4.3.1.	Learners' low English language proficiency and their ability to learn Geography	54
4.3.2.	Learners' behaviour when struggling to understand Geography content	60
4.3.3.	Geography teachers' understanding of code switching in relation to Geography teaching and learning	62
4.3.4.	Situations or appropriate time in which code switching can be used in Geography lessons	63
4.3.5.	Appropriate time to allow learners' use of code switching in Geography classes.....	68
4.3.6.	Geography topics that require the use of code-switching.....	69
4.4.	Impact of code switching in Geography teaching	73
4.4.1.	Impact of code switching during lesson observations	73
4.4.2.	Impact of code switching in Geography education; learners' and teachers' perspective	84
4.4.3.	Drawbacks of code switching in Geography lessons.....	91
5.	CHAPTER FIVE: DISCUSSION OF FINDINGS AND CONCLUSION	93
5.1.	Introduction.....	93
5.2.	Teachers' understanding of code switching in relation to Geography teaching and learning	93
5.2.1.	Reasons for use of code switching in Geography teaching and learning processes	94
5.2.2.	Appropriate time to use code switching in Geography instructional processes	96
5.3.	Impact of code switching in Geography teaching and learning processes.....	96
5.3.1.	Benefits of code switching in Geography lessons	97
5.3.2.	<i>Code switching stimulates learners' engagement or participation and collaboration ..</i>	102
5.3.3.	<i>Code switching improves learners' academic performance</i>	103
5.3.4.	<i>Drawbacks of code switching in Geography teaching and learning</i>	104
5.4.	Conclusion	105

5.5. Recommendations.....	106
5.6. Limitations to the study.....	107
5.7. Possible areas or avenues for further research	107
Reflections on the study.....	108
REFERENCES.....	109
APPENDICES.....	123
APPENDIX 1: INTRODUCTORY LETTER FROM THE UNIVERSITY (FACULTY OF EDUCATION).....	123
APPENDIX 2: STRUCTURED OBSERVATION CHECKLIST	124
APPENDIX 3: INTERVIEW GUIDE WITH LEARNERS.....	126
APPENDIX 4: INTERVIEWS GUIDE WITH TEACHERS	128
APPENDIX 5: SIMILARITY INDEX (FROM TURNITIN PLAGIARISM CHECKER)	130
LIST OF TABLES	
Table 4. 1 Teachers’ biographic details.....	52
Table 4. 2 Geography teachers’ understanding of the concept code switching.....	62
Table 4. 3 Views on circumstances requiring the use of code switching in Geography teaching	64
Table 4. 4 Functions of code switching during Geography lessons at school A	76
Table 4. 5 Functions of code switching during Geography lessons at school B	78
LIST OF FIGURES	
Figure 2. 1 CHAT framework, Adapted from Cong-Lem (2022)	14
Figure 2. 2 Theoretical Framework	16
Figure 3. 1 Explanatory Sequential Mixed Method Design Research Design.	33

Figure 4. 1 How low English proficiency affects learners’ ability to learn Geography 55

Figure 4. 2 Low English language proficiency on Learners’ ability to learn Geography 55

Figure 4. 3 Limited command in English language and mastery of Geography terminology 57

Figure 4. 4 Topics challenging learners due to low English language proficiency 60

Figure 4. 5 Topics that require the use of code switching according to teachers 69

Figure 4. 6 Topics that require the use of code switching is advantageous, teachers and learners’ perspective. 70

Figure 4. 7 Types of code switching employed by teachers at School A 74

Figure 4. 8 Types of code switching employed by the teacher at School B 75

Figure 4. 9 Comparison of code switching functions during Geography lessons at both schools 80

Figure 4. 10 Contribution of code switching to learners’ understanding of Geography content.. 85



**NATIONAL UNIVERSITY
OF LESOTHO**

1. CHAPTER ONE: INTRODUCTION OF THE STUDY

1.1. Introduction

This study focuses on examining the perspectives of both learners and teachers regarding the utilisation of code-switching in Geography teaching and learning endeavours. The primary goal was to ascertain whether code-switching could serve as an effective strategy to assist learners in overcoming difficulties arising from their limited English proficiency when engaged in Geography instructional activities. This investigation commences with an introduction to the study, followed by an overview of the context and the specific objectives that guided the research endeavours. Furthermore, this chapter highlights the potential significance of the study.

1.2. Motivation

The motivation behind initiating this study was ignited by my role as an informed Geography teacher. I observed that learners with limited proficiency in the English language faced challenges in comprehending certain Geography content. This observation was drawn from my experience during Teaching Practice, where I encountered situations in which learners struggled to understand specific Geography concepts until I incorporated code-switching between English and Sesotho. This experience led me to ponder how these learners could be assisted in grasping Geography content despite the language barrier.

In my view, integrating code-switching into Geography teaching and learning processes has the potential to serve as an intervention strategy. This strategy could provide support for learners' educational journeys and contribute to their understanding of complex Geography concepts. Furthermore, my decision to explore this avenue was prompted by a series of Lesotho General Certificate of Secondary Education (LGCSE) Geography Examiner's Reports from 2018, 2019, 2021 and 2022. These reports consistently emphasised the need for teachers to aid learners in comprehending Geography terminology and technical language. This recurring challenge appeared to have implications for how learners approached examination questions. Therefore, the study aimed to gather insights from Lesotho Geography learners and teachers to assess whether code-switching effectively enhances the understanding of intricate concepts hindered by low proficiency in the English language.

Based on the aforementioned context, my motivation for conducting this study was rooted in a desire to address the predicament faced by learners who encounter difficulties in comprehending Geography content or concepts due to language-related obstacles.

1.3. Background to the study.

Geography, in its essence, involves exploring the patterns, reasons, and locations of human and natural activities, along with the intricate interconnections between them (Strahler, 2013.). It delves into analysing the environment as a cohesive system and the relationships it encompasses (Opoku et al., 2021). The instructional approach for Geography is largely learner-centered, employing various methodologies such as discussions, projects, research, question-and-answer sessions, and fieldwork (Opoku et al., 2021).

Much like other subjects, global research highlights the issue of poor academic performance in Geography education. Contributing factors include insufficient teaching resources, weak mathematical literacy among learners, admissions of learners with limited abilities, and challenges with artistic skills (Brier & lia dwi jayanti, 2020). Furthermore, the role of weak English language foundation among learners has been shown to significantly impact their Geography performance (Mwesiga, 2017).

From my perspective, one under addressed aspect in existing research is the insufficient English language background of learners. Research indicates a direct link between learners' Geography performance and their proficiency in the language of instruction, predominantly English. For instance, Namibian National Junior Certificate examination reports between 2012 and 2015 consistently attribute limited English proficiency to learners' poor Geography performance (Shilongo, 2017). Similar situations emerge in Zimbabwe, where learners' struggles with English comprehension lead to inadequate responses in Geography exams (Opoku et al., 2021). This concern holds significance due to the crucial role English plays in education, being the primary medium of instruction (Yang et al., 2019).

In Pakistan, research reveals that learners' challenges in understanding certain Geography concepts stem from limited English language proficiency (Munazza, 2016). Similarly, in Lesotho, the

Geography examiner's reports of 2018, 2019, 2021, 2022 emphasise the need to assist learners in mastering Geography-specific terminology (Geography LGCSE Examiners Report, 2018, 2019, 2021 & 2022). Moreover, the language used in instruction significantly affects learners' comprehension (Suganda et al., 2018). Simasiku et al. (2015) highlight that despite some parents and learners desiring English instruction, many learners struggle due to insufficient support from parents, schools, and teachers. Research in Tanzania echoes this sentiment, suggesting that English instruction can hinder learners' grasp of Geography concepts, recommending the use of simplified English (Suganda et al., 2018).

Geography teachers hold a responsibility to cater to learners with language-related difficulties, providing scaffolded learning experiences. However, it's essential that all learners can access the curriculum without language barriers, as per the Lesotho Basic Education Curriculum Policy (2021). The Curriculum and Assessment Symposium in 2023 recommended curriculum reforms, including the use of English as the medium of instruction from grade one, deviating from the grade-four requirement in the Lesotho National Language Policy (LELP). The use of code-switching was also suggested to enhance learners' comprehension.

In line with these recommendations, the Lesotho General Certificate of Secondary School Education (LGCSE) Examiner's Report advises Geography teachers to aid learners in mastering specialised Geography terminology (Geography LGCSE Examiners Report, 2018, 2019, 2021 and 2022). This support could involve code-switching between English and Sesotho. In my observation, this aligns with my teaching practice experience, where learners struggled with certain Geography concepts due to limited English proficiency. Geography encompasses terms rarely used in learners' daily lives, potentially hindering their academic success (Nyoni et al., 2019). Hence, the need to understand language usage for learners is vital.

Based on the above discussion, judicious language usage by teachers is essential to effectively convey content to learners, especially in Geography. English often serves as the second language in former British colonies like Lesotho (Rao, 2019), becoming the primary medium of instruction. Some schools enforce English-only policies, penalising learners for speaking Sesotho. This practice could impede learners' understanding of Geography concepts and other subjects.

Code-switching is recognised globally as a valuable tool in education. Tanzania has started using the mother tongue to aid learners' understanding and ensure universal access to subject matter (Myika, 2015). Code-switching can enhance mutual understanding between students and teachers (Rao, 2019). However, Geography teachers should use code-switching when learners struggle due to limited English proficiency, gradually phasing it out as learners master content. This approach may aid learners in using appropriate Geography terminology in assessments. To address language barriers, teachers can tap into bilingual students to ensure access to subject matter. Code-switching has been used in South Africa to enhance conceptual understanding in subjects like mathematics (Chikiwa & Schäfer, 2019). Similar results could be achieved in Lesotho's Geography education. Code-switching aligns with a preference for indigenous languages as a scholarly medium (Thiong'o, 1986), aiding learners' understanding.

Research on the intersection of language and Geography education is limited globally and locally. Therefore, this study aims to investigate learners' and teachers' perspectives on code-switching in Geography instruction in Lesotho, focusing on its impact on Geo-literacy improvement. The study seeks to answer whether code-switching can effectively overcome language barriers in Geography instruction.

1.4. Problem Statement

Research has identified poor English background among learners as one of the problems contributing to poor academic performance in Geography (Mwesiga, 2017). This translates into difficulty in understanding Geography concepts, as one of the aforementioned factors. Furthermore, this poses challenges in learners' ability to study Geography. More so, research in Tanzania has identified factors that hinder learners understanding of Geography concepts and this include language barrier. This is evident when Geography learners are unable to comprehend the subject matter until Geography teachers mix English with Kiswahili, the mother tongue in Tanzania (Mwesiga, 2017).

This seems to be the case in Lesotho where learners struggle to understand Geography concepts and terminology as a result of language barrier, despite paucity of research. Evidence from LGCSE Geography examiner's reports suggests a deteriorating rather than an improving condition. To cite

an example, learners struggle to use appropriate Geography terminology as indicated in Geography examiner's reports of 2018, 2019, 2021 and 2022. This implies learners do not perform well in Lesotho Geography examinations in consequence of poor command of Geography terminology. According to Simasiku et al. (2015), most of learners enter high schools where English is the medium of instruction with deficits in English vocabularies they need in order understand content of curricular subjects.

In agreement with Clemence (2001), careful language usage by Geography teachers is essential for successful delivery of content to learners. Experience has shown that, Geography teachers in Lesotho often opt for mother tongue during instruction perhaps with an aim of breaking language barriers. Therefore, it could be fundamental for Geography teachers to recognise the value of code switching in Geography instructional processes in order to improve learners' comprehension of subject matter. Evidence from research in Namibia has revealed that, Geography learners struggle to understand the subject matter due to lack low English proficiency and abandon the subject as they progress to next grades (Kanita, 2020). Learners should be mediated and helped to comprehend Geography content if they struggle to due deficits in English.

Given the above discussion, code switching could be an intervention towards solving the problem of failure to understand Geography concepts due to language barrier or deficits in English as the medium of instruction. This necessitates and provides an impetus for an empirical investigation on how code switching can help overcome or mitigate problems relating to learners' deficits in Geography lessons. Therefore, this study was aimed at adding to the research literature and filling the contextual knowledge gap by investigating the impact of code switching in Geography education from learners' and teachers' perspectives.

1.5. The Aim of the Study

The aim of this study was to investigate the impact of code switching in Geography teaching and learning from learners' and teachers' perspectives. This aim was achieved through the research objectives and questions listed below.

1.6. Research objectives

The main research objective of this study was to investigate the role code switching plays towards Geography grade 10 learners' understanding of concepts during Geography teaching and learning processes.

1.6.1. To investigate teachers' understanding of the concept code switching in relation to Geography teaching and learning.

1.6.2. To investigate the impact of code-switching towards improving learners' understanding of Geography concepts.

1.7. Research Questions

This study sought to provide answers to the main research questions that research reads, "What are the Geography learners' and teachers' perspectives on the use code switching in geography lessons?". From this main questions, the following subsidiary questions emerged:

1.7.1. What is Grade 10 Geography teachers' and learners' understanding of the concept code switching in relation to Geography teaching and learning?

1.7.2. What are the teachers' and learners' views on the impact of code-switching in Geography teaching and learning?

1.8. Significance of the study

It is also important for researchers to state how their studies are likely to make a contribution to practice or existing body of knowledge or how different audiences could benefit from reading their studies (Creswell & Creswell, 2018). Moreover, research findings of every study are expected to be useful to the stakeholders and decision makers relevant to the subject understudy and this is termed action validity (Cohen et al., 2018). Thus, I believe the findings of this study may be of great help to the relevant stakeholders, particularly the Ministry of Education and Training (MoET) and National Curriculum Development Centre (NCDC). Therefore, this section provides a justification on why the study is worth doing. In other words, it provides potential value of the study, and who is likely to benefit from the findings of the study.

1.8.1. Expected Beneficiaries of the Study

As far as my knowledge extends, this study represents the first attempt to explore how language-related difficulties, which appear to impede learners' comprehension of Geography concepts, can be addressed in Lesotho. The outcomes of this study have the potential to provide valuable insights to Geography educators in Lesotho, the Ministry of Education and Training, and other pertinent stakeholders in the education sector. Specifically, these findings may underscore the significance of employing code switching in Geography teaching and learning. Moreover, the results could raise awareness among policy makers involved in Lesotho's Language Education Policy (LELP) about the potential influence of instructional language on educational reforms, ultimately leading to strategies to enhance future learning conditions for learners.

In nations with a restricted range of indigenous languages like Lesotho, the incorporation of students' mother tongues in instructional methods has shown promising results (Mwesiga, 2017). Therefore, this study has the potential to offer guidance to the National Curriculum Development Centre (NCDC), the Ministry of Education, and Lesotho's Education Language Policy regarding the significance of integrating mother tongues (Sesotho, IsiXhosa, and Sephuthi) into Geography instruction as well as other subjects across all grade levels. In fact, the findings might contribute to the revision of the existing policy, potentially granting Sesotho a more prominent role in instructional practices. Additionally, this study could inform the Lesotho Education Language Policy about the advantages of utilising both mother tongue and English as mediums of instruction from grade 1 to grade 3, allowing learners to acquire a foundation in the English language by the time they reach grade 4. This aligns with the current policy, which states that "mother tongue will be used as a medium of instruction up to grade 3 and from grade 4, English should be the medium of instruction" (Ministry of Education Training, 2009, p. vii). Consequently, this study has the potential to challenge traditional perspectives in classrooms where English is the established medium of instruction.

Finally, the study's findings may offer valuable insights to Geography educators in Lesotho, illuminating both the benefits and potential drawbacks of employing code switching in Geography education.

1.8.2. Possible contribution for future research

There appears to be paucity or a lack of literature in Lesotho that addresses the challenges arising from learners' insufficient linguistic proficiency in the language of instruction within Geography teaching and learning. Given this situation, this study holds the potential to make a valuable contribution to the research domain, potentially serving as a foundation for generating data for future research endeavours.

1.9. Operational Definition of key terms

This section provides the operational meaning of the keywords or variables in the context of this study, as reflected in the research topic.

1.9.1. Geography as a subject

Geography can be defined as the study of the interaction between human beings and their environment (Strahler, 2011). This subject provides learners with the tools to comprehend topics related to the exploitation of natural resources by humans and the conservation of nature for the sake of sustainability. The pedagogical approach to Geography is predominantly inquiry-based and learner-centered, employing various teaching techniques such as research, case studies, projects, and fieldwork. From my perspective, fieldwork, in particular, plays a pivotal role or should take the central focus in the teaching and learning of Geography. This instructional method enhances learners' comprehension of concepts by connecting theory to real-life situations and contexts. In essence, Geography extends beyond the confines of the classroom. Similarly, Dhakal (2019) emphasises that educators should regard Geography as a pragmatic and practical discipline. This underscores the importance for Geography teachers to value instructional strategies like fieldwork and research, as they can supplement the knowledge acquired within the classroom walls.

In the context of Lesotho, the Geography syllabus is categorised into four sections: physical geography, economic geography, basic techniques and inquiry skills, as well as settlement, population, and migration. Each of these segments aims to address specific issues. Furthermore, the syllabus content follows an integrated approach, fostering the exchange of knowledge and a holistic understanding.

1.9.2. Code switching

In this study, the term "code switching" is operationally defined as the deliberate and structured utilisation of both English and Sesotho languages in the processes of Geography teaching and learning. This approach aims to ensure that the subject matter is comprehensible to all learners, regardless of their challenges with the language of instruction.

1.9.3. Impact

In the context of this study, the term impact implies both the positive and the negative effect brought by the use of code switching in Geography teaching and learning processes.

1.9.4. Perception

This term denotes learners' and teachers' views on the impact of code switching in Lesotho Geography education as influenced by their experiences, beliefs and attitudes.

1.9.5. Proficiency in English language

In this study, this term implies learners' ability to express themselves fully in English during Geography lessons particularly when answering and asking questions. This term also denotes their ability to comprehend content of the lesson as and when English is solely the medium of instruction.

1.9.6. Academic Performance

In this study, academic performance implies learners' ability to be actively engaged in Geography lessons in terms of answering and asking meaningful questions when code switching is utilised. It also denotes obtaining good grades A, B, C and D following exposure to code switching during Geography teaching and learning.

1.10. Thesis outline

This section elucidates the structure of this study. The initial chapter offers a broad overview, serving as the foundational framework. It introduces the study's purpose, delineating the problem at hand. Furthermore, Chapter One expounds on the study's objectives and potential contributions.

Moving to the second chapter, the study establishes a connection with prior research, undertaking a review of pertinent literature that relates to the phenomena being investigated. This chapter also introduces the theoretical perspectives that guide this study.

Chapter Three outlines the research methodology employed in this study. It commences by illustrating the philosophical and research paradigm underpinning the study's view on knowledge construction. Furthermore, this chapter delineates the chosen research design, outlines the population, sample selection process, data generation methods and tools, approaches to data analysis, and ethical considerations.

The fourth chapter presents the data generated and subjectively analyses it thematically. Finally, in Chapter Five, the major findings are discussed and interconnected with the reviewed literature. This chapter culminates the study, summarising the key discoveries. Lastly, Chapter five furnishes recommendations derived from the research findings, as well as suggesting potential avenues for further investigation into the phenomena under scrutiny.

1.11. Conclusion

This chapter has presented a comprehensive view of the study, encompassing an exposition of the research problem alongside its supporting evidence. Furthermore, it has emphasised the study's aim and objectives. Additionally, the significance and potential impact of the study have been expounded on within this chapter. Concludingly, the chapter has provided an overview of the entire study structure. The subsequent chapter introduces the theoretical framework that informs this study and delves into the relevant literature.

2. CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

The preceding chapter furnished an overview of the study and introduced the research problem. Chapter One further delineated the study's objectives and also underscored its potential significance.

Literature review is essentially the presentation, categorisation, and critical evaluation of existing research within a specific subject area (Brouard, 2020). Consequently, this chapter serves as a comprehensive examination of pertinent literature connected to the research topic: "Impact of code-switching on Geography teaching and learning: learners' and teachers' perceptions." The review of this related literature was shaped by the research problem and questions. Moreover, this chapter establishes the theoretical framework that guides the study. The structure of this chapter encompasses various themes: an elucidation of code-switching, its advantages in the teaching and learning context, and the repercussions of employing code-switching in education. Additionally, the literature covered in this review spans from 2012 to 2023, with the exception of generic sources. The sources were drawn from platforms such as Google Scholar, ResearchGate, and ScienceDirect, among others.

2.2. Theoretical Framework

Researchers are advised to incorporate theoretical frameworks to guide their studies. Consequently, this study was underpinned by the theoretical perspectives of Gibson's Direct Theory of Perception, Hoffmann's Theory of Code-Switching, and Cultural Historical Activity Theory (CHAT).

To investigate the perceptions of both learners and teachers regarding the impact of code-switching in Geography teaching and learning in Lesotho, this study adopted the lenses of Gibson's Direct Theory of Perception, specifically through the externalism approach. Within this approach, the rationale, perception, inferences, reasoning, and validation are influenced by external factors. In other words, individuals combine their existing knowledge with external reality to shape their understanding of the world (Démuth, 2012; Adams, 2013).

Furthermore, according to this theory, people perceive their surroundings through the information garnered from their senses and the external environment. For Gibson (1979), this information is sufficient for individuals to create meaning and inferences about their surroundings, which aligns with the use of code-switching in Geography teaching and learning, as explored in this study.

As previously emphasised, externalism asserts that validation is influenced by external factors. In simpler terms, individuals draw from their prior knowledge and combine it with external reality to form their understanding of the world (Démuth, 2012; Adams, 2013). Therefore, the perceptions of learners and teachers regarding code-switching in Geography teaching and learning are influenced by their experiences within their external environment, particularly the classroom setting. In this context, the external environment from which these perceptions arise is the classroom itself, where learners are exposed to code-switching in Geography education. Consequently, the study employed focus group discussions and in-depth interviews to generate data, enabling participating teachers and learners to share their experiences related to the research phenomenon.

This theoretical foundation was coupled with Hoffmann's Theory of Code-Switching, which is elaborated upon in the following section. Among the tools used for data generation in this study was structured classroom observation. This method aimed to observe the prevalent types of code-switching employed by teachers in Geography teaching and learning to overcome language barriers and for specific purposes. Hoffmann's Theory identifies three types of code-switching: intra-sentential, inter-sentential, and emblematic switching. However, for the purposes of this study, the theoretical focus centred on intra-sentential and inter-sentential switching.

Furthermore, this theory facilitated an understanding of the reasoning behind the prevalent types of code-switching identified through structured classroom observations during Geography lessons. As per Hoffman (1991), intra-sentential switching occurs within a single clause, where a sentence is composed in one language without interruption. Conversely, inter-sentential code-switching takes place between clauses or sentence boundaries (Hoffman, 1991). In simpler terms, it transpires at grammatical stopping points, such as full stops (Hoffman, 1991). In essence, this type of code-switching happens between sentences (Wardhaugh, 2006). In my perspective, this could

enhance learners' comprehension of Geography concepts while aiding Geography teachers in effectively conveying content to ensure all learners grasp the lesson's material. Furthermore, Hoffmann's theory identifies various functions of code-switching, with this study aligning itself with the functions of repetition for clarification and the intent of clarifying speech content for the listeners.

Clarification is essential for the speaker to be better understood by the listener. Repetition for clarification occurs when the speaker (the Geography teacher) utilises two languages to elucidate their speech, making it more comprehensible to listeners, in this case, Geography learners (Hoffman, 1991; Sinaga & Hutahaeon, 2020). In fact, code-switching promotes the fluidity of dialogue and enhances the listener's comprehension (Sinaga & Hutahaeon, 2020). This, in turn, breaks down language barriers, aiding learners in understanding discussed Geography concepts and improving academic performance. Another function that this study aligns with is the intention of clarifying speech content for the interlocutors. This is particularly relevant when the recipients (Geography learners in this scenario) may have missed or not fully understood the speaker's (Geography teacher's) intended message (Jurianto, 2018). Essentially, the use of code-switching in Geography lessons can assist learners in grasping the content they might have missed.

Understanding the contexts in which code-switching occurs is also crucial. Thus, alongside Hoffman's insights (which do not delve into the contexts), this study was guided by Holmes & Wilson (2022), who explain various types of code-switching, including situational code-switching. As per Holmes and Wilson (2022), situational code-switching transpires when the languages used in a conversation change based on the circumstances in which the participants find themselves. In this context, different languages are employed in different situations, while the core topic remains constant (Holmes & Wilson, 2001). For instance, within the context of this study, situations could arise when Geography teachers recognise the necessity to clarify content due to learners struggling to grasp concepts owing to language barriers. This implies that English, as the medium of instruction in Lesotho's education system, can be utilised during Geography instruction when learners are capable of comprehending concepts, and then the mother tongue can be employed when teachers intend to overcome language barriers. Moreover, drawing from Holmes and Wilson (2001), this study is also anchored in the Cultural Historical Activity Theory (CHAT) to elucidate the purpose of using code-switching in a Geography classroom context.

One of the principles within CHAT asserts that individuals create and modify various types of tools to facilitate learning and communication (Vygotsky, 1978). In essence, Geography teachers can employ adapted tools during instructional processes, and for this study, one such tool could be code-switching. Furthermore, CHAT highlights that tools developed or adjusted within an activity can encompass conceptual tools (Foot, 2014), and this holds true for code-switching in the context of this study. Additionally, this theory proposes that the creation and adaptation of tools within an activity, such as the utilisation of code-switching in Geography teaching and learning, are shaped by the requirements of the individuals engaged in the activity (Foot, 2014), in this case, addressing the language barriers encountered by Geography learners.

Furthermore, CHAT also stipulates that tools, whether they are physical or conceptual, are modified based on the objective of the activity. In the context of this study, the objective is to overcome language barriers and facilitate learners' comprehension of Geography concepts. This theory dissects an activity (in this case, Geography teaching and learning) into six core components, as illustrated in the diagram below:

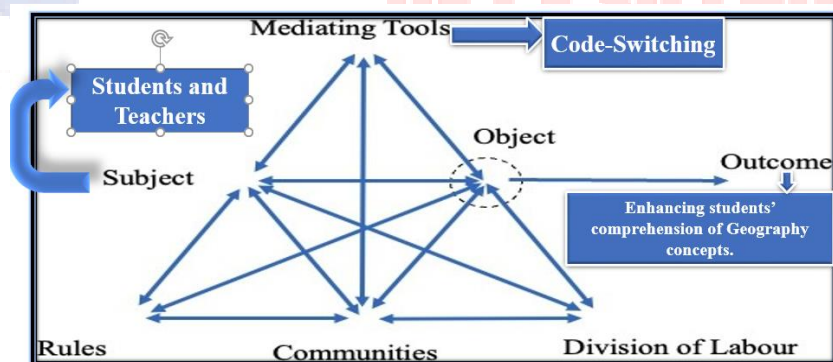


Figure 2. 1 CHAT framework, Adapted from Cong-Lem (2022)

In the context of this study, the elements that constitute the act of Geography teachers employing code-switching to overcome language barriers and enhance learners' comprehension revolve around three key components: the subject (which involves the actors, i.e., Geography teachers and learners), mediation tools (tools crafted or adjusted to attain a specific objective or result), and the object (the intended outcome; in this case, breaking language barriers to facilitate learners' understanding of discussed concepts) (Foot, 2014). In simpler terms, the Geography teacher,

functioning as the subject or actor within the activity of Geography teaching and learning, utilises mediation tools (code-switching) to achieve the desired goal (bridging language barriers to enable learners' grasp of Geography concepts). Consequently, this aligns with the functions of code-switching, specifically "repetition for clarification and intention of clarifying the speech content for the interlocutors," as previously noted by Hoffmann (1991).

It is crucial to illustrate how these theories synergise to provide a comprehensive perspective for the present study. Gibson's Direct Theory of Perception serves as the lens through which the perceptions of learners and teachers concerning the use of code-switching in Geography teaching and learning are examined. Furthermore, the insights provided by Hoffmann and Holmes expound upon the various types of code-switching and the motives or functions driving individuals to switch between languages. Cultural Historical Activity Theory (CHAT) goes beyond to indicate that the utilisation of tools, whether they are tangible or conceptual (as is the case with code-switching in this study), simultaneously enable or constrain certain forms of action (Foot, 2014). Within the theoretical framework of CHAT, it is widely accepted that Geography teachers should recognise that the incorporation of code-switching in Geography teaching and learning can both enable and restrict specific forms of action. Hence, the participants disclosed the actions (pertaining to Geography teaching and learning) that are facilitated by the use of code-switching and those that it limits. The diagram below visually represents the interconnectedness of these theories in informing the current study.

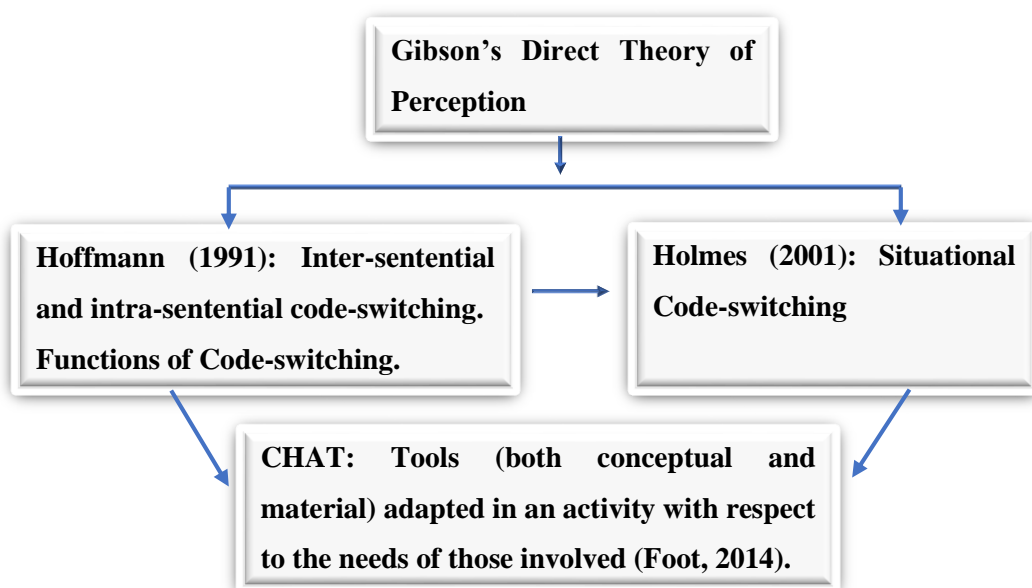


Figure 2. 2 Theoretical Framework

In conclusion, this study draws upon the aforementioned theories, serving the purpose of achieving triangulation, specifically through theoretical triangulation. The concept of theoretical triangulation involves the utilisation of different theories to comprehend the phenomenon being studied, allowing for diverse perspectives or viewpoints (Rugg, n.d.; Fielding, 2012; Cohen, Manion & Morrison, 2018). Furthermore, I am of the opinion that employing multiple theories also enhances the validity and reliability of the research findings. Gibson's Direct Theory of Perception guided the procedures of data generation, influencing the selection of methods that enabled learners and teachers to share their experiences concerning the utilisation of code-switching in Geography lessons. Moreover, Hoffmann's theory explicates the types of code-switching and their functions. In addition, Holmes extends Hoffmann's work (1991) by proposing situational code-switching. Lastly, CHAT extends further, indicating that code-switching is adapted based on the requirements of individuals engaged in a particular activity, as is the case with Geography teaching and learning.

2.3. Description of code Switching

The concept of Code Switching has been defined by several authors, encompassing the use of two languages or different linguistic forms within a single conversation (Hoffmann, 1991; Mabule, 2015). Additionally, Salzman and Auer (2000, p. iii) describe code switching as the “alternating use of two or more languages during the course of a conversation”. I agree with the viewpoints of the mentioned authors, asserting that code switching involves employing more than one language within the same conversation (which could include interactions between learners and teachers discussing Geography topics). The choice of language is influenced by the linguistic attributes of the participants. Moreover, it is explained as a "transition from one language to another by the speaker within the same discourse" (Suganda et al., 2018). For example, the selection of a particular code may depend on whether those participating in the conversation (such as Geography teachers and learners in this context) understand the chosen language or code. This is why Nuhu et al. (2014) emphasise the importance of ensuring that all participants comprehend the language when considering a switch in codes. This principle holds true within Geography teaching and learning efforts.

2.3.1. Types of code switching

This section engages in a discourse about the diverse categories of code-switching: intra-sentential, inter-sentential, and situational. Grasping these code-switching classifications is paramount, given that data was generated through structured classroom observation to identify the prevalent types of code-switching used by Geography teachers during instructional sessions and potential reasons for their adoption.

Among the code-switching varieties, inter-sentential stands out. As outlined by Hoffmann (1991), inter-sentential code-switching transpires between sentence boundaries, with each sentence composed in a distinct language. Furthermore, Khalil and Firda (2018) elaborate inter-sentential code-switching as occurring between two dissimilar sentences, where the initial sentence is articulated in the primary language (L1), succeeded by the subsequent one in the secondary language (L2). Essentially, this transpires within different yet cohesive sentences within the same utterance. In my perspective, the speaker's intention in such cases is to ensure the listener comprehends the focal content of that particular utterance. In the context of Geography teaching and learning, the initial sentence might be in English, followed by a sentence in Sesotho, aiming to cater to learners with lower English proficiency. Furthermore, proponents of this approach attest that one rationale behind this form of code-switching is point emphasis (Khalil & Firda, 2018; Al-Qaysi, 2019).¹ Additionally, Fathimah's study (2016) revealed that code-switching serves an exposure function in education. In the context of Geography teaching and learning, this would involve exposing learners to Geography content that they might otherwise struggle to access due to limited English proficiency.

Furthermore, another category of code-switching is intra-sentential. In accordance with Hoffmann (1991), this type of code-switching arises when the speaker integrates a word from another language within a sentence or clause. Moreover, Wibowo et al. (2017) define intra-sentential code-switching as occurring within the confines of the same sentence or clause, leading to a sentence comprising elements from both languages understood by the conversational participants. This form of code-switching shares reasons akin to inter-sentential code-switching. As indicated by Muthusamy et al. (2020), the employment of intra-sentential code-switching is motivated by the necessity to underscore points and convey content clearly to listeners. In this context, a Geography teacher might inject a phrase or term from Sesotho, isiXhosa, or Phuti to replace English phrases

or words that learners find challenging to understand. Subsequently, as learners exhibit mastery over initially challenging Geography concepts, the reliance on code-switching may diminish.

Furthermore, situational code-switching is also notable. As explained by Eyato (2018), this form of code-switching involves transitioning between languages based on the situations in which the speaker finds themselves. In the context of Geography teaching and learning, this would manifest when a Geography teacher encounters language barriers hindering learners' comprehension of concepts. Consequently, the teacher might switch from English to indigenous languages to accommodate struggling learners and facilitate their understanding of the lesson's content.

2.3.2. Types of code switching frequently use by teachers in instructional processes

Research has identified various types of code switching that teachers frequently employ in instructional processes. In Malaysia, it has been discovered that the commonly used code switching types in teaching and learning are intra-sentential and inter-sentential (Azlan & Narasuman, 2013). As previously mentioned, intra-sentential code switching involves the alternating use of two languages within a sentence or a clause, while inter-sentential code switching implies switching between sentence boundaries (Hoffmann, 1991). It's crucial for teachers to ensure that the vocabulary of the switched code or language is comprehensible to all participants in a dialogue (Azlan & Narasuman, 2013).

Likewise, Mangila (2019) highlights that in the Philippines, teachers predominantly use inter-sentential and intra-sentential code switching. To me, this indicates that Geography teachers in Lesotho should prioritise language proficiency as a prerequisite when transitioning from English to the mother tongue. Additionally, teachers utilise code switching to facilitate learners' engagement with the curriculum (Ferguson, 2009). In accordance with the perspective of Ataş and Sağın-Şimşek (2021), I believe that code switching aids learners in comprehending the content. Similarly, code switching is integrated into teaching and learning because it "assists learners in accessing meaning" (Stromvig, 2018, p. 60).

Consequently, I hold the belief that the utilisation of code switching in Geography teaching and learning in Lesotho allows learners with varying levels of English proficiency to grasp Geography concepts. In the context of this study, code switching is perceived as a mechanism within

Geography teaching and learning that dismantles language barriers, thereby enabling learners to access the curriculum and enhance comprehension. In simpler terms, it is seen as a strategy employed by Geography teachers for the purpose of clarification, as evident in prior literature (Amad & Jusoff, 2009; Ferguson, 2009; Stromvig, 2018; Ataş & Sağın-Şimşek, 2021) and earlier within the theoretical framework section of this study (Hoffman, 1991). Furthermore, it is also regarded as a means to stimulate active participation of learners in Geography teaching and learning (Suganda et al., 2018).

2.4. Reasons for the use of code switching in teaching and learning

Teachers employ code switching in teaching and learning for a multitude of reasons. One significant rationale for using code switching in educational activities is the limited proficiency of learners in the English language. Proficiency in the language of instruction is crucial for comprehending academic content (Albakri, 2017). Learners with lower English language proficiency often struggle during interactions with both teachers and peers, necessitating the use of code switching (Racca & Lasaten, 2016; Albakri, 2017; Mwesiga, 2017). Learners' challenges in understanding content due to poor English command prompt the use of code switching (Hendrickz, n.d.; Naranjo et al., 2016; Kanita, 2020). For instance, learners might be hesitant to seek clarity, which is evident when Geography teachers pose questions during lessons (Hendrickz, n.d.). In a Zimbabwean context, Geography teachers incorporate Shona to scaffold the learning process and enhance content access (Nyoni et al., 2019). Thus, code switching can offer support to learners whose English language deficits hinder content comprehension, fostering active participation in teaching and learning.

Code switching is also a strategy to ensure learners receive both instructions and subject matter (Lee, 2010). This practice breaks language barriers, aiding learners in understanding the subject matter. It aligns with the idea that codes are switched to facilitate listener understanding (Hoffmann, 1991). For example, Geography teachers in Lesotho might switch from English to the mother tongue to ensure their learners grasp the subject matter. Teachers also employ code switching to manage classroom discussions and indicate topic shifts (Ferguson, 2009).

Furthermore, research shows that code switching enhances learners' understanding, bridges knowledge gaps, and encourages discussion participation (Cahyani et al., 2018; Puspawati, 2018). This is particularly important when learners have varying levels of English proficiency as the medium of instruction. Code switching is also seen as a means to foster connections between teachers and learners (Nurhamidah et al., 2018), stimulate engagement and interaction (Stromvig, 2018), and facilitate comprehension (Sakaria & Priyana, 2018). It addresses the cognitive difficulties that learners may have in understanding complex concepts (Sakaria & Priyana, 2018). Teachers switch codes to accommodate learners with low English proficiency (Ahmad & Jusoff, 2009). This practice enables these learners to grasp subject matter (Ahmad & Jusoff, 2009). Code switching helps learners become more active in discussions and improves comprehension (Samar & Moradkhani, 2014; Suganda et al., 2018). On the other hand, code switching is also used for reformulation purposes, especially when learners struggle to comprehend questions (Suganda et al., 2018).

Additionally, code switching serves to clarify and interpret content (Van der Walt, 2011; Yang, 2020), supporting the repetition for clarification concept in the theoretical framework (Hoffmann, 1991). Bensen and Çavuşoğlu (2013) state that teachers switch codes repetitively to transfer content in an understandable manner. This strategy encourages constructive engagement in discussions (Ahmad & Jusoff, 2009; Suganda et al., 2018), making learners more active participants. Code switching can serve as an intervention strategy to overcome language barriers in Geography teaching and learning in Lesotho, ultimately enhancing subject matter understanding (Patmasari & Kamaruddin, 2022).

Furthermore, learners also switch codes, shifting from English to their mother tongue when expressing viewpoints during classroom discussions (Dema & Dorji, 2021). However, this should be done selectively to avoid losing subject-specific vocabulary (Dema & Dorji, 2021). In summary, code switching is employed in teaching and learning for various reasons. Both teachers and learners should use it judiciously, applying it when situations warrant its use. Having discussed the reasons for teachers' use of code switching in teaching and learning processes, it is equally important to comprehend the advantages and disadvantages associated with employing code switching in these processes.

2.5. Impact of code switching in teaching and learning processes

The use of code switching in teaching and learning is reported to have both positive and negative impact.

2.5.1. Benefits of code switching in teaching and learning activities

This section of the literature review focuses on the advantages of employing code switching in teaching and learning. Maluleke (2019) asserts that code switching aids teachers in clarifying complex concepts and encourages active participation among learners. This suggests that integrating code switching into Geography instruction in Lesotho could serve as an intervention to enhance comprehension of challenging Geography concepts. Furthermore, code switching assists teachers in assessing learners' grasp of the subject matter (Simasiku, 2016). This is aligned with the notion that code switching aids in gauging learners' understanding (Maluleke, 2019).

Additionally, the use of the English language in instruction might pose difficulties for learners with limited proficiency, impeding comprehension. Leoanak and Amalo (2018) propose that incorporating code switching can effectively deliver content, resonating with the clarification function of code switching highlighted by Hoffman (1991). Moreover, employing code switching in teaching and learning is believed to support those struggling to understand English, enhancing their comprehension of content compared to exclusive English instruction (Naha et al., 2018). Consequently, integrating code switching in Geography instruction in Lesotho has the potential to aid learners facing challenges when English is the sole medium of communication.

Code switching can also foster increased participation among learners, which is crucial for their academic success (Naha et al., 2018). By encouraging active involvement, learners are more likely to grasp the content effectively. Findings from Naha et al.'s (2018) study reveal that learners become more engaged and attentive when code switching is used, facilitating better comprehension of lessons. This aligns with the perspectives of Ahmad and Jusoff (2009), Simasiku et al. (2015), and Simasiku (2016), who assert that code switching enhances learners' understanding compared to exclusive use of English. Thus, there is a consensus that code switching accommodates English-challenged learners and promotes their expression of ideas. Naha et al. (2018) recommend that teachers continue utilising code switching as it aids in comprehending difficult concepts.

Simasiku et al. (2015) contend that code switching improves the quality of responses from learners with lower English proficiency. This aligns with Speech Accommodation Theory by Giles (1970), which underscores the importance of creating an enabling environment through code switching. This approach helps learners gradually build their vocabulary and understanding of the topic. Furthermore, code switching enables learners to interpret concepts in a language they are comfortable with (Simasiku et al., 2015).

Moreover, Mahdi and Almalki (2019) demonstrate that code switching aids teachers in explaining intricate subject matter to learners. This pedagogic function breaks language barriers and enables learners to access content through understanding challenging concepts. Similarly, Leoanak and Amalo (2018) state that using the mother tongue in the classroom assists learners with limited English proficiency in comprehending lesson content. Teachers also use code switching to gauge learners' comprehension (Mahdi & Almalki, 2019). Hence, there is a consensus that code switching in Geography instruction assists learners with limited English proficiency in expressing themselves. Somera-Luzano (2022) supports this view, asserting that code switching aids learners in expressing their viewpoints and guides teachers in refining their teaching based on comprehension levels.

Furthermore, Songxaba et al. (2017) argue that code switching establishes a connection between learners and teachers, facilitating mutual understanding. It aids learners in expressing ideas in their preferred language and helps teachers adapt their English language use (Shariely, 2016; Roxas, 2019; Tati et al., 2020; Ahmad Kamal & Ramly, 2022). However, careful use of code switching is essential, as excessive reliance might hinder learners from mastering subject-specific vocabulary and its proper use during examinations.

2.5.2. Demerits of using codeswitching in teaching and learning processes

However, there are drawbacks associated with the utilisation of code-switching in the context of teaching and learning. Tahir et al. (2022) point out that excessive use of code-switching could potentially hinder the development of critical thinking skills in learners. Consequently, teachers should exercise caution and refrain from relying on it extensively. In my perspective, this underscores the need to moderate the use of code-switching, gradually reducing its application as learners enhance their English proficiency and conquer initially challenging content. It also appears evident that although code-switching enhances learners' comprehension, its

implementation in Geography instruction should be approached with caution, as it might lead to difficulties in reading Geography materials and other subjects (except Sesotho) in Lesotho, all of which are presented in English.

Furthermore, code-switching should only be employed when teachers identify learners grappling with language barriers that hinder their comprehension of the subject matter, catering specifically to the needs of that subgroup of learners within the class (Bensen & Çavuşoğlu, 2013). Additionally, instances arise where the mother tongue lacks the necessary vocabulary for discussing specific teaching and learning content. In such cases, I believe that teachers should refrain from shifting to the mother tongue, as it could further hinder learners' grasp of the subject matter. Similarly, Ahmad Kamal and Ramly (2022) caution against excessive reliance on code-switching, as it could potentially impede learners' proficiency in the language relevant to the subject being taught. This implies that code-switching should solely serve the purpose of overcoming language barriers and aiding learners in accessing content.

Moreover, Leoanak & Amalo (2018) suggest that code-switching should be minimised or completely phased out once learners exhibit improved proficiency. Similarly, Horasan (2014) and Hu et al. (2022) recommend gradual reduction and controlled utilisation of code-switching as learners' proficiency levels rise. Additionally, teachers possess the insight to determine when to employ either English or the mother tongue, ensuring learners' academic performance remains unaffected (Roxas, 2019). Naha et al. (2018) also advise against continuous code-switching throughout a lesson, emphasising its selective use only when necessary. Moreover, Tahir et al. (2022) discovered that excessive code-switching could result in weakened English proficiency and subsequently weaken critical thinking abilities. This suggests that when learners demonstrate mastery over previously challenging material, code-switching should be phased out, and the prescribed medium of instruction (such as English in this study) should be consistently upheld.

In conclusion, the aforementioned discussion underscores both the benefits and potential drawbacks of code-switching in Geography teaching and learning. While there are disadvantages, they do not negate the application of code-switching in Geography classrooms. In my opinion, Geography should embrace this instructional tool, as literature has elucidated its pedagogical

advantages. The identified drawbacks outlined in the literature should serve as guidelines for teachers when incorporating code-switching into their teaching and learning processes.

2.6. Empirical Review

Numerous studies have investigated the perspectives of both learners and teachers regarding the implementation of code switching in classroom contexts. Both learners and teachers hold distinct viewpoints on the utilisation of code switching in the teaching and learning processes.

Learners perceive code switching as a strategy that aids in their improved comprehension. Patmasari and Kamaruddin's (2022) study suggests that learners regard code switching as a means for teachers to enhance interactions and facilitate their understanding of lesson content. For example, participants in the study noted that code switching helps them grasp abstract terms during lessons (Patmasari & Kamaruddin, 2022). This indicates that the use of both Sesotho and English can aid learners in comprehending abstract concepts in Geography. This implies that code switching between English and Sesotho could enhance learners' grasp of Geography terminology. As mentioned in chapter one, the LGCSE Geography examiner's reports of 2018, 2019, 2021, and 2022 recommend that learners should master Geography jargon. This suggests that learners in Lesotho may not be familiar with Geography terminology, which is evident in their performance on examination questions. In line with Patmasari and Kamaruddin (2022), code switching could potentially address this concern highlighted in the LGCSE Geography examiner's reports.

Conversely, literature highlights that learners are not in favour of excessive reliance on code-switching in the classroom. For instance, participants in Dema and Dorji's (2021) study suggested that code switching should only be employed when necessary to prevent negative impacts on their vocabulary. This implies that code switching should gradually be phased out as learners gain mastery and proficiency in Geography terms and concepts previously challenging due to deficits in English.

Furthermore, teachers also hold varying opinions on the use of code switching. For instance, Songxaba et al.'s (2017) study reveals that teachers perceive code switching as a tool to enhance learner comprehension and facilitate learning. However, some teachers in the same study advocate

for selective code switching only when required, as mentioned earlier. Additionally, Songxaba et al. (2017) found that code switching becomes essential when some learners struggle with low levels of English proficiency, contributing to improved learning. This suggests that code switching can aid learners with limited English proficiency in the Geography class and support effective content delivery by teachers. This aligns with the clarity function outlined in the theoretical framework (Hoffmann, 1991).

Moreover, teachers view code switching as a means to facilitate learning. Wiguna and Adriyanti's (2022) study demonstrates that teachers perceive code switching during instruction as a method to enhance subject accessibility for learners. Additionally, teachers in the same study believe that code switching assists in improving learners' vocabulary by aiding comprehension of complex subject terminology. This suggests that code switching in the Geography class could enhance learners' vocabulary, potentially leading to improved use of terminology in exams. Similarly, Papaja's (2009) study in Poland indicates that code switching aids both learners and teachers in understanding each other when dealing with crucial vocabulary, enhancing learners' comprehension of the subject matter. As mentioned earlier, the recurring recommendation in the LGCSE Geography examiner's reports of 2018, 2019, 2021, and 2022 underscores the need for teachers to help learners master Geography terminology, which could be achieved through code switching in Geography class, among other strategies.

Furthermore, Yana and Nugraha's (2019) study reveals that learners in Indonesia perceive code switching as valuable for understanding exam instructions. This implies that code switching could enhance learners' interpretation of graphs and diagrams, potentially improving their academic performance. Jiang et al. (2019) report that teachers in China view code switching as a technique to prevent misunderstandings, ensuring learners grasp concepts and terms. This can facilitate a stronger teacher-learner connection, enhancing learners' grasp of Geography content. Teklesellassie & Boersma's (2018) study in Ethiopia shows that teachers believe code switching helps learners understand content, especially when language barriers arise.

Moreover, Ngoc and Nhi's (2020) study reveals that teachers perceive code switching as a strategy for translating new subject vocabulary and explaining challenging concepts to learners, improving

comprehension. This suggests that code switching can offer learners an extended explanation of concepts they initially struggled to understand (Ngoc & Nhi, 2020). Similarly, Adriosh and Razi (2019) propose that code switching assists teachers in clarifying unclear concepts. This could apply to Geography teaching in Lesotho, where some learners struggle due to low English proficiency levels. Additionally, Songxaba et al. (2017) find that many teachers view code switching (isiXhosa and Afrikaans) in the classroom as enhancing learner comprehension. Nonetheless, some teachers caution that excessive reliance on code switching could slow down the learning process. In my view, it should be a strategy integrated by Geography teachers when learners struggle to comprehend content taught solely in English.

As mentioned earlier in chapter two and the theoretical framework, code switching should be context-specific in the classroom. Holmes and Wilson (2001) define situational code switching as changing language in dialogue based on the situational context. Leanak and Amalo (2018) advise that code switching can be adopted and gradually phased out as learners master previously challenging content. Teachers should determine when to switch codes in order to enhance learner understanding of the subject matter (Leanak & Amalo, 2018). In my opinion, the context might be when learners cannot access Geography lesson content due to limited English proficiency.

Furthermore, Mae et al.'s (2022) quantitative study in the Philippines regarding teachers' opinions on code switching in secondary schools found that teachers consider code switching a tool that enhances learner comprehension and facilitates subject access. Additionally, code switching is viewed as a pedagogical strategy by teachers to explain novel concepts to students (Mae et al., 2022). Similarly, Hu et al. (2022) reveal that both learners and teachers consider code switching a pedagogical strategy that expands opportunities for content accessibility. Javed et al. (2021) report that teachers perceive code switching in teaching and learning activities as rendering lesson content understandable to learners, making it more memorable over time. In essence, this suggests that code switching can be a strategy that aids learners in retaining lesson content more effectively

2.7. Research Gap

Drawing from the aforementioned empirical studies, it becomes crucial to elucidate the research gap that this study aimed to address, specifically pertaining to theoretical and knowledge gaps. It

is evident that a scarcity of research exists concerning the utilisation of code switching in Geography instruction and learning within the context of Lesotho. Although substantial and noteworthy contributions have been made by scholars from other regions, particularly in different subjects, a noticeable gap remains with regard to the field of Geography. Hence, the primary objective of this study was to bridge this knowledge gap by comprehensively exploring the perceptions of Geography teachers and learners in Lesotho regarding the outcomes, whether positive or negative, arising from the utilisation of both English and the mother tongue in the instructional process.

2.8. Conclusion

This chapter underscores the fact that both teachers and learners possess diverse perspectives regarding the implementation of code switching in the teaching and learning process. Both parties acknowledge its potential to enhance content accessibility. Conversely, it is noteworthy that teachers express reservations about the widespread use of code switching in teaching and learning, as it could potentially hinder learners' critical thinking skills, particularly when it comes to utilising English. The literature indicates that an excessive reliance on code switching should be avoided. Gradual removal of code switching should coincide with learners demonstrating mastery or proficiency in previously challenging content. I am inclined to believe that this scenario could apply to Geography teaching and learning in Lesotho, as supported by the literature presented above.

However, it is imperative to recognise that integrating code switching into instructional practices should be regarded as a beneficial pedagogical approach. To enhance its effectiveness, teachers should receive in-service workshops that emphasise its pedagogic significance and how it contributes to optimising learners' content acquisition (Makulloluwa, 2013 & Rehman et al., 2020).

3. CHAPTER THREE: METHODOLOGY

3.1. Introduction

The preceding chapter provided a comprehensive review of the pertinent literature concerning the research topic. In continuation, this chapter elucidates the study's orientation, research approach, population, sample, and sampling technique. Additionally, this chapter expounds upon the techniques employed for data generation, outlines the methods for data analysis, and delineates the procedures for data generation. The rationale behind the selection of these methodologies is also elaborated upon. Furthermore, this chapter expounds on the adherence to research ethics principles, which were instrumental in establishing the credibility, trustworthiness and validity of the findings. Therefore, within this chapter, the research plan is outlined, serving as the foundational framework for addressing the research questions and objectives of this study.

3.2. Research Paradigm or Orientation

This study is based on the pragmatic constructivism research paradigm, which combines elements from both pragmatic and constructivist viewpoints to create an understanding of reality. This paradigm includes important aspects such as epistemology, ontology, and axiology (Guba & Lincoln, 1989). Khatri (2020) defines the research paradigm as the foundational philosophy of research, providing a framework through which reality and true knowledge are perceived. It also guides how generated data is interpreted, thus shaping the direction of research (Khatri, 2020). Furthermore, the choice of research paradigm influences the methods used for generating data. In this context, adopting a specific paradigm involves aligning with its assumptions and principles, with the aim of comprehending reality according to that chosen perspective (Kivunja & Kuyini, 2017). For this study, the methodological framework is rooted in two core elements of the research paradigm: ontology and epistemology.

To start with, ontology concerns the nature of reality. Khatri (2020) defines ontology as the philosophical standpoint that informs how reality is perceived and understood. Additionally, ontology encompasses the concept of what constitutes true knowledge (Scotland, 2012; Cohen et al., 2018). It can be subjective or objective, where the former sees reality as singular and unchanging, while the latter acknowledges multiple interpretations of reality. This study aligns

with subjective ontology, recognising that knowledge originates from various sources. As a result, participants were encouraged to share their distinct and subjective viewpoints on the research phenomena. To be specific, focus group and in-depth interviews were employed in this study, with learners and teachers respectively.

Moreover, the research paradigm involves epistemology, which addresses how knowledge is acquired (Cohen et al., 2018). According to Khatri (2020), epistemology examines how knowledge is gathered from diverse sources. This study adheres to subjective epistemology, considering knowledge as a product of various contexts, personal beliefs, experiences, and emotions. Essentially, the perceptions of learners and teachers regarding the impact of code switching in Geography education are influenced by their beliefs and practical encounters.

Considering the above discussions, this study is situated within the philosophical framework of pragmatic constructivism. This perspective asserts that individuals build their knowledge and understanding of the world around them based on their experiences and reflections (Fadul, 2019). As such, people create, utilise, and share their experiences to contribute to their understanding. Given the participants' familiarity with the use of code switching in Geography education, the study assumes that learners and teachers can draw from their experiences to inform future practices.

From a constructivist viewpoint, researchers aim to grasp the research problem from the participants' perspectives by employing various methods of data generation, as demonstrated in this study (Creswell & Creswell, 2018; Fadul, 2019). Similarly, constructivist researchers strive to understand the phenomenon under study through the lens of research participants to gain insights (Cohen et al., 2018). This study recognises that knowledge is situated in context and is subjective, thus valuing the viewpoints of the participants. Adom et al. (2016) confirm that the constructivist paradigm seeks to understand the research problem through participants' experiences using diverse data generation techniques, as exemplified in this study.

From the pragmatic standpoint, this study maintains that learners' perspectives on the use of English and Sesotho in Geography education are influenced by their teachers' guidance. Grounded

in pragmatic beliefs, the study acknowledges that participants' experiences and beliefs shape their viewpoints on the impact of code switching in Geography education.

The selection of this research paradigm is driven by the study's central question: "What are the learners' and teachers' perceptions of the use of code switching in Geography teaching and learning?" It was determined that learners' and teachers' perceptions are better understood when illuminated in relation to their varied lived experiences. Additionally, constructivism asserts that observing research participants in their natural environment assists in understanding the phenomena being studied (Adom et al., 2016), a principle upheld in this study.

Furthermore, this study is guided by a pragmatic worldview. Pragmatism argues that perspectives should be grounded in the outcomes of actions, which in this case pertains to the use of code switching in Geography education. Pragmatists advocate for a comprehensive understanding of research phenomena through both quantitative and qualitative evidence (Creswell & Creswell, 2018). Thus, this study embraces a mixed-method research approach to integrate quantitative and qualitative findings, enhancing the depth of understanding regarding the impact of code switching on Geography teaching and learning processes. Within this paradigm, participant learners and teachers shared their perspectives based on practical experiences, thereby enriching the insights of the study.

3.3. Research Approach

Several reasons underpin the use of a mixed-method research approach in this study. According to Creswell and Creswell (2018), integrating both quantitative and qualitative databases enhances validation, where one dataset can corroborate the other. Essentially, one dataset addresses questions that arise from the other (Creswell & Creswell, 2018). In the context of this study, the data generation process consisted of two phases, with the quantitative phase being substantiated and elucidated by the qualitative phase to yield an in-depth comprehension of learners' and teachers' perceptions regarding code-switching in Geography teaching and learning. Furthermore, the mixed-method research approach was chosen because "quantitative research provides breadth in research, and qualitative research adds depth to quantitative data" (Dawadi et al., 2021, p. 4), which, in my view, leads to a more profound understanding of the phenomenon under study.

Consequently, the two types of data were utilised to complement one another, as suggested by Cohen et al. (2018).

During the process of data generation, the initial phase was quantitative, employing a structured observation method to identify prevalent types of code-switching in Geography teaching and learning. This was carried out to discern potential reasons for using code-switching in this context. The data generation method involved utilising an observation checklist based on the theoretical framework and literature review. The subsequent qualitative phase of data generation followed on from the quantitative phase, focusing on gathering data about learners' and teachers' perceptions of code-switching in Geography education. This phase involved focus group interviews with learners and in-depth interviews with Geography teachers to validate and unpack the quantitative data.

In summary, the data generation process unfolded as follows: the initial phase was quantitative (via structured observation), aiming to generate data on the prevalent types of code-switching employed by Geography teachers and their underlying reasons. Moreover, this phase also involved recording learners' reactions when exposed to code-switching in Geography teaching and learning. Subsequently, the qualitative phase explained the data from the quantitative phase through open-ended questionnaires (for learners) and in-depth interviews with teachers. Specifically, this qualitative phase sought to generate data on Geography learners' perceptions of the impact of code-switching in overcoming language barriers during Geography education. Furthermore, this qualitative phase contributed data on the perceptions of both Geography learners and teachers concerning the same issue (the use of code-switching to mitigate language barriers in Geography teaching and learning).

3.3.1. Research Design

It is important to understand what research design is before indicating the one chosen in this study that informed the data generation process. This is because researchers should not only select research approach but should also explain how the data generation process will be designed as informed by the selected research approach (Creswell & Creswell, 2018). By definition, research design comprises the strategies of inquiry within the research approaches qualitative, quantitative

and mixed methods (Creswell, 2014). Furthermore, Creswell and Creswell (2018) define research design as the types of investigation within the research approaches qualitative, quantitative and mixed methods. In my opinion, research design is the plan of work by the researcher, indicating how the data were generated at the field in order to answer the research questions, thus it is the frame work for data generation. According to Charry and Charles (2014), research design is the orderly planning of research which translates into drawing valid conclusions.

Mixed method research has a number of designs; Convergent parallel, Exploratory sequential, Explanatory sequential, Embedded and Transformative. In this study, data generation processes were guided by explanatory sequential mixed method research design in order to generate data that provides answers for research questions and meet the objectives of this study. Explanatory sequential mixed method research design is defined as the approach in research that involves two phases of data generation being the quantitative and qualitative phases (Creswell & Creswell, 2018), where quantitative phase of data generation comes first and is further validated or explained by the qualitative phase.

After phase one of data generation (quantitative phase), the data is then analysed and the results are used to plan for the second phase (qualitative) of data generation. In my view, it is called explanatory sequential because qualitative data generation phase is used to explain the data obtained in quantitative phase (which was done thorough structured classroom observation in this study). In other words, the data generation process was serial in nature. More so, “the quantitative results typically inform the types of participants to be purposefully selected for the qualitative phase and the types of questions that will be asked of the participants” (Creswell & Creswell, 2018, p. 304). In addition, the qualitative research approach places into considerations the voices of research participants (Dawadi et al., 2021). Consequently, in this study, focus group interviews with learners was used for data generation from grade 10 Geography Learners as well in-depth interviews with grade 10 Geography teachers.

The aim of this mixed method research design is to have data from qualitative phase explaining in detail, the quantitative data (Creswell & Creswell, 2018; Cohen et al., 2018), this was the case in this study. Therefore, it is important to have participants explaining in detail, their answers

obtained from the first phase of data generation. The diagram below is an illustration of how the data generation process ran in this study.

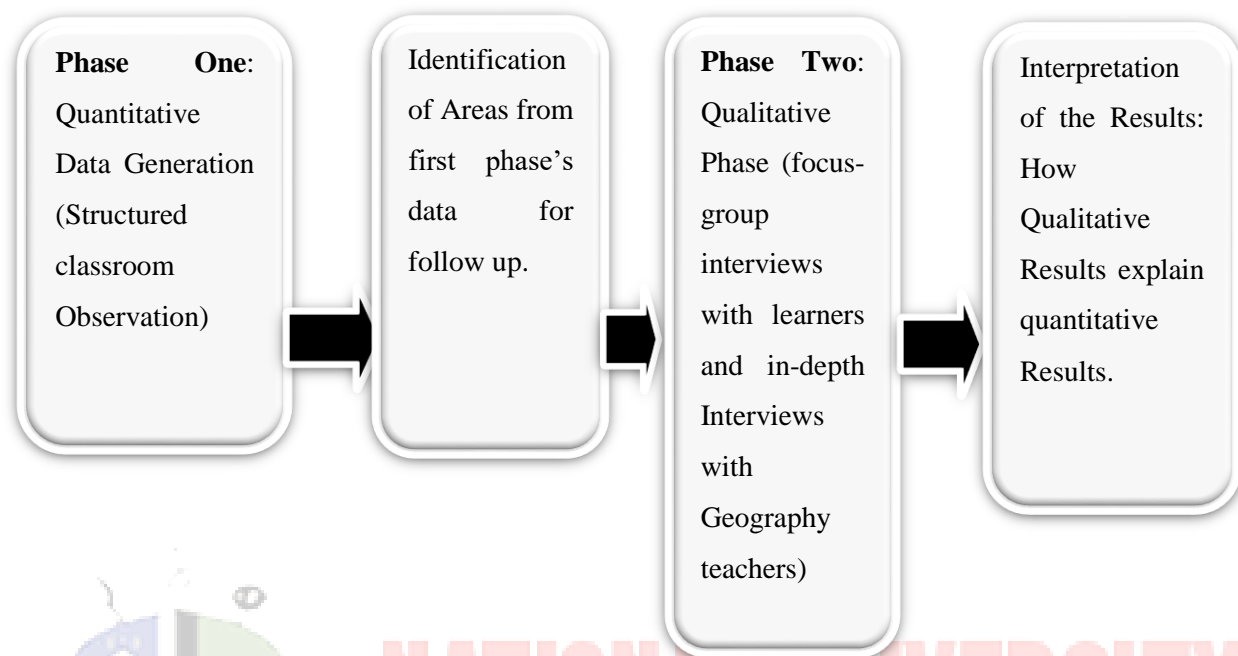


Figure 3. 1 Explanatory Sequential Mixed Method Design Research Design. Adapted from Creswell and Creswell (2018).

Moreover, it is important understand how data generation process was conducted through exploratory sequential mixed method research design in order to answer the research questions. Therefore, data generation processes in this study took form of mixed method case study design, where the first phase was quantitative (through structured classroom observation) and then followed by qualitative phase (focus group interviews with learners and in-depth interviews with teachers). Therefore, based on the focus of this study, the data generation processes took a form of case design but through explanatory sequential mixed research design as earlier stated. Mixed method research and case study design are believed to have to be connected (Carolan et. al., 2016).

By definition, case study research design involves an in-depth study of different perspectives about research phenomena and in real-life situation with the purpose gaining a deeper understanding of the research problem (Loraine & Vimala, 2019). In my opinion, the ‘different perspectives’ part of the above definition augments the research paradigm in this study, constructivism, that

knowledge is subjective and socially constructed. Furthermore, the case study research design resonates with structured classroom observation method of data generation in this study that, research phenomena is studied in real-life situation to gain an in-depth understanding of the case. Therefore, the behaviour of grade 10 Geography learners when exposed to code-switching was observed and recorded during teaching and learning processes. According Yin (2018), case study research design has the advantage of studying research phenomena (the case) in real-life contexts, thus structured classroom observations in this study. Moreover, this design appreciates participants' opinions on the case, hence focus-group interviews and in-depth interview data generation methods in this study. Therefore, this case study was conducted through explanatory sequential design, where quantitative data was explained by qualitative data.

To summarise, this explanatory sequential mixed method took a form of mixed method case design. According to Guetterman and Fetters (2018), mixed method case study design employs case study design through the lenses of mixed method research to generate quantitative and qualitative data, integrate and analyse it to gain understand of the research problem. Therefore, in this study, data generation processes took a form explanatory sequential mixed method research design through mixed method case study design. Firstly, the quantitative data was generated through structured classroom observation as earlier mentioned. Then, quantitative data was explained through qualitative phase (focus-group interviews with learners and focus group interviews with teachers). The focus of quantitative phase was to generate data on the types of code-switching frequently used by Geography teachers and why. Furthermore, the second phase, qualitative, focused on generating data on learners' and teachers' perceptions regarding the use of code-switching in Geography teaching and learning. This design helped the study to achieve its objective and have a clear picture of the impact of code switching in Geography education in Lesotho.

3.4. Scope and Delimitation of the study

This section delineates the scope and emphasis of the study, setting forth its investigative boundaries and objectives. The data generation was conducted within two high schools located in Maseru. The methods employed for data generation encompassed structured classroom observations, focus group interviews conducted with learners, and in-depth interviews conducted

with teachers. The primary aim was to examine the effects of code switching, which, in the context of this study, refers to the utilisation of both English and Sesotho languages. Within the academic discourse, code switching is often interchangeably referred to as translanguaging and code mixing, among other terms. However, this study specifically concentrated solely on code switching, with a particular focus on intra and inter sentential code switching.

The target population for this study comprised grade 10 learners and Geography teachers. The sample size consisted of a total of 24 participants, encompassing 21 learners and three teachers.

3.5. Positionality statement

It is essential for researchers to elucidate their positionality concerning the phenomenon under investigation. According to Holmes (2020), positionality in research refers to the researcher's standpoint in relation to the research problem. Positionality can be categorised as either an outsider or an insider perspective. The former pertains to researchers who lack personal experience related to the subject being studied, while the latter encompasses researchers who possess close connections and personal experiences with the research phenomena (Holmes, 2020). Consequently, researchers' positionality exerts varying degrees of influence on the research process. This positionality is evident in three main aspects: the research problem itself, the research participants, and the research context (Grix, 2019). In the context of this study, my positionality is linked to the research problem due to my past struggles in understanding Geography content because of English language deficits.

In this study, I assumed an insider positionality. During my time in high school, both I and some of my classmates faced challenges in comprehending Geography content due to our English language limitations. Some concepts and terminology became more accessible when our teacher employed a combination of English and Sesotho languages. Furthermore, I encountered similar situations during my teaching practicum. Certain learners encountered difficulties in fully expressing themselves and grasping certain Geography concepts until I employed code switching between English and Sesotho. Consequently, this personal connection to the research phenomenon significantly influenced the focus of this study.

Having an insider positionality offers several advantages in research. As posited by Geertz (1977) and Holmes (2020), an insider perspective empowers the researcher to ask participants insightful questions that can yield valuable information about the research problem. Therefore, being an insider allowed me to engage learners and teachers with meaningful queries, potentially enhancing the validity and trustworthiness of the study's findings.

An outsider positionality, on the other hand, provides space for participants' voices during data generation, analysis, and the discussion of findings (Holmes, 2020). Consequently, the methods employed for data generation included in-depth and focus group interviews with learners and teachers respectively. These approaches were chosen to assess the impact of code switching from the participants' viewpoints. Additionally, the data analysis involved incorporating verbatim quotations (as discussed in Chapter Four) to ensure that the voices of learners and teachers are prominently heard throughout this study.

3.6. Population

It is of significance for researchers to clearly define the population of interest in their studies, as well as outline the sampling procedure (Creswell & Creswell, 2018). As defined by Majid (2018), the population of interest in research pertains to the specific group from which the research aims to gather data. In this study, the population of interest comprises 53 grade 10 learners and one teacher from School A, along with two grade 10 Geography teachers from School B. Additionally, there were 58 learners (31 from grade 10A and 27 from grade 10B), culminating in a total of 112 participants. School A features a single Geography class, thus necessitating only one teacher. Given the manageable size, the entirety of the population was within reach for this study.

The eligibility criteria, which outlines the prerequisites that qualify individuals to be selected as research participants (Majid, 2018), were meticulously adhered to. Specifically, the population under consideration was limited to Geography learners and teachers to ensure the accuracy and relevance of data for the research inquiries. Teachers were required to possess a minimum of five years of teaching experience in Geography, as I believed this tenure would grant them a comprehensive understanding of language-related aspects in Geography teaching and learning. The selection of the two schools was guided by convenience, as they were easily accessible to me.

3.6.1. Sample

Working with a substantial number of participants in research can lead to inefficiencies in terms of time and resources. Hence, it becomes crucial to opt for a subset of individuals who can effectively stand for the broader group, a practice referred to as sampling. Moreover, attempting to survey the entire population can pose challenges, making it imperative for researchers to carefully choose a sample that accurately mirrors the entire population. This approach enables the acquisition of data that would likely be obtained if the entire population were surveyed (Ary et al., 2010).

A sample denotes a collection of individuals chosen to symbolise the larger population under investigation (Ary et al., 2010). In the case of School B, the sample consisted of 15 participants, comprising 14 learners and their Geography teacher. For School A, the sample encompassed 12 learners and two Geography teachers, totalling 14 participants. At School B, Geography is taught across two classes, thus all teachers from those classes participated in the study. In the context of this research, the sample size totalled 29 participants, including 26 learners and three teachers. The selection of this sample was conducted in a systematic manner.

3.7. Sampling Technique

The employed sampling method is known as Systematic Sampling. As described by Cohen et al. (2018), systematic sampling is categorised under probability-based approaches and involves selecting participants from a randomly chosen starting point using a consistent sampling interval. This technique was opted for due to its capacity to offer all members an equal opportunity of being chosen, thus minimising the risk of sample bias. In alignment with Ary et al. (2010), research outcomes derived from a biased sample cannot be accurately generalised to the broader study population. Hence, the systematic sampling technique was adopted to mitigate this potential bias.

3.8. Data Generation Methods and Instruments

This section sequentially outlines the data generation methods employed in this study, which encompass structured classroom observation, focus group interviews with learners, and in-depth interviews with teachers. Additionally, it delineates the specific type of data generated through each of these methods.

3.8.1. Structured Classroom Observation

The initial data generation method employed in this study was structured classroom observation, constituting the quantitative phase intended to elucidate the functions served by code switching in Geography education, as well as learners' reactions when exposed to it. A total of eight lessons were observed, evenly divided between schools A and B. This approach aimed to amass data on the prevalent types of code switching frequently employed in grade 10 Geography classes and the potential motivations underlying the transition from English to the mother tongue. Moreover, it included a focus on identifying instances of frequent code switching. It is believed that observation, as a data generation technique, aids the researcher in comprehending participants' behaviour within their natural environment, particularly within the classroom setting of this study. In my role as a complete observer, I employed the field notes technique as recommended by Ary (2010), which enabled me to generate insights into how the utilisation of code-switching influenced teacher-learner interactions in Geography teaching and learning. My observations extended to recording notes on learners' behaviours enabled by code switching during Geography instruction.

Additionally, an observation checklist, aligned with both the literature and theoretical framework, was utilised (see Appendix 2). This checklist, a product of my own design, was developed under the guidance of the study's theoretical framework and the insights gathered from the literature review. A total of nine lessons were observed, five from school A and four from school B. This data generation method concentrated on discerning instances where switching between English and Sesotho assisted learners in grasping the content within Geography classes. Field notes were taken and served as a discreet means of data generation, minimising any distractions to both learners and teachers during the classroom observations.

Furthermore, it is through the observation data generation method that insights into the frequently employed types of code switching within Geography teaching and learning were gleaned. This method specifically aimed to address the second research question, probing the impact of code-switching during Geography lessons and learners' responses to it. The overarching goal of incorporating structured classroom observation was to scrutinise whether code switching indeed had a tangible impact within the Geography classroom, as the study sought to ascertain. Moreover,

the study aimed to ascertain whether the benefits derived from code switching in the Geography classroom extended to improved overall academic performance among learners. Notably, this data generation method's significance lies in its ability to capture participants' non-verbal behaviours (Cohen et al., 2018). For this study, it offered insights into both verbal and non-verbal behaviours exhibited by learners when exposed to code switching (the alternating use of English and Sesotho) during Geography instruction.

In the context of this study, this method is referred to as classroom observation, aligning with Ferrare's (2015) description that classroom observation entails directly witnessing teaching and learning processes as they unfold. Here, the focus was on observing Geography teaching and learning to document the prevalent types of code switching adopted by teachers, along with their underlying rationale. Additionally, it sought to capture learners' responses when they encountered code switching during Geography instruction. The observation checklist was designed through the lens of the study's theoretical framework and informed by the literature review.

Specifically, non-participant classroom observation was employed—a data generation method where the researcher remains an observer without engaging in any activities at the research site, as observed from my perspective. This approach mirrors non-participant observation, where the researcher records unfolding events to establish facts about a particular phenomenon in its natural context, free from intervention (Nadia, 2019).

Nonetheless, classroom observations carry inherent limitations. One notable constraint, within the context of this study, is the inability to generalise inferences drawn from the data generated through this method (Cohen et al., 2018). Such observations do not account for the perspectives of participating Geography teachers and learners. Consequently, this method was used in conjunction with other data generation approaches discussed in sections 3.8.1 and 3.8.2, aimed at providing breadth, depth, and comprehensive insights into the generated data. This strategy was devised to establish a holistic understanding of the impact of code-switching during Geography lessons, and to investigate the significance attributed to the utilisation of English and Sesotho in Geography education by both learners and teachers. Thus, this data generation method allowed me to directly observe the impact of code switching within Geography instruction, complementing learners' and

teachers' perspectives. Ultimately, this approach facilitated an in-depth comprehension of the phenomena under investigation.

3.8.2. Focus-group interviews

Furthermore, this study employed the focus-group interview as a data generation method, specifically with the learners. As delineated by Cohen et al. (2018), this approach involves assembling participants into groups and posing questions that enable them to express their individual as well as collective viewpoints. Indeed, this method provides researchers with the opportunity to delve deeper into participants' responses and explore intriguing issues they bring up (Cohen et al., 2018), making it a suitable choice for this study. In my perspective, focus-group interviews engender a vibrant exchange of ideas and opinions, resulting in the generation of rich data pertaining to the phenomena being investigated. In this study, focus-group interviews were conducted with grade 10 Geography learners, guided by the understanding that these interviews, as indicated by Lapad et al. (2012), can yield more detailed insights on the impact code switching in Geography education.

In the specific context of this study, the focus-group interview aimed to attain an in-depth understanding of learners' perceptions regarding the role of code switching in Geography teaching and learning. In essence, it sought to explore whether code switching facilitated learners' comprehension of Geography concepts. The data garnered from this data generation method addressed the second research question: "What are the teachers' and learners' perspectives on the impact of code-switching in Geography teaching and learning?" During the focus-group interview, participants (Geography learners) were presented with questions that did not come with predetermined answers. This method, characterised by its honesty-inducing nature (Cohen et al., 2018), was utilised to gather insights into how code switching contributed to learners' access to Geography knowledge and concepts.

The focus-group interview was conducted in two separate groups, denoted as Groups A and B, each comprising seven learners. This division was employed at school A to ensure manageability, considering that larger groups might be challenging for the researcher to effectively oversee (Gill & Baillie, 2018). According to Gill and Baillie (2018), this data generation method takes the form

of a structured discussion between the interviewer and interviewees, revolving around a predefined topic. In this study, this method proved instrumental in generating data regarding learners' perspectives on the utilisation of code switching in Geography teaching and learning processes.

3.8.3. In-depth Interviews

One of the data generation methods in researches grounded in Constructivist paradigm is in-depth interviews (Adom et al., 2016) and this was the case in this study. Furthermore, this data generation method helped gaining an in-depth qualitative follow-up data on reasons why teachers switch codes in Geography teaching and learning, thus augmenting the data that have been generated during structured classroom observations. This is because of the design that informed data generation in this study, explanatory sequential mixed method research. In-depth interviews are qualitative data generation methods that allow a deep exploration of individual research participants on a particular research phenomena (Adom, et al., 2016). Semi-structured questions were used in this method. In particular, this data generation method was used on teachers only due to their small number (three). In addition, the rationale behind this method was to allow teachers to share their views on code-switching helping to break language barriers in Geography teaching and learning. In research, using interviews to generate data reflects a move away from seeing human beings as manipulatable but recognising contextuality of research data (Kvale, 1996) and this resonates with the paradigm informing this study (constructivism) that knowledge is shaped by experiences.

Again, interview method of data generation helps the researcher to gather information about participants' views, feelings, beliefs and experiences about the phenomena under study (Ary, et. al., 2010). Therefore, interviews were among the data generation methods in this study and in particular, in-depth (with teachers) and focus group (with learners) interviews. This method helped obtain information about teachers' regarding the use of code switching in Geography teaching and learning. This involved the oral questioning of the research participants (Ary et. al., 2010; Shilongo 2017). This data generation method was used in this study as a follow-up on the quantitative data that have been generated through classroom observation. According to Ary et. al., (2010), in-depth interviews help obtain certain information from the participants and the same questions are asked on all of them. Resultantly, this data generation method has helped in generating data on how Geography teachers view the impact of code switching in Geography education.

As earlier mentioned, this study is situated within the parameters of constructivism and therefore, the questions asked were open-ended (Ary et. al., 2010). In addition, Seidam (2006) contends that interviews enable the research to gain an understanding about information that shape their perceptions.

Three methods of data generation were used in this study to ensure triangulation and in particular, methods triangulation. According to Rugg (n.d.), methods triangulation is the use of different methods of data generation in order to gain insight about the situation. Additionally, this is done to avoid partialities that may arise from a single method of data generation (Rugg, n.d.; Fielding, 2012) hence the use of three data generation tools in this study.

3.9. Ensuring Rigour: Validity, Trustworthiness and Reliability

In order to enhance the validity, credibility, and confidence in the outcomes of this study, a combination of three data generation tools was employed: structured classroom observation, focus-group interviews (with learners), and in-depth interviews (with teachers), constituting a methodology known as methods triangulation. As outlined by Rugg (n.d.) and Cohen et al. (2018), methods triangulation involves utilising distinct data generation methods that complement each other to provide comprehensive insights into the phenomenon being studied.

Moreover, this study integrated verbatim quotations into its framework, adhering to the guidance of Phaswana (2010), who suggested that such quotations aid readers in verifying and tracing the original sources of data, facilitating an evaluation of the alignment between findings and the initial data. Similarly, according to Eldh et al. (2020), the use of participants' own words supports researchers' interpretations and explanations of data, thus enriching readers' comprehension of research outcomes. From my perspective, this approach aligns well with the philosophical perspective that underpins this study, namely pragmatic constructivism, which asserts that knowledge is constructed through real-life experiences. This reinforces the significance of ensuring that participants' perspectives are strongly represented in the findings. Eldh et al. (2020) also emphasise that data interpretation should be grounded in the events themselves, rather than being shaped by researchers' personal viewpoints and presumptions. Therefore, to establish the

trustworthiness of the research findings, direct quotations from participants were incorporated into the data analysis and interpretation process whenever deemed necessary.

Additionally, participants were assured of the confidentiality of their identities before the data generation process, promoting an environment of openness and free expression. Furthermore, a blended coding approach, combining both inductive and deductive methods, was adopted in this study. This was done to avoid mortality; a situation where researchers cannot obtain desired data as results of issues relating to lack of assurance on whether participants' identity will be confidential or not.

3.10. Procedures for data generation

Clarifying the methodology of data generation and detailing access to the research site is a crucial aspect for researchers. In this study, the initial step involved seeking permission from the principals of the schools where data generation took place. Correspondingly, Datamixed (2006) underscores the necessity of obtaining authorisation from both participants and research sites, highlighting the significance of securing access rights from those overseeing the research site.

Further, the involvement of Geography grade 10 teachers and learners from these schools was requested to participate in the data generation process. Personally, I oversaw the data generation process. As highlighted by Gaillet and Eble (2021), participants should be informed about any observations, particularly in private settings like classrooms. Accordingly, both learners and teachers were notified about the observations during their teaching and learning activities.

As previously indicated, the data generation process encompassed two phases: quantitative and qualitative. The initial phase employed structured classroom observation to generate data on the prevalent types of code-switching employed by Geography teachers, the underlying reasons, and the reactions of learners when exposed to such switches. This quantitative phase comprised structured classroom observations. Subsequently, the second phase involved in-depth interviews with teachers and focus-group interviews with learners, aimed at elucidating the insights garnered during the first phase of data generation. This sequential approach aligns with the explanatory mixed method research design that guided the data generation process.

Revisiting the earlier discussion, the observation data generation method served to generate information concerning the motives behind using code-switching in Geography education and the common types of code switching. Furthermore, the reactions of learners when exposed to code switching during Geography teaching and learning were documented. Subsequent to this, focus-group interviews with learners and in-depth interviews with teachers were used to corroborate and expand upon the data obtained through structured observations. Specifically, respondents provided their perspectives on the utilisation of code switching in Geography education, addressing whether it aids in overcoming language barriers. Additionally, insights into the pedagogical functions of code switching in Geography teaching and learning were derived.

As previously mentioned, the data generation design in this study follows an explanatory sequential mixed method approach. As implied by the explanatory mixed method design, the data generation process comprised two distinct phases. The quantitative outcomes informed the formulation of questions to participants, facilitating a deeper comprehension of the subject under scrutiny. In this case, the focus was on teachers' and learners' perceptions regarding the use of code switching in Geography education, achieved through focus group interviews and in-depth interviews, as previously outlined.

3.11. Methods of Data Analysis

This section elucidates the data analysis techniques employed in this research. The study utilised thematic analysis, specifically employing inductive and deductive coding, along with incorporating verbatim quotations. Prior to commencing data analysis, manual transcription of the audio tapes was conducted to facilitate insights and a more profound comprehension of the datasets. In my view, this form of transcription maintains superior levels of accuracy when contrasted with automated transcription. This step was taken to guarantee that the authentic essence of the generated data remains unaltered, consequently upholding the validity and dependability of the findings reported in this study.

3.11.1. Thematic Analysis Approach

The method employed for data analysis in this study is Thematic Analysis. According to Braun et al. (2008) and Stranges et al. (2014), Thematic Analysis involves scrutinising the datasets to

identify emerging themes or patterns. Furthermore, Thematic Analysis consists of six distinct steps or phases. Braun et al. (2008) outline these steps as follows: becoming familiar with the datasets, generating codes, identifying themes, reviewing the themes, explaining the themes, and producing the final report.

During the initial step, I acquainted myself with the data and began the search for underlying themes, aligning with Braun et al.'s (2008) guidelines. As indicated by Braun et al. (2008), the sixth step necessitated the aggregation of all pertinent data related to each identified theme. In the interest of comprehensive analysis, a substantial number of participants' responses were encompassed for each code, ensuring a thorough understanding and detailed data representation. In this data analysis approach, the emergent codes or themes serve as the basis for categorising the data for analysis, as stated by Tams (2014).

Subsequent to this, a review of the established themes was conducted for validation, and the final step involved composing the write-up in accordance with the suggestions of Stranges et al. (2014). The themes were carefully examined to determine their coherence and to gather data pertinent to each individual theme. The strength of this approach lies in the ability to break down the data into manageable segments, as highlighted by Stranges et al. (2014).

Furthermore, Adom et al. (2016, p. 6) recommend that researchers operating within the constructivist philosophical framework should "set aside their own biases and emotional responses as they construct meanings that accurately depict the true state of the phenomenon under study." Thus, I approached the interpretation of the datasets and the presentation of findings subjectively, aiming to offer an intricate portrayal of the perspectives held by learners and teachers regarding the impact of code-switching in Lesotho.

3.11.2. Inductive and Deductive Coding

The data analysis methods employed in this study encompass both inductive and deductive coding. Researchers employing coding as a method of data analysis familiarise themselves with the datasets, as noted by Linneberg & Korsgaard (2019). As described by Nelson (2005) and Cohen et al. (2018), coding involves categorising units of data with labels to reveal trends and meaning,

thereby condensing the datasets into a manageable format, as emphasised by Stranges et al. (2014). Consequently, all data belonging to the same theme were grouped together.

Furthermore, in research grounded in the constructivist philosophical paradigm, data analysis processes tend to be inductive in nature (also known as a top-down approach). However, both inductive and deductive coding methods were utilised in this study due to the presence of both quantitative and qualitative datasets. Inductive coding entails open coding processes, where codes and themes stem from the generated qualitative dataset, as outlined by Adom et al. (2016). This approach involves "drawing conclusions from the data" (Adom et al., 2016, p. 6). Linneberg and Korsgaard (2019) additionally expound on inductive coding as the direct development of codes from the dataset, naming codes after the phrases and terms used by the participants themselves.

In contrast, this study integrated inductive coding with deductive coding (a bottom-up approach), where the theoretical framework informed the process. Deductive coding entails a predetermined set of themes derived from the study's theoretical framework and literature (Linneberg & Korsgaard, 2019). This merging aimed to assess the alignment and coherence of inductively developed themes and codes with the theoretical framework.

In summary, a blended approach to coding was adopted in this study, integrating both inductive and deductive coding (Graebner et al., 2012). Inductive coding was employed to give voice to the datasets, while deductive coding ensured alignment and coherence with the study's theoretical framework (Linneberg & Korsgaard, 2019). The analysis began with inductive coding, followed by deductive coding for validation. Furthermore, a predefined set of themes informed by theory and literature was used to validate the inductively determined themes, ensuring their connection to the theoretical framework and literature. This hybridised approach seeks to harness the advantages of both methods (Proudfoot, 2022). Coding, as a data analysis method, offers numerous benefits in research, and in this study, it was chosen for its capacity to foster a deeper understanding of the datasets (Linneberg & Korsgaard, 2019).

3.11.3. Verbatim Quotations

Furthermore, direct quotations from both learners and teachers were incorporated into the analysis and interpretation of the datasets to enhance the findings, in line with the recommendation by

Phaswana (2010). This approach involved utilising verbatim quotations. As indicated by Ludwig (2006), the inclusion of verbatim quotations during the process of data analysis, interpretation, and discussion of findings contributes to assessing the credibility of the analysis, thereby bolstering the trustworthiness of the research outcomes. Employing this analytical method bolstered my understanding of how learners and teachers perceive the impact of code-switching in Geography teaching and learning. From my perspective, this also heightened the overall validity and credibility of the research findings.

As previously mentioned, this study operated within the framework of an explanatory sequential mixed-methods research design. In this design, data generation unfolds in two phases: the quantitative phase preceding the qualitative phase, which subsequently validates or provides explanations for the quantitative results. Hence, the recommended data analysis and interpretation process entails presenting the results of the initial quantitative phase first, as advocated by Creswell & Creswell (2018). Subsequently, the second stage involves presenting the outcomes of the subsequent qualitative phase, elucidating how these qualitative results elucidate or extend the quantitative findings (Creswell & Creswell, 2018).

3.12. Ethical Issues or Considerations

It is the responsibility of the researcher to ensure that the data cannot be linked back to its origin by the reader. As highlighted by Polonsky and Waller (2021), ethical considerations in research are gaining increasing significance, particularly when involving human participants. Therefore, this section elucidates how ethical concerns that emerged during the course of conducting this research were addressed. As stated by Cohen et al. (2018), ethical issues in research pertain to the norms governing researchers' expected actions and omissions. Consequently, this study adhered to the following ethical principles, as explained below, in accordance with the ethical considerations in research.

The subsequent ethical considerations were applicable to this study: informed consent, voluntary participation, confidentiality and anonymity, academic integrity, and principles pertaining to audio recording.

3.12.1. Informed Consent

In research involving human participants, it is imperative that they are fully informed about the nature of the activity in which they are being asked to take part (Polonsky & Waller, 2021). In simpler terms, obtaining consent from participants is crucial to ensure that they possess a comprehensive understanding of the requirements (Ary et al., 2010). It is advised that this consent takes the form of an official letter from the university, as it not only enhances the response rate but also conveys to participants the official status of my research as a university activity (Polonsky & Waller, 2021). Thus, I requested the university's letterhead and distributed an information sheet to school principals and all participants (refer to Appendix 1).

Through the informed consent process, participants were made aware of the following aspects: my identity, the rationale underlying my study, and the contact information of my supervisor, in line with the recommendations by Polonsky & Waller (2021). Furthermore, the informed consent encompassed details such as the study's duration, any potential risks or benefits, the methodology for data generation from participants (Ary et al., 2010; Fleming & Zegwaard, 2018), as well as assurances regarding confidentiality and anonymity.

3.12.2. Confidentiality and Anonymity

To ensure the preservation of confidentiality, participants' identities were safeguarded when presenting the findings, following the guidance of Polonsky & Waller (2021). Similarly, participants' identities remained confidential and anonymous, necessitating the avoidance of self-identifying details and information, as outlined by Fleming & Zegwaard (2018). Consequently, in this study, actual names of participants and school names, from which the data originated, were withheld in the reporting of findings. This was particularly crucial given the use of verbatim quotations as a data analysis method, as previously mentioned. Instead, alphabetical codes were employed to refer to participants during the presentation of findings. Additionally, codes were established to ensure the protection of identities for both schools and participants. These codes were consistently applied during the data transcription process and the reporting of outcomes. This practice aligns with the advice provided by Creswell and Creswell (2018), which emphasises the importance of respecting participants' privacy by utilising pseudonyms for individuals and locations. This measure was taken to safeguard the identity of research participants.

3.12.3. Voluntary Participation

As stipulated by Polonsky and Waller (2021), participants should engage in research of their own accord, without any form of coercion. In simpler terms, they should not be compelled to participate. To illustrate, phrases such as "*I require your completion of this questionnaire or your participation in this interview*" were consciously avoided, as I hold the opinion that they are not appropriate or courteous, in alignment with the views of Ary et al. (2010), Cohen et al. (2018), and Polonsky & Waller (2021). Furthermore, I am of the belief that such statements could potentially lead to a heightened attrition rate.

3.12.4. Academic Fraud and Plagiarism

As highlighted by Creswell and Creswell (2018), research must steer clear of fraudulent practices. Particularly, when research encompasses the process of data generation, analysis, and interpretation, there is a potential risk, as noted by Polonsky and Waller (2021), of encountering what is termed academic fraud—deliberate misrepresentation of the datasets. This can entail presenting findings that deviate from accuracy. Hence, in this study, distortion of data interpretation was diligently avoided, and the authentic essence of the data was faithfully conveyed in the findings. This commitment to ethical conduct during the analysis process aligns with the cautionary note from Cohen et al. (2018).

During the phase of data interpretation, as advocated by Creswell and Creswell (2018), researchers are urged to furnish a precise depiction of the generated data. Additionally, according to Creswell and Creswell (2018), plagiarism stands as an ethical quandary within research, even though it might not be taken seriously by some researchers. In this study, proper attribution to the original sources was extended both to quoted and paraphrased content. As a preventive measure, the Turnitin plagiarism detection software was utilised to assess the extent of potential plagiarism. The generated similarity index, obtained through this software, is provided in the appendices section of this paper.

3.12.5. Audio Taping

The consent form and information sheet explicitly indicated the presence of audio recording, as advised by Polonsky & Waller (2021). Additionally, participants were informed about the fate of

the recorded materials following the data analysis and interpretation process, which involved the deletion of the data, in line with the guidelines for data retention (Polonsky & Waller, 2021).

To clarify, the recordings were preserved for a defined duration, a minimum of twelve months, in accordance with the recommendations from the Australian Research Council (2019). Subsequently, the data underwent erasure after the completion of the data transcription phase, following the guidance of Polonsky & Waller (2021). In line with good practice, once data is analysed, it should be retained for a reasonable period before its destruction, to prevent any potential misuse (Creswell & Creswell, 2018). To adhere to these principles, this study ensured that data would be securely stored for a span of five years.

3.13. Conclusion

Collectively, this chapter has delineated the research paradigm that underpins this study, elucidated the chosen research approach and design, and detailed the methods employed for data generation. Moreover, it has clearly articulated the nature of the data generated through each specific data generation method. The techniques utilised for data generation encompass structured classroom observation, focus group interviews (with learners), and in-depth interviews (with teachers).

Furthermore, this chapter has expounded upon the approach to data analysis as well as the methodologies employed, specifically thematic analysis involving inductive and deductive coding as well as verbatim quotations. The rationale behind the selection of these methods has been provided. Additionally, this chapter has outlined the strategies employed to address issues of validity.

Of equal significance, this chapter has outlined the ethical considerations governing the research process. This includes the steps taken to ensure informed consent, encourage voluntary participation, maintain confidentiality and anonymity, prevent plagiarism, and manage audio recordings in an ethical manner.

4. CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION

4.1. Introduction

The preceding chapter delineated the research paradigm, approach, and design. It also expounded upon the data generation methods employed and the data analysis techniques utilised. The purpose of this chapter is to conduct an analysis and presentation of the data generated through structured observations, focus group interviews (with learners), and in-depth interviews (with Geography teachers) in relation to each of the research questions that this study aimed to address.

Prior to embarking on the data analysis process, the audio recordings were manually transcribed. This transcription approach was chosen to facilitate insights and a deeper comprehension of the datasets. In my view, this method of transcription offers heightened accuracy in comparison to automated transcription. As elucidated in the previous chapter (Chapter Three), this meticulous transcription was carried out to safeguard against dilution of the genuine meaning inherent in the generated data. This, in turn, upheld the validity and reliability of the findings reported in this study.

The thematic presentation of data analysis in this chapter is aligned with the research questions. The primary objective of this study was to explore the role of code-switching in Geography education in Lesotho, with a focus on English and Sesotho, as perceived by Grade 10 learners and Geography teachers. Echoing the earlier explanation in Chapter Three, verbatim quotations from participants were integrated into the study. In this representation, the letters A and B were employed as pseudonyms to denote the schools contributing data.

The ensuing data analysis is organised into the subsequent themes, which correspond to the research questions: teachers' comprehension of code-switching, perspectives of learners and teachers regarding the impact of code-switching in Geography education, and learners' responses to the utilisation of code-switching in Geography education. Nevertheless, the analysis is preceded by a presentation of biographical details concerning the research participants.

4.2. Biographic Information of the research participants in this study

The section presents the biographic information of the research participants in this study. As earlier stated, the participants in this study consisted of both grade 10 learners and three Geography teachers from two schools, A & B. The reason for one teacher is that, Geography is an elective subject at school B.

Participant learners were 26 in total (19 males and 7 females). At school A (attended by boys only), there were 12 male learners with age group of 18 to 23. On the other hand, there were participant 14 learners at school B (7 males and 7 females), with age group of 18 to 24. Their language of origin is Sesotho.

Table 4. 1 Teachers' biographic details.

TEACHERS FROM SCHOOL A						
GENDER	AGE	QUALIFICATION	TEACHING EXPERIENCE	AREAS OF SPECIALISATION	LANGUAGE OF ORIGIN	
Female	38	Bachelor of Education	2008-2023	Geography and English Language	Sesotho	
Male	34	Bachelor of Education	2018-2023	Geography and English Language.	Sesotho	
TEACHERS FROM SCHOOL B						
Male	35	Bachelor of Education	2018-2023	Geography and Sesotho	Sesotho	

4.2.1. Language

With reference to the evidence from the tables above, it is clear that Sesotho is the native language for both the grade 10 Geography teachers and learners who took part in this study while English is a second language. Consequently, they were the right participants in this study. This is because, there is a possibility of having some learners struggling to understand Geography content due to deficits in English as their second language.

4.2.2. Gender

Of all the participants in this study, there are 21 males (19 learners and 2 teachers) and 8 females (7 learners and 1 teacher) as reflected in tables above. This makes a total 29 participants (72 % males and 28 % females). Therefore, both genders are represented in this study although there are more male participants. School A is attended by boys only, hence 12 male participant learners.

4.2.3. Age

When research participants are minors or below the age of 18, one of the ethical principles that researchers should adhere to is giving their parents a consent form for permission (Spriggs & Gillam, 2010). Learners' age-group in this study ranges from 18-24 years old. Hence, there is a general agreement that they are not minors or young people who may or are still not capable of making informed decisions on certain issues.

4.2.4. Qualification

The participant teachers in this study are two males and one female. All the participant teachers in this study hold Bachelors' Degree in Education, with measures Geography and English language (teacher X and Y) and Geography and Sesotho (teacher X). Given their qualifications, these teachers are likely to have all the necessary knowledge and skills regarding the teaching of Geography.

4.2.5. Areas of specialisation

The participants in this study comprised of three grade 10 Geography teachers, two from school A (one female and one male) and one male teacher from school B. The two teachers from school A hold Bachelor's Degree in Education (with measures Geography and English language) while the teacher from school B specialises in Geography and Sesotho as shown in table 4.1. Hence, they have sufficient knowledge on issues relating to Geography education and learners' proficiency in English as the language of instruction in Lesotho.

4.2.6. Teaching experience

The male teachers (X and Z) from both schools have five years of teaching experience in Geography education respectively. The female teacher has 15 years teaching experience. Based on

their biographic information and academic background, these teachers are suitable participants for this study, as they specialise in Geography and the languages of instruction (English and Sesotho). In other words, they possess sufficient experience to participate in studies on Geography education and language of instruction. All teachers who participated in this study have more than five years of teaching experience. Therefore, they had the potential of giving the reliable and insightful information in relation to the objective of this study.

4.3. Geography learners' and teachers' perceptions on the use of code switching

The aim of this research question was to investigate who both learners and Geography teachers perceive or view the use of code switching in Geography education. Before delving into learners' perspectives on the use of code switching in Geography teaching and learning, there was a discussion on how their low proficiency in English as the language of instruction impacts them in a Geography class.

4.3.1. Learners' low English language proficiency and their ability to learn Geography

During classroom observations, this study unveiled that learners grapple with comprehending certain Geographical terms and concepts due to their limited proficiency in English. This difficulty stems from their reliance on their teachers' explanations and clarifications, facilitated by code-switching between English and Sesotho. A total of 11 terms were identified as challenging for learners due to their English language deficits. Notably, 10 of these terms were associated with the topic of river processes at school A, while the remaining term emerged within the context of tourism at school B. The terms include "*tributary*," "*meandering river*," "*drainage*," "*river bank*," "*confluence*," "*vertical erosion*," "*head-ward erosion*," "*lateral erosion*," "*boulders*," and "*suspension*." At school B, the term "*tourist destination*" on the topic of tourism posed challenges for learners. Among these 11 terms, 2—*lateral erosion and tributaries*—stood out as particularly challenging due to English language limitations. Additionally, one learner expressed difficulty in understanding terms denoting the names of rocks.

However, it is important to exercise caution when drawing conclusions solely from the quantitative evidence provided above, which indicates that learners struggle with certain Geography terms and concepts. As a result, a follow-up investigation was initiated through interviews. This decision was

informed by the explanatory sequential design guiding this study, where qualitative data is employed to elucidate quantitative data (Creswell & Creswell, 2018). It was deemed crucial to explore the interplay between learners' proficiency in English and their aptitude for comprehending Geography concepts, preceding the examination of learners' and teachers' perspectives regarding the utilisation of code-switching in Geography education. Both learners and teachers were interviewed in this context.

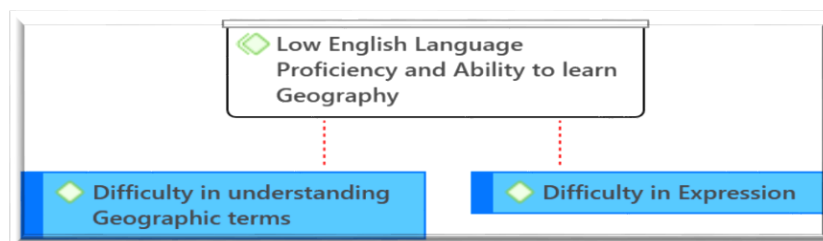


Figure 4. 1 How low English proficiency affects learners' ability to learn Geography

As illustrated in Figure 4.2 above, the primary findings indicate that learners with deficiencies in English language encounter challenges in articulating themselves during discussions. Moreover, this investigation revealed that learners facing English language deficits also experience difficulties in comprehending specific Geography terms and concepts.

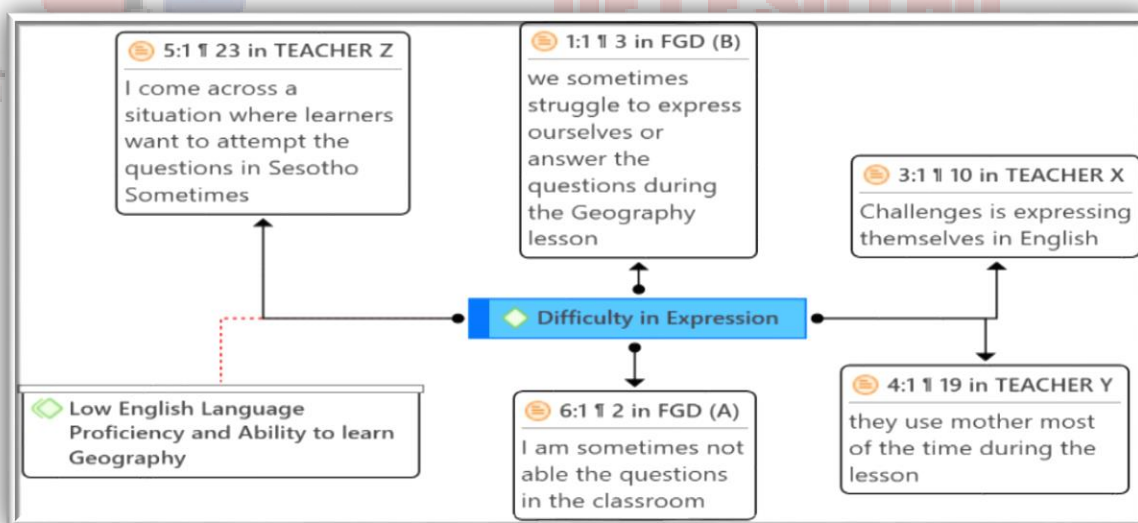


Figure 4. 2 Low English language proficiency on Learners' ability to learn Geography

Drawing upon Figure 4.3, it becomes apparent that learners possessing limited proficiency in English encounter difficulties within Geography lessons. Their struggles extend to effectively

participating in class discussions, which subsequently appears to impact their grasp of Geography concepts. Furthermore, this predicament carries consequences for their academic achievements, as underscored by the observations of teacher X. This, in turn, influences their performance during assessments and examinations.

“Learners face challenges in expressing themselves in English, especially in a Geography class when they are attempting to answer a question. The other challenges are when writing. If they cannot express themselves very clearly, very clearly in English, then it becomes a problem when they have to put a pen on the paper” (Teacher X, in-depth interview).

Along the similar lines, Teacher Y explained that, *“as you have heard from yesterday’s lesson, they are not able to express themselves until I emphasise in Sesotho”*.

More so, Teacher Z stated that *“the major challenge is that I come across a situation where learners want to attempt the questions in Sesotho because they cannot express themselves clearly”*.

The analysis revealed that the challenge of struggling with expression was consistently evident in the responses of all participating teachers. This perspective was corroborated by the viewpoints shared by learners from school A. These learners also acknowledged experiencing difficulties in expressing themselves during Geography lessons. In total, this challenge was acknowledged by 10 out of 29 participants (34%), encompassing all three teachers and seven learners.

Additionally, it came to light that the impediment of comprehending specific terms and concepts serves as one manifestation of how limited proficiency in English affects learners' capacity to grasp Geography. This same observation surfaced during the classroom observations, where learners encountered difficulties with 11 specific terms or concepts. This qualitative insight complemented and enriched the quantitative data stemming from the observations, offering a deeper understanding of the interplay between learners' English proficiency and their capability to engage with Geography. The figure below provides an illustration of learners' responses within this context.

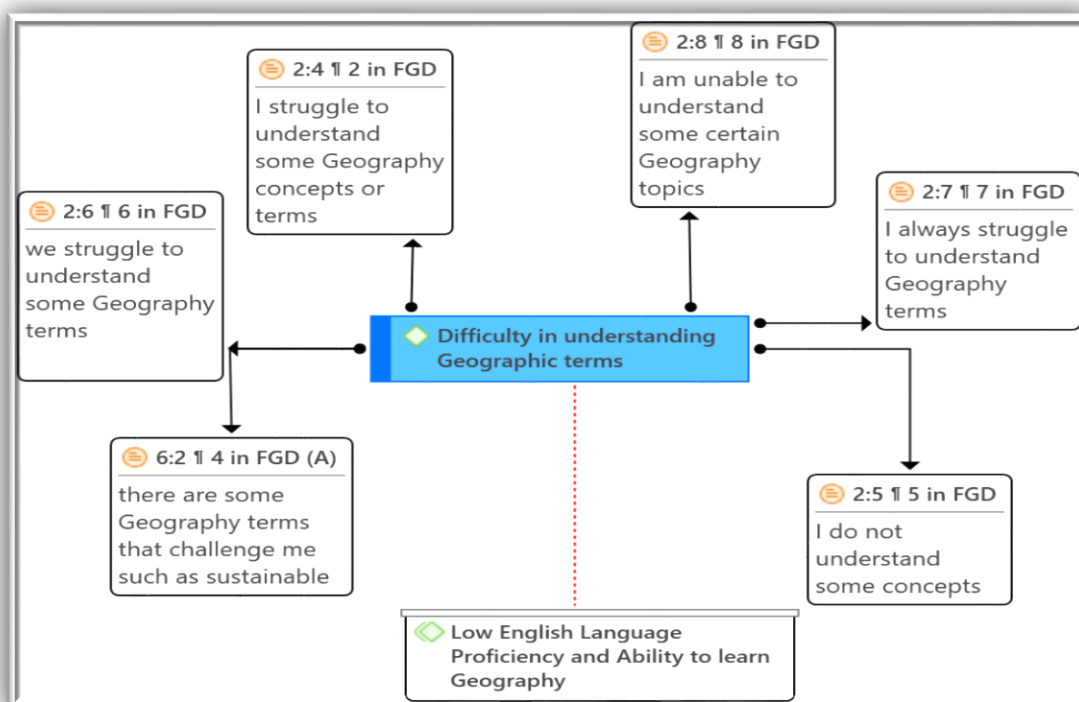


Figure 4. 3 Limited command in English language and mastery of Geography terminology

This challenge manifests in some topics like marine processes and river processes as indicated by respondent 1A and 2A. This could translate into performing poorly in not only those topics of the syllabus but many others.

“I struggle to understand some Geography concepts or terms such as in the topic of marine process” (respondent 1A).

“I get affected such that I do not understand some Geography terms such as lateral erosion. Again, this affects my performance in topics such as in marine process and river processes” (respondent 2A).

“I always struggle to understand Geography terms such as lateral erosion. I also struggle in topics like in marine processes, thermal and wind power and plate tectonics” (respondent 3A).

A common thread of similarity exists within the responses of learners from school A. Their shared challenge revolves around the impact of their limited English proficiency, which serves as the medium of instruction, on their capacity to comprehend Geography. Consequently, they encounter difficulties in grasping certain terms and subjects. To elaborate, this is manifested in the struggles

faced by all respondents, namely 1A, 2A, and 3A, particularly evident in the marine processes and river processes topics. Additionally, both respondents 2A and 3A encounter difficulties in understanding the concept of lateral erosion due to their restricted command of the English language. Conversely, the struggles faced by respondents 2A and 3A are distinct: the former in relation to river processes and the latter in connection with plate tectonics.

The majority of topics and concepts (*river processes, marine processes, lateral erosion plate tectonics*) mentioned in learners' responses from school A are from section A of the Geography syllabus (*elements of physical Geography*). Additionally, two of the topics mentioned (*thermal power and wind power*) are from the section B of the syllabus (*Economic Geography*).

Learners from school B also gave their diverse opinions how their low English language proficiency affects their ability to learn Geography. The major challenges learners face, as a consequence of their English language deficits, include difficulties in connecting with the teacher and understanding the lesson content, struggling with understanding certain Geography terms, expressing themselves during classroom discussions, and formulating questions. This was also evident during classroom observations.

"I am sometimes not able the questions in the classroom or understand what the teachers is saying to us" (respondent 1B).

"It affects so much and there are some Geography terms that me like in the topics weathering, river processes" (respondent 2B). This is also experienced by learners from school A. All the topics mentioned by respondent 2B are from section A (*elements of physical Geography*).

It is crucial to emphasise the points of convergence evident in the responses of both learners and teachers within this context. The analysis also unveiled that these difficulties carry consequences for the academic accomplishments of learners, as pointed out by learner 2A and teacher X. This is particularly noticeable when they encounter open-ended questions worth seven marks in tests and examinations. Moreover, learners shared that they occasionally face challenges in understanding certain Geography terms due to their constraints in English, the instructional language. For instance, one learner highlighted that the notion of lateral erosion remained elusive until their

teacher expounded on it in Sesotho. “*I get affected such that I do not understand some Geography terms such as lateral erosion*” (respondent 1A). This topic belongs to the domain of Physical Geography, constituting the initial section of the syllabus. This observation was similarly recorded during classroom observations.

Moreover, when analysing learners' responses regarding the impact of their limited English language proficiency on their Geography learning, it becomes apparent that beyond grappling with specific terminology, they also encounter difficulties in certain syllabus topics. This shows the gravity of the harm caused by learners' English language deficits in Geography teaching and learning processes. Particularly, their challenges encompass subjects from both section A (Elements of Physical Geography) and section B (Economic Geography).

In reference to section A of the syllabus, learners cited topics such as marine processes, plate tectonics, weathering, and river processes. The topic of marine processes was mentioned thrice, while the concepts of lateral erosion and river processes were mentioned twice. Topics like plate tectonics, thermal power, wind power, and weathering were each mentioned once. Additionally, from section B of the syllabus, learners referred to thermal power and wind power. Consequently, it is evident that learners' deficiencies in English, the language of instruction, adversely impact their grasp of Geography within both section A (Elements of Physical Geography) and section B (Economic Geography) of the syllabus.

Drawing from the responses of participant learners and teachers across both schools concerning the potential influence of limited English proficiency on learners' Geography acumen, it becomes clear that shortcomings in English language proficiency indeed hinder learners' mastery of Geography.

Furthermore, learners were inquired about the topics they find challenging due to their limitations in English language. The ensuing list outlines the topics mentioned by learners from both schools.

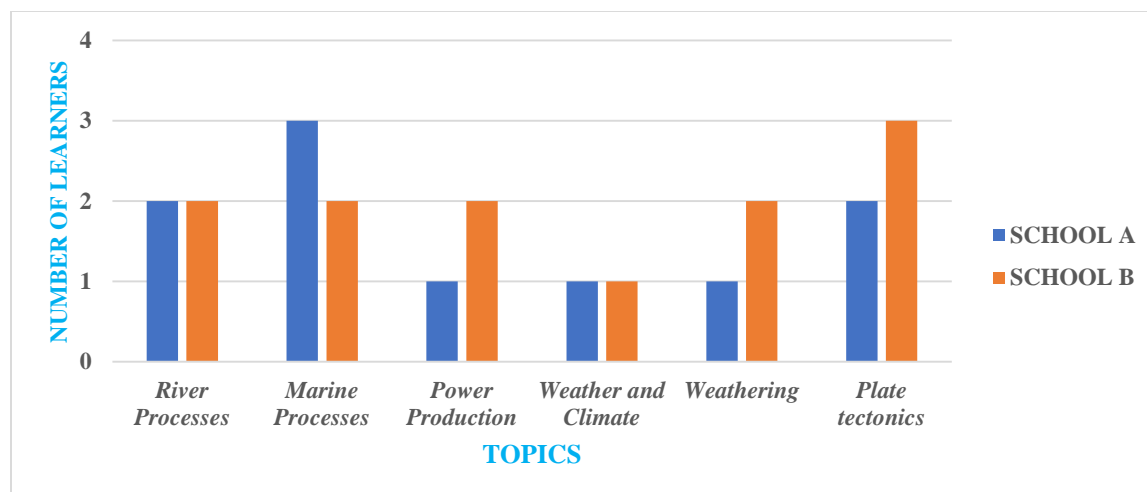


Figure 4. 4 Topics challenging learners due to low English language proficiency

Illustrated in Figure 4.1 above, learners grapple with numerous Geography topics during lessons due to their limited proficiency in the English language. To be precise, this challenge was voiced by 21 learners (12 from school B and 9 from school A), constituting 81% of the total 26 learners. This divergence could arise from variations in English language proficiency between learners from the two schools. Six topics within Geography lessons prove challenging for learners in both schools due to their English language deficits.

In alignment with the presented evidence, marine processes and plate tectonics emerge as the most formidable topics across both schools. Out of the six aforementioned challenging topics, five pertain to section A of the syllabus (Elements of Physical Geography), with the remaining topic (power production) stemming from section B (Economic Geography). Consequently, the implication is that low English language proficiency adversely impacts learners, particularly in the realm of Physical Geography.

4.3.2. Learners' behaviour when struggling to understand Geography content

The participating teachers in this study were queried about observable behaviours in learners that might indicate they are encountering difficulties in comprehending Geography lessons. According

to the insights provided by Geography teachers in this study, learners manifest certain behaviours when grappling with Geography content due to their limitations in English language proficiency. From the standpoint of these Geography teachers, one prevalent behaviour exhibited by learners is their silence during class discussions. Two teachers (X and Y from school A) elaborated that learners occasionally begin to comprehend the content after it is explained to them in Sesotho.

For example, teacher X (from school A) stated that

“I have realised that learners encounter challenges in expressing themselves in English, especially in a Geography class when they are attempting to answer a question. I sometimes elaborate in Sesotho and that is when they give correct answers”.

This is evident on topics like map reading. Teacher Z from school B explicated that

“based on my teaching experience, they struggle to express themselves ...one of them want to attempt questions in their mother tongue. Sometimes they remain silent when I ask them questions. In topics like map reading, you find that I explain for a long time but some still do not understand.”

Furthermore, a variety of indications suggesting that learners from school A are encountering challenges in comprehending Geography content due to their limited English proficiency were observed during classroom sessions. These manifestations encompassed struggles in expression and difficulties in comprehending Geography terminology. Learners themselves confirmed that their deficits in the English language contribute to their difficulties with certain Geography terms and concepts. For instance, one learner expressed,

"I am affected in such a way that I struggle to grasp certain Geography terms like lateral erosion. This, in turn, impacts my performance in topics such as marine processes and river processes" (respondent 2A).

Several learners opted to pose questions and provide answers in their native language during classroom discussions. This aligns with the observation made by teacher Z (from school B) regarding signs that learners might be grappling with understanding lesson content due to their limited English proficiency. The teacher noted,

"Based on my teaching experience, they face challenges in expressing themselves during class discussions and in writing. Some of them prefer to tackle questions in their native language."

This pattern was also discernible during classroom observations. Learners at school A encountered difficulties comprehending terms like "confluence" and "river banks" until their teacher provided explanations in their native tongue.

Throughout five observed lessons, difficulties in expression emerged on five occasions, while struggles with understanding certain Geography terms arose six times. The terms and concepts that learners encountered difficulty with during classroom observations included "river banks," "drainage," "confluence," "boulders," "suspension," "meander," and "lateral erosion." Learners managed to understand these terms when their teachers switched between English and Sesotho. Notably, all these terms and concepts fall within section A (Elements of Physical Geography) of the syllabus. Similar patterns were evident at school B during classroom observations. In the context of the topic of tourism, some learners at school B were unable to articulate themselves during class discussions. When prompted to define the term "tourism destination," the entire class fell into silence. This phenomenon could likely be attributed to their limited English language proficiency.

Consequently, the analysis unveiled that learners' constrained command of the English language impacts their participation in the lesson. This reluctance to take ownership of their learning was evident during classroom observations.

4.3.3. Geography teachers' understanding of code switching in relation to Geography teaching and learning

At the beginning of the interview, Geography teachers were inquired about their understanding of the concept of code switching. This inquiry aimed to determine their level of familiarity with the concept. The responses obtained are depicted in the table below.

Table 4. 2 Geography teachers' understanding of the concept code switching

Participants	Responses
--------------	-----------

Teacher X (from school A)	“I understand the concept code switching in a notion that sometimes when concepts are too difficult for learners to understand when I teacher in English, I could switch between English and Sesotho so that they can better understand the concept and some Geography terms”.
Teacher Y (from school A)	“For me, code switching is when I use English and Sesotho in the Geography classroom while teaching with the intension of making the lesson easily understood by learners because not all of them understand English very well”.
Teacher Z (from school B)	“for me, code switching is using both English and Sesotho here and there to make content of Geography to be easier for learners to understand ”.

The data depicted in the above table illustrates that the teachers participating in this study comprehend the concept of code switching as the practice of utilising both English and Sesotho languages during Geography lessons. The interviews further revealed that Geography teachers possess an awareness of code switching and recognise its significance in the realm of Geography education. They perceive it as a supplementary instructional strategy, employing it to facilitate learners' understanding of specific terms. Notably, teacher X employs code switching from English to Sesotho and vice versa as a means of clarifying potentially intricate concepts.

4.3.4. Situations or appropriate time in which code switching can be used in Geography lessons

During the focus-group interviews conducted with learners, their viewpoints concerning the appropriate instances for Geography teachers to employ code switching were explored. They were also queried about their preferences for when teachers should utilise code switching in the context of Geography education. Furthermore, teachers were also interviewed on this matter. The findings reveal that circumstances in which learners favour the application of code switching in Geography lessons encompass instances when they encounter challenges related to comprehension and expression. Code switching is also welcomed during explanations involving diagrams and images, for purposes of clarification and illustration, as well as when introducing new topics.

In addition, Geography teachers express a preference for employing code switching when providing examples, during fieldwork activities, and while explaining diagrams and teaching aids.

Table 4. 3 Views on circumstances requiring the use of code switching in Geography teaching

Opinions	F (N= 29)	Percentage (%)
<i>For illustration and clarification</i>	18	62%
<i>When introducing the new topic</i>	3	10%
<i>When experiencing difficulty in expression</i>	21	72%
<i>During fieldwork</i>	3	10%
<i>When explaining diagrams and pictures</i>	2	7%

Referring to the table 4.2 above, it became apparent that both learners and teachers possess an awareness of code switching within Geography classes. As indicated in the table, 62% of the participants (comprising 15 learners and 3 teachers) hold the belief that code switching can be effectively employed in Geography lessons for purposes of illustration and clarification.

To cite an example one learner said that, “*I think my Geography teacher should code switch when giving examples so that the lesson becomes relatable but it should not be all the time because we use English during examination*” (Respondent 1A).

Similarly, “*I code switch in Geography class when mentioning examples*” (Respondent 2B). However, one learner (respondent 1A in particular) warns that code switching should not be used all the time.

Furthermore, all three teachers share a similar perspective with the learners that code switching can effectively be utilised when providing examples for illustrative purposes.

For instance, teacher X from school A stated that “*I think one of the situations that requires the use of code switching is when I mentioned examples so that learners can relate and understand what I am teaching*”.

This aligns with the viewpoint of respondent 1A, who believes that when teachers engage in code switching while providing examples, it renders the lesson content more relatable.

Additionally, three participant learners (1 from school A and 2 from school B) hold the perspective that code switching can be employed within Geography instructional processes, particularly when introducing new topics. For instance, one learner expressed the following sentiment:

“I think when introducing the new topic and when our teacher is clarifying” (respondent 2A).

Further, respondent 3B indicated that *“I think our teacher can use code switching when starting the new topic so that understand what that topic is all about.”*

Based on these perspectives, it can be deduced that employing code switching during the initial phases of a topic offers learners a comprehensive understanding of it. Furthermore, the analysis indicates that a combined total of 21 participants, consisting of 19 learners and 2 teachers (equivalent to 72% of the participants), hold the belief that code switching can prove beneficial in Geography lessons when learners face difficulties in articulating themselves due to their limited proficiency in English, which serves as the medium of instruction. This pertains to situations where learners possess an answer but struggle to respond to posed questions during classroom discussions.

For example, *“I also use both English and Sesotho when I know the answer to the question that our teacher is asking but I am not able to answer it in English”* (respondent 2B).

In the same vein, another learner indicated that *“I use Sesotho and English in a Geography class when I ask questions and when I want to understand the meaning of some terms in Geography”* (respondent 4A).

More so, 2 teachers are of the similar view. For example, one teacher explicated that, *“I think code switching is suitable in cases where learners cannot clearly express themselves. Then I allow them to use both languages when answering questions in the class”* (Teacher X).

Moreover, three participants, consisting of two teachers and one learner, hold the belief that code switching can be effectively utilised during fieldwork. Fieldwork constitutes a fundamental component of Geography pedagogy, as outlined in chapter 1. The analysis unveiled that both learners and teachers are of the opinion that employing both English and the mother tongue is appropriate during fieldwork. This approach facilitates better comprehension and relatability for learners.

For instance, teacher Y from school A stated that,

“for the years I have been teaching Geography, code switching can be useful when I take learners for fieldwork so that they see the content like diagrams and processes in reality. It improves their understanding in that situation.”

More, teacher Z indicated that *“code switching can be used during fieldwork like I use it when I take to rivers. It improves their understanding.”*

Based on the aforementioned responses, it is evident that code switching holds advantages during fieldwork and can enhance learners' comprehension.

Furthermore, a single learner and one teacher (constituting 7%) view code switching as suitable for explaining structures and diagrams. This approach could prove beneficial since Geography exams frequently entail questions necessitating learners to augment their responses with accurately labelled diagrams. Alternatively, question papers might incorporate inserts containing diagrams that learners need to analyse in order to address related questions.

For example, *“I think when our teacher is supposed to use English and Sesotho when explaining diagrams and structures”* (respondent 3A).

Additionally, teacher X explained that *“I use both languages when explaining diagrams ad when using teaching aids to help them understand better.”*

Nonetheless, a single learner (referred to as 3B) issues a caution against Geography teachers relying solely on code switching, given that the examination question papers are presented in English. The learner expressed, *“I believe that code switching shouldn't be used all the time since*

Geography question papers are in English." This perspective indicates that learners view code switching as a supplementary instructional approach within Geography education, meant to be employed primarily or as required.

Subsequently, teachers were queried about the methodologies they employ to ensure universal access to Geography content. Below are the responses provided by the participating teachers in this regard.

Teacher X: *"I also make sure I use the prescribed Geography textbooks all the time and this helps them"*

Teacher Y: *"I bring teaching aids in the classroom so that learners can understand better I also take them for fieldwork so that they understand better because my school is located on a good environment that has good Geography around it."*

Teacher Z: *"because of the location of my school, I have an opportunity to take them for fieldwork so that they these things in real life and you find that it helps them a lot."*

Fieldwork and the use of teaching aids such as diagrams were mentioned by two (67%) out of three participant teachers. This indicates that teachers are aware of the usefulness of fieldwork as one of the core of Geography pedagogy. Therefore, enough exposure areas with Geography phenomena or features could improve learners' comprehension of the subject matter.

It also came to light that employing designated Geography textbooks aids learners in comprehending the concepts more effectively. This sentiment was echoed by participating learners, who mentioned that engaging in fieldwork can also contribute to their enhanced understanding. *"we should always go for field trips so that we can see the Geography in real situation"* (respondent 5A, focus group interviews). Relatedly, *"I think we should be allowed to do experiments and go for fieldwork to see concepts we are being taught"* (respondent 2A, focus group interviews).

Respondent 1A also indicate that, *"most of the things that we learn in Geography, they are things that we can understand if we see them live outside the classroom but we are always in the classroom."*

Based on the aforementioned evidence, Geography teachers do indeed employ the fieldwork instructional technique as anticipated. This signifies that Geography teachers should recognise the educational significance of fieldwork, which holds a central role among the teaching techniques within this subject.

4.3.5. Appropriate time to allow learners' use of code switching in Geography classes

Furthermore, the investigation illuminated into Geography teachers' viewpoints regarding the incorporation of code switching in Geography instruction and learning, focusing on the appropriate instances for learners to use both languages within a Geography class. The query posed to teachers during the interviews revolved around the circumstances or situations under which learners could be granted permission to utilise both languages in a Geography class.

Teachers from the two schools shared the perspective that learners could employ code switching when they encounter difficulty expressing themselves in English, even though they possess a valid point. This viewpoint is exemplified by teachers X and Y.

To exemplify, teacher X from school A indicated that,

“For me, learners can be allowed to code switch when they are not able to express themselves. So when it comes to expressing oneself in attempting a question or in asking a question, it becomes a problem. So that is why they will ask, please sir, may I speak in Sesotho and allow them”. I think when they answer questions in the classroom if their English fails because you find that they may have a point but struggle to express themselves clearly. But, I do not allow them to code switch all the time because I want them to understand English as the medium of instruction because when we depend to using Sesotho, they will face challenges when writing. So I think learners should be allowed to code switching when they want understand something better then continue in English.”

However, aside from these particular cases, Geography lessons should predominantly be conducted in English, as recommended by teacher Y.

Moreover, Teacher Z proposed that Geography teachers can employ both languages during practical activities, particularly when instructing topics concerning map reading and interpretation,

which are covered in the final section D of the syllabus (map reading and interpretation skills). One teacher elaborated,

“Based on my teaching experience, I think when dealing with practical activities especially on the topic of map reading and divide them into groups, Geography teachers can allow them to use both Sesotho and English to enhance their understanding. But when dealing with theory part of Geography, I think teacher must speak English most of the time and Sesotho occasionally because it will be easy for them to answer questions in an examination” (Teacher Z, in-depth interviews).

Nevertheless, concerning the theoretical facets of the subject, the same teacher recommended that Geography instructors could occasionally employ code switching. This stance is particularly emphasised by teacher Y.

4.3.6. Geography topics that require the use of code-switching

During the interviews with Geography teachers, one of the questions pertained to the topics in which they believe code switching could be utilised, drawing from their teaching experience. These topics are outlined in the figure below.

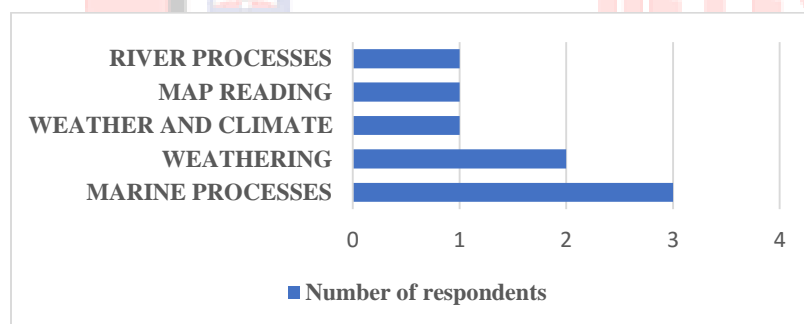


Figure 4. 5 Topics that require the use of code switching according to teachers

In total, code switching was identified as beneficial in 10 different topics. The majority (5) of Geography topics and concepts in which code switching (utilising both English and Sesotho) proves advantageous are drawn from section A of the syllabus (Elements of Physical Geography). These encompass subjects like weather and climate, plate tectonics, and weathering, among others. Additionally, a single concept was also mentioned from section C (Settlement, Population, and Migration), specifically population pyramids. Both participant learners and teachers also cited map

reading and interpretation skills from section D (Basic Techniques and Inquiry Skills). Learners also mentioned the topics of thermal and wind power from section B (Economic Geography) of the syllabus. Consequently, there is a unanimous consensus that code switching is advantageous across all sections of the Geography syllabus, although section A (Elements of Physical Geography) has a higher number of mentioned topics.

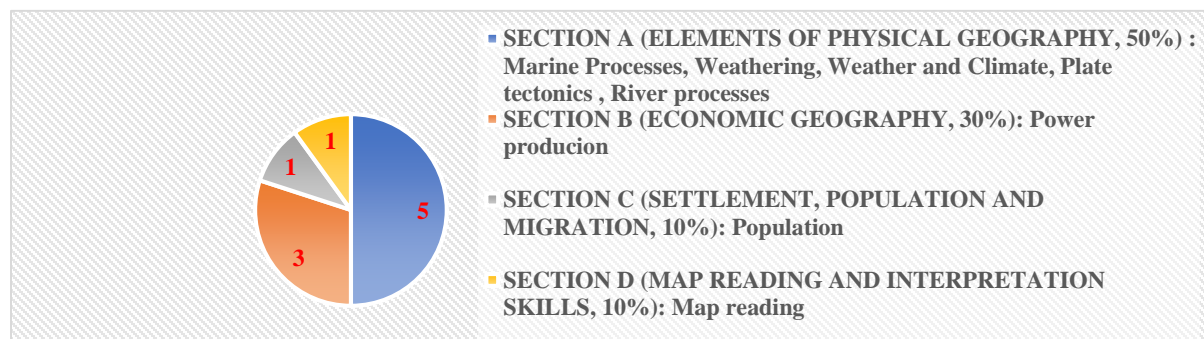


Figure 4. 6 Topics that require the use of code switching is advantageous, teachers and learners' perspective.

Code switching appears to be particularly advantageous in section A of the syllabus (Elements of Physical Geography). Section B (Economic Geography) ranks second, featuring three topics, while sections C and D rank third with one topic each. This perspective is based on the viewpoints of both learners and teachers. The findings suggest that code switching is most effective during Geography lessons when addressing topics from section A of the syllabus. Additionally, all the topics listed in figure 4.6.1 were also identified by learners as posing challenges due to their limited proficiency in the English language.

The analysis, as depicted in the aforementioned figure, reveals that the topic of marine processes stands out among the four mentioned topics. This is followed by another topic mentioned by two teachers, while the topics of river processes, map reading, and weather and climate were each mentioned once.

“I think there are many topics in the Geography syllabus that requires teachers to use both Sesotho and English when teaching them. Topics such as marine processes because in

Lesotho we have no access the to the sea so you find that topics is not familiar to learner. But, it does not have to be too much of it” (teacher X from school A).

Based on this response, it can be deduced that code switching proves advantageous in Geography lessons, particularly when instructing topics involving Geography phenomena that are unfamiliar to learners, such as marine processes. Another noteworthy observation is that the four topics perceived by teachers as requiring code switching were also identified as challenging for learners due to deficiencies in the English language. Specifically, these topics are weather and climate, marine processes, river processes, and weathering, all originating from section A of the syllabus (Elements of Physical Geography). This implies that code switching can hold significant value in addressing these subjects.

The focus group interview with a teacher from school A revealed that learners might encounter difficulties in Geography lessons, especially when tackling unfamiliar topics.

“I have realised that learners struggle to understand topics like marine process as a result of their low proficiency in English language, they do not relate on concepts like coral reefs you find that they are not relatable to learners because. Again, topics like weathering and river processes, learners struggle to understand ...so I have realised that code switching is important in those topics” (Teacher Y).

This suggests that employing code switching in topics such as marine processes and weathering renders the lesson content more relatable.

The analysis also unveiled that code switching can be effectively utilised in topics containing potentially challenging terms. One teacher provided the following insight in this regard:

“I think examples of such topics such as weathering, marine processes because the terms used in those topics is challenging for some learners to understand the lesson. So I think code switching is necessary in such topics. Again, topics such as the selected climatic regions, that is the one that you find it seems to be difficult for them to understand. And in that topic you will find that they struggle to understand tropical rainforest and tropical desert specifically so I think code switching may help learners a lot in those topics. Another

topic is map reading like I mentioned I even explain for a long time in that one” (Teacher Z, in-depth interview from school B).

It is worth noting that all teachers provided examples of topics from section A (Physical Geography) of the syllabus. However, one teacher expressed a differing viewpoint and cautioned against excessive use of code switching in those specific topics. The topic of marine processes was mentioned three times, while weathering was mentioned twice. Additionally, the topics of map reading and selected climatic regions were mentioned once. All of these topics are derived from section A of the syllabus, namely, "Elements of Physical Geography," except for map reading, which is from the section on "Map Reading and Interpretation Skills."

Furthermore, all the teachers indicated that they have been employing code switching as a conceptual tool and a medium of instruction in Geography lessons since the outset of their teaching careers. This practice is intended to overcome language barriers and enhance learners' comprehension of the content.

The analysis clearly revealed that, in relation to the first research question addressed in this study, the majority of learners and Geography teachers interviewed demonstrated a positive attitude toward the use of code switching in Geography teaching and learning. However, all teachers emphasised that code switching should only be used when necessary in Geography education. Similarly, some learners expressed that despite its benefits, this conceptual tool should not be heavily relied upon to avoid challenges during examinations. Based on the qualitative evidence presented regarding the first research question, it became evident that learners' limited English proficiency impacts their ability to learn Geography in several ways, including difficulty in expressing themselves, struggles to grasp Geography terminology and concepts (such as the concept of lateral erosion in the topic of river processes), as well as an inability to tackle questions worth seven marks during examinations.

The challenge of difficulty in expression became evident when certain learners sought to answer questions in Sesotho during classroom discussions. Thus, it is evident that learners' proficiency in the language of instruction detrimentally affects their performance in Geography. The analysis

also unveiled that certain topics from section A (Physical Geography) necessitate teachers' utilisation of code switching. For instance, teachers mentioned topics like weathering, the rock cycle, selected climatic regions, and erosion as requiring the use of code switching.

4.4. Impact of code switching in Geography teaching

This study also aimed to investigate the impact of code switching (the use of English and Sesotho) in Geography education from both teachers' and learners' perspectives and experiences. The study employed an explanatory mixed research design, encompassing two phases of data generation, where quantitative data is complemented, followed up, or elucidated by qualitative data, as previously outlined in chapter three (methodology). The quantitative aspect involves presenting frequency counts of code-switching usage during Geography lessons in both schools. Consequently, for the second research question, both quantitative and qualitative evidence are provided. The quantitative and qualitative data were generated through classroom observations and interviews (with learners and teachers) respectively (refer to appendices 2, 3, and 4). The quantitative phase primarily aimed to generate data on the types of code switching employed by teachers in Geography classes and the purposes for which they were used.

The data for the second research question is presented under the following themes: functions of code switching carried out by learners and functions of code switching executed by teachers. Each of these themes includes sub-themes. Furthermore, the qualitative evidence is presented under the theme: impact of code switching in Geography education from the perspectives of learners and teachers.

4.4.1. Impact of code switching during lesson observations



Figure 4. 7 Types of code switching employed by teachers at School A

As indicated in figure 4.3 above, inter-sentential code switching (the use of two languages between two independent sentences) was employed 2 times during the first lesson at school A. The same type of code switching occurred 5 times during the second lesson, 4 times during the third lesson, 2 times during the fourth lesson, and 3 times during the fifth lesson. Intra-sentential code switching (the use of two languages within one sentence) was employed 2 times during the first lesson, 2 times during the second lesson, 3 times during the third lesson, once during the fourth lesson, and 3 times during the fifth lesson. In total, inter-sentential code switching was used 17 times over the course of five lessons, while intra-sentential code switching was used 11 times. Evidently, inter-sentential code switching dominated the lessons at school A. During the classroom observations, this type of code switching was employed to fulfil the functions outlined in the table below. The fluctuations in code switching utilisation depicted in the graph suggest that teachers view it as an additional instructional technique to be employed as needed, particularly to overcome language barriers. These types of code switching were used on various occasions, with the intention of enhancing learners' understanding of lesson content.

Based on the above findings, it can be deduced that Geography teachers frequently utilise code switching. They are well aware of the pedagogic significance of code switching. As observed during the classroom sessions, it was consistently used in all five lessons. In essence, transitioning between English and Sesotho codes seems to be a routine and customary aspect of Geography instructional processes. Therefore, Geography teachers are conscious of its pedagogic importance. For instance, teacher X employed intra-sentential code switching when teaching river erosional processes within the topic of river processes, to aid learners in comprehending the concept of abrasion. Teacher X explained, *"In this process, the pebbles are not suspended on top of the water level but grind the river bed ka ha a boima."* This assisted learners in understanding the abrasion process within river erosional processes. The lesson became relatable to the learners, who began mentioning significant trees and large boulders they observed grinding against the river bed in the Roma valley after heavy rainfall. From this observation, it was evident that code switching facilitated the relatability of lesson content for learners. Teacher X also utilised inter-sentential code switching to clarify concepts, aiding learners in understanding the notion of river energy.

Teacher X elucidated, "High river energy is seen when the velocity of water is high. *E etsahala hangata ka nako ea likhohola ha pula e nele haholo, o tla bona ha o fihla Roma valley metsi a le sekhahla.*" Based on this evidence, it can be inferred that this bilingual instructional technique or the use of code switching enhances learners' comprehension of lesson content. This highlights how code switching is employed to elucidate and promote understanding of the topic.

Based on the presented evidence, it can be argued that this bilingual instructional technique, namely the use of code switching, maximises learners' opportunities for understanding lesson content. Furthermore, code switching stimulates learners' active participation during classroom discussions.

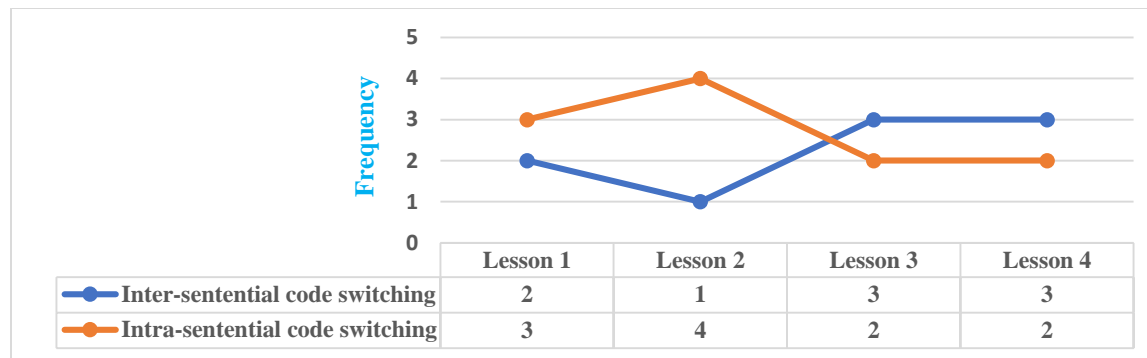


Figure 4. 8 Types of code switching employed by the teacher at School B

Across four observed lessons at school B, the use of code-switching displayed fluctuations in the first three lessons, yet remained consistently employed from the third lesson to the fourth. The teacher employed intra-sentential code switching three times in the first lesson, four times in the second lesson, and twice in both the third and fourth lessons. Inter-sentential code switching was employed twice in the first lesson, once in the second lesson, and three times in both the third and fourth lessons. The fluctuations illustrated in figure 2 suggest that Geography teachers understand the significance of code switching but use it as the need arises.

Figures 4.3 and 4.4 indicate that code switching was utilised in all observed lessons. This implies that Geography teachers recognise the pedagogical importance of code switching, a concept explored in greater detail in tables 4.4 and 4.5.

In terms of intra-sentential code-switching integration in Geography education in both schools (A and B), the usage is nearly identical. It was employed 21 times in school A and 11 times in school B. Additionally, inter-sentential code switching was used 26 times in both schools, with 17 times in school A and 9 times in school B. According to this data, inter-sentential code switching (alternating languages between separate sentences within a statement) was more prevalent than intra-sentential code switching in both schools (utilised 5 times more than intra-sentential). This potentially indicates that the participating Geography teachers in both schools view language switching between sentences as a strategy to enhance learners' retention and comprehension of subject matter.

Moreover, the influence of code switching on Geography teaching and learning processes is outlined in the table below.

Table 4. 4 Functions of code switching during Geography lessons at school A

Functions of code switching performed by learners

Function	Frequency					Total
	Lesson 1 (grade 10A)	Lesson 2 (grade 10A)	Lesson 3 (grade 10B)	Lesson 4 (grade 10B)	Lesson 5 (grade 10B)	
Understanding potentially complex concepts/terms	✓	✓✓	✓	✓✓✓	✓✓✓	9
Asking and answering questions	✓	✓✓✓	✓✓	✓✓✓	✓✓✓✓	12
Functions of code switching performed by teachers						

Clarification	✓	✓✓✓	✓✓✓✓	✓✓	✓	<i>11</i>
Repetition	✓	✓	✓✓✓	✓✓	✓	<i>8</i>
Facilitating teacher-learner and learner-learner communication	✓	✓	✓✓✓	✓✓	✓✓	<i>9</i>
Checking learners' understanding	✓✓	✓	✓		✓	<i>5</i>
Enhancing learners' comprehension (providing meaning to new vocabulary and giving examples)	✓✓✓	✓✓✓✓	✓✓	✓✓✓✓	✓✓	<i>15</i>
Facilitating learners' participation	✓	✓	✓✓			<i>4</i>
Lesson review	✓	✓	✓✓			<i>5</i>
Classroom management			✓			<i>1</i>

As outlined in the aforementioned table, a total of five (5) lessons were observed at school A, and based on the presented data, teachers employed code switching in Geography classes more frequently than learners.

Teachers from school A frequently engaged in functions aimed at enhancing learners' comprehension, such as providing explanations for potentially unfamiliar Geography vocabulary or terms, offering examples, clarification, repetition, and facilitating communication between

teachers and learners. These functions occurred 15, 11, 8, and 9 times, respectively. On the other hand, the functions of classroom management, fostering learners' participation, and reviewing the lesson were less frequently performed, with only one occurrence for classroom management and 4 and 5 times respectively for the other functions. These functions were carried out for various reasons.

Furthermore, learners also employed code switching when posing and responding to questions. This transpired 12 times over the course of five observed lessons. Earlier, one of the teachers mentioned that this serves as an indicator that learners might struggle to comprehend the content due to their limited command of the English language.

Teacher Y explained, “...most learners want to attempt the questions in Sesotho or in both languages because they cannot express themselves clearly in Geography lessons”.

The evidence presented above indicates that teachers are aware of the importance of code switching in Geography teaching and learning processes. This implies that code switching is an enabling factor towards establishing connection (breaking barriers) between learners and teachers in Geography education.

Table 4. 5 Functions of code switching during Geography lessons at school B

Function	Frequency				Total
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	
To understand potentially complex terms	✓✓		✓		3
Asking and answering questions	✓✓✓	✓	✓✓	✓✓✓✓	9
Functions of code switching performed by the teacher					
Clarification	✓✓	✓✓	✓	✓	7
Repetition or Reiteration		✓	✓✓✓		4

Facilitating teacher-learner communication		✓			1
Checking learners' understanding			✓✓		2
Enhancing learners' comprehension (providing meaning to new vocabulary and giving examples)	✓✓	✓✓	✓	✓✓✓	8
Enhancing learners' engagement (providing prompts)	✓✓	✓	✓✓✓		5
Lesson review	✓	✓	✓✓✓		5
Classroom management	✓		✓	✓	3

Four lessons were observed at school B. According to the quantitative evidence presented in the table above, code switching also played a major role towards facilitation of effective content delivery in Geography lessons as was the case at school A. The function of clarification through code switching occurred 7 times (36% less), compared to 11 time at school A. Along similar lines, the function of enhancing learners' comprehension through code switching occurred times, illustrating a (47% reduction) in comparison to 15 times at school A. With reference to results of each lesson (the number of times each function occurred), the implication could be that the Geography teachers view code switching as an additional medium of instruction. With regards to learner usage, learners from this school (B) used both English and Sesotho for nine times in four lessons to ask and answer questions. On the contrary, at school A, this occurred 12 times in five lessons. Therefore, code switching avails learners with an opportunity to express their thoughts when their limited command in English becomes a barrier in Geography instructional processes. The use of code switching from both schools contributed towards successful delivery of the content as presented in tables 4.4 and 4.5. Below is the comparison of code switching incidences from the two schools (A and B) for further understanding of tables 4.4and 4.5.

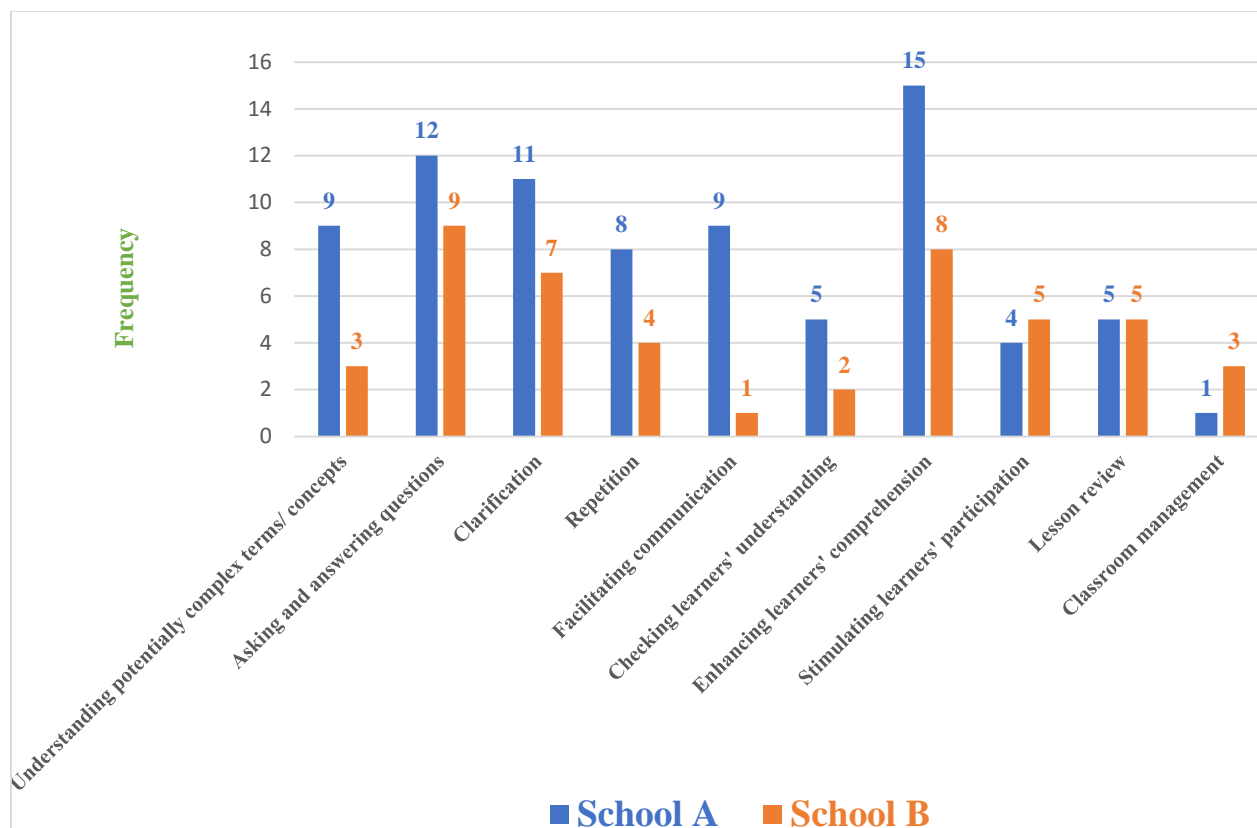


Figure 4. 9 Comparison of code switching functions during Geography lessons at both schools

Based on the aforementioned results, Geography teachers are conscious of the opportunity to incorporate code switching into their Geography instructional methods in order to include all learners in discussions. This insight is supported by the frequencies displayed in figure 4.8 above. They perceive it as a significant instructional technique within Geography education. From the figure provided, code switching was employed more frequently for various functions in Geography lessons at school A compared to school B. This discrepancy could potentially arise from the fact that the topics taught during the classroom observations varied between the two schools. To be specific, the observations took place during the teaching of river processes at school A and tourism at school B. These topics belong to sections A and B (Elements of Physical Geography and Economic Geography) respectively. Consequently, the situations that warrant the use of code switching might differ from one topic to another.

Additionally, code switching was similarly utilised to stimulate learners' participation. However, it's noteworthy that classroom management and facilitating communication were less common reasons in school B.

4.5.1 Clarification

In a deliberate effort to enhance learner comprehension, teachers employed code switching to elaborate on concepts and render the lesson content more accessible. Teacher X utilised code switching (inter-sentential level) to aid learners' grasp of the concept of lateral erosion. Specifically, teacher X expounded, "*Lateral erosion happens on the river's banks and widens the river. E etsahala mabopong a noka, o tla bona noka ea rona e ba sephara.*" This elucidation resulted in learners comprehending the concept.

Likewise, Teacher Y employed code switching (intra-sentential level) to clarify Geographical terminology, particularly focusing on the topic of river processes and the concept of confluence. Teacher Y illustrated, "*Confluence is the point moo linoka tse peli li kopanang. This is where two rivers meet. Mohlala e ka ba Senqunyane e kopa Malibamats'o to form one river.*" This instructional approach rendered the lesson content relatable to learners. For instance, one learner provided an example of Roma valley joining Phuthiatsana river, as these are rivers in close proximity. The fact that learners mentioned nearby rivers as examples after the teachers' explanation of confluence in both languages signifies that code switching makes Geography lessons more relatable. Moreover, learners' ability to offer examples related to the lesson content indicates that they find the content comprehensive when both English and Sesotho are employed.

4.5.2 Repetition or reiteration

In this function, teachers from both schools reiterated their explanations multiple times upon recognising that learners were struggling to grasp the content.

"*I'm saying, high river energy e bonahala ha metsi a noka a le mangata. The river load is bigger at this time,*" stated teacher X while employing code switching to repeat information during the lesson on river processes. At that moment, learners seemed to understand the lesson content better

and began mentioning Roma valley, thereby making the lesson more relatable to them. Furthermore, the same teacher enhanced learners' comprehension by providing explanations for unfamiliar vocabulary, such as the term "meandering river." Teacher X explained, "*By meandering river, we mean noka e matsoeli-ntsoeke. This river flows in a snakelike way.*"

4.5.3 Enhancing learners' comprehension

The function of enhancing learners' comprehension through code switching was observed during classroom sessions, particularly in providing meanings for potentially unfamiliar Geography terms and offering examples. The teacher's utilisation of code switching effectively aided learners in understanding a variety of Geography terms. To illustrate, learners struggled to grasp the meanings of terms like "confluence" and "river banks" until their teacher employed code switching between English and Sesotho to provide explanations. This approach proved successful in enhancing learners' comprehension. Code switching assists learners in attaining a clear understanding of new and potentially unfamiliar Geography terms while fostering a connection between the teacher and the learner. This connection is crucial for effective content delivery.

As mentioned earlier, difficulties in comprehending certain Geography terms due to limited proficiency in English are among the challenges learners face in Geography lessons. This became evident during focus group interviews. Code switching was also observed to be beneficial when explaining diagrams, structures, and teaching aids, facilitating learners' grasp of the content.

This sentiment was also expressed by one learner who stated, "I think our teacher is supposed to use English and Sesotho when explaining diagrams and structures, like when showing us how weather instruments work."

This observation suggests that code switching is advantageous for Geography teachers when elucidating diagrams and structures.

At school B, the teacher employed code switching during the topic of tourism. While explaining "*no go zones*" (areas tourists should avoid trespassing), the teacher went on to mention initiation sites as a familiar example in Lesotho. "*No go areas are places that tourists should avoid. Tsona li kenyeletsa mephato mona Lesotho*" (Teacher Z). Consequently, the lesson became relatable to learners, leading them to provide additional examples of "no go zones" in the context of tourism.

Hence, code switching not only aids learners in comprehending lessons better but also stimulates their participation. This could potentially contribute to an improvement in learners' academic performance.

4.5.4 Stimulating learners' participation

During the classroom observations, it became evident that code switching facilitates active engagement of learners in classroom discussions. The majority of learners displayed active participation, which was especially noticeable when the teacher summarised the lesson and checked learners' understanding. From my perspective, one of the indications of successful content delivery is the learners' active involvement, whether through posing questions or providing answers. This was also previously emphasised by another teacher who stated, "*But when I code switch, they seem to be lively and enjoying the lesson. They want to raise their hands and attempt questions... they are now active participants*" (from in-depth interviews).

Furthermore, a similar pattern emerged during the classroom observations at school B. There were instances where learners remained passive and quiet during discussions. However, when their teacher posed questions in both languages, learners became engaged in the conversation and transformed into active participants. Learners began offering examples of potential tourist destination sites that could be developed or enhanced for tourism attraction in Lesotho. For instance, one learner mentioned Roma valley as an example.

4.5.5 Lesson review

This occurred at the outset of new lessons, where teachers aided learners in recollecting the content from the previous lesson by briefly summarising it using code switching between English and Sesotho. For this purpose, code switching was employed at the conclusion of the lesson to provide a summary. An instance of this was observed during the topic of river processes at school A. Teacher X elucidated, "*We said confluence is the point where two rivers meet. Ra etsa mohlala ka Phuthiatsana e kopana le Senqunyane to become river.*" This technique was also utilised to gauge learners' comprehension of the previous lesson and promptly address any gaps by explaining concepts in both languages. This facilitated learners in establishing connections between the preceding and current lessons.

Nevertheless, the use of code switching in Geography instructional processes has certain disadvantages, as evident from classroom observations. Learners tend to use both languages as they please. Thus, significant control from the teacher is necessary to ensure that learners' subject-related vocabulary remains unaffected. From my perspective, there's a risk that learners might lose grasp of Geography terminology if teachers' control is not maintained. Therefore, both the teacher and the learner should engage in code switching when the need arises.

Following this quantitative phase of data generation, a qualitative follow-up was conducted, as this study adhered to the parameters of an explanatory mixed-method design. The quantitative data generated from observations at both schools was insufficient to draw comprehensive conclusions and recommendations. Therefore, a qualitative follow-up was included to attain a thorough and in-depth understanding of the research findings. This approach was taken to enable both learners and teachers to share their perspectives on the impact of code switching in Geography education, as well as to ensure authenticity. Consequently, the subsequent section presents the analysis and presentation of qualitative evidence on the impact of code switching in Geography teaching and learning, from the viewpoints of learners and teachers. This study aimed to investigate how participant teachers and learners collectively and individually perceive the utilisation of code switching in Geography education.

4.4.2. Impact of code switching in Geography education; learners' and teachers' perspective

After gathering quantitative evidence regarding the impact of code switching in Geography lessons, a qualitative follow-up was carried out through interviews with both learners and teachers. This phase aimed to delve into the impact of code switching in Geography education, examining it from the teachers' perspectives based on their teaching experiences, as well as from the learners' viewpoints and their experiences. Their viewpoints can be classified into the following sub-themes: enhanced comprehension, improved academic performance, and increased active participation.

4.4.2.1. Improved comprehension

The employment of code switching in Geography education emerged as a strategy to aid learners in comprehending and comprehensively engaging with the lessons. This viewpoint was shared by two out of the three participant teachers (67%). Furthermore, learners from both schools conveyed that the integration of code switching within Geography instructional methods enhances their grasp of the subject's content. In essence, code switching elevates their comprehension of Geography's content. From both the learners' and teachers' standpoints, code switching in Geography classes contributes to enhanced understanding, encompassing various aspects as depicted in the figure below.

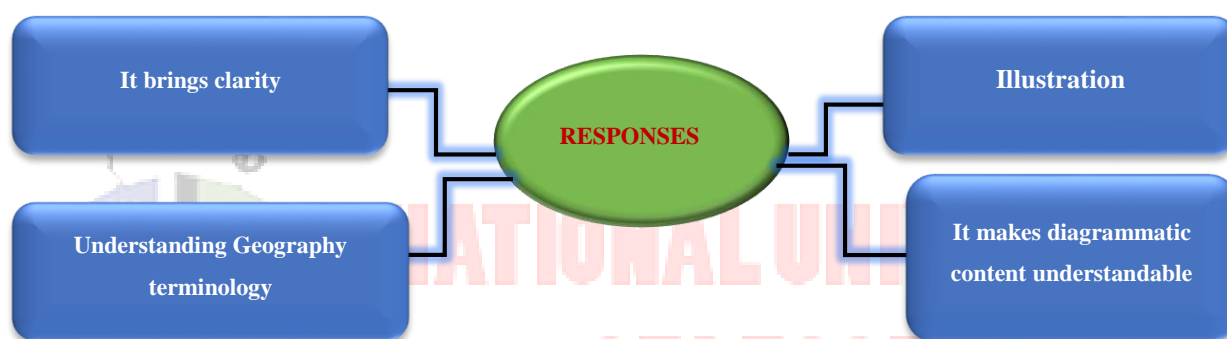


Figure 4. 10 Contribution of code switching to learners' understanding of Geography content

From the diagram provided above, it is evident that code switching enhances learners' understanding of Geography content through various means. The following are the teachers' responses in this context:

Teacher X: *"When I code switch, they better understand and you will see some of them, especially the slow learners, they are active in class, they participate."*

Similarly, teacher Y indicated: *"You find that they understand better when I talk using both Sesotho and English in my teaching. I use them to clarify."*

This phenomenon was also observed during classroom sessions, as illustrated in tables 4.6 and 4.7. Based on the teachers' statements above, code switching improves learners' comprehension in Geography education, increasing their likelihood of grasping the lesson's content.

Furthermore, it's recognised that every class comprises learners with diverse learning speeds, some quick to learn while others take more time. Analysis revealed that code switching accommodates those learners who comprehend the lesson at their individual pace due to their limited command of English. According to Teacher X, *"when I use both languages, even the very slow learners, some of them do understand the concepts very quickly when I code switch."*

This suggests that code switching is an instructional technique that caters to the needs of all learners within a Geography class.

Similarly, the analysis revealed that code switching renders the lesson's content relatable for learners in Geography instructional processes. When elaborating on how code switching achieves this relatability, one teacher stated:

"In most cases, learners start to realise and relate when I use both English and Sesotho, such as in the case of topics like plate tectonics and marine processes that they cannot see in our country. Learners get the clue when I also speak in Sesotho" (Teacher Y, focus group interviews).

This indicates that certain Geography concepts might pose challenges for learners due to their unfamiliarity. Hence, code switching makes such concepts and topics—like marine processes—relatable and easy to understand. Learners also share this view, stating: *"I understand quickly because when our teacher speaks in Sesotho, the lesson becomes relatable"* (Respondent 4A).

Geography is a subject with practical aspects and diagrams.

Moreover, Geography examinations include tasks that necessitate learners to complement or support their responses with diagrams. Additionally, question papers often include inserts (with diagrams) that learners must analyse, interpret, and then answer accompanying questions. Findings from this study suggest that code switching is advantageous when dealing with practical activities in Geography teaching and learning. For instance, a teacher highlighted the value of code switching while teaching the topic of map reading and interpretation from section D of the syllabus (Map Interpretation and Inquiry Skills). Teacher Z elaborated,

"I have also realised that code switching helps a lot when dealing with practical activities, especially in the topic of map reading and interpretation. When I switch languages, they

understand the calculations in that topic very well, like actual ground distance calculation, 4 and 6 grid reference.”

This implies that teachers' language adaptations enhance learners' understanding of Geography content, particularly practical or diagrammatic concepts like map reading, as previously explained. This observation is shared by both teachers and learners.

For instance, *"I understand better when our Geography teacher is explaining diagrams and structures in English and Sesotho. It also helps slow learners—they understand quickly"* (Respondent 5B).

Furthermore, findings indicate that code switching aids learners in comprehending certain Geography terms.

"It helps us understand some Geography terms that we struggle with in terms of their meaning. There are Geography terms that we understand when our teacher elaborates in Sesotho" (Respondent 1A).

Hence, as per the presented evidence, code switching assists learners in grasping Geography concepts that they might otherwise struggle with due to their limited command of the English language.

As mentioned earlier, struggling to comprehend some Geography terms and concepts is one of the challenges faced by learners with limited English proficiency. According to the evidence above, code switching aids learners in understanding Geography content. In particular, it assists them in comprehending certain Geography terms that they have difficulty understanding, as illustrated by respondents 1A and 2B. Additionally, it fosters relatability of lesson content, contributing to improved understanding. This aligns with what teacher Y (from school A) mentioned: that the lesson becomes relatable when both English and Sesotho are employed.

4.4.2.2. Stimulates learners' participation and collaboration

The analysis indicated that incorporating code switching in Geography instructional processes enhances learners' participation. In my opinion, learners' active engagement serves as a way for teachers to gauge their comprehension and can act as an indicator of successful content delivery.

Teacher X from school A provided further insight: *“When I code switch they better understand and you will see some of them especially the slow learners, they are active in class, they participate.”*

Relatedly, teacher Z from school B stated that,

“when I code switching, they want to raise up their hands and try to attempt to questions. So you find out they are now engaged, they are now active participants.”

From my perspective, this approach could also assist teachers in assessing the depth of learners' comprehension; the greater their participation, the better their understanding likely is. The presented evidence above illustrates that employing code switching enables learners to articulate their perspectives on the discussed Geography topics. Additionally, learners themselves believe that code switching enhances their comprehension, leading to more active involvement in Geography lessons. To illustrate, one learner pointed out that:

“when our Geography teachers uses both Sesotho and English during the Geography class, that is when I understand the content better and I am also able to participate during the lesson” (Respondent 1B, focus group interviews).

Furthermore, it also came to light that code switching encourages the participation of the majority of learners in Geography lessons. In particular, respondent 3A pointed out that *“when we use both languages in Geography class, more learners are attracted to participate in class and we enjoy the lesson”*.

This was previously emphasised by teacher Z, stating that: *“when I code switch, they want to raise up their hands and try to attempt to questions. They are engaged, they are now active participants. They participate well”*.

Based on the aforementioned evidence, it can be concluded that code switching in Geography education provides learners with an opportunity to participate in discussions and express themselves. This was also evident during the observed classroom sessions, where it sparked their

critical thinking. Additionally, this aspect can aid teachers in identifying gaps in learners' knowledge and adjusting their approach accordingly.

Furthermore, this study unveiled that the integration of code switching in Geography teaching and learning fosters collaboration among learners. This was particularly noticeable during group discussions observed in the classroom. Learners displayed active engagement and interaction while participating in group discussions or question-and-answer sessions. When assigned tasks to complete in pairs or groups, with the freedom to communicate in both languages, nearly all the groups exhibited interactive behaviour. This suggests that exposure to code switching encourages learners to actively participate in their learning.

During in-depth interviews with the participating Geography teachers, they were also questioned about learners' behaviour when code switching is employed in Geography classes. All three teachers concurred that code-switching leads to engaged learners who are enthusiastic about participating actively in the lesson and taking ownership of their learning process.

“Yes. When speaking English, like throughout, they seem to be quiet and facially. You're going to see them surprised and seems like they are lost. But when I codeswitch, they seem to be lively and enjoying the lesson. They want to raise up their hands and try to attempt to questions like they are happy now because I am at their level. So you find out they are now engaged, they are now active participants. They participate well in that way” (Teacher Z).

In the same vein, Teacher X explained, *“When I code switch they, better understand and you will see some of them especially the slow learners, they are active in class, they participate very well”.*

Moreover, Teacher X indicated that

“I sometimes allow them to form groups and have discussions on some concepts during the lesson as you may have realised. I allow them to code switch as they discuss and you find that they are interactive at that time when I allow them to code switch. You see that every group member wants to say something”.

This approach can assist learners in avoiding mere memorisation of Geography content during lessons and encourage a more profound comprehension. Considering teachers' input, it can be inferred that code switching indeed spurs learners' active engagement in both questioning and answering sessions within Geography instruction. Moreover, their collaborative involvement in group discussions, in my opinion, signifies a grasp of the subject matter. This behaviour also reflects learners' eagerness to take control of their learning process. Furthermore, Teacher Y pronounced that,

“In the terms of behaviour, learners participate well when I code switch and when I allow them to code switch. They voluntarily answer questions and they give good comments and examples. Even the questions they ask, they are of somebody who is following the lesson very well”.

This suggests that code switching transforms classroom discussions from situations where learners participate only when prompted, to a scenario where their engagement is voluntary. In my perspective, learners' spontaneous participation signifies a stronger grasp of the subject matter and a genuine desire for learning.

4.4.2.3. Improved academic performance

It was also evident from teachers' feedback that the use of code switching enhances learners' academic performance, resulting in improved outcomes in tests and examinations. This was mentioned by one of the three participating teachers.

To be specific, Teacher Y pointed out, *“Yes, you find that when they write tests or examinations, learners perform well. Indeed, you find they pass with good grades.”* Therefore, the aforementioned evidence demonstrates that employing code switching (English and Sesotho) in Geography education leads to enhanced performance during tests and examinations, resulting in better grades.

Likewise, learners from both schools share the belief that incorporating both English and Sesotho in Geography instructional processes enhances their academic performance.

According to Respondent 2A, *“when my teacher speaks in English and Sesotho, this increases our understanding and this also increases our performance in examinations.”*

Again, Respondent 3B stipulated that, *“when our teacher speaks in English and Sesotho, it helps us understand the lesson well and we perform better in examinations.”*

In summary, the utilisation of code switching by Geography teachers enhances learners' comprehension of the content, consequently leading to improved academic performance.

4.4.3. Drawbacks of code switching in Geography lessons

This study has also revealed that the use of code switching in Geography instructional processes can have a negative impact if relied upon excessively. Out of 29 participants (7 learners and 3 teachers), ten participants shared their suggestions regarding the use of code switching in Geography education. Both teachers and learners in this study agree that code switching should be employed only when necessary to avoid challenges during examinations. Additionally, learners and teachers highlighted that learners tend to use their mother tongue at will. This observation emerged during focus group and in-depth interviews conducted with learners and teachers. Below are excerpts from the responses of participant teachers and learners regarding this matter.

Teacher Y expressed, *“I think code switching should be used in a Geography class only when making emphasis on some concepts or trying to clarify so that learners can understand better. Otherwise, lessons should be conducted in English so that learners do not struggle to answer questions in an examination.”*

Learners also emphasised that while code switching has benefits when used in Geography classes, examinations are conducted in English. Respondent 1B explained, *“We may be tempted to speak Sesotho throughout the lesson, but the examinations are written in English. So, code switching should not be used all the time.”*

Similarly, Teacher Z argued,

“Question papers are not provided in Sesotho even though code switching is helpful to us as Geography teachers. I advise all Geography teachers to teach in English most of the time and use Sesotho where necessary.”

As evidenced above, all learners and teachers from both schools agree that code switching should be used in Geography classes when it is deemed necessary. This consensus was highlighted by all

three participant teachers (100%) and 7 (24%) out of 26 participant learners. In total, 10 (34%) out of 29 participants in this study emphasised this point. Therefore, it can be concluded that Geography teachers should employ code switching when the need arises, as emphasised by the verbatim quotations provided by teachers and learners above. This could involve clarifying, emphasising, or reiterating concepts that learners might find challenging due to their English language deficits. This approach can help them learn Geography effectively.

In conclusion, this chapter aimed to thematically present the data analysis in response to the research questions posed in this study. The investigation focused on examining the impact of code switching in Geography education from the perspectives of both learners and teachers. The chapter commenced by analysing and presenting the biographical information of the participating teachers and learners.

The analysis has unveiled that the use of code switching in Lesotho's Geography Education presents both positive and negative impacts, with the advantages outweighing the disadvantages. Positive effects include the improvement of learners' comprehension in various aspects of Geography, such as terminology, academic performance, and active participation. Moreover, it enhances their understanding of diagrammatic content, potentially aiding them in interpreting visual elements during examinations. However, the study also identified a potential drawback in the form of learners' familiarity with subject-specific vocabulary, which could impact their academic performance.

It's noteworthy that both the quantitative and qualitative datasets have offered a comprehensive understanding of the phenomenon under investigation. The qualitative findings provide an open-ended perspective, complementing the closed-ended understanding derived from the quantitative approach. This integration of data sets has provided a broader and more nuanced insight into the studied phenomenon. The qualitative results have enriched and expanded upon the quantitative findings obtained from structured observations.

5. CHAPTER FIVE: DISCUSSION OF FINDINGS AND CONCLUSION

5.1. Introduction

The preceding chapter encompassed the presentation and analysis of data with regard to the research questions that this study aimed to address. This chapter presents a comprehensive summary of the entire study, which was focused on exploring the perceptions of Grade 10 learners and teachers regarding the impact of code-switching on Geography teaching and learning in Lesotho. The chapter also establishes connections between the findings and the primary research questions stated in the initial chapter, delving into discussions that align these findings with the empirical literature as reviewed in chapter two. It's important to note that the conclusions drawn from the study's findings are confined to the use of code switching, involving the utilisation of both English and Sesotho within Geography instructional processes.

Moreover, this chapter delves into the theoretical and practical implications stemming from the research findings, while also offering recommendations for consideration. Additionally, it explores the contributions that the research findings make to the field of Geography education.

The main research question that this study sought to answer is: “what are learners’ and teachers’ perceptions on the impact of code switching in Geography education?” This research question was further sub-divided into following subsidiary research questions:

- i. What is the Grade 10 Geography teachers’ understanding of the concept code switching?
- ii. What are the teachers’ and learners’ views on the impact of code-switching in Geography teaching and learning?

5.2. Teachers’ understanding of code switching in relation to Geography teaching and learning

The primary aim of this study was to investigate Geography teachers' grasp of the concept of code switching in the context of Geography teaching and learning. The study aimed to assess teachers' familiarity with this concept. Based on their responses, all three participating teachers exhibited familiarity with the concept. They perceive code switching as a technique to enhance learners' comprehension during Geography lessons, particularly when learners face difficulties in understanding the content conveyed solely in English. Essentially, teachers view code switching

as the incorporation of both English and Sesotho in Geography classes with the goal of facilitating learners' understanding of the subject matter.

This interpretation aligns with Hoffman's Theory of code switching. As per this theory, teachers conceive of code switching as a strategy to make speech content intelligible to the listener, which in this case pertains to Geography learners (Hoffman, 1991). Furthermore, Geography teachers' conception of code switching harmonises with the findings of Bensen and Çavuşoğlu (2013) and Patmasari and Kamaruddin (2022), who found that code switching aids in students' comprehension of lesson content with ease.

Additionally, this study drew upon the Cultural Historical Activity Theory (CHAT). According to CHAT, the utilisation of tools like code switching within an activity is contingent upon the needs of those involved. Similar to the principles of CHAT, teachers incorporate code switching into Geography lessons when there is a necessity to assist learners in comprehending the lesson content, especially when language deficits in English pose a barrier. In consonance with CHAT's perspective that tools play a mediational role in an activity, the participating teachers in this study perceive code switching as a means to mediate learners by augmenting their understanding of Geography content when language limitations are obstructive. Therefore, they regard it as a tool that mediates learners' comprehension of Geography content.

5.2.1. Reasons for use of code switching in Geography teaching and learning processes

At the initiation of the data generation process, this study aimed to uncover the underlying reasons for the utilisation of code switching in Geography teaching and learning. The findings of the study indicate that the primary driver behind Geography teachers' adoption of code switching is learners' limited proficiency in the English language. It became evident that learners who struggle with English encounter difficulties in expressing themselves and comprehending Geography terms and concepts. These learners also encounter challenges when attempting to address high-order questions worth seven marks in tests and examinations.

This observation suggests that learners with inadequate English proficiency face impediments to effective learning within Geography instructional processes. This observation aligns with the findings of Hendrickz (2008), Mwesiga (2017), and Kanita (2020), who noted that deficiencies in English as the medium of instruction detrimentally affect students' capacity to respond to teachers' questions during Geography lessons and other classroom activities. Some students even struggle to formulate responses in complete sentences (Hendrickz, 2008). Similarly, this challenge manifested during classroom discussions, where learners experienced difficulty in furnishing complete answers in English and often resorted to code switching. As highlighted by Dema and Dorji (2021), learners resort to code switching between English and their mother tongue when grappling with expressing themselves in English, as well as when encountering difficulties in grasping Geography terminology. Consequently, Geography teachers employ code switching to facilitate learners' comprehension of lesson content. This use of code switching, as indicated by Nurhamidah et al. (2018), fosters a connection between learners and teachers, particularly when language acts as a barrier to understanding lesson content. This aligns with the findings of Amad and Jusoff (2010) and Gulzar (2010), who similarly established that teachers employ code switching due to learners' limited proficiency in English, as witnessed in this study.

Furthermore, these findings resonate with Naranjo et al. (2016), who affirmed that students facing challenges in English as the language of instruction struggle to grasp the specific terminologies of subjects like Geography and Physics. In such cases, teachers resort to code switching to alleviate this difficulty. Additionally, the assertions of Racca & Lasaten (2016) align with these observations, as they underscored language proficiency as a determining factor in students' academic achievement. In conclusion, it can be inferred that learners with restricted proficiency in English may encounter barriers in accessing the Geography curriculum, impeding their capacity to comprehend and express Geography terminology. This limitation could potentially translate to suboptimal performance during assessments, as learners struggle to comprehend the specialised language used in assessment items. This could also explain the recommendations in examiner's reports from 2018, 2019, 2021, and 2022 advocating for enhanced mastery of Geography terminology among learners. This underscores that inadequate proficiency in Geography terminology adversely affects learners' ability to engage with the subject matter and achieve satisfactory academic outcomes.

5.2.2. Appropriate time to use code switching in Geography instructional processes

Furthermore, the investigation has disclosed that the application of code switching in Geography instructional processes should occur selectively, when circumstances allow or when a genuine need arises. The study has determined that code switching can be effectively employed in Geography lessons to provide examples. Additionally, it was evident that the opportune instances for code switching in Geography teaching and learning arise when engaging in practical activities, particularly during calculations within the realm of map reading and interpretation.

Furthermore, this study has demonstrated that code switching can find utility in Geography lessons when learners face challenges in expressing themselves, even when possessing valid insights. This signifies that the utilisation of both English and Sesotho enables learners to articulate their viewpoints, particularly when they encounter difficulty doing so solely in English, despite having valid contributions. This aligns with the findings of Sakaria and Priyana (2018), who suggest that teachers can resort to language switching in cases where learners grapple with the comprehension of certain concepts, such as during calculations as proposed by Teacher Z (refer to chapter four, section 4.2.5). Additionally, it is underscored in the theoretical underpinning that code switching should be context-dependent, contingent on the particular circumstances of the conversational participants (Holmes & Wilson, 2022), a notion exemplified by Teacher Z's observations. Therefore, it appears that teachers' adeptness in adapting their language choices enhances learners' comprehension of Geography content, particularly when dealing with practical or diagrammatic concepts like map reading.

5.3. Impact of code switching in Geography teaching and learning processes

This study aimed to explore the effects, both positive and negative, of code switching in the context of Geography teaching and learning. On the positive side, the incorporation of code switching in Geography instruction proved to offer various advantages. Notably, it enhanced learners' grasp of the subject matter, spurred active engagement during lessons, and contributed to improved academic performance. Furthermore, code switching played a role in enhancing comprehension by means of clarification and reinforcement techniques.

Conversely, the study underscores the importance of judiciously employing code switching, as it was revealed to carry potential negative implications. One such drawback is the risk of diminishing learners' proficiency in the subject, should code switching become excessively reliant upon. This cautionary insight emphasises the necessity for Geography educators to exercise discretion when implementing code switching strategies.

5.3.1. Benefits of code switching in Geography lessons

This study has unearthed the manifold benefits of code switching within Geography lessons. It serves to enhance learners' understanding of Geography content while also fostering their active involvement. Furthermore, code switching has been shown to contribute to improved academic performance among learners.

5.3.1.1. Improved comprehension

This study has uncovered that incorporating code switching into Geography teaching and learning significantly enhances learners' comprehension across various dimensions. Specifically, it aids them in comprehending diagrams and engaging with practical activities. Furthermore, code switching plays a pivotal role in fostering an understanding of Geography-specific terminology.

It helps learners on diagrammatic content and practical activities

This study has revealed that code switching holds significant utility in Geography lessons, particularly when instructing content featuring diagrams and images. Employing code switching in such instances enhances learners' grasp of the material, resulting in improved comprehension overall. Furthermore, the study demonstrated that code switching proves advantageous when addressing calculations within the realm of map reading and interpretation. In specific terms, educators noted that it aids learners in understanding calculations, particularly those involving actual ground distances. According to Leoanak and Amalo (2018), the strategic use of code switching can enhance the effectiveness of lesson delivery.

This finding implies that code switching can yield benefits when applied to calculations within the context of map reading. It simplifies comprehension of practical tasks like calculations, thereby fostering an enhanced understanding of the subject matter. In fact, a majority of Geography paper

two question papers include items that require learners to support their responses with well-labeled diagrams. This underscores the importance for Geography teachers to ensure learners possess a clear grasp of diagrammatic elements, given their integral role in assessments for the subject. Even instances where diagrams aren't required for response support, question papers may feature inserts necessitating learners to interpret visuals. In this study, it was observed that the introduction of (Sesotho) by Geography teachers during the explication of Geography diagrams and images contributes to learners' topic comprehension. As noted by Nyoni et al. (2019), utilising the mother tongue in conjunction with English serves as a valuable instructional tool that enhances understanding of subject matter. I also posit that this approach could aid in map reading aspects such as bearings, slope calculations, time calculations, and various other mathematical facets of the topic, as well as in other areas. According to Mustapha et al. (2022), difficulties in scale interpretation are among the challenges encountered by learners in the realm of map reading. Based on teachers' perspectives outlined in chapter four, code switching could serve as a strategy to address this issue.

Furthermore, it could be inferred that code switching has the potential to enhance learners' comprehension of diagrammatic Geography content, especially within section A (Elements of physical Geography) of the syllabus, which features a significant amount of content involving diagrams and images. In my estimation, this improvement could also extend to learners' interpretation of inserts (charts, graphs, images inserted within question papers) during Geography examinations, driven by their enhanced understanding of diagrams and images during the teaching and learning process.

Code switching makes Geography content relatable to learners

Additionally, this study has revealed that the utilisation of code switching in Geography instructional processes aids both Geography teachers and learners in citing relatable examples during lessons. This phenomenon was also evident during classroom observations, where the practice of code switching allowed teachers to introduce examples that rendered the lesson more relatable to learners. Consequently, learners' comprehension of the lesson's content improved. In such scenarios, teachers would elucidate unfamiliar vocabulary through code switching, followed by a continuation of the lesson in English. Moreover, they would incorporate illustrative examples, as was the case with learners at school A, as detailed in section 4 of the preceding chapter.

Subsequently, these examples rendered the lesson more comprehensible to learners. This pattern was further corroborated by insights gleaned from in-depth interviews.

These findings corroborate the observations made by Shilongo (2017), indicating that code switching assists teachers in elucidating Geography concepts to foster meaningful learning experiences for learners. This reinforces my belief that the deliberate alternation of languages in Geography instruction can be employed as a means to grant learners access to subject matter. It becomes apparent that code switching enhances learners' comprehension of Geography concepts, ultimately contributing to an elevated level of comprehension and meaningful learning. Hence, I concur with Abubakar (2022) in asserting that code switching serves as a pedagogical technique that enables Geography teachers to furnish examples while teaching abstract concepts to learners. Therefore, code switching effectively renders Geography content relatable to learners, thereby promoting an enhanced level of comprehension.

Code switching improves learners' proficiency Geography terminology

Moreover, this study has uncovered that the integration of code switching into Geography teaching and learning processes aids learners in grasping challenging Geography terms. This phenomenon was apparent during classroom observations, where teachers provided explanations for potentially unfamiliar Geography terms and concepts using Sesotho. A similar trend emerged from focus group and in-depth interviews with learners and teachers, respectively.

Coincidentally, code switching serves as a technique through which learners can comprehend intricate, unfamiliar, or abstract subject terminology (Wiguna & Adriyanti, 2022; Patmasari & Kamaruddin, 2022). Likewise, Chikiwa and Schäfer (2019) and Ngoc and Nhi (2020) found that teachers view code switching as a means to elucidate new subject-specific vocabulary, thereby enhancing comprehension. The evidence suggests that code switching contributes to learners' mastery of Geography terminology. This aligns with Simasiku et al.'s (2015) assertion that code switching aids in the enhanced interpretation of subject-specific terminology. For instance, during classroom observations, learners grappled with terms like "meandering river," "boulders," and "river bed" until their teachers clarified the meanings using both languages. Furthermore, Shilongo (2017) contends that code switching aids learners in better understanding Geography concepts,

particularly those that are novel and unfamiliar. Hence, it is evident that code switching in Geography education fosters vocabulary acquisition among learners.

These findings further corroborate the conclusions drawn by Simasiku et al. (2015) that the use of code switching enables learners to comprehend subject concepts in their familiar language. Additionally, Coker et al. (2018) emphasise that code switching offers learners the ability to tackle complex vocabulary across different subjects. This consistency extends to Cahyani et al.'s (2018) findings, which suggest that code switching assists learners in gaining a profound understanding of unfamiliar subject matter concepts. In light of Cahyani et al. (2018) and Coker et al. (2018), it follows that this heightened understanding could translate into enhanced academic performance in Geography, particularly when learners grasp the subject's terminology. Furthermore, it is my belief that aiding learners in comprehending unfamiliar terms and concepts constitutes a crucial contribution of code switching to Geography instruction. This contribution holds the potential to ensure accurate interpretation of questions during tests and examinations, as learners encounter Geography terms they have thoroughly comprehended.

As previously noted, the LGCSE examiner's reports from 2018, 2019, 2021, and 2022 underscore the importance of assisting learners in mastering and utilising appropriate Geography terminology during examinations. This indicates that learners might struggle to excel in assessments due to their deficits in Geography vocabulary, as highlighted in the aforementioned reports. From this standpoint, teachers can leverage code switching to facilitate learners' understanding of Geography terminology, potentially resulting in improved academic performance in LGCSE examinations.

Code switching's utility in fieldwork teaching and learning strategy Another vital context in which code switching's significance emerged is within the domain of the fieldwork instructional approach, which stands at the core of Geography pedagogy. Teachers indicated that incorporating code switching enhances learners' comprehension of the subject matter when this instructional method is employed. This insight suggests that coupling code switching with the fieldwork approach to Geography teaching and learning optimises learners' grasp of the subject matter.

As previously mentioned in the theoretical framework, Hoffman's theory of code switching underscores the notion that code switching enhances the speaker's (Geography teachers) clarity to the listener (Geography learners). Consequently, the aforementioned quotations posit that combining code switching with the fieldwork method in Geography lessons fosters meaningful learning experiences for learners. According to Songxaba et al. (2017), code switching facilitates learners' ease of understanding lesson content.

In summation, code switching serves to familiarise learners with Geography terminology, aids in their comprehension during calculations, particularly in map reading and interpretation. Furthermore, code switching emerges as a valuable tool for enhancing learners' understanding during fieldwork activities, a pivotal aspect of Geography pedagogy. In my perspective, fieldwork is a cornerstone of Geography education. In light of these benefits discussed, it becomes evident that the amalgamation of code switching's advantages contributes to and enhances learners' comprehension of Geography content.

Role of code switching in clarification and repetition This study also unveils code switching's role in serving as a tool for clarification and repetition in Geography instruction. This observation was gleaned from classroom observations in both schools, as well as from interviews conducted with learners and teachers through focus groups and in-depth conversations. During classroom observations, teachers resorted to code switching as a means of reiterating vital aspects of the lesson, aiming to facilitate better understanding and access to the intended content. This practice was particularly evident when teachers utilised both English and Sesotho to clarify the concept of river energy, which had proved to be unclear following multiple explanations solely in English.

The foregoing evidence underscores that the bilingual instructional approach encapsulated by code switching maximises learners' potential to fathom the content of a lesson. This alignment is consistent with Hoffman's theory, which proposes that code switching can be employed for the purpose of clarification in dialogues. According to Hoffman (1991), two languages are used to ensure that the speaker (Geography teacher) is comprehensible to the listener (learners). This perspective also resonates with Kumar et al.'s (2021) findings, which suggest that employing both

mother tongue and English fosters clarity in complex ideas and content. In my view, this enhanced clarity translates to a higher level of content comprehension.

5.3.2. Code switching stimulates learners' engagement or participation and collaboration

The findings of this study also uncover that code switching plays a role in eliciting learners' active participation in Geography lessons. This phenomenon became evident through classroom observations and was further reinforced by insights obtained from focus group and in-depth interviews with both learners and teachers. As expounded in chapter four, both teachers and learners attested that the utilisation of code switching in Geography lessons results in heightened learner engagement. Specifically, this manifest when learners willingly contribute responses during classroom discussions. This pattern was consistently observed during classroom observations, where learners interacted with their peers, and nearly every learner actively engaged in discussions. Teachers reported that learners provided answers and offered insightful comments and examples. Learners corroborated this by expressing their increased participation during Geography lessons when code switching was employed. They demonstrated their eagerness by raising their hands, expressing opinions even before being prompted by teachers, and contributing accurate comments and examples. A majority of them openly shared their thoughts during group discussions when code switching was integrated.

In this context, code switching sparks learners' enthusiasm for learning Geography, as they willingly and proactively engage in classroom discussions. From the perspectives of both learners and teachers, code switching fosters an environment of motivated learners who actively participate. This aligns with Suganda et al.'s (2018) contention that code switching fosters learners who are fully engaged in discussions. These findings further validate the conclusions drawn by Simasiku et al. (2015), Maluleke (2019), and Kumar et al. (2021), indicating that code switching encourages learners' active involvement when employed as part of teaching and learning activities. Thus, it can be inferred that code switching can be effectively utilised within Geography education as a technique to stimulate and cultivate learners' active participation.

This sentiment was reinforced by the insights garnered from in-depth interviews with Geography teachers. They affirmed that code switching kindles learners' interest in learning, resulting in their heightened engagement during classroom discussions. Consequently, code switching contributes to learners who become central to their learning experience in Geography lessons. This aligns with Naha et al.'s (2018) assertion that the introduction of language switching by teachers in the classroom triggers heightened awareness, curiosity, and elevated participation levels among learners. Learners also exhibit a better grasp of the lesson's content. In my perspective, their active involvement likely bolsters their comprehension of Geography content, ultimately contributing to improved academic performance. There's a likelihood of them retaining a larger portion of the content discussed during teaching and learning sessions. As outlined by Triyanto (2019), active participation in instructional processes enhances learners' opportunities to better understand the lesson's content.

5.3.3. Code switching improves learners' academic performance

The findings of this study underscore that the incorporation of both English and Sesotho (code switching) in Geography teaching and learning processes contributes significantly to enhanced academic performance among learners. This revelation emerged from the perspectives of both learners and teachers. Teachers emphasised that learners excel and attain commendable grades in tests and examinations due to the impact of code switching. This observation was consistently supported by learners, who highlighted that code switching bolsters their understanding of Geography content, thereby leading to improved performance in examinations.

These findings align closely with Simasiku et al. (2015), who assert that code switching enhances learners' comprehension of subject matter, consequently contributing to improved academic performance. Additionally, Albakri (2017) contends that the amalgamation of English and mother tongue supports learners in comprehending the content more effectively, ultimately leading to favorable academic outcomes. Another study by Stromvig (2018) corroborates this by suggesting that code switching aids learners in grasping the meaning of the content, thereby promoting enhanced academic achievements.

However, it is worth noting that while code switching holds potential benefits, it is advisable for Geography teachers to exercise discretion in its use. It should be employed selectively and contextually, as learners should not anticipate a constant language shift. Instead, learners could be granted the flexibility to employ code switching when they encounter challenges in expressing themselves, while teachers can utilise it strategically to emphasise, reiterate, and clarify specific content. This balanced approach ensures that code switching remains a useful tool without being overused.

5.3.4. Drawbacks of code switching in Geography teaching and learning

Despite the identified advantages of code switching in Geography teaching and learning processes as revealed by this study, both teachers and learners have also expressed concerns about potential drawbacks. The study's findings underscore that while code switching offers benefits, excessive use of it in Geography teaching and learning can lead to certain disadvantages. Participants, including learners and teachers, reached a consensus that even though code switching holds multiple advantages during Geography lessons, examinations are conducted in English. Consequently, they proposed that its usage should not be constant but rather contextually determined. Moreover, learners noted that their peers might be tempted to code switch casually. One teacher cautioned that Geography instruction should predominantly occur in English, with code switching utilised only for clarification when learners struggle to grasp the lesson's content.

From these findings, it can be deduced that code switching in Geography lessons should be employed occasionally, specifically when the need arises for emphasis and clarification. This aligns with the conclusions of Dema and Dorji (2021), who highlighted that code switching might negatively impact learners' vocabulary and should therefore be used judiciously. The consensus that examinations are administered in English further underscores the need to avoid excessive reliance on code switching during instruction, a viewpoint echoed by a learner who emphasised that code switching should not become a routine in Geography lessons due to the English-language examinations. This sentiment corresponds with the discoveries of Mochacha and Lwangale (2020), who observed that heavy code switching could negatively affect learners' performance in English-written examinations.

Furthermore, another learner expressed concern that extensive code switching could potentially diminish their vocabulary. This underscores the significance of maintaining appropriate Geography terminology and its alignment with examination requirements, which is highlighted in the LGCSE examiner's reports of 2018, 2019, 2021 and 2022. Excessive code switching could inadvertently hamper learners' ability to use correct Geography terminology during assessments. In light of these concerns, the advice of Horasan (2014) is pertinent, suggesting that code switching should gradually diminish as learners' proficiency in subject vocabulary and concepts improves, ultimately fostering mastery. This resonates with the guidance provided by Songxaba et al. (2017), Kamal and Ramly (2022), Hu et al. (2022), and Tahir et al. (2022), recommending measured code switching usage to safeguard learners' critical thinking skills.

Furthermore, the findings align with the principles of Cultural Historical Activity Theory (CHAT), emphasising the importance of setting rules within an activity. As noted by Foot (2014), well-defined rules and regulations guide participants (learners and Geography teachers) in an activity (Geography teaching and learning), enabling desired outcomes. In this context, both teachers and learners establish rules on when code switching is permissible. Learners, for instance, can be allowed to code switch when facing challenges in self-expression, while teachers can employ it when explaining unfamiliar concepts or diagrams. Thus, the proposal is that code switching should be employed in Geography lessons judiciously, aligning with the situational approach emphasised by Holmes and Wilson (2001) in the theoretical framework. This entails using code switching as circumstances demand, in order to mitigate the potential drawbacks, such as a decline in learners' Geography terminology knowledge.

5.4. Conclusion

The aim of this study was to explore the perceptions of learners and teachers regarding the use of code switching in Geography teaching and learning in Lesotho. The study has successfully achieved the objectives outlined in Chapter One. It has shed light on the potential benefits of employing code switching in Geography education in Lesotho, particularly in terms of facilitating the teaching and learning processes. Notably, there is a scarcity of research on the topic of code switching in Geography education within the Lesotho context, and this study has addressed this gap in knowledge, contributing to the existing body of literature on the impact of code switching

on teaching and learning. Consequently, the perspectives of both learners and teachers indicate that the use of code switching can yield multiple advantages in the realm of Geography education in Lesotho. It assists learners in understanding complex Geography terminology, which has been underscored in the LGCSE Geography examiner's reports of 2018, 2019, 2021, and 2022. This aligns with the suggestion that a combination of English and Sesotho in instruction can enhance learners' command of Geography jargon, potentially addressing issues raised in the aforementioned examiner's reports.

Furthermore, the viewpoints of learners and teachers reveal that code switching contributes to better comprehension of Geography diagrammatic content and practical activities, such as those related to map reading and interpretation. It also enhances learning in various topics such as weathering, weather, climate, marine and river processes, as well as map reading and interpretation. Additionally, learners and teachers perceive code switching as a technique that fosters active participation among learners and subsequently improves their academic performance. Thus, it can be inferred that the use of code switching in Lesotho's Geography teaching and learning processes is advantageous, ultimately enhancing the quality of Geography education in the country.

5.5. Recommendations

Based on the findings of this study, several recommendations can be proposed:

- Revising or modifying the Lesotho Education Language Policy (LELP) is necessary to introduce the use of English in teaching and learning from grade one, rather than waiting until grade four. This practice, observed in countries like Zambia, familiarises learners with English-led instruction from an earlier stage (Trudell, 2016). A potential modification could involve using both English and mother tongue as mediums of instruction in lower grades (grades 1 to 3). This adjustment is prompted by the belief that the introduction of English language instruction in grade four contributes to learners' challenges in using appropriate Geography terminology, as highlighted in the LGCSE examiner's reports of 2018, 2019, 2021, and 2022.

- Teachers should evaluate learners' grasp of Geography terminologies after helping them comprehend these terms through code switching. This assessment will ensure that teachers are confident that learners have indeed understood the previously challenging terms, enabling them to use such vocabulary accurately in examinations.
- Additionally, the LELP should specify the circumstances that warrant the use of mother tongue and English. This clarification will serve as guidance for educators regarding when to employ code switching during instructional processes.

5.6. Limitations to the study

However, the study also uncovers potential drawbacks associated with the use of code switching. Both learners and teachers express concerns about the excessive use of code switching, especially in light of examinations being conducted in English. It is recommended that code switching be used selectively, emphasising its benefits in specific situations such as clarification and emphasis. This aligns with previous research that cautions against the overuse of code switching to ensure that learners' mastery of subject-specific vocabulary is not compromised.

This study acknowledges several limitations. Due to financial and time constraints, the research focused solely on code switching between English and Sesotho, thereby excluding isiXhosa and Sephuthi contexts. Additionally, the study did not cover private schools, potentially missing out on valuable insights into the impact of code switching in Geography education across different school settings.

5.7. Possible areas or avenues for further research

Possible avenues for future research could explore code switching in broader linguistic contexts, encompassing isiXhosa and Sephuthi, as recognised by the Lesotho Education Language Policy of 2019. Moreover, investigating the impact of code switching in private schools could provide a comprehensive understanding of its effects on Geography teaching and learning.

Reflections on the study

Reflecting on the entire research process, this study has been a valuable learning experience. Despite initial financial challenges, the baseline stage of the first academic year provided insights into curriculum design and research methods. The data generation phase, involving interviews and transcription, deepened understanding of Geography education. However, the process of compiling the study and producing a coherent write-up was demanding. The findings underscored the significance of learners' mastery of Geography terminology for academic success, urging teachers to assess and address this aspect. The study also highlighted the role of code switching in enhancing vocabulary and comprehension. Nonetheless, the study emphasises the importance of caution in its usage, particularly in the context of examination requirements.



**NATIONAL UNIVERSITY
OF LESOTHO**

REFERENCES

- Abubakar, S. A. (2022). Code switching and Code mixing (CS-CM) in Multi Teacher-Talk: Pedagogic Educational Implications. *African Scholar Journal of Arts and Sociological Research (JASR-6)*, 26(6).
- Adams, R. M. (2013). The journal of philosophy. *Particulars, Actuality, and Identity Over Time*, 0(0), 1–22. <https://doi.org/10.4324/9781315052731-4>
- Adom, D., Attah, A. Y., & Ankrah, K. (2016). Constructivism Philosophical Paradigm: Implication for Research, Teaching and Learning. *Global Journal of Arts Humanities and Social Sciences*, 4(10), 1–9.
- Adriosh, M., & Razi, Ö. (2019). Teacher's Code Switching in EFL Undergraduate Classrooms in Libya: Functions and Perceptions. *SAGE Open*, 9(2). <https://doi.org/10.1177/2158244019846214>
- Ahmad Kamal, M. A., & Ramly, B. (2022). The Effects of Code Switching in English Language Classroom during Online Distance Learning and its Effects on Executive Function Performance. *International Journal of Academic Research in Progressive Education and Development*, 11(3), 1563–1583. <https://doi.org/10.6007/ijarped/v11-i3/14788>
- Al-Qaysi, N. (2019). Students and educators' attitudes towards code-switching: A longitudinal study. *International Journal of Information Technology and Language Studies (IJITLS)*, 3(2), 61–72. <http://journals.sfu.ca/ijitls>
- Albakri, S. (2017). Effects of English medium instruction on students' learning experiences and quality of education in content courses in a public college in Oman. PQDT - UK & Ireland, 1–312. https://ore.exeter.ac.uk/repository/bitstream/handle/10871/27743/AlbakriS.pdf?sequence=1&isAllowed=y%0Ahttps://search.proquest.com/docview/2001125927?accountid=13042%0Ahttp://oxfordfx.hosted.exlibrisgroup.com/oxford?url_ver=Z39.88-2004&rft_val_fmt=info:o
- Algarin-ruiz, K. M. (2014). *Code Switching : A Tool in the Classroom*. 1–57.
- Aceme, N. (2015). *Mother tongue as the medium of instruction at developing country universities in a global context*. 111(1), 1–5.
- Ataş, U., & Sağın-Şimşek, Ç. (2021). Discourse and educational functions of students' and teachers' code-switching in EFL classrooms in Turkey. *Linguistics and Education*, 65.

<https://doi.org/10.1016/j.linged.2021.100981>

- Ary, D, Jacobs, L. C., Sorenson, C. & Razavieh, A. (2010). Introduction to Research in Education. 8th Ed. Australia: WARDSWORTH CENAGE Learning.
- Azlan, N. M. N. I., & Narasuman, S. (2013). The Role of Code-switching as a Communicative Tool in an ESL Teacher Education Classroom. *Procedia - Social and Behavioral Sciences*, 90(InCULT 2012), 458–467. <https://doi.org/10.1016/j.sbspro.2013.07.115>
- Badrul Hisham Ahmad, & Kamaruzaman Jusoff. (2009). Teachers' Code-Switching in Classroom Instructions for Low English Proficient Learners. *English Language Teaching*, 2(2), 49–55.
- BARRIERS TO GEOGRAPHY LEARNING AND TEACHING IN GRADE 12 IN THE LIMPOPO PROVINCE* by LESHABELA HERBERT MADUANE Submitted in fulfilment of the requirements for the degree of DOCTOR OF PHILOSOPHY in LANGUAGE EDUCATION in the FACULTY OF HUMANITIES (School of . (2016).
- Bensen, H., & Çavuşoğlu, Ç. (2013). Reasons for the Teachers' Uses of Code-Switching in Adult Efl Classrooms. *Hasan Ali Yücel Eğitim Fakültesi Dergisi Sayı*, 20(2), 69–82.
- Braun, V., Clarke, V., Braun, V., & Clarke, V. (2008). *Using thematic analysis in psychology*. *Using thematic analysis in psychology*. 0887(2006).
- Brier, J., & lia dwi jayanti. (2020). 21(1), 1–9. <http://journal.um-surabaya.ac.id/index.php/JKM/article/view/2203>
- Brouard, F. (2020). Notes on literature review. *Sprott School of Bussiness, Carleton University*, 1–21. <https://carleton.ca/profbrouard/wp-content/uploads/noteResearchLiteratureReview.pdf>
- Catolan, M.C., Forbat, L., & Smith, A. (2016). Developing the Declarative Model: The Design Case Study Research in Health Care. 26(5).
- Cahyani, H., de Courcy, M., & Barnett, J. (2018). Teachers' code-switching in bilingual classrooms: exploring pedagogical and sociocultural functions. *International Journal of Bilingual Education and Bilingualism*, 21(4), 465–479. <https://doi.org/10.1080/13670050.2016.1189509>
- Charry, J. R. & Charles, M, J. (2014). Hand Book of Research Methods in Social and Personality Psychology (2nd Ed). New York, NY: Harvard University Press.
- Chikiwa, C., & Schäfer, M. (2019). Teachers' use of verbal language to evoke visualizations in multilingual mathematics classes. *Perspectives in Education*, 37(2), 124–140.

<https://doi.org/10.18820/2519593X/pie.v37i2.9>

Choguill, C. L. (2005). The research design matrix: A tool for development planning research studies. *Habitat International*, 29(4), 615–626.

<https://doi.org/10.1016/j.habitatint.2005.06.001>

Clemence, C. (2001). *TEACHING TRIGONOMETRY IN A GRADE 11 MULTILINGUAL MATHEMATICS CLASS: A FOCUS ON TEACHER CODE SWITCHING PRACTICES*. 15–25.

Cohen, L., Manion, L., & Morrison, K. (2018). Case studies. In *Research Methods in Education*. <https://doi.org/10.4324/9781315456539-19>

Coker, C., Greene, E., Shao, J., Enclave, D., Tula, R., Marg, R., Jones, L., Hameiri, S., Cansu, E. E., Initiative, R., Maritime, C., Road, S., Çelik, A., Yaman, H., Turan, S., Kara, A., Kara, F., Zhu, B., Qu, X., ... Tang, S. (2018). *Transcommunication*, 53(1), 1–8. <http://www.tfd.org.tw/opencms/english/about/background.html%0Ahttp://dx.doi.org/10.1016/j.cirp.2016.06.001%0Ahttp://dx.doi.org/10.1016/j.powtec.2016.12.055%0Ahttps://doi.org/10.1016/j.ijfatigue.2019.02.006%0Ahttps://doi.org/10.1016/j.matlet.2019.04.024%0A>

Cong-Lem, N. (2022). Vygotsky's, Leontiev's and Engeström's Cultural-Historical (Activity) Theories: Overview, Clarifications and Implications. *Integrative Psychological and Behavioral Science*, 56(4), 1091–1112. <https://doi.org/10.1007/s12124-022-09703-6>

Cook, Loraine, D., & Kamalodeen, Vimala, J. (2019). Mixed Methods Case Study. *Mixed Methods International Research Association*, September 2019. <http://mmira.wildapricot.org/admin/website/?pageId=1514647%0A>

Cuba, E. G. & Lincoln, J. S. (1989). *What is this Constructivist Paradigm Anyway in Fourth Generation Evaluation*. London: Sage Publications.

Creswell, J. W & Creswell, J. D. (2014). *Research Designs: Qualitative, Quantitative and Mixed Method Approaches* (4th Ed). Thousands Oaks, CA: SAGE Publications.

Creswell, W. J., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. In *Journal of Chemical Information and Modeling* (Vol. 53, Issue 9). [file:///C:/Users/Harrison/Downloads/John W. Creswell & J. David Creswell - Research Design_ Qualitative, Quantitative, and Mixed Methods Approaches \(2018\).pdf%0Afile:///C:/Users/Harrison/AppData/Local/Mendeley Ltd./Mendeley Desktop/Downloaded/Creswell, Cr](file:///C:/Users/Harrison/Downloads/John%20W.%20Creswell%20&%20J.%20David%20Creswell%20-%20Research%20Design%20Qualitative,%20Quantitative,%20and%20Mixed%20Methods%20Approaches%20(2018).pdf%0Afile:///C:/Users/Harrison/AppData/Local/Mendeley%20Ltd./Mendeley%20Desktop/Downloaded/Creswell,%20Cr)

- Darwin Holmes, A. G. (2020). Researcher Positionality - A Consideration of Its Influence and Place in Qualitative Research - A New Researcher Guide. *Shanlax International Journal of Education*, 8(4), 1–10. <https://doi.org/10.34293/education.v8i4.3232>
- Datamixed, C. (2006). Collecting data in mixed methods research. *Qualitative Research*, 110–127. http://gaap.ifpri.info/files/2010/12/GAAP_Toolkit_Feb_14.pdf
- Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-Methods Research: A Discussion on its Types, Challenges, and Criticisms. *Journal of Practical Studies in Education*, 2(2), 25–36. <https://doi.org/10.46809/jpse.v2i2.20>
- Dema, D., & Dorji, U. (2021). *Learners ' Preference : A Reason to Use Code-Switching in Teaching and Learning Short Stories in Grade X English*. 05, 36–60.
- Démuth, A. (2012). Perception Theories. In *Applications of Case Study Research* (Issue 4). http://issafrica.org/crimehub/uploads/3f62b072bd80ab835470742e71a0fcb5.pdf%5Cnhttp://www.cdc.gov/ViolencePrevention/pdf/SchoolViolence_FactSheet-a.pdf%5Cnwww.sace.org.za
- Dhakal, K. R. (2019). Teaching Geography in Secondary School: Teachers Perceptions and Experiences. *The Geographic Base*, 6(1997), 32–41. <https://doi.org/10.3126/tgb.v6i0.26165>
- Donald, A., Jacobs, L. C., & Sorenson, C. K. (2010). *Introduction to Research in Education*. Wardsworth: Cengage Learning.
- Eldh, A. C., Årestedt, L., & Berterö, C. (2020). Quotations in Qualitative Studies: Reflections on Constituents, Custom, and Purpose. *International Journal of Qualitative Methods*, 19, 1–6. <https://doi.org/10.1177/1609406920969268>
- Examination Council of Lesotho (2018). *Lesotho Genberal Certificate of Secondary Education. Geography EXAMINERS ' REPORT*. 1–3.
- Eyato, R. G. (2018). Types of codes switching in EFL classroom . *Al-Lisan*, 3(2), 58–67.
- Fabiana Meijon Fadul. (2019). CONSTRUCTIVISM PHILOSOPHICAL PARADIGM: IMPLICATIONS FOR RESERCH, TEACHING AND LEARNING. *Global Journal of Arts Humanities and Social Sciences*. 4(10), 1–9.
- Fathimah, D. N. (2016). Why Is There Code Switching in Efl Classroom? : a Case Study in a Vocational School in Cimahi West-Java. *Jurnal Pendidikan Bahasa Dan Sastra*, 16(1), 70. https://doi.org/10.17509/bs_jpbbsp.v16i1.3063
- Ferguson, G. (2003). Classroom code-switching in post-colonial contexts. *AILA Review*, 16(July

- 2003), 38–51. <https://doi.org/10.1075/aila.16.05fer>
- Ferguson, G. (2009). What next? Toward an Agenda for Classroom Code switching Research. *International Journal of Bilingual Education and Bilingualism*, 12(2).
- Ferrare, J. J. (2015). *A Review of Classroom Observation Techniques in Postsecondary Settings WCER Working Paper No . 2013-1 February 2013. April.*
- Fielding, N. G. (2012). Triangulation and Mixed Methods Designs: Data Integration With New Research Technologies. *Journal of Mixed Methods Research*, 6(2), 124–136. <https://doi.org/10.1177/1558689812437101>
- Fleming, J., & Zegwaard, K. E. (2018). Methodologies, methods and ethical considerations for conducting research in work-integrated learning. *International Journal of Work-Integrated Learning*, 19(3), 205–213.
- Foot, K. A. (2014). Cultural-Historical Activity Theory: Exploring a Theory to Inform Practice and Research. *Journal of Human Behavior in the Social Environment*, 24(3), 329–347. <https://doi.org/10.1080/10911359.2013.831011>
- Fredriktho, F. F. (2018). *The Use of Code-Switching by Lecturers in Content Classes of the English Department Universitas Airlangga*. 07(02), 121–128.
- Gaillet, L. L., & Eble, M. F. (2021). Introduction to Primary Research. *Primary Research and Writing*, 2, 27–52. <https://doi.org/10.4324/9781315767567-8>
- Geertz, C. (1977). *The Interpretation Of Cultures (Basic Books Classics)*. <http://www.amazon.com/Interpretation-Cultures-Basic-Books-Classics/dp/0465097197>
- Gibson, J. J. (1979). *The Ecological Approach to Visual Percpetion*. Boston: Houghton Mifflin
- Giles, H. (1970). Giles (1970) - Reactions to accents. In *Educational Review (Birmingham)* (Vol. 22, pp. 211–227).
- Gill, P., & Baillie, J. (2018). Interviews and focus groups in qualitative research: An update for the digital age. *British Dental Journal*, 225(7), 668–672. <https://doi.org/10.1038/sj.bdj.2018.815>
- Graebner, M. E., Martin, J. A., & Roundy, P. T. (2012). Qualitative data: Cooking without a recipe. *Strategic Organization*, 10(3), 276–284. <https://doi.org/10.1177/1476127012452821>
- Guetterman, T. C., & Fetters, M. D. (2018). Two Methodological Approaches to the Integration of Mixed Methods and Case Study Designs: A Systematic Review. *American Behavioral Scientist*, 62(7), 900–918. <https://doi.org/10.1177/0002764218772641>

- Gulzar, M. A. (2010). Code-switching : Awareness about Its Utility in Bilingual Classrooms. *Bulletin of Education and Research*, 32(2), 23–44.
- Hait, S. A. (2014). *The Functions of Code Switching Used by Secondary Students in English Classes*.
- Hendrickz, L. (n.d.). *English as medium of instruction in grade 11 geography: a case of one secondary school in the Western Cape. November 2008*.
- Holmes, J., & Wilson, N. (2022). An Introduction to Sociolinguistics, Sixth Edition. In *An Introduction to Sociolinguistics, Sixth Edition*. <https://doi.org/10.4324/9780367821852>
- Hoffman, C. (1991). *An Introduction to Bilingualism*. London: Longman.
- Horasan, S. (2014). JOURNAL OF LANGUAGE AND LINGUISTIC STUDIES Code-switching in EFL classrooms and the perceptions of the students and teachers. *Journal of Language and Linguistic Studies*, 10(1), 31–45. www.jlls.org
- Hu, Y., Afzaal, M., & Alfadda, H. (2022). The Perceptions of International Learners Toward Teacher Code-Switching in the Elementary and Intermediate Chinese Foreign Language Classrooms. *Frontiers in Psychology*, 13(April). <https://doi.org/10.3389/fpsyg.2022.860567>
- Hyginus Lester Junior Lee. (2010). Code Switching in the Teaching of English as a Second Language to Secondary School Students. *Malaysian Journal of ELT Research*, 6(December), 1–45.
- Inuwa, Y. N., Christopher, A. A., & Bakrin, H. B. (2014). Factors Motivating Code Switching Within the Social Contact of Hausa Bilinguals. *IOSR Journal of Humanities and Social Science*, 19(3), 43–49. <https://doi.org/10.9790/0837-19354349>
- Javed, S., Bhatti, Z. I., & Binth, A. (2021). *Rationale Behind Switching And Mixing Native Code By ESL Teachers In Language Classroom : A Study From Pedagogical Perspective*. 18(6).
- Jiang, L., Zhang, L. J., & May, S. (2019). Implementing English-medium instruction (EMI) in China: teachers' practices and perceptions, and students' learning motivation and needs*. *International Journal of Bilingual Education and Bilingualism*, 22(2), 107–119. <https://doi.org/10.1080/13670050.2016.1231166>
- Journal, K., Commons, C., License, A., & By, C. C. (2022). *Mustapha, S., Sampson, M., Aliyu H. D. & Unwuzurike U. A . ©2022*. 3(1), 123–130.
- Kanita, P. N. (2020). *The decline in Geography learner numbers in the secondary phase: a Namibian, Khomas region: Windhoek case study by Paulina Ndapewa Kaniita*. March, 1–

175.

- Khatri, K. K. (2020). Research Paradigm: A Philosophy of Educational Research. *International Journal of English Literature and Social Sciences*, 5(5), 1435–1440. <https://doi.org/10.22161/ijels.55.15>
- Kivunja, C., & Kuyini, A. B. (2017). Understanding and Applying Research Paradigms in Educational Contexts. *International Journal of Higher Education*, 6(5), 26. <https://doi.org/10.5430/ijhe.v6n5p26>
- KÖKTÜRK, Ş., Odacıoğlu, M. C., & UYSAL, N. M. (2016). Bilingualism and Bilingual Education, Bilingualism and Translational Action. *International Journal of Linguistics*, 8(3), 72. <https://doi.org/10.5296/ijl.v8i3.9601>
- Kumar, T., Nukapangu, V., & Hassan, A. (2021). Effectiveness of Code-Switching in Language Classroom in India at Primary Level: A Case of L2 Teachers' Perspectives. *Pegem Egitim ve Ogretim Dergisi*, 11(4), 379–385. <https://doi.org/10.47750/pegegog.11.04.37>
- Kvale, S. (1996). *Interviews*. London: Sage Publications.
- Ministry of Education and Training (2019). *Lesotho Basic Education Curriculum Policy (LBCEP)*).
- Mochacha, F. M. (2020). Influence of Code Switching in Mastery of English Speaking Skills in Secondary Schools in Kwanza Sub-Country Tranzo-Nzoia country, Kenya. *Journal of Educational Research*. ISSN: 2456_2947. 5(2).
- Lapad, S. D. Quataroli, M. T., & Riemer, F. J. (2012). *Qualitative Research. An Introduction to Methods and Designs*. Jossey-Bass: John Willey and Sons, Inc.
- Liu, P. (2022). Understanding the roles of expert teacher workshops in building teachers' capacity in Shanghai turnaround primary schools: A Teacher's perspective. *Teaching and Teacher Education*, 110, 103574. <https://doi.org/10.1016/j.tate.2021.103574>
- Ludwig, W. (2006). Untersuchungen zum Gesetz des Crossing-over - I. Die einteiligen Koppelungsgruppen. In *Zeitschrift für Induktive Abstammungs- und Vererbungslehre* (Vol. 69, Issue 1). <https://doi.org/10.1007/BF01762869>
- Mae, C. R., Ruthie, R., & Tejero, V. (2022). *THE ATTITUDES OF TEACHERS TO CODE-SWITCHING IN THE PUBLIC SECONDARY SCHOOLS IN ALAMADA, COTABATO*. 186–201. <https://doi.org/10.5281/zenodo.7220478>
- Maboleba Kolobe, & Lifelile Matsoso. (2021). Minority Languages' exclusion in the Lesotho

- School Curriculum: Perceptions of Teachers and Learners. *Journal for Language Teaching*, 55(1), 133–149. <https://doi.org/10.4314/jlt.v55i1.6>
- Mabule, D. R. (2015). What is this? Is It Code Switching, Code Mixing or Language Alternating? *Journal of Educational and Social Research*, 5(1), 339–350. <https://doi.org/10.5901/jesr.2015.v5n1p339>
- Mahdi, A., & Almalki, M. S. (2019). *Teachers' Perceptions towards Pedagogical Implications of Code Switching: Saudi EFL Classroom Context in Focus*. 7(3), 1–9.
- Majid, U. (2018). Research Fundamentals: Study Design, Population, and Sample Size. *Undergraduate Research in Natural and Clinical Science and Technology (URNCSST) Journal*, 2(1), 1–7. <https://doi.org/10.26685/urncst.16>
- Makulloluwa, E. (2013). Code switching by teachers in the second language classroom. *International Journal of Arts & Sciences*, 6(3), 581–598. <http://universitypublications.net/ijas/0603/pdf/T3N299.pdf>
- Maluleke, M. J. (2019). *Using code-switching as an empowerment strategy in teaching mathematics to learners with limited proficiency in English in South African schools*. 39(3), 1–9.
- Mangila, B. B. (2019). Pedagogic Code-Switching: A Case Study of the Language Practices of Filipino Teachers in English Language Classrooms. *English Language Teaching Educational Journal*, 1(3), 115. <https://doi.org/10.12928/eltej.v1i3.738>
- May, S. (2017). Bilingual and Multilingual Education. *Bilingual and Multilingual Education*, January. <https://doi.org/10.1007/978-3-319-02258-1>
- Mizza, D. (2014). The First Language (L1) or Mother Tongue Model Vs. The Second Language (L2) Model of Literacy Instruction. *Journal of Education and Human Development*, 3(3), 101–109. <https://doi.org/10.15640/jehd.v3n3a8>
- Mohamad Khalil, S., & Mohd Shahril Firda, M. S. Z. (2018). Inter-Sentential and Intra-Sentential Code Switching in Parliamentary Debate. *International Journal of Modern Languages And Applied Linguistics*, 2(4), 29. <https://doi.org/10.24191/ijmal.v2i4.7691>
- Munazza, F. (2016). Perceptions of geography as a discipline among students of different academic levels in Pakistan. *Review of International Geographical Education Online (RIGEO)*, 6(1), 67–85.
- Muthusamy, P., Muniandy, R., Kandasamy, S. S., Hussin, O. H., Subramaniam, M., &

- Farashaiyan, A. (2020). Factors of code-switching among bilingual international students in Malaysia. *International Journal of Higher Education*, 9(4), 332–338. <https://doi.org/10.5430/ijhe.v9n4p332>
- Mwesiga, F. (2017). *Factors Influencing Students ' Poor Performance in Geography Subject in Tanzania : the Case of Community Secondary Schools in Morogoro*. 1(1), 1–28.
- Nagy, T. (2018). On Translanguaging and Its Role in Foreign Language Teaching. *Acta Universitatis Sapientiae, Philologica*, 10(2), 41–53. <https://doi.org/10.2478/ausp-2018-0012>
- Naha, D., Memory, D., Nkengbeza, C. M., & Liswaniso, M. A. (2018). the Effects of Code Switching on English Language Teaching and Learning At Two Schools in Sibbinda Circuit. *International Journal of English Language Teaching*, 6(5), 56–68. www.eajournals.org
- Naranjo, J., Fuad, H., Hakim, Z., Panchadria, P. A., Robbi, M. S., Yulianti, Y., Susanti, E., Sholeh, M., Teuku Fadjar Shadek, R. S., Kamil Arif, I., Gunadhi, E., Partono, P., Sampieri, R. H., & Pariyatin, Y. (2016). *Jurnal Algoritma*, 12(1), 579–587. <http://jurtek.akprind.ac.id/bib/rancang-bangun-website-penyedia-layanan-weblog>
- National Health and Medical Research Council, Australian Research Council and Universities Australia, . (2019). *Management of Data and Information in Research*. 10. <https://www.nhmrc.gov.au/file/14359/download?token=L5GTBw96>
- Ngoc, D., & Nhi, L. (2020). *European Journal of Foreign Language Teaching PRIMARY TEACHERS ' CODE -SWITCHING IN EFL CLASSROOMS*. 72–93. <https://doi.org/10.46827/ejfl.v5i2.3375>
- Nguyen, L., Yuan, Z., & Seed, G. (2022). Building Educational Technologies for Code-Switching: Current Practices, Difficulties and Future Directions. *Languages*, 7(3), 1–18. <https://doi.org/10.3390/languages7030220>
- Nurhamidah, N., Fauziati, E., & Supriyadi, S. (2018). Code-Switching in Efl Classroom: Is It Good or Bad? *Journal of English Education*, 3(2), 78–88. <https://doi.org/10.31327/jee.v3i2.861>
- Nyoni, E., Manyike, V., & Lemmer, E. (2019). Difficulties in Geography teaching and learning in the ESL classroom in Zimbabwe. *Per Linguam*, 35(2), 74–87. <https://doi.org/10.5785/35-2-810>
- Opoku, F., Serbeh, R., & Amoah, E. G. (2021). Geography education in perspective: an enquiry into Ghanaian senior high school students' positive and negative attitudes towards geography. *International Research in Geographical and Environmental Education*, 30(1), 39–53.

- <https://doi.org/10.1080/10382046.2020.1727115>
- Patmasari, A., & Kamaruddin, A. (2022). An Investigation of the Use of Code-Switching in EFL Classroom: Attitudes and Perceptions. *ELS Journal on Interdisciplinary Studies in Humanities*, 5(2), 2022. <https://doi.org/10.34050/elsjish.v5i2.21006>
- Phaswana, E. (2010). Learner councillors' perspectives on learner participation. *South African Journal of Education*, 30(1), 105–122. <https://doi.org/10.15700/saje.v30n1a251>
- Polonsky, M., & Waller, D. (2021). Designing and Managing a Research Project: A Business Student's Guide. *Designing and Managing a Research Project: A Business Student's Guide*, c, 53–76. <https://doi.org/10.4135/9781544316499>
- Pondan Perlindungan Leoanak, S., & Kurniati Amalo, B. (2018). Teachers' Beliefs and Perceptions of Code Switching in English as Foreign Language Classroom. *SHS Web of Conferences*, 42, 00034. <https://doi.org/10.1051/shsconf/20184200034>
- Proudfoot, K. (2022). Inductive/Deductive Hybrid Thematic Analysis in Mixed Methods Research. *Journal of Mixed Methods Research*, 0(0), 1–19. <https://doi.org/10.1177/15586898221126816>
- Puspawati, I. (2018). Teachers' Use of Code Switching in EFL Classroom and its Functions. *Journal of Foreign Language Teaching and Learning*, 3(1), 73–74. <https://doi.org/10.18196/ftl.3128>
- Racca, R. M. A. B., & Lasaten, R. C. S. (2016). English Language Proficiency and Academic Performance of Philippine Science High School Students. *International Journal of Languages, Literature and Linguistics*, 2(2), 44–49. <https://doi.org/10.18178/ijll.2016.2.2.65>
- Rao, P. S. (2019). The Role of English As A Global Language. *Research Journal Of English (RJOE)*, 4(1), 2456–2696.
- Reese, C. O. (2000). Media reviews. In *Adoption Quarterly* (Vol. 3, Issue 3, pp. 101–106). https://doi.org/10.1300/J145v03n03_07
- Rehman, Z. ur R., Bashir, I., & Rehman, A. R. ur. (2020). An exploration of teachers' code switching. *Competitive Social Science Research Journal*, 1(2), 54–71. <https://cssrjournal.com/ojs/index.php/cssrjournal/article/view/19>
- Rugg, D. (n.d.). *An Introduction to Triangulation*. http://www.unaids.org/en/media/unaids/contentassets/documents/document/2010/10_4-Intro-to-triangulation-MEF.pdf

- Sakaria, S., & Priyana, J. (2018). Code-Switching: A Pedagogical Strategy in Bilingual Classrooms. *American Journal of Educational Research*, 6(3), 175–180. <https://doi.org/10.12691/education-6-3-3>
- Salzmann, Z., & Auer, P. (2000). Code-Switching in Conversation: Language, Interaction and Identity. In *Language* (Vol. 76, Issue 4). <https://doi.org/10.2307/417240>
- Samar, R. G., & Moradkhani, S. (2014). Codeswitching in the language classroom: A study of four EFL teachers' cognition. *RELC Journal*, 45(2), 151–164. <https://doi.org/10.1177/0033688214534796>
- Seidan, I. (2006). *Interviewing as a Qualitative Research. A Guide For Researcher in Education and The Social Sciences*. London: Techers' College.
- Setati, M. (1996). *Code switching and Mathematics meaning in a Senior primary class of Secondary language learners. MED Research Reports*.
- Scholar, M. E. (2015). *Research Methodology and Approaches*. 5(3), 48–51. <https://doi.org/10.9790/7388-05344851>
- Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9), 9–16. <https://doi.org/10.5539/elt.v5n9p9>
- Shartley, N. E. (2016). *Code switching in Unversity classroom intercation. A Case Study of University of Dar es Salaam. Stellenbosch papers in Linguistics plus 49*
- Shilongo, E. (2017). *An Investigation of Code switching in Secondary Junior Schools. A Thesis Sumbitted in Partial Fulfillment of Degree of Master of Education (Curriculum Studies)*.
- Shohamy, E. (2008). Language policy and language assessment: The relationship. *Current Issues in Language Planning*, 9(3), 363–373. <https://doi.org/10.1080/14664200802139604>
- Simasiku, L. (2016). The Impact of Code Switching on Learners' Participation during Classroom Practice. *Studies in English Language Teaching*, 4(2), 157. <https://doi.org/10.22158/selt.v4n2p157>
- Simasiku, L., Kasanda, C., & Smit, T. (2015). Can code switching enhance learners' academic achievement? *English Language Teaching*, 8(2), 70–77. <https://doi.org/10.5539/elt.v8n2p70>
- Sinaga, C. R., & Hutahaeon, D. T. (2020). An Analysis of Code Switching Used by Reza Arap on Deddy Corbuzier's Youtube Channel. *JETAFL (Journal of English Teaching as a Foreign*

- Language*) ISSN: 2459-9506 *An*, 6(3), 31–47. <http://repository.radenintan.ac.id/10790/1/A-THESIS-2.pdf>
- Skjott Linneberg, M., & Korsgaard, S. (2019). Coding qualitative data: a synthesis guiding the novice. *Qualitative Research Journal*, 19(3), 259–270. <https://doi.org/10.1108/QRJ-12-2018-0012>
- Somera-Luzano, M. (2022). Code Switching In The Teaching And Learning Process. *Journal of Positive School Psychology*, 6(8), 9218–9226. <https://journalppw.com/index.php/jpsp/article/view/11422%0Ahttps://journalppw.com/index.php/jpsp/article/download/11422/7397>
- Songxaba, S. L., Coetzer, A., & Molepo, J. M. M. (2017). Perceptions of teachers on creating space for code switching as a teaching strategy in second language teaching in the Eastern Cape province, South Africa. *Reading & Writing*, 8(1), 1–7. <https://doi.org/10.4102/rw.v8i1.141>
- Songxaba, S. L., Coetzer, A., Molepo, J. M., Teacher, P., Africa, S., Sisulu, W., Africa, S., Sisulu, W., & Africa, S. (2017). *Perceptions of teachers on creating space for code switching as a teaching strategy in second language teaching in the Eastern Cape province , South Africa*. 1–7.
- Spriggs, M., & Gillam, L. (2010). How much should children be told about the research when they are not the ones giving consent? *Understanding Consent in Research Involving Children: The Ethical Issues A Handbook for Human Research Ethics Committees and Researchers*, 15. <http://www.mcri.edu.au/projects/ConsentInResearch/>
- STEILS, N. (2019). Non-participant observation online: using screen recording and trace analysis for collecting and analyzing individual behaviors online. *World Conference on Qualitative Research*, 1, 30–33. <https://proceedings.wcqr.info/index.php/wcqr2019/article/view/203>
- Stranges, M. K. W., Ul Haq, S., & Dunn, D. G. (2014). Black-out test versus UV camera for corona inspection of HV motor stator endwindings. *IEEE Transactions on Industry Applications*, 50(5), 3135–3140. <https://doi.org/10.1109/TIA.2014.2306979>
- Strahler, A. (2013). *Introducing Physical Geography (6th Ed.)*. Hoboken, New Jersey: John Willey & Sons.
- Stromvig, H. (2018). *The functions of teacher code switching in classrooms , and teachers ' perceptions towards this practice : A case study of siSwati-English interactions in a semi-*

urban high school in Eswatini. December.

- Suganda, L. A., Loeneto, B. A., & Zuraida, Z. (2018). Teachers' Use of Code Switching in An English as a Foreign Language Context in Indonesia. *Script Journal: Journal of Linguistic and English Teaching*, 3(2), 111. <https://doi.org/10.24903/sj.v3i2.202>
- Tahir, A., Fatima, I., & Abuzar, N. (2022). Teachers' and Students' Attitude Toward Code Alternation in Pakistani English Classrooms. *JEELS (Journal of English Education and Linguistics Studies)*, 3(1), 85–108. <https://doi.org/10.30762/jeels.v3i1.43>.
- Tams, C. J. (2014). Article X. *Convention on the Prevention and Punishment of the Crime of Genocide*., 5(March), 388–393. https://doi.org/10.5771/9783845258911_388.
- Tatic, J. Doring, L., & Nanusuma, S. (2020). Analysis of types of code switching among community college students. *Journal of Social Science and Advanced Research*. 1(2).
- Teaching, C. I. N., & Young, E. F. L. (2022). *Acitya : Journal of Teaching & Education*. 4(1), 25–39.
- Teklesellassie, Y., & Boersma, E. (2018). Attitudes towards Code-Switching in an English-Medium Content Classroom. *PASAA: Journal of Language Teaching and Learning in Thailand*, 55(June), 57–77.
- Thiongo, N. W. (1986). *Decolonising The Mind: The Politics of Language in African Literature*. ISBN: 0-435-08016-4.
- Triyanto. (2019). Understanding student participation within a group learning. *South African Journal of Education*, 39(2), 1–8. <https://doi.org/10.15700/saje.v39n2a1629>
- Trudell, B. (2016). The impact of language policy and practice on children's learning: Evidence from Eastern and Southern Africa. *United Nations International Children Emergency Fund*, 1–144. [https://www.unicef.org/esaro/UNICEF\(2016\)LanguageandLearning-FullReport\(SingleView\).pdf](https://www.unicef.org/esaro/UNICEF(2016)LanguageandLearning-FullReport(SingleView).pdf)
- Van der Walt, C. (2011). The functions of code switching in English language learning classes. *Per Linguam*, 25(1), 148–156. <https://doi.org/10.5785/25-1-27>
- Vygotsky, L. (1978). *Mind in Society*. Harvard: Harvard University Press.
- Wardhaugh, R. (2016). *An Introduction to Sociolinguistics*. 5th Ed. Oxford & Malden, MA: Blackwell.
- Wibowo, A. I., Yuniasih, I., & Nelfianti, F. (2017). Analysis of types code switching and code mixing by the sixth president of Republic Indonesia's speech at the national of independence

- day. *Progressive; Journals of Linguistics, Literature, and Teaching*, 12(2), 77–86.
- Yana, Y., & Nugraha, I. F. (2019). Students' Perception on the Use of Code-Switching in English Classroom. *PROJECT (Professional Journal of English Education)*, 2(2), 167. <https://doi.org/10.22460/project.v2i2.p167-174>
- Yang, M., O'Sullivan, P. S., Irby, D. M., Chen, Z., Lin, C., & Lin, C. (2019). Challenges and adaptations in implementing an English-medium medical program: a case study in China. *BMC Medical Education*, 19(1), 1–8. <https://doi.org/10.1186/s12909-018-1452-3>
- Yang, W. (2020). Functions and Application of Code-Mixing and Code-Switching in a Second/Foreign Language Classroom. *Frontiers in Educational Research*, 3(4), 38–40. <https://doi.org/10.25236/FER.2020.030409>
- Yin, R. K. (2018). *Case Study Research Design and Methods*. (3rd Ed.). Thousands Oaks: SAGE Publications.
- Year, P., Year, R., Policies, R., Policy, L., & Policy, A (2023). *THE LESOTHO EDUCATION LANGUAGE POLICY MINISTRY OF EDUCATION AND TRAINING*.
- Zainil, Y. (2019). Pedagogical Practices of Code-Switching in EFL Classrooms in Padang, Indonesia. *KnE Social Sciences*, 3(14), 634. <https://doi.org/10.18502/kss.v3i14.4343>



NATIONAL UNIVERSITY
OF LESOTHO

APPENDICES

APPENDIX 1: INTRODUCTORY LETTER FROM THE UNIVERSITY
(FACULTY OF EDUCATION)

The National University of Lesotho

Telephone: +266
22340601/3631
FAX: +266
22340000
http://www.nul.ls

P.O. Roma 180
Lesotho
Africa


FACULTY OF EDUCATION

Date 05/04/2023

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

A Letter of introduction to undertake research

This letter serves to introduce Mr. Thabang Khalema, who is a Master of Arts in Education (M.A.ED) student in the Faculty of Education at the National University of Lesotho (NUL). The student is undertaking research which involves interviews with geography teachers and classroom observations. Kindly accord him the necessary assistance and support in this important activity.

Your cooperation is highly appreciated.

Yours sincerely,


Associate Professor M. Raselimo (Supervisor)



APPENDIX 2: STRUCTURED OBSERVATION CHECKLIST

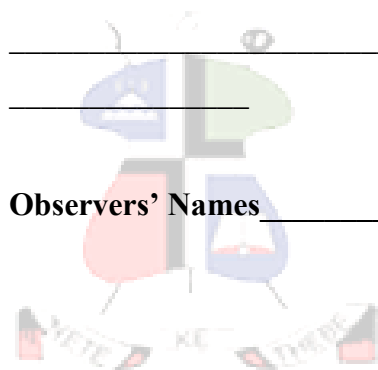
SCHOOL NAME:			
<u>Date:</u> <u>Participant's Name:</u> ... <u>Grade:</u> <u>Topic:</u>			
<u>Lesson Duration:</u>			
TYPE OF SWITCHING.	CODE	FREQUENCY.	COMMENTS.
Inter-sentential switching.	Code		
Intra-sentential switching.	Code-		
LOW ENGLISH PROFICIENCY-RELATED CHALLENGES FACED BY LEARNERS IN GEOGRAPHY INSTRUCTIONAL PROCESSES.			
➤ Difficult in Expression			
➤ Difficulty in understanding Geography terminology.			
FUNCTIONS OF CODE SWITCHING PERFORMED BY LEARNERS			
➤ To Understand potentially complex concepts			
➤ Reiteration			
➤ Expression			
FUNCTIONS OF CODE SWITCHING PERFORMED BY TEACHERS			
Pedagogic Functions.			
➤ Clarification.			
➤ Repetition Reiteration			
➤ Facilitating Teacher-student and student-teacher communication.			
➤ Checking learners' understanding.			
➤ Enhancing Learners' comprehension. <ul style="list-style-type: none"> • Providing meaning of new vocabulary. • Providing examples. 			

OTHER FUNCTIONS.		
➤ Enhancing Students' Engagement or Participations.		
➤ Lesson Review		
➤ Classroom Management.		
➤ Greetings.		

Lesson

Observation

Notes



NATIONAL UNIVERSITY
OF LESOTHO

Observers' Names

Signature

APPENDIX 3: INTERVIEW GUIDE WITH LEARNERS



Dear Learners.

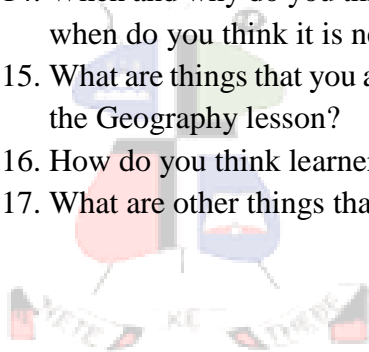
I am Thabang Khalema, a second year postgraduate (masters) student in the Faculty of Education at the National University of Lesotho (NUL). I am conducting research on the topic '*Students' and teachers' perceptions on the use of code-switching in Geography teaching and learning processes*'. From my experience as a high school learner and a student teacher during my teaching practice, I have realised that some students have difficulties with the use of English as a medium of instruction, which may negatively affect their understanding of Geographical concepts. Therefore, the aim or purpose of my study is to understand if the use of code-switching can help students who are not able to understand Geography content because they do not understand English.

Please note that your names will be kept as a secret and no one will know that answers are yours. Therefore, you are kindly invited to voluntarily participate in this research by participating in this interview. The findings of the study are intended to contribute to enhancement of quality teaching and learning in Geography. Therefore, kindly complete this questionnaire and respond to the questions the best way you can, based on your knowledge and experience as a Geography student. Thank you for agreeing to participate in this study.

Yours sincerely
Thabang Khalema
+266 50782754

1. Please explain how low understanding of English affects you in a Geography class.
2. Are there any Geography terms and topics that you struggle to understand due to English?
Please mention examples of such topics or concepts
3. When do you use both English and Sesotho in a Geography class?
4. Please give advantages and disadvantages of using both English and Sesotho in a Geography class.
5. Does your teacher use both English and Sesotho in a Geography class?

6. Do you benefit when your Geography teacher uses both English and Sesotho in Geography class especially when you struggle to understand some concepts due to low understanding of English?
7. In your opinion, when should students be allowed to use both English and Sesotho during Geography lessons and why?
8. What are other ways in which you benefit when your teacher uses both English and Sesotho in Geography a class?
9. How are you affected when your teacher uses English alone in Geography classroom?
10. Do you benefit when the teacher uses both English and Sesotho in a Geography class? Please explain your answer
11. Code switching is the use of two languages such as English and Sesotho to communicate. Do you like it when your teacher uses both English and Sesotho in Geography classes?
12. Do you think English and Sesotho should always be used in Geography class? If 'YES', please explain why. If 'NO', please explain why.
13. In your opinion, when do you think Sesotho is necessary to be used in a Geography class? Please explain your answer.
14. When and why do you think it is necessary to use Sesotho in Geography class? In other words, when do you think it is necessary for you to be allowed to use Sesotho in Geography class?
15. What are things that you are able to do when your teacher uses both English and Sesotho during the Geography lesson?
16. How do you think learners who struggle to understand Geography content can be helped?
17. What are other things that affect your understanding of Geography content?



THANK YOU, GOOD LUCK ON YOUR STUDIES!!!

APPENDIX 4: INTERVIEWS GUIDE WITH TEACHERS

Greetings my dear colleagues. I am Thabang Khalema (201702984), a postgraduate second year student at the National University of Lesotho (NUL), studying Master of Arts in Education (MA Ed), Geography. I am conducting research on the topic that reads “*Impact of code switching in Geography education: learners’ and teachers’ perspectives*”.

The purpose of this interview is to gain insight into your experiences and opinions about the use of code switching (using Sesotho and English) in Geography teaching and learning processes. After this interview, it is my hope that you and I as Geography teachers as well as learners will benefit and learn how embedding mother tongue (Sesotho) in Geography teaching and learning processes can help towards successful content delivery in cases where learners encounter challenges as a result of their low proficiency levels in the language of instruction, English. Thus, the findings or the results of this study will contribute to the quality of Geography teaching and learning processes.

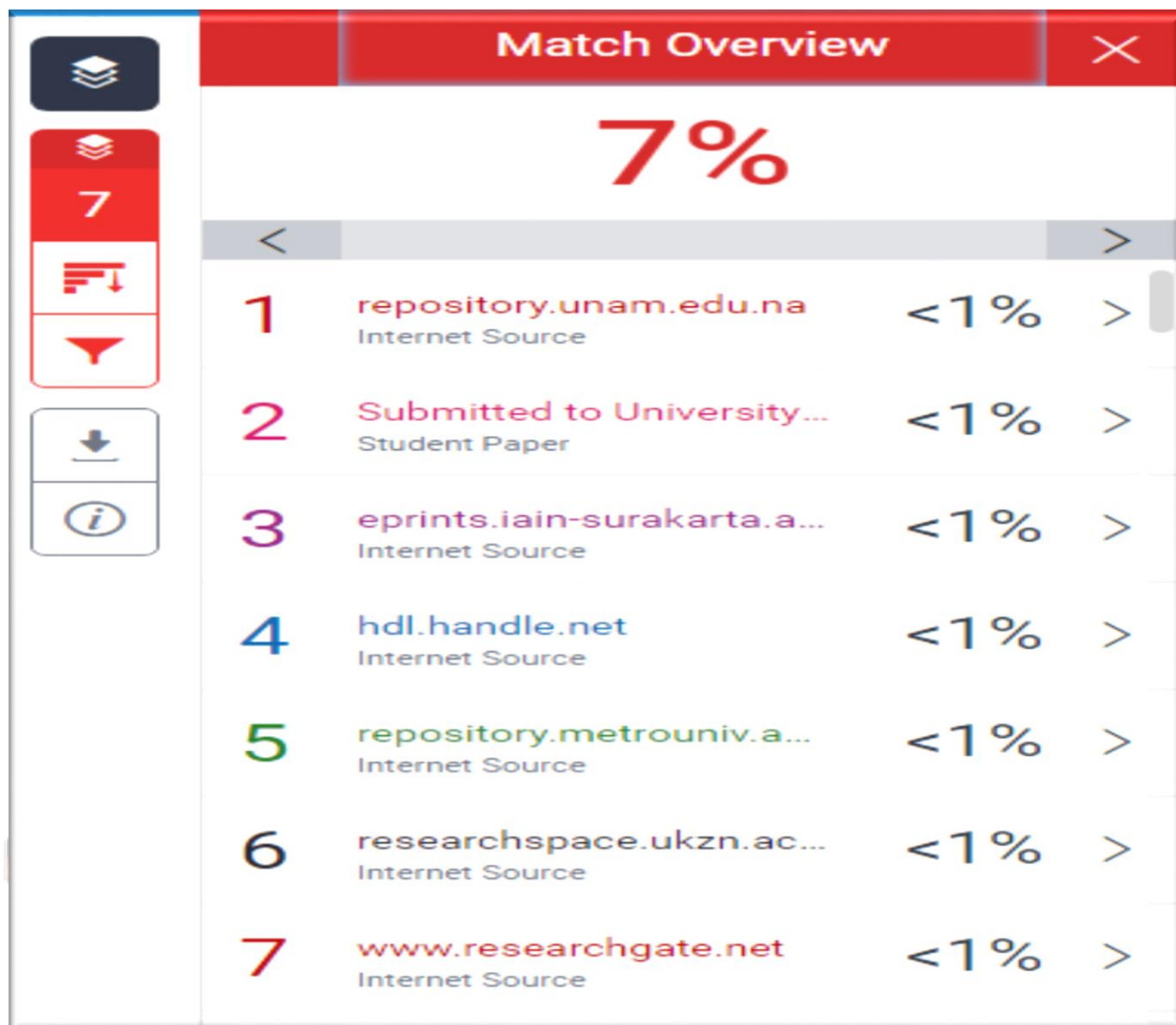
N/B: PLEASE NOTE THAT THERE WILL BE AUDIO TAPING DURING THIS INTERVIEW PROCESS AND REST ASSURED THAT YOUR IDENTITY SHALL BE TREATED WITH CONFIDENTIALITY AS ONE OF THE IMPORTANT PRINCIPLES IN RESEARCH ETHICS WHEN REPORTING THE FINDINGS OF THE STUDY. AFTER TRANSCRIPTION, THE AUDIO TAPES WILL BE KEPT UNTIL THE EXAMINER IS DONE WITH MARKING MY THESIS. THEN, SUCH TAPES WILL BE DELETED AND THEY WILL NOT FALL INTO THE HANDS OF THOSE WHO CAN MISAPPROPRIATE THEM.

THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION IN HELPING ME COMPLETE THIS STUDY.

1. How old are you?
2. Please explain your qualification.
3. How long have you been a Geography teacher?
4. What challenges related to poor English background do your learners experience during Geography teaching and learning?
5. How do you help your learners to overcome those challenges?

6. Based on your experience as a Geography teacher, what are signs that learners are struggling to understand the content of the lesson as a result of their low proficiency in English?
7. Based on your experience, which Geography topics or concepts are difficult for learners to understand due to poor English background?
8. What is your understanding of the concept, code-switching?
9. Do you use English and mother tongue during Geography lessons? Please explain.
10. In the event that you have used both English and Sesotho in your teaching of Geography, for how long have you been doing so?
11. For what purposes do you use both Sesotho and English in your Geography class?
12. When using both Sesotho and English in Geography teaching and learning, does this help you achieve the reasons you mention in Question 11 above? In other words, does it bring any impact?
13. When you use both mother tongue in your Geography class, how do your learners behave?
14. Based on your experience, what impact does the use of both Sesotho and English bring in your teaching of Geography except for helping learners with low proficiency in English?
15. Do your learners code-switch in Geography class and for what purpose?
16. In your opinion, does code switching help learners understand Geography concepts that were difficult when you used English alone?
17. In your opinion, under what circumstances should code switching be used in Geography teaching and learning?
18. In your view, when learners be allowed to switch codes in Geography class?
19. What are other strategies do you use to help learners with low proficiency levels in your class?

APPENDIX 5: SIMILARITY INDEX (FROM TURNITIN PLAGIARISM CHECKER)



The screenshot displays the Turnitin Match Overview interface. At the top, the title "Match Overview" is shown in a red header bar. Below the title, the overall similarity index is prominently displayed as "7%". A list of seven matches is shown below, each with a unique color-coded number (1-7) and a similarity percentage of "<1%". The matches are as follows:

Match Number	Source	Similarity Percentage
1	repository.unam.edu.na Internet Source	<1%
2	Submitted to University... Student Paper	<1%
3	eprints.iain-surakarta.a... Internet Source	<1%
4	hdl.handle.net Internet Source	<1%
5	repository.metrouniv.a... Internet Source	<1%
6	researchspace.ukzn.ac... Internet Source	<1%
7	www.researchgate.net Internet Source	<1%



NATIONAL UNIVERSITY OF LESOTHO