

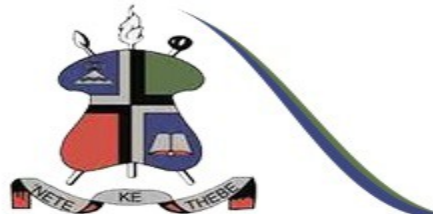
Utilising Phonemic-Orthography to Accelerate Spelling Proficiency for the Development of
Critical Literacy Skills in a 9th Grade ESL Classroom: An Action Research Case Study
Conducted at a Secondary School in Maseru

by

THAMAE LIPOLELO

A Thesis Submitted in Fulfilment of the Requirements for the degree of

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Supervisor: Dr. Tawanda Wallace Mataka

Declaration

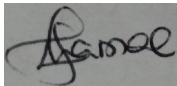
I, Lipolelo Thamae, declare that I am the sole author of the thesis entitled **"Utilising Phonemic-Orthographic Integration to Accelerate Spelling Proficiency for the Advancement of Critical Literacy Skills in a 9th Grade ESL Classroom: An Action Research Case Study Conducted at a Secondary School in Maseru."** This thesis was conducted for the purpose of obtaining my Master's Degree at The National University of Lesotho, under the guidance of Dr. Tawanda Wallace Mataka. I confirm that this is my original work and that it has not been previously submitted for any academic qualification to my knowledge. Furthermore, I affirm that all instances of information and concepts included in this study, whether quoted directly or paraphrased, have been appropriately acknowledged through accurate citations and references. By signing this declaration, I assert that the work presented in this study is a true and accurate reflection of my own efforts, and I have upheld the highest standards of ethical conduct in the pursuit of knowledge.

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Dedications

I dedicate this research work to my future "academic descendants", the linguists in training who are committed to nurturing various forms of literacy while working diligently for a more socially just environment that rectifies the academic categorisation of ESL learners.

Equally importantly, I extend this dedication to my family. Their unwavering support and belief in me have served as the driving force throughout this journey. I am profoundly grateful for their presence by my side every step of the way.

Finally, I offer this work to all ESL learners who persistently strive to overcome challenges in their quest for knowledge. May this research contribute to enriching your learning experiences and fostering the advancement of critical literacy.

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Abstract

In our rapidly evolving world, equipping English Second Language (ESL) learners with critical literacy skills has become imperative, enabling them to navigate dynamic environments by evaluating information critically, adapting to technological changes, and participating thoughtfully in global conversations. This action research case study investigated the application of phonemic-orthography to expedite spelling proficiency and cultivate critical literacy among ESL learners. Conducted within a high school in Lesotho, the study sought to enhance spelling proficiency through phonemic-orthography implementation to foster critical literacy growth. Drawing on five theoretical frameworks—Cultural-Historical Activity Theory, Legitimation Code Theory, Communicative Language Teaching, Constructivism, and Behaviorism—the study employed a mixed-method approach. Data collection involved tests, questionnaires, document analysis, focus groups, reflective journals, activities, and observations, with analysis conducted using Atlas.ti, Excel, and ANCOVA via Strata17 in SPSS. Results affirmed that phonemic-orthography significantly accelerates spelling skills within a compressed two-month period. Simultaneously, the incorporation of phonemic-orthography facilitates gradual critical literacy development. Notably, the null hypothesis (h_0) was rejected, confirming the impact of phonemic-orthography on both spelling acceleration and critical literacy development. This research underscores the potency of phonemic-orthography as a robust strategy and catalyst for enhancing ESL spelling while nurturing critical literacy proficiencies. The interplay of the five theoretical perspectives underscores the intricacies of effective pedagogy. The implications extend to educators and researchers seeking impactful literacy practices in diverse language learning contexts. The findings demonstrate a statistically significant enhancement in spelling skills among ESL students after adopting phonemic-orthography techniques. Furthermore, ESL learners exhibit heightened confidence in engaging critically with complex texts.

Keywords: *phonemic-orthography, spelling skills, critical literacy development, action research, ESL learners, empowerment*

Acronyms and Abbreviations

4IR: Fourth Industrial Revolution

α : Significance level

h_0 : Null Hypothesis

h_α : Alternative Hypothesis

$\frac{t\alpha}{2}$: T-distribution

ANCOVA: Analysis of Covariance

AmE: American English

Apr: April

BrE: British English

CAP: Curriculum and Assessment Policy

CHAT: Cultural-Historical Activity Theory

CLT: Communicative Language Teaching

CPH: Critical Period Hypothesis

CT: Constructivism Theory

ECOL: Examination Council of Lesotho

EIL: English as an International Language

EL: English Language

ELT: English as a Language of Teaching

ESL: English as a Second Language

Feb: February

FoE: Faculty of Education

HEI: Higher Education Institutions

IC: Integrated Curriculum

ICM: Intervention and Conventional Methods

IPA: International Phonetic Alphabet

IPI: Improvement Post Intervention

Jun: June

KM: Kilometres

L1: First Language

L2: Second Language

LAD: Language Acquisition Device

LELP: Lesotho Education Language Policy

LCT: Legitimation Code Theory

LOTL: Language of Teaching and Learning

LRE: Language Rule Effect

Mar: March

MAX: Maximum

MIN: Minimum

MMR: Mixed Method Research

MoET: Ministry of Education and Training

MT: Mediation Tools

N/S: Not Specified

NCES: National Center for Education Statistics

NCDC: National Curriculum Development Centre

PAR: Participatory Action Research

PCK: Pedagogical Content Knowledge

PCR: Pragmatist-Critical Realism

PSSD: Peer Support in Spelling Development

P-Value: Probability Value

RQ: Research Question

SES: Socio-Economic status

SD: Standard Deviation

SPSS: Statistical Package for the Social Sciences

TSSD: Teacher Support in Spelling Development

QUAL: Qualitative

QUAL: Quantitative

UNESCO: United Nations Educational Scientific and Cultural Organisation

ZELA: Zimbabwe Early Learning Assessment

ZPD: Zone of Proximal Development

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CHAPTER 1

1.0 Introduction

This chapter functions as an introduction to the study. It begins with the rationale, followed by the contextual background of the study. Subsequently, the problem statement is presented, leading to the research objectives, research questions, hypothesis, significance, delimitations, organisational structure of the study, and a concluding section.

1.1 Rationale

Literacy holds a pivotal role as it enhances one's life and opens avenues for personal and familial development. However, factors like family backgrounds and attitudes towards the target language can hinder the development of students' literacy skills (Hebert, 1992). Particularly in post-colonial nations with a history of colonisation, English might not be well-received due to its historical connotations, contributing to literacy challenges. This issue was evident in my high school experience. During my time in Form B, I witnessed fellow learners facing marginalisation due to pronunciation and spelling errors. I noted how certain teachers, who were not immune to imperfections themselves, treated classmates struggling with these challenges. Instead of supportive approaches, these students often faced mockery, leading to diminished confidence and avoidance of English communication. Reflecting on this, I recalled a teacher who attributed learners' difficulties to English being introduced as a Second Language (ESL) due to colonisation. This raises the question of why some teachers, despite their English teacher training, harbour attitudes that hinder gradual ESL teaching to nurture proficiency. This issue indirectly affected me, fostering a fear of speaking that persisted until my postgraduate years. Consequently, I struggled to communicate fluently in both my native language and English. As a pre-service teacher, I encountered learners grappling with pronunciation and spelling difficulties, which hindered effective communication.

In my postgraduate studies, I noticed fellow students mispronouncing and misspelling words. This led me to question their educational background based on these errors. Postgraduate studies, according to Mataka (personal communication, Jan 7, 2022), require critical engagement in dialogue to address and resolve issues. Reflecting on this, I connected the pronunciation and spelling issues back to high school

and recognised them as threats to literacy. Motivated by these observations, I embarked on research to develop an intervention strategy to enhance spelling skills and pronunciation. The aim was to empower learners to confidently use productive skills; speaking and writing (Yerlen, 2022). Before formulating the intervention, I delved into extensive reading to understand the nuances of literacy, its constituents, and how pronunciation and spelling contribute to it. The following section elaborates on my findings about literacy.

1.2 Background of the study

1.2.1 Theoretical Background

Literature has established that literacy skills are essential for success, especially in the 21st century. Murnane et al. (2012) emphasise the increasing demand for strong literacy skills. Traditionally, literacy encompasses an individual's ability to read, write, speak, and listen. Pilgrim et al. (2015) and Montoya (2018) contend that the core meaning of literacy is effective reading and writing across various contexts. Similarly, Srivastana (2017) endorses literacy as the ability to read and write. However, the scope of literacy extends beyond mere reading and writing, as articulated by the United Nations Educational Scientific and Cultural Organisation (UNESCO) (2019) as "the ability to identify, understand, interpret, create, communicate and compute using printed, written and visual materials associated with varying contexts" (p.96). Likewise, Frankel et al. (2016) describe literacy as "the process of using reading, writing and oral language to extract, construct and integrate...meaning through interaction...with... texts" (p.7). UNESCO Institute of Statistics (2020) measures literacy by the percentage of the population capable of reading, writing, and comprehending simple daily statements.

While the definitions of literacy vary, a common theme is the "ability to read and write." Moreover, Markey (2008) argues that literacy is not static; it evolves alongside history and societal shifts. Thus, this study adopts Bailey (2005)'s definition of literacy as a dynamic practice within discourse, where people use reading and writing for personal and social purposes through language-based actions and transitions. Bailey (2005) notes that literacy involves more than encoding a text; it encompasses a historical context with expectations and social conventions. This perspective underscores the interconnectedness of literacy and context. For instance, a learner's literacy should be evaluated based on their ability to read a passage aloud with correct pronunciation and write a composition with proper spelling. Similarly, a secretary's literacy involves reading mail and composing accurate reports. In this study, literacy refers to learners' capacity to respond to classroom and societal activities by using

accurate spelling in writing and engaging in discourse with correct pronunciation. This extends beyond skill acquisition; reading for pronunciation and spelling is tied to learners' proficiency in discussing and debating classroom, school, and societal issues. Achieving literacy holds numerous benefits. Dasman (2021) supplements that "literacy is important in the context of self-improvement, personal branding, professional development, schooling, and national development" (p.1). Additionally, literate individuals are more likely to actively participate in society compared to those who are illiterate (Dasman, 2021, p.1). This echoes Freire's notion of conscientisation and Giroux's concept of 'dialectical thought.' These perspectives collectively emphasise that literacy empowers individuals to engage with and address the issues affecting them. Furthermore, literacy nurtures critical thinking, enabling individuals to uncover concealed problems and articulate their critiques both orally and in writing.

1.2.1.1 Literacy performance in the First and Second worlds

While literacy holds considerable self-serving value, it is not immune to external threats that can lead to what is commonly termed as illiteracy. Lauwerier (2016) notes that illiteracy does not necessarily mean a complete inability to read or write, but rather difficulties in comprehending complex paragraphs or producing sophisticated writing. Thus, illiteracy can take various forms, as literacy challenges in different contexts can manifest as illiteracy. The following section provides examples of literacy challenges from diverse global contexts. Although literacy is often associated with economic standards, it is a universal concern affecting developed, developing, and underdeveloped nations worldwide. For instance, in Malaysia, students face challenges in academic writing and reading in English, hampering their success (Manjet, 2015; 2017; 2016). In China, over 80 million people are illiterate, predominantly in rural areas (China's National Bureau of Statistics, 2020). Similarly, Germany faces literacy challenges, with citizens aged 18 to 44 being illiterate (Ronimus et al., 2019). In the UK, 16% of the population experiences literacy difficulties (Ronimus et al., 2019). The United States is not exempt either, as O'Reilly and Sabatini (2013) note that learners in grades 4 to 12 lack literacy proficiency and struggle to comprehend what they read (National Center for Education Statistics, 2019).

This empirical examination suggests that various factors contribute to literacy challenges and subsequently affect literacy performance. In China, lack of resources like textbooks and demotivating salaries for teachers affects literacy performance (Fan & Xie, 2014). Cultural gender differences also play a role; traditional Chinese family hierarchy places males above females, leading to limited literacy

opportunities for girls (Hu & Scott, 2016; Lin & Pei, 2016). A similar situation occurs in Britain, where working-class children drop out of school (Ronimus et al., 2019). Residential location also affects literacy performance, with urban areas outperforming rural areas (National Center for Education Statistics, 2019). Considering these factors impacting literacy performance, it is important to note that both developed and developing countries have implemented intervention strategies to promote literacy. China, for example, implemented the Compulsory Education Law, resulting in increased access to education (Yang & Guo, 2020). Similarly, Finland's pedagogical approaches exceeded initial expectations in promoting literacy (Ronimus et al., 2019).

1.2.1.2 Literacy performance in the Third world

This section emphasises that literacy challenges are not limited to the first and second worlds; they are also prevalent in the third world. In Ethiopia, the Ministry of Education (2018) acknowledges that learners encounter difficulties in reading and spelling, lacking letter-sound reading habits and making word recognition errors (Rowe et al., 2016). This contributes to their low proficiency in the English language (EL). Similarly, in Zambia, a significant number of learners struggle to acquire basic reading skills (Brombacher et al., 2015), and failure to learn to read becomes a significant risk for failure in upper grades taught in EL (Lyytinen et al., 2019; Sampa et al., 2018). Likewise, despite Nigeria's overall literacy rate of 84%, variations across different zones indicate literacy challenges within the country. The Niger Delta Zone and Northern Nigeria exhibit relatively higher illiteracy rates than the South-West region (UNESCO, 2015). In a similar vein, Namibia faces literacy issues, with 35% of its population considered illiterate (UNESCO, 2019). South Africa is another context where literacy is a concern. Fouchè (2016) estimates that between 7.4 and 8.5 million people in South Africa are functionally illiterate.

The underlying factors contributing to the third world's literacy challenges are varied. In South Africa, learners are inadequately prepared by the basic education system (van Broekhuizen & Spaull, 2017). Additionally, challenges include a shortage of trained teachers, high learner-to-teacher ratios, limited budgets allocated to the education sector by many African governments, and language policies in education (Beyani, 2013). Addressing these literacy challenges necessitates the establishment of literacy development initiatives. South Africa introduced the Run Home to Read Literacy Programme, and Uganda implemented the Functional Literacy Programme. However, these programmes only benefited a small percentage, reaching just 5% of the target population (UNESCO, 2015). This underscores that

while third world countries have attempted intervention strategies, the outcomes have varied, with some yielding positive results and others encountering significant challenges.

1.2.2 Contextual background

1.2.2.1 Literacy performance in Lesotho

While literacy challenges are prevalent in various third world countries, the language policy in Lesotho could be considered an effort to enhance literacy performance. The 2009 Curriculum and Assessment Policy (CAP), which Makumane and Ngcobo (2021) view as a guide for curriculum development, designates English as both a subject and a medium of instruction from grade 4 onwards (Ministry of Education and Training (MoET), 2009). This policy aims to facilitate "effective communication" (p.9). One goal of secondary education in Lesotho is to enable learners to acquire functional literacy (MoET, 2009), involving effective communication through listening, speaking, reading, and writing in various contexts (p.19). The grade 9 English language syllabus outlines aims to develop reading and writing skills to enhance learners' proficiency and communication abilities in standard English (MoET, 2009, p.2).

However, the syllabus seems to marginalise a crucial aspect of speaking; pronunciation, which is essential for effective communication. This misalignment contradicts the general aims outlined and the reality that proficiency and communicative competence in English cannot be divorced from speaking skills. Additionally, the evaluation of English language (EL) skills in academic settings, as noted by Nallaya (2012), typically includes listening, speaking, reading, and writing. The omission of pronunciation raises questions about the significance attributed to speaking skills. Similarly, communicative competence involves appropriate use of utterances alongside knowledge of grammar, syntax, morphology, and phonology (Nallaya, 2012). This underscores the importance of speaking skills in assessing progress in learning English as a second language (ESL) and the integral role of pronunciation in this process.

Lesotho's current educational paradigm aims to cultivate well-rounded learners capable of navigating the complexities of the modern world (MoET, 2009), aligning with the global emphasis on critical literacy as a foundational educational component. However, within Lesotho's ESL framework, a challenge emerges where learners struggle to master fundamental spelling skills, hindering their journey towards broader critical literacy competencies.

To address this challenge, the Lesotho integrated curriculum initiative seeks a holistic educational approach, interconnecting various subjects and skills to offer a comprehensive learning experience. This suggests that integrating language skills, including spelling and critical literacy, is central to this effort. Nonetheless, a lack of evidence-based strategies for enhancing spelling skills and fostering critical literacy within this integrated framework is evident. Recognising this gap, this study aims to explore the application of phonemic-orthography strategies in Lesotho's integrated curriculum, aiming to enhance ESL learners' spelling proficiency and critical literacy, while filling the void in strategies to boost spelling proficiency in the country. Despite the existence of literacy challenges across the third world, certain countries like Zimbabwe boast high literacy rates (Makaudze & Kangira, 2016). However, Lesotho shares the demographic trait identified by Johnson (2016), where a higher illiteracy rate among males (17%) contrasts with a lower rate among females (5%). This imbalance is attributed to cultural practices and limited educational opportunities for girls (Johnson, 2016). Despite gender-combined schools and all-girls' schools, poor literacy skills seem to persist. The connection between speaking and writing skills exacerbates the issue, as evident from misspellings.

In the midst of the Fourth Industrial Revolution, spelling skills gain significance as accurate spelling becomes a technological skill with far-reaching implications for communication and technology-related fields (Fouad Ali et al., 2022). Pronunciation difficulties notwithstanding, spelling's importance remains paramount. In summary, this study's focus on spelling difficulties within Lesotho's educational context aims to contribute to improved technological and overall literacy, bridging the gap between aspirations and practical implementation in the integrated curriculum.

1.3 Problem statement

In a parallel vein, School X's pass rate has declined steadily from 2017 to 2021. The number of top achievers in grade 12 over five consecutive years are as follows: three in 2017, four in 2018, three in 2019, two in 2020, and one in 2021 (Examination Council of Lesotho (ECoL), 2017-2021). In 2021, out of 196 learners who took the final examinations, one achieved an A*, along with 13 As, 86 Bs, 275 Cs, 310 Ds, 328 Es, 243 Fs, 184 Gs, and 109 Us; additionally, 19 learners did not sit for the exams due to various reasons including illness and inability to pay the examination fee. The English language examiners' report attributed this decline to spelling challenges (ECoL, 2021), a sentiment shared by school X's ESL teachers, who attributed the subpar performance to poor literacy skills. These spelling

difficulties become evident when learners encounter written questions and need to respond in writing, leading to a loss of marks as per ECoL (2021), which subsequently affects the overall performance of ESL learners. This concern prompted the researcher to investigate into spelling while integrating pronunciation, given the World Bank Group's (2019) directive that all children should be able to read and spell correctly by the age of ten.

The notable struggle of a significant number of ESL learners in accurately spelling words within the contemporary ESL education framework in Lesotho has serious consequences. The issue's impact extends beyond undermining written communication; it impedes language learning and critical literacy development. The inability to express thoughts coherently in written form places these learners at a disadvantage across academic and professional domains, limiting their potential for success. Although various factors contributing to this issue have been identified, effective solutions to mitigate the impact of misspelling on ESL learners' academic performance remain elusive. This knowledge gap underscores the urgency to explore innovative approaches that rectify this problem and promote an inclusive and empowering learning environment. In this context, the present study investigates the implementation of phonemic-orthography strategies as a powerful means not only to enhance spelling skills among ESL learners but also to accelerate critical literacy development, equipping them with essential linguistic and cognitive tools for academic and personal growth.

In light of this context, the study centres on the innovative use of phonemic-orthography strategies as a potential solution. These strategies leverage the phonemic nature of language, offering learners a structured framework to connect sounds with written representations, thereby enhancing spelling accuracy. By permeating into the implementation of these strategies, the research aims to fill the gap in understanding and provide insights that could revolutionise ESL education.

1.4 Research objectives

1.4.1 Main objective

To establish how phonemic-orthography action research case study grounded in phonics instruction can accelerate critical literacy skills in a Grade 9 ESL classroom.

1.4.1.2 Specific objectives

1. Identify the underlying causes of spelling challenges within a Grade 9 ESL classroom.
2. Develop effective strategies for implementing phonemic-orthography to develop critical skills and address the academic performance of Grade 9 ESL learners simultaneously.

3. Determine the factors influencing the performance of Grade 9 ESL learners after the implementation of phonemic orthography.

1.5 Research questions

1.5.1 Main question

How can phonemic-orthography action research case study grounded in phonics instruction accelerate critical literacy in a grade 9 ESL classroom?

1.5.1.1 Specific questions

1. What are the preconditions for spelling challenges in a grade 9 ESL classroom?
2. How can phonemic-orthography be implemented to simultaneously accelerate critical literacy skills and redress academic classification of the grade 9 ESL learners?
3. Why do learners whose intervention of phonemic-orthography informed through phonics approach principles behave the way they do after an intervention?

1.5.2 Hypothesis

h_0 = There is no significance difference in performance between pre and post implementation of phonemic-orthography.

1.6 Significance of the study

For ESL learners, the expectations throughout their years in secondary school go beyond simply mastering the traditional knowledge of subjects. It involves achieving competence in applying this content within the context of the contemporary world they inhabit. Furthermore, in the context of the Fourth Industrial Revolution (4IR), students are expected to engage critically in discussions concerning critical issues, encompassing but not limited to improved productivity, efficiency, and enhanced decision-making. Another rationale behind the adoption of phonemic-orthography to enhance spelling skills is its connection to professionalism and employability. According to Brown and Souto-Otero (2020), strong written communication skills are highly valued by employers in today's job market. I agree that employees who demonstrate accurate spelling are more likely to convey professionalism. This is particularly significant in the Lesotho education context, as the secondary education curriculum's second aim emphasises the development of technological skills for both the world of work and further studies (MoET, 2009). To establish spelling as a technological skill, Fouad Ali et al. (2022) highlight that precise spelling holds technological importance in today's interconnected world. It contributes to

effective communication, online visibility, data accuracy, user experience, content creation, and various aspects of technology-related fields. As technology continues to shape interactions, proficiency in spelling enhances overall technological literacy.

Consequently, this study aims to be significant, as it was designed to empower learners by treating them as subjects rather than objects in the learning process. It emphasises the active involvement of learners alongside their teachers as equal participants. This approach aligns with Freire's (1970) advocacy for education that breaks free from an authoritarian teacher-pupil dynamic. Moreover, as a literacy development method, successfully implementing an intervention in this research could contribute to nurturing citizens capable of critically engaging with issues through discourse. Furthermore, this study has the potential to equip teachers with expertise to become humanistic educators who counteract the passivity of learners. It strives to inspire them to humanise education and make it accessible to all learners, regardless of their socio-economic backgrounds. The practical, learner-centred, and holistic approach employed to implement phonemic-orthography supports efforts to stimulate students' interest, ignite their enthusiasm for learning, engage them in meaningful learning environments, and provide them with a platform to reflect on their actions and voice their opinions through discourse. This reflective process assists both teachers and learners in refining the teaching and learning journey.

Additionally, as the demand increases for preparing students to proficiently use English in professional settings, skills like teamwork, critical thinking, and creativity are as essential as traditional knowledge. Consequently, this study advocates for the interdependence of teachers and learners in teaching and learning phonemic-orthography. It may also encourage teachers to reconsider their teaching methodologies and recognise that effective learning is not solely guided by them; learning from students can be equally beneficial. This research might also enlighten ESL teachers about incorporating literacy skill development into their ESL teaching routines. Given that spelling significantly influences overall performance in English Language, this study serves as a reminder to ESL teachers that neglecting spelling skills could equate to letting down their students. Thus, they are encouraged to integrate these skills innovatively, embracing a culture of extensive reading.

Finally, this study is expected to provide the National Curriculum Development Centre (NCDC) insights on how to update the Curriculum Assessment Policy Statement (CAP) and Integrated Curriculum (IC) to acknowledge English Language as an empowering subject. This echoes Mataka et

al. (2022), who link reading and writing to learners' educational identity. Education, through reading and writing, should mirror students' true selves, thereby becoming liberating in nature.

1.7 Delimitations of the study

Delimitation pertains to the study's boundaries, as described by Miles and Scott (2017), who define it as a term employed by researchers to specify how they intend to narrow down their study's focus onto specific elements. These elements can encompass the methodology employed, the chosen research site, the participants involved, or even the phenomena being investigated (Terrell, 2016). With this in mind, the current study was confined to a single 'all-girls' high school located in Maseru. This limitation extends to the academic level as well; the study exclusively concentrated on ESL learners in grade 9. Furthermore, despite the multifaceted nature of literacy and the diverse connotations it carries—ranging from basic literacy and functional literacy to performance literacy—this study was delimited to the realm of critical literacy, which is extensively expounded upon in chapter 3.

1.8 Operational definition of terms

Critical literacy: An educational and societal construct that transcends conventional literacy competencies like reading and writing, encompassing the capacity to scrutinise, decipher, and challenge written, visual, and spoken materials. This aptitude enables individuals to navigate a progressively intricate and information-laden environment, simultaneously fostering societal consciousness and a dedication to upholding social equity and justice.

Spelling: It refers to the accurate arrangement of letters in a specific order to form words in a written language.

Pronunciation: It is the way in which words are spoken in a language

Integrated curriculum: also known as interdisciplinary or cross-curricular education, is an educational methodology that intricately weaves together diverse academic subjects or disciplines into a cohesive and interconnected framework. Rather than treating subjects in isolation, this approach fosters a holistic understanding by emphasising the interrelationships and interdependencies among various domains of knowledge. By immersing students in a learning environment where subjects organically intersect, the integrated curriculum promotes the exploration of synergies and interplays, enabling learners to perceive the practical, real-world implications of these interactions.

Phonemes: Phonemes are the smallest units of sound in a language that can change the meaning of a word: they are distinct sounds that are used to create words and differentiate between words in spoken language.

Graphemes: They are the visual symbols, such as letters or groups of letters, that are used to represent specific sounds in a written language.

Phonemic orthography: entails a writing system where the graphemes (written symbols) utilised to depict the distinct sound units (phonemes) within a language are methodically and consistently coordinated. To put it differently, each grapheme corresponds directly with a particular phoneme, facilitating the anticipation of word pronunciation from their written forms, and vice versa.

Phonics: It is an instructional approach to teaching reading and spelling that focuses on the relationship between letters (graphemes) and the sounds (phonemes) they represent in a language.

Phonics approaches: They are various instructional methods and strategies used to teach phonics, which is the relationship between letters (graphemes) and the sounds (phonemes) they represent in a language.

Academic performance (in relation to spelling): It refers to how well a student is able to correctly spell words as part of their overall educational achievement.

1.9 Organisation of the study

Subsequently, this study is organised with the following succeeding chapters: Chapter 2 serves as the theoretical framework, encompassing the integration of theories that underpin this study. Chapter 3 comprises the reviewed literature, which was researched based on the research questions posed in this study. Chapter 4 delineates the methodology adopted in this study, which aided in data generation and the strategies employed for its analysis. Chapter 5 presents and interprets both the results and findings, given that this study follows a mixed-method approach. Chapter 6 delves into the discussion of the results and findings presented in Chapter 5. Finally, Chapter 7 engages with the examination of limitations, pedagogical implications, conclusion, and recommendations.

1.10 Conclusion

This chapter has offered an overview of the study, encompassing its rationale, background, problem statement, research objectives, research questions, hypothesis, significance, delimitations, and the

study's organisation. The subsequent section, namely Chapter 2, will delve into the discussion of the theoretical framework.

CHAPTER 2

THEORETICAL FRAMEWORK

2.0 Introduction

The previous chapter discussed the general background of this study. In contrast, this chapter focuses on the theoretical framework. Grant and Osanloo (2015) define a theoretical framework as a blueprint that guides the construction of a researcher's study in terms of its purpose, approach, and structure. This study is grounded in several theoretical lenses, including Cultural-Historical Activity Theory (CHAT), Legitimation Code Theory (LCT), Communicative Language Teaching (CLT), Constructivism Theory (CT), and complemented by Behaviourism.

These theories advocate for synergic praxis, a concept explored later in this chapter as a justification for integrating them. Notably, praxis in this study aligns with Freire's conception, wherein praxis represents the fusion of action and reflection, signifying meaningful engagement. For Freire (1970), a word embodies work, encapsulating the essence of praxis, where action finds expression through verbalism and reflection within activism. Similarly, the incorporation of multiple theories in this study finds support in the work of Berge and Ingerman (2017), who emphasise that multiple theories deepen the understanding of phenomena under scrutiny. Freeman (2018) further suggests that this approach suits adept and organised doctoral candidates and researchers capable of effectively combining qualitative and quantitative data. The amalgamation of multiple theories in one study is feasible due to their complementary nature. The diagram below illustrates the integration of these aforementioned theories.

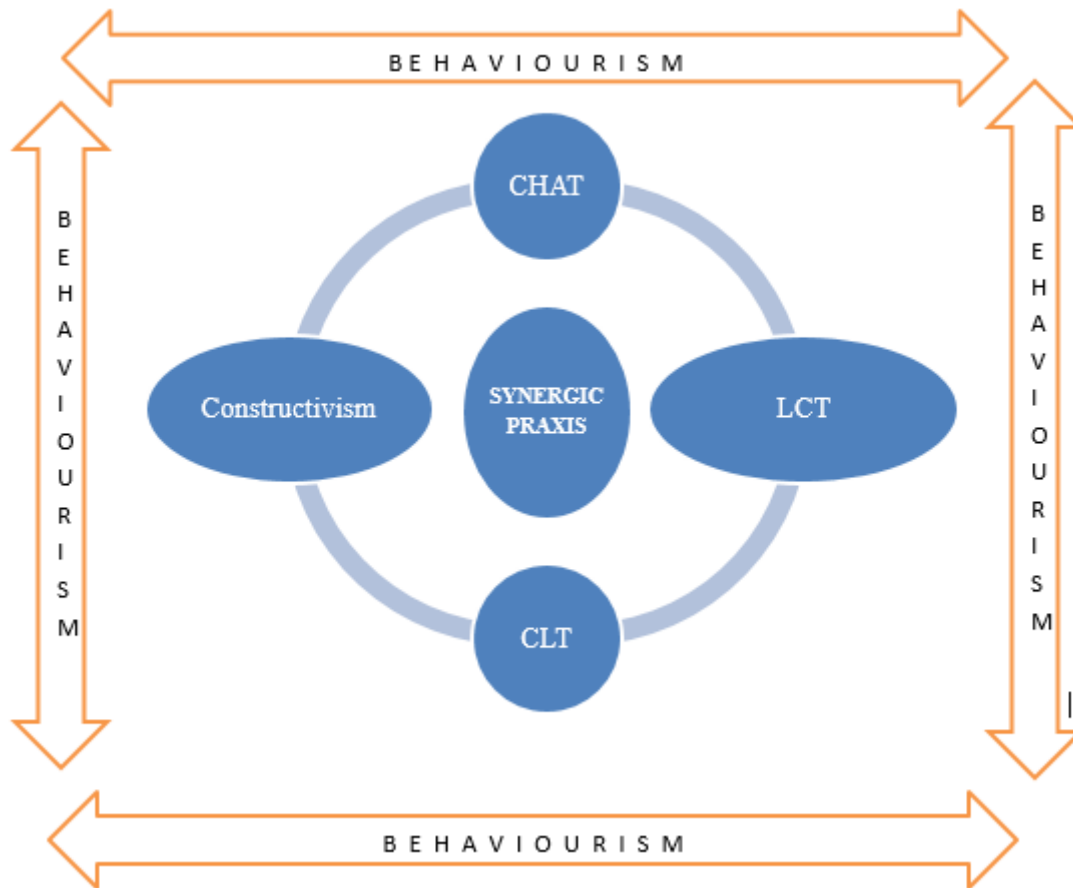


Figure 1: Theoretical framework model

Having illustrated the blend of the theories that guided this study, the section below discusses the aforementioned theories.

2.1 Cultural-Historical Activity Theory

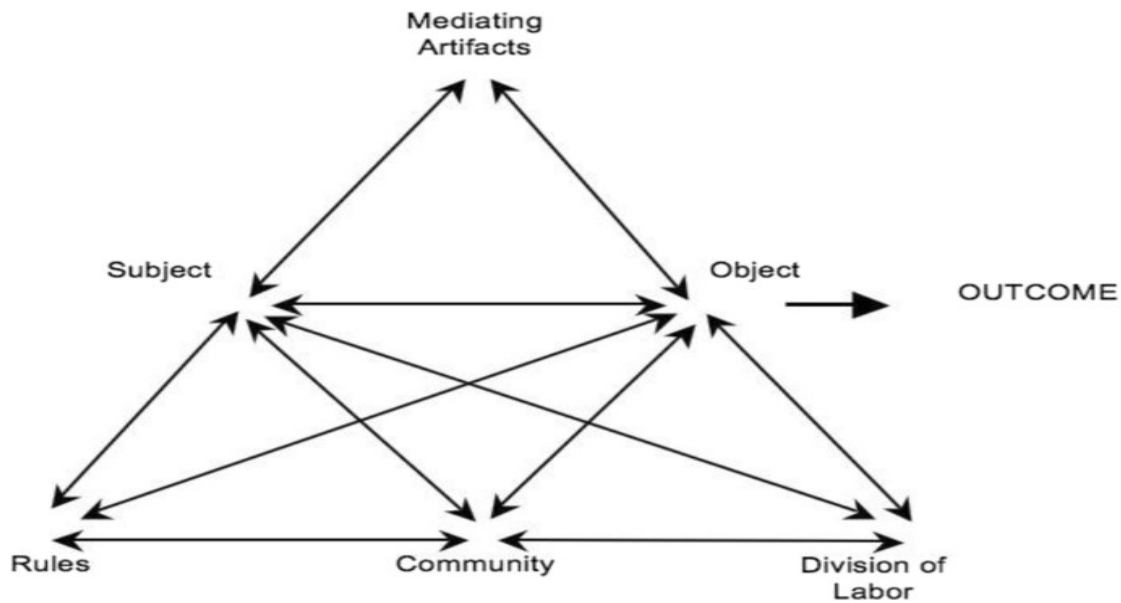


Figure 2: CHAT Engeström (1987)

CHAT, or Cultural-Historical Activity Theory, furnishes an explanatory framework for comprehending human action and behaviour within the context of their cultural and historical backgrounds. It probes into the ways in which actions and behaviours are shaped by intricate factors, encompassing interactions amongst individuals, artefacts, mediation tools, and the socio-cultural milieu. These intricate interactions manifest as activity systems, encompassing subjects, tools, rules, norms, community, and the objective of the activity (Engeström, 1996b). Notably, Qureshi (2021) underlines that CHAT, rooted in the works of pioneers such as Lev Vygotsky, constitutes a social theory. Engeström (1987) further designates CHAT as both a transformative theory for the scrutiny and reconstruction of human activity, and a methodological approach for innovative collaborative learning support. As emphasised, CHAT reshapes the landscape of learning through the conduit of culturally and historically mediated practical activities (Engeström et al., 2005). Highlighting the pivotal role of mediation tools in human activity, CHAT postulates the indispensability of these tools, both physical and symbolic, in the execution of practices such as phonemic-orthography.

In the realm of CHAT, human interaction's mediation by tools underscores the essentiality of these tools for fostering meaningful interaction (Karanasios & Allen, 2014). Furthermore, the theory underscores the substantial influence of social structures and cultural artefacts on human activity. Ergo, the implementation of phonemic-orthography necessitates a nuanced consideration of the encompassing

historical and cultural backdrop of grade 9 ESL learners, as these factors intricately mould their learning processes. CHAT brings contradictions to the forefront as catalysts of change within activities (Bennett et al., 2015). The mediation tools, in alignment with the Zone of Proximal Development (ZPD), serve as bridges between independent and assisted learning. Through guided practice, entailing modelling, phonetic analysis, mnemonic devices, and feedback, learners' spelling proficiency gains traction. Encouraging collaborative endeavours, CHAT encompasses mediation tools, division of labour, and communal regulations, all converging toward the achievement of a shared objective; proficiency in spelling. CHAT's transformative prowess extends pedagogic paradigms into tangible real-world scenarios that transcend traditional subject demarcations (Engeström, 1996b). It fundamentally facilitates the comprehension of human actions' social, cultural, and historical underpinnings (Leont'ev, 1978). The theory champions the virtues of collaboration, underscored by weak classification; yielding adaptable structures and weak framing; endorsing open teaching strategies to catalyse creativity and engender deeper comprehension. These strategies empower grade 9 ESL learners to explore spelling patterns and cultivate skills pertinent to real-world written communication.

In summation, CHAT offers a holistic perspective for unravelling the intricate interplay amongst community members, social interactions, cultural contexts, and historical narratives within activities. It resoundingly underscores the central role of collective human engagement in fostering meaningful learning. Nonetheless, while CHAT excels in unveiling challenges and outcomes, it abstains from presenting explicit resolutions. Thus, the ensuing section turns its focus to the Legitimation Code Theory (LCT), probing its potential to address this void and facilitate the integration of phonemic-orthography within this study's context.

2.2 Legitimation Code Theory

Legitimation Code Theory (LCT), crafted by Karl Maton and Patrick Thomson, offers a framework aimed at scrutinising and comprehending the legitimisation of knowledge and educational practices within diverse social contexts. These processes of legitimation significantly shape educational practices and contribute to social disparities (Arbee et al., 2014; Vernon, 2021). Indeed, LCT draws inspiration from Bernstein's code theory, formulating concepts to address the shortcomings of segmentalism (Maton et al., 2016). In line with Rott and Wolff (2019), the essence of LCT lies in dissecting the sources and mechanisms of legitimacy, facilitating epistemic and social access to knowledge practices

Semantic gravity signifies the degree to which the meaning of a concept is tethered to its context, exhibiting variations in strength that denote differing levels of abstraction (Blackie, 2014). Correspondingly, Maton (2014) explicates that semantic gravity relates to the depth of knowledge embedded within a specific knowledge practice. In simpler terms, semantic gravity conveys how closely a concept is intertwined with its particular context. For instance, drawing from fig. 3, when instructing and learning spelling in a grade 9 ESL classroom through phonemic-orthography, high semantic gravity would underscore a focus on meticulous and technical aspects of spelling—comprising rules, patterns, and phonetics—directly relevant to spelling advancement. This might encompass explicit guidance on syllables and phonemic awareness. Thus, a high degree of semantic gravity implies that the ESL teacher prioritises intricate and precise spelling knowledge (Blackie, 2014; Maton, 2014). Having explored both semantic gravity and semantic density, the ensuing diagram illustrates semantic waving and is subsequently deliberated upon.

Conversely, semantic density gauges the intricacy with which meaning is condensed within symbols, terms, concepts, phrases, and even gestures (Maton, 2014). Likewise, semantic density exemplifies the degree of information encapsulated within a particular representation (Blackie, 2014). In the context of this study, this suggests that semantic density serves as a concept elucidating the level of intricacy in integrated knowledge's meaning within different teaching contexts of spelling, employing symbols and appropriately general language use. Specifically, from the perspective of fig. 2, elevated semantic density would involve elucidating the correlations between spelling and other language-related realms like phonics and orthography. For example, teachers may elucidate how spelling patterns correspond to the meaning of a given word or how spelling consistency influences sentence meaning. Generally, heightened semantic density denotes the ESL teacher's emphasis on the interconnected dimensions of spelling knowledge, elucidating how spelling integrates with other language facets. This holds significance as the study's aim goes beyond mere spelling correctness; it strives to foster critical literacy. The anticipation is for grade 9 ESL learners to engage in critical literacy while utilising accurate spelling, seamlessly weaving it into other language dimensions to enhance expressive abilities, particularly in writing. The equilibrium between these two semantic codes is attained through the application of semantic waving, discussed in the subsequent section.

The diagram below illustrates the semantic waving.

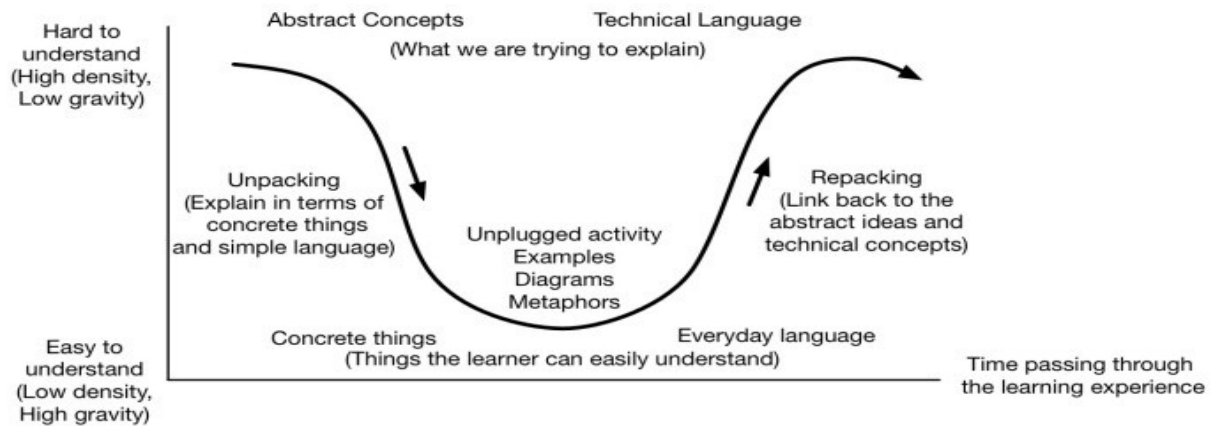


Figure 4: Semantic waving (Maton, 2011)

Given the diverse range of learners within a classroom, their knowledge can exhibit either strong or weak semantic gravity, due to varying capabilities. Addressing such scenarios, Maton (2014) advocates for semantic waving which Maton explicates as "an approach that involves strengthening semantic gravity by transitioning from abstract ideas to concrete cases, and weakening it by moving from specific cases towards more abstract notions less dependent on context" (p. 110). For instance, an English as a Second Language (ESL) teacher might tailor lessons on digraphs based on individual learning needs, focusing on one digraph and its related phoneme or expanding to cover several digraphs, contingent on the learners' abilities (Hill, 2015). Consequently, texts featuring digraphs would be utilised to gauge learners' comprehension. Those who grasp the concept would recognise that the digraph 'sh' is comprised of two letters generating the sound /sh/ (Hill, 2015), while those struggling would receive necessary assistance. In this study, semantic waving proved instrumental in bridging the knowledge gap among grade 9 ESL learners with varying abilities, thereby rectifying academic classifications and catering to diverse cognitive needs. Furthermore, semantic waving in relation to semantic density involved discussing how spelling permeates and integrates into diverse language aspects. For example, the grade 9 ESL learners were apprised of spelling's impact on word meanings, extending to influencing meaning at the sentence level.

In conclusion, LCT aids in tracking shifts in semantic gravity and semantic density through educational processes (Maton, 2016). Beyond its promotion of collaborative and engaged pedagogy, semantic profiling via semantic waves assists teachers in navigating between strong and weak semantic gravity and density to accommodate diverse learners in a single classroom. This equilibrium is crucial; an

excess focus on detailed rules, devoid of broader linguistic context, could lead to rote memorisation lacking deep comprehension of spelling principles. Conversely, excessive emphasis on relational aspects without addressing specific spelling rules might not equip grade 9 ESL learners with essential tools for accurate spelling. In this study, this theory facilitated teaching strategies that fostered not only spelling skills but also a profound comprehension of language structures. This holds significance, given that the grade 9 ESL syllabus does not treat spelling as a standalone entity, but as an integral part of broader concepts. Hence, this theory aptly served as a blueprint for implementing phonemic-orthography, simultaneously addressing academic classifications and accelerating spelling skills to enhance critical literacy abilities. Reflecting on shifts in semantic gravity and density proves crucial, as it shapes future semantic waving. While this theory aligns well with the study's objectives, it may not heavily emphasise precise language-based pedagogical content. With this established, the subsequent section will delve into Communicative Language Theory to fill this identified gap.

2.3 Communicative Language Teaching

Communicative Language Teaching (CLT) prioritises communication as the key objective of language education (Spada, 2007). This aligns with our study's emphasis on synergic praxis, interlinking communication and synergy. CLT focuses on practical language use and equipping learners for real-life situations (Yung, 2023), promoting effective language functioning (Amanov, 2023). However, CLT's heavy emphasis on oral communication can sometimes neglect written skills like spelling. Through interactive activities, CLT fosters communication among peers and with teachers (Ataboyev & Tursunovich, 2023), utilising group discussions, problem-solving tasks, and more (Rakhmonovich et al., 2022). This social interaction echoes Hymes (1972), advocating task-based group activities. CLT views learners as active participants (Kotut, 2016), emphasising contextualised and experienced-based learning. Applying CLT to spelling, the focus shifts to integrating spelling within meaningful contexts (Oлакunle, 2023). For instance, storytelling incorporates target words, and writing exercises encourage creative expression and application. Interactive activities like spelling games and reading authentic texts reinforce spelling (Liando & Tatipang, 2023). Collaborative learning addresses spelling problems, while chunking activities help sound out syllables and build words (Hymes, 1972). Collaborative editing and constructive feedback support learning from mistakes; empowering learners to choose words of interest enhances motivation and engagement.

CLT aligns with Butler (2011), considering learning interpersonal and learner-oriented. Constructivism further closes gaps in CLT, as shown in the next section. In conclusion, integrating spelling into communicative activities enhances learners' motivation and practical understanding. Despite CLT's strengths, it overlooks learner engagement. The next section introduces constructivism to address this gap effectively.

2.4 Constructivism Theory

Constructivism Theory (CT) elucidates how people actively construct knowledge both cognitively (Piaget, 1977) and socially (Vygotsky, 1986). Mvududu and Thiel-Burgess (2012) assert that teachers should value learners' existing knowledge and encourage practical application. This echoes active learning, emphasising active over passive learning. Learning is an active process where learners use new experiences to transform their current knowledge if needed (Amineh & Asl, 2015). CT, pioneered by Piaget and expanded by Vygotsky and Bruner (Aravind & Bhuvanewari, 2023), underscores learners' active role in knowledge construction (Knoblauch & Pfenhauer, 2023). According to Huang et al. (2023), individuals build new knowledge based on prior experiences and interactions (Umar et al., 2023). Piaget's theory advocates learners independently exploring concepts (Kouicem & Nachoua, 2018), while Vygotsky's theory emphasises collaboration and tool usage (Li, 2023). Constructivism promotes collaboration and active participation (Fernando & Marikar, 2017), enhancing learning.

In the context of spelling, CT aligns with a learner-centered approach (He, 2023), where learners engage, connect, and make sense of new information (Amineh & Asl, 2015). Additionally, in interactions, teacher and peers support those needing assistance, termed scaffolding (Li, 2023). Scaffolding, using tools and mediation, aids the teaching process (Niemi & Mutisilta, 2016). This approach suggests guided exploration of spelling patterns and rules by the learners (Andrews et al., 2020), akin to Vygotsky's scaffolding concept (Berggen, 2015). Reflection and metacognition are valued in CT (Al-Jarrah et al., 2019). Grade 9 ESL learners could assess their spelling progress and strategise in spelling journals (Guo et al., 2020). CT emphasises learner agency and interactive learning (Aravind & Bhuvanewari, 2023). Combining theories aimed to bridge gaps, but CT's flexible approach lacks structure (van de Walt, 2020), sometimes leading to student behavioural challenges. CT does not explicitly address behaviour regulation. For instance, it does not outline how to encourage proper

spelling or handle misbehaviour. This deficiency aligns with behaviourism, discussed in the following section

2.5 Behaviourism Theory

Behaviourism was developed by Pavlov, Watson, and Skinner. It emphasises observable behaviours and external stimuli as primary influences on human behaviour (Smith, 2020). It recognises observable and measurable behaviour as a foundation for understanding both human and animal behaviour (Drew, 2023). It operates on operant conditioning, conceptualised by B.F. Skinner, in exploring how behaviours are shaped by consequences (Skinner, 1965). It encompasses reinforcement, including both negative and positive reinforcement (Ishomudin et al., 2023). Positive reinforcement, as highlighted by Hardiyana (2023), increases the likelihood of behaviour recurrence, while punishment, according to Leeder (2022), diminishes the likelihood of repeated behaviour. This reinforcement and punishment framework have been employed in behaviour modification techniques to address various behavioural issues (Duchesne et al., 2014). In education, behaviourism asserts that learning is demonstrated when learners' behaviour changes due to rewards or punishment granted by the teacher (Duchesne et al., 2014). In the context of spelling education, applying behaviourism involves conditioning techniques to reinforce accurate spelling and minimise errors. Positive reinforcement, such as praise or rewards, strengthens desired behaviour, creating associations between correct spelling and positive outcomes (Chen, 2023).

Conversely, punishment aims to curtail undesirable behaviour (Okesina & Famolu, 2022), discouraging learners from persisting in unwanted actions (Leeder, 2022). Hardiyana (2023) suggests behaviour modification through these principles. Further, drilling, a behaviourist approach, uses consistent repetition to enhance understanding (Yohaidah, 2022). Repetition, including drilling, enhances the connections between spelling patterns and corresponding words, as supported by Ishomudin et al. (2023). This repetitive practice not only strengthens memory but also aids in error correction by reinforcing correct spelling through positive feedback, as highlighted by the same authors. Moreover, the incorporation of rewards into spelling activities contributes to increased engagement and motivation, as emphasised by Drew (2023). Following the application of reinforcement techniques, it becomes imperative to monitor progress, a concept emphasised by Skinner (1965). However, it is important to note that, alongside the use of rewards, tracking the spelling development of each learner and providing

regular feedback are pivotal strategies. This practice enables precise reinforcement and targeted interventions to facilitate improvement, as advocated by Skinner (1965). Ultimately, this systematic and comprehensive approach ensures the effectiveness of learning and behaviour modification in spelling education.

2.6 Synergic praxis

Synergic praxis denotes the collaborative and cooperative endeavours of individuals or groups striving collectively to attain a shared objective. The concept of "synergy" underscores that the combined efforts of multiple individuals working in tandem can yield outcomes greater than the mere sum of their individual contributions (Kubota, 2023).

2.7 Summary

In conclusion, the integration of these four theories calls for collaborative actions involving both teachers and learners. Teachers are responsible for selecting relevant activities like dictionary training, flashcards, and visual memory to teach blending, segmenting, rhyming, deletion, isolation, substitution, and other phonemic-orthography concepts. Both parties engage in these activities and reflect to monitor progress. Importantly, the teacher must create an inclusive environment that caters to diverse learners. Alongside these theories, behaviourism plays a role in establishing discipline. The diagram below illustrates the interconnectedness of cultural and historical activity theory, legitimate code theory, communicative language theory, constructivism theory, and behaviourism, guiding teachers in managing learners effectively. To successfully implement the phonics approach for accelerated phoneme-grapheme association and spelling skill development, teachers and learners should participate in communicative activities and engage in reflective practices. This consistent reflection aims to refine activities and ensure continuous practice until all learners can accurately pronounce and spell words, enabling them to participate critically in discussions.

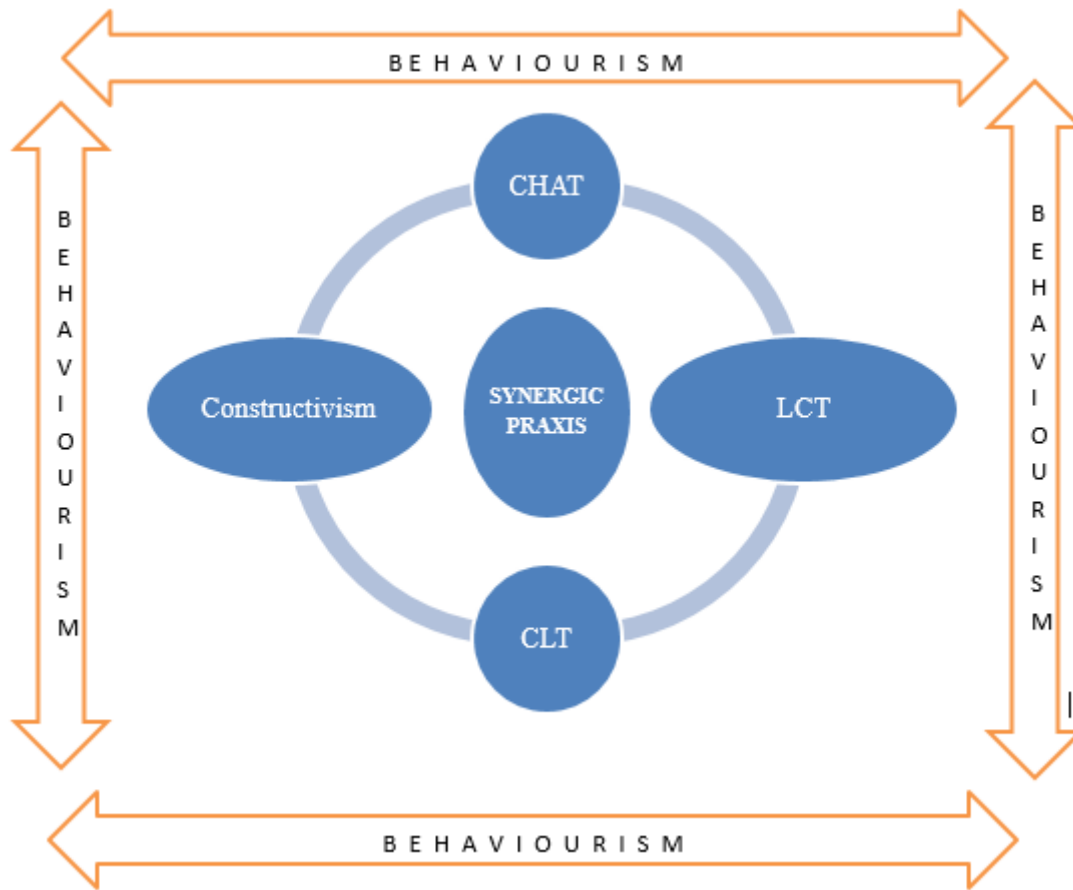


Figure 5: Theoretical Framework Model

CHAPTER 3

REVIEW OF RELATED LITERATURE

3.0 Introduction

The preceding chapter examined the theories and the approach that form the foundation of this study. In this chapter, the focus shifts to exploring the factors that can influence spelling difficulties. Spelling, being a component of writing skills, significantly impacts literacy. Consequently, untreated spelling issues can hinder the achievement of literacy goals. Subsequently, the chapter scans into the phonics approaches that can be employed to tackle the existing problem of misspelled words that poses a threat to literacy. However, due to the study's aim of fostering critical literacy through accelerated spelling skills, the discussion begins by establishing how critical literacy aligns with the concept of phonemic-orthography. Additionally, the chapter examines potential factors contributing to spelling challenges, proposes an intervention, outlines the phonics-based approach and associated implementation strategies, reviews empirical studies focused on spelling development, and concludes with a synthesis of findings.

3.1 Critical literacy as it relates to phonemic-orthography

There is a certain degree of confusion within the field of language education concerning critical literacy. According to Vasquez et al. (2019), critical literacy can encompass various aspects, ranging from being associated with critical thinking and reasoning to the analysis of power dynamics. This suggests that there is no single universally accepted definition of critical literacy. Therefore, it can be argued that critical literacy is context-dependent. For instance, critical literacy can encompass all forms of communication that possess the potential to influence individuals and facilitate social transformation (Comber & Simpson, 2001).

In the view of Luke (2018), critical literacy has been a subject of theoretical debate and practical innovation within the realm of education. Freire (1970) posits that critical literacy involves changing the world through reading and analysing written text. Further, Janks (2014) extends this concept, portraying the world itself as a text that can be interpreted from a critical literacy perspective. Again, Vasquez (2016) furthers this idea by suggesting that topics that ignite learners' interests, based on their experiences or artefacts they engage with in the material world, should be approached as text. This

approach enables the construction of a curriculum that holds significance in learners' lives, allowing them to engage with it from a critical literacy perspective.

Baghbanian et al. (2020) defines critical literacy as a way of being that emerges from participating in the world both inside and outside of the educational context. This involves examining an issue from various viewpoints, analysing it, and proposing possibilities for transformation and improvement. For instance, after reading a passage like "Mudiwa, the Shona girl" (Mothebesoane et al., 2020, p.12), ninth-grade English language learners might explore xenophobia from different angles – both from the perspective of perpetrators and victims. Subsequently, they would analyse the factors contributing to xenophobia and suggest ways to address this issue for the betterment of society. In this process, oral and written expression play a crucial role, underscoring the significance of pronunciation and spelling. Freire (1970) stresses that literacy education should cultivate learners' critical consciousness.

Critical literacy has connections to Freire's work (Bishop, 2014). However, Abednia and Crookes (2019) argue that the term "critical" is not explicitly present in Freire's work, apart from the phrase "critical consciousness," let alone "critical literacy." Nevertheless, critical literacy can be traced back to critical pedagogy, which extends from Freire's focus on critical consciousness and was further developed by Giroux (Giroux & Giroux, 2006). Critical pedagogy, rooted in critical theory, is an extension of Freirean concepts (Giroux, 1983). This pedagogical approach advocates for dialogic education that fosters active citizenship, even in situations with limited reading materials (Abednia & Crookes, 2019). Similarly, this study promotes dialogic education as a foundation for critical literacy among ninth-grade English language learners who lack access to textbooks and dictionaries. The attainment of critical literacy is paramount, considering the integrated curriculum's emphasis on using English language to address emerging issues in school and the community. This underscores the significance of correct pronunciation and spelling, as problem-solving is accomplished through dialogue and written communication.

Vasquez (2014) characterises critical literacy as involving the examination of a single issue from diverse angles, with the intent of analysis and suggesting avenues for transformation and improvement. This aligns with Freire's emphasis on dialogue as a vehicle for education. Notably, dialogue occurs through discourse (Zeltukhina et al., 2016), encompassing both oral and written forms of expression. Thus, accurate pronunciation and spelling are fundamental for effective communication within critical literacy. Dialogic classrooms offer learners the opportunity to exercise what Vasquez et al. (2019) refer

to as a linguistic repertoire. This internalisation of language before dialogue (Brunner, 1978) implies that when learners utilise their linguistic repertoire in a classroom dialogue, they actively engage in critical literacy, regardless of the availability of mediation tools. This mirrors the situation faced by the ninth-grade English language learners in school X, who lack such tools. The phonemic-orthography intervention strategy implemented in this study, utilising phonics approach, facilitated their development of critical literacy skills within a dialogic classroom environment.

In the context of this study, the decision to focus on critical literacy rather than general literacy was influenced by Mataka (2015), who asserts that a teacher's chosen definition of literacy shapes classroom policies and teaching methods. For example, this study adopted a pedagogical approach that aligned phonemic-orthography with critical literacy components. This approach employed phonemic-orthography through phonics instruction to enhance not only spelling skills but also pronunciation, thus fostering critical literacy. Furthermore, it is essential to acknowledge the relationship between spelling and pronunciation (Mahmdova et al., 2017). While some scholars argue that English lacks consistent phoneme-grapheme correspondence due to its irregularities (Fowler et al., 2016), others contend that a connection exists (Rao, 2018). Brengelman (1970) highlights English's irregular spelling patterns, with a multitude of spelling alternatives for the same phoneme. This complexity necessitates phonics instruction, which emphasises the relationship between sounds and their corresponding written symbols. However, this approach demands teachers with phonetic training (Venezky, 1977).

Building upon this, Alhumsi and Awwad (2020) suggest that teachers with a solid understanding of phonological awareness can scaffold learners to detect sounds and establish phoneme-grapheme associations. Despite ongoing debate, phonics presents an avenue to address the complexities of English spelling through systematic instruction. Thus, while discrepancies persist, there are emerging alternative approaches like phonics that can potentially bridge the gap between phonemes and graphemes.

In summary, the exploration of critical literacy has revealed its contextual nature, encompassing a range of perspectives and practices. By grounding phonemic-orthography in critical literacy components, this study aimed to enhance spelling skills and pronunciation. Amidst debates about English's irregularities, phonics emerges as a potential strategy for fostering phoneme-grapheme correlation. This discussion has provided valuable insights for understanding the relationship between phonics, critical literacy, and the challenges posed by English spelling.

3.2 Preconditions for spelling challenges

The following section identifies factors that are influential in misspelling words.

3.2.1 Eye dialect

“Since eye dialect...is based on the phonological and orthographic features of one language” (Brett, 2019, p.59), it contributes to spelling errors and mistakes (Demirezen, 2021). Eye dialect refers to misspellings that are grounded on pronunciation that is standardised; for example, writing */sez/* instead of */says/*, */animulz/* for */animals/*, */enuff/* instead of */enough/* and */wimmin/* as opposed to */women/* (Britannica, 2016). An eye dialect is associated with a person’s state of being illiterate or their attempt to be comic (Britannica, 2016; Brett, 2009). The above discussion implies the ESL learners may spell some words in an incorrect manner due to eye dialect. The following section discusses pedagogical content knowledge.

3.2.2 Pedagogical content knowledge

Pedagogical content knowledge (PCK), was introduced by Shulman (1986), and “is described as the fusion of content and pedagogy that is unique to teachers” (p.8). It serves as an effective means of making knowledge accessible to learners (Gomez, 2020). Safitri et al. (2020) assert that ESL teachers' possession of PCK reflects their mental cognition, enabling them to convey knowledge to ESL learners through a blend of appropriate teaching strategies, methodologies, and techniques, which, as Ibrahim (2016) emphasises, should accompany the ESL teachers' proficiency in English language (EL) as a subject.

In the realm of language education, Bunch (2013) argues that “one source of pedagogical content knowledge is knowledge about the target language, linguistics, second language acquisition, bilingualism, and related fields” (p.307). Neglecting PCK can have negative repercussions on learners' academic performance (Shing et al., 2015). Therefore, if an ESL teacher lacks phonetic, phonology, and orthographic knowledge alongside suitable methodologies, this deficiency can impact ESL learners' ability to learn correct spelling, a crucial component of attaining critical literacy. Moreover, the challenges faced by Lesotho ESL learners in accurate spelling, as previously highlighted in English language examiner's reports, may be directly linked to linguistics, as Bunch (2013) emphasises. Linguistics studies language sounds (phonetics) and their organisation and use (phonology) (O’Grady, 1997); so spelling, aiming to represent spoken language sounds with written symbols, appears to be

influenced by phonetics and phonology. Therefore, ESL teachers' lack of linguistics knowledge translates into a lack of PCK.

Empirical observations reveal that the majority of ESL teachers in Lesotho secondary schools possess a Bachelor of Education degree or lower, typically earned at the National University of Lesotho (N.U.L). Notably, the N.U.L Faculty of Education offers theoretical linguistics at the undergraduate level and applied linguistics at the postgraduate level. This approach's weakness lies in the lack of exposure to applied linguistics, leaving pre-service teachers unskilled in applying English language theory practically. Consequently, when they enter teaching practice, they struggle to bridge pedagogy, content, and theory in real-world contexts. This absence of applied linguistics exposure contributes to their perceived lack of PCK. Applied linguistics aligns with the concept of PCK, as Mataka (personal communication, March 22, 2022) affirms its role in imparting knowledge to ESL learners using pedagogical methods that break down linguistic knowledge into accessible content. Educational levels appear to impact PCK, as higher qualifications can facilitate its development. Fernandez (2014), however, argues that PCK should not be limited to academic training, advocating for reflective practice even among practicing teachers like those at school X. An ESL teacher with PCK is better equipped to assist ESL learners in mastering spelling, a view supported by Msamba et al. (2023), who contend that ESL teachers lacking PCK may struggle to choose effective instructional strategies, resulting in inadequate teaching methods that fail to accommodate diverse ESL learners' needs.

Having explored PCK, the subsequent section will scrutinise into the distinctions between British English and American English.

3.2.3 Variation between British and American English

English serves as both an international language (EIL) and a language of teaching (ELT) (Vodopija-Krstanovic & Marinac, 2019) and exhibits variations that Hala-Hala (2021) categorises as Englishes. The term "Englishes" has multiple interpretations in the literature, often influenced by scholars' perspectives. However, in this study, the term's definition aligns with Napratilora and Devianti (2018)'s characterisation. Napratilora and Devianti (2018) describe Englishes as English-based varieties with distinct phonological (pronunciation), lexical (vocabulary), morphological, and syntactic (grammar) features. Notably, Englishes manifest in various regions such as West Africa, East Africa, and Asia (Napratilora & Devianti, 2018). Examples of Englishes in these regions encompass Nigerian English,

Kenyan English, Hong Kong English, Singaporean English, and Indian English (Napratilora & Devianti, 2018).

However, for the context of this study, the focus narrows down to British and American English due to their prominence in Lesotho.

3.2.3.1 A brief history of British and American Englishes in Lesotho

Lesotho's historical ties as a British protectorate and colony are well-known. This connection lasted for a substantial period, with Lesotho being under British protection for 98 years, in addition to its colonisation years (Kamwangamalu & Moyo, 2003). Machobane (1990) similarly notes that Lesotho was under British colonisation until 1966. This era of colonisation led to the establishment of a new language hierarchy where the coloniser's language assumed the highest prestige and influenced the structure of each colony (Migge & Lèglise, 2007, p.5). These dynamics offers insight into the prominence of British English in Lesotho's administrative and educational frameworks. Lesotho's colonial history clearly establishes British English (BrE) as a linguistic influence (Ralejoe, 2016), thereby linking its usage in Lesotho to the colonial past (Hala-Hala, 2021). This historical connection between Lesotho and Britain, as outlined by Ralejoe (2016) and Hala-Hala (2021), underscores that the English language used in Lesotho, both in speech and writing, traces back to British English. For instance, it is reasonable to anticipate that grade 9 ESL learners, being English users in Lesotho, would spell "centre" rather than "center," as Oxford Dictionaries Language Matters (2016) confirms the former as British English and the latter as American English. Similarly, considering Gómez's (2009) categorisation, the pronunciation of the word "got" as [gət] by grade 9 ESL learners in Lesotho aligns with BrE, while [ga:t] corresponds to AmE. The variation in these pronunciations involves changes in vowels, from [ɐ] to [a:] and [ɔ:] (Gómez, 2009).

This inclination towards British English usage in Lesotho can also be attributed to the influence of missionary expeditions. Hala-Hala (2021) suggests that English usage in Lesotho can be traced back to the arrival of missionaries. Additionally, Ralejoe (2016) emphasises that the Roman Catholic, Lesotho Evangelical, and Anglican churches hold significant sway in Lesotho, particularly in the education system. Selepe (2016) adds that these missionary denominations introduced formal education, teaching literacy and numeracy to the Basotho population, preparing them for roles in the colonial administration. Given Lesotho's status under British rule at the time (Selepe, 2016), the introduction of

English into administration and education was inherently tied to British influence. This aligns with the logical pedagogical stance that BrE should prevail in Lesotho's education system, given its historical connection rooted in colonisation.

3.2.3.1.1 American English (AmE) in Lesotho

Despite the evident prevalence of BrE in Lesotho, it is important not to disregard the fact that English is expanding beyond the boundaries of BrE. Observations have indicated that some learners in Lesotho are incorporating both BrE and AmE, sometimes concurrently and interchangeably. However, this assertion lacks comprehensive investigation due to the scarcity of studies exploring this linguistic phenomenon in Lesotho. The absence of publicly accessible corpora addressing this matter has limited our understanding of this aspect. Nonetheless, this research was motivated by the belief that the use of AmE by English language learners in Lesotho might be underestimated. This inclination towards adopting AmE is not unique to Lesotho; it is becoming more prominent across various African countries (Plonski et al., 2013), indicating a broader trend. The rise of globalisation and increased technological access are contributing factors to the adoption of AmE in countries where BrE is officially endorsed.

As highlighted by Osei-Tutu (2021), the influence of television and internet usage has led to the interchange between different forms of English. This phenomenon is notably evident in countries like Ghana, where AmE is gaining traction despite the historical influence of BrE on Ghanaian English (Osei-Tutu, 2021). This trend in Ghana could potentially serve as a precursor for developments in Lesotho. If left unaddressed, there is a risk that the prevalence of AmE might erode the prescribed usage of BrE in Lesotho. This predicament raises the question of what will become of English learners in Lesotho if the practical usage of the English dialect they are meant to learn diverges from what they are taught. The table below, based on Crystal's (2000) analysis of spelling variations between BrE and AmE, provides a visual representation of this contrast.

3.2.3.2 *BrE vs AmE spelling*

Table 1: BrE vs AmE

BrE

AmE

Doubled consonants

Fulfillment

Fulfilment

-our vs -or

Centre

Center

-ise vs -ize

Analyse

Analyze

The presented table illustrates a selection of words provided by Crystal (2000) as examples of spelling variations between BrE and AmE. This underscores the notion that individuals might inadvertently misspell words when they utilise BrE instead of AmE, and conversely.

3.2.3.3 Homonyms

Firstly, homophones encompass words that share the same pronunciation as others but differ in meaning and spelling (Ibrahim, 2021). Secondly, homographs are words that share the same spelling but possess multiple meanings (Gorfein et al., 2000). Lastly, homonyms are words that share a similar sound with other words but diverge in meaning (Abu-Humeid & Altai, 2010). The table below provides examples of homophones, homographs, and homonyms based on sources such as Ibrahim (2021), Humeid & Altai (2010), and Gorfein et al. (2000).

Table 2: Homonyms

HOMOPHONES	HOMOGRAPHS	HOMONYMS
Weak-Week	Bat-Bat	Bank-Bank
Sun-Son	Ring-Ring	Bright-Bright
See-Sea	Band-Band	Lean-Lean

Having discussed how BrE against AmE may contribute towards misspelling words, the section below expounds on the learner-teacher ratio and classroom sizes; specifically, how they contribute towards spelling challenges that the ESL learners face.

3.2.4 Learner-teacher ratio and classroom sizes

Effective teaching and learning involve a dynamic interaction between teachers and students, as described by Achor et al. (2019). This interaction is influenced by factors such as classroom size and learner-teacher ratio, which can affect students' academic performance, as noted by Ayeni and Olowe (2016) and Slavin (2009). Classroom size is defined as the number of students in a specific course or classroom taught by a single teacher (Ayeni & Olowe, 2016). Additionally, learner-teacher ratio is calculated by dividing the total number of students enrolled in a school by the number of school teachers (Ajani & Akinyele, 2014). The two play significant roles in either enhancing or diminishing students' academic performance (Mulei et al., 2016).

While some scholars use classroom size and learner-teacher ratio interchangeably (Slavin, 2009), the Organisation for Economic Co-operation and Development (OECD, 2022) distinguishes between the two. According to OECD, class size is determined by dividing the number of students enrolled by the number of classes, whereas learner-teacher ratio is obtained by dividing the number of full-time equivalent pupils at a given level of education by the number of equivalent teachers at that level.

Building on Achor et al.'s (2019) perspective that effective teaching relies on teacher-learner interaction, it can be concluded that direct interaction between teachers and students significantly influences students' performance. Furthermore, larger classroom sizes and higher learner-teacher ratios can negatively impact academic performance, making it challenging for a single teacher to effectively educate a large number of students simultaneously. Consequently, this discussion suggests that ESL (English as a Second Language) teachers may struggle to address all their ESL learners' educational needs in environments with large classroom sizes and high learner-teacher ratios. This aligns with the United Nations' (2015) assertion that large classroom sizes and high learner-teacher ratios are contributing factors to poor academic performance in Sub-Saharan Africa.

3.2.4.1 Learner-teacher ratio in South Africa

Similarly, Kimani and Bhorat's (2014) research conducted in South Africa highlights the persisting issue of impractical learner-teacher ratios that originated during the apartheid era. During that period, the government favoured white schools over black schools, resulting in significant disparities. Kimani and Bhorat (2014) report that white schools received highly qualified teachers, whereas black schools had a scarcity of teachers, and many of them lacked proper qualifications. Furthermore, the learner-teacher ratio in white schools was as low as 1:20, while it ranged from 1:40 to 1:70 in black schools. This stark contrast in learner-teacher ratios helps to explain the stark differences in academic performance between white and black schools, with white schools achieving higher academic standards and black schools struggling with poorer academic outcomes.

3.2.4.2 Learner-teacher ratio in Zimbabwe

The challenges associated with learner-teacher ratios appear to impact not only South Africa but also Zimbabwe. According to Africa Check's report on September 26, 2022, it was revealed that learner-teacher ratios have a direct impact on the academic performance of students in Zimbabwe. Consequently, stakeholders in the Zimbabwean education system decided to lower these ratios in an effort to enhance academic performance. As a result, during the 2021 academic year in Zimbabwe, the learner-teacher ratios were adjusted to 1:37 for early childhood development, 1:36 at the primary level, 1:23 in rural secondary schools, and 1:22 in urban secondary schools.

It is essential to recognise that educational research has been extensively conducted based on the 2021 and 2022 English language exam results administered by Zimbabwe Schools Examination Council (Zimsec). These results will provide insights into whether there has been an improvement in academic performance following the reduction of learner-teacher ratios in Zimbabwe. Given the reforms made to learner-teacher ratios in Zimbabwe, I am inclined to believe that there has been an improvement in academic performance.

3.2.4.3 Learner-teacher ratio as it relates to critical literacy in Lesotho

The discourse surrounding learner-teacher ratios extends beyond South Africa and Zimbabwe, encompassing Lesotho as well. In Lesotho, the recommended learner-teacher ratio for secondary schools is 1:24, as noted by UNICEF in 2018. However, Ralejoe (2016) reveals that Lesotho grapples with an exceptionally high pupil-teacher ratio, reaching up to 1:100. This alarming disparity potentially

elucidates why Lesotho currently faces challenges with English language learners struggling with spelling, as observed in the findings of ECOL (2021). Additionally, this issue contradicts the country's claim of achieving a high literacy rate.

This dilemma underscores the need to distinguish between conventional literacy and critical literacy, a distinction that this study seeks to elucidate. According to Johnson (2016), Lesotho has adopted the universal literacy definition, which considers individuals as literate when they can comprehend, proficiently read, and write simple sentences related to their daily lives. However, this definition, in my perspective, falls short of addressing the requirements of the Integrated Curriculum (IC) currently in use. The IC aims to equip learners with skills beyond basic reading and writing; it prepares them to become lifelong learners capable of managing substantial data and solving complex contemporary issues (Drake & Reid, 2018). Therefore, English language learners in Lesotho must not only be literate but critically literate, particularly in the 21st century and the era of the 4th industrial revolution, where learners are expected to transcend simplicity.

While literacy may be limited to reading and writing, critical literacy encompasses the ability to read and write for emancipatory purposes, a central theme in this study. Furthermore, in classrooms with high learner-teacher ratios, as highlighted by Ralejoe (2016), it becomes increasingly challenging for English language teachers to address the individual spelling needs of every learner. Despite the absence of studies examining the correlation between learner-teacher ratios and the academic performance of English language learners in Lesotho, the prevailing conditions, as outlined by Ralejoe (2016) and ECOL (2021) indicating poor academic performance in English spelling, suggest a significant impact of learner-teacher ratios on academic performance. Moreover, considering that a single ESL teacher may have to instruct up to 70 learners, it becomes apparent that addressing the spelling needs of each student in such a classroom would pose a formidable challenge. This discussion also intersects with the influence of socio-economic status, which will be explored in the subsequent section.

3.2.5 Socio- economic status

Socio-economic status (SES), as defined by Baker (2014), encompasses various factors that measure an individual's or family's education, health, economic well-being, income, and consumption patterns. Gaur (2013) further elaborates on SES, considering it as a gauge of one's economic and social standing relative to others. It relies on multiple variables such as income, education, occupation, family

affluence, assets, social position, participation in society, caste, influence, and more (Gaur, 2013:139). Drawing from the delineations provided by Baker (2014) and Gaur (2013), SES can be perceived as an individual's access to economic resources that enhance and facilitate their social aspects of life. These resources encompass financial means, power, possessions, healthcare, leisure time, and the opportunities that education brings, including access to knowledge and understanding. Furthermore, these economic assets often determine a person's prosperity and acceptance within their respective communities. Implicit in this definition is the idea that possession of these economic resources groups individuals into specific social hierarchies. Supporting this perspective, Smith et al. (2011) emphasise that various indicators of one's SES become evident in social interactions, and Gobena (2018) underscores the impact of socio-economic status on academic achievement. Specifically, learners have needs that should ideally be met by their families, as identified by Gobena (2018), including creating a conducive reading environment, providing nutritious food, access to play areas, supplying books and materials, and enrolling them in the best available schools.

Building on the above discussion, it becomes evident that SES is closely linked to a person's economic resources, social status, and educational attainment. Consequently, learners from different socio-economic backgrounds may encounter varying levels of access to educational resources and opportunities, which can significantly affect their spelling and literacy development. For instance, ESL learners from higher SES backgrounds often have access to well-funded schools, qualified teachers, and a more enriched learning environment. This enhanced access can result in more comprehensive literacy instruction, including spelling, and greater academic support.

Conversely, the earlier discussion implies that learners from lower SES families may have limited exposure to complex language structures, potentially affecting their spelling and literacy skills. The subsequent section will delve into one of the variables associated with SES in greater detail.

3.2.6 Parents' educational level

Caregivers, whether biological or adoptive parents or guardians, are often seen as primary educators of children. In this context, the educational background of these caregivers can potentially impact the academic performance of the learners, with a specific focus on spelling correctly, which is considered a crucial component of critical literacy. This influence is highlighted by Amhad (2013), who suggests that

learners with parents who have lower levels of education tend to perform less effectively academically. Additionally, as emphasised by Onyedikachim and Ezekiel-Hart (2021), parents' education level is part of a broader set of psychological and sociological factors that affect children's academic outcomes. The importance of parental education in predicting student academic achievement is underscored by Asad Khan et al. (2015), who state that it is "the best predictor of student academic achievement."(p.4). Educated parents tend to be more aware of the educational needs of their children and are more likely to provide both moral and financial support for their children's education (Amuda & Ali, 2016). Furthermore, educated parents tend to be more actively engaged in their children's educational activities at home (Idris & Amhad, 2020) and can employ effective learning strategies due to their stronger work orientation (Kainuwa & Yusuf, 2013). Moreover, educated parents are better equipped to secure the necessary resources for their children (Bakar et al., 2017), contributing positively to their academic performance (Amuda & Ali, 2016).

Considering the above discussion, it becomes evident that ESL learners with educated parents are more likely to excel in spelling due to the support and guidance they receive. On the contrary, ESL learners who struggle with spelling may have parents who are less educated and may not fully comprehend the importance of supporting their child in developing spelling skills necessary for successful participation in critical literacy. However, it is worth noting that this argument can be challenged, as illustrated by the case of Ben Carson, an African American paediatric neurosurgeon. Despite being raised by a poor, uneducated, and single mother working as a domestic worker, Ben Carson's mother played a crucial role in his academic success (Angel & Carter, 2009). She encouraged her children to study, even going the extra mile to provide Ben with the necessary resources, such as spectacles, which greatly contributed to his academic achievements. This example demonstrates that while literature suggests a link between a parent's level of education and spelling challenges faced by ESL learners, the positive impact of uneducated caregivers on their children's learning should not be underestimated.

In summary, while parental education plays a significant role in shaping a child's academic performance, there are exceptions where uneducated caregivers can provide valuable support and encouragement for their children's education, as seen in the case of Ben Carson. Therefore, it is essential to consider individual circumstances and the broader context when examining the relationship between parental education and academic outcomes.

3.2.7 Household sizes

Household size is another aspect of socioeconomic status (SES) that warrants investigation (Carson, 2021). In many instances, larger household sizes can be linked to lower SES or higher levels of poverty. This is because larger families often face greater financial challenges due to increased expenditures on basic necessities like food, housing, and education (Nagaraju et al., 2019). With limited financial resources, it can be more difficult for larger households to adequately meet their economic needs (Rambika & Krishnamoorthy, 2019). The United Nations (2021) specifically notes that larger households can impact access to resources. This implies that grade 9 ESL learners who come from larger households may encounter challenges when it comes to accessing resources such as books, educational materials, and quiet study spaces due to higher demand and competition among family members. Consequently, this scarcity could reduce the exposure of learners to reading materials and educational support, which are essential for developing strong spelling and literacy skills.

Moreover, Jack et al. (2021) argue that smaller households offer a more intimate environment compared to larger households. Building on the perspective of Jack et al. (2021), Eklund and Sadowski (2023) suggest that intimate households promote individual attention. In this context, it implies that grade 9 ESL learners from smaller households may receive more personalised attention from parents or guardians, leading to more focused assistance with spelling. Furthermore, this personalised attention can have a positive impact on the learners' literacy development. Contrarily, the extension proposed by Eklund and Sadowski (2023) could mean that larger households may have busier and more chaotic schedules, leaving less time for parents or caregivers to engage in educational activities with ESL learners. In contrast, smaller households may have a more manageable schedule, allowing for dedicated time for reading and spelling practice.

3.2.8 Family income

Another factor that can be used to assess socioeconomic status (SES) is family income (Nagaraju et al., 2019). According to the National Center for Education Statistics (NCES) (2021), high family income is associated with the availability of technology. Based on NCES's findings, it can be argued that higher-income families may have greater access to technology, such as computers, tablets, and the internet, which can be valuable tools for the literacy development of grade 9 ESL learners. Inversely, low family income could result in other learners not having access to online resources, educational apps,

and digital learning platforms that could enhance their spelling and literacy skills. As a result, their spelling challenges may be attributed to their families' low income.

It is worth noting that family income is not limited to access to technology that can aid in spelling development, as Heath et al. (2018) point out the issue of extracurricular activities. In this context, families with higher incomes might be able to enrol grade 9 ESL learners in extracurricular activities such as language classes, writing workshops, or educational camps. It is believed that these experiences may reinforce spelling and literacy skills in a fun and engaging way. In cases of limited income, it seems that some learners may not have access to these beneficial activities.

Additionally, Ren et al. (2019) highlight the issue of health and nutrition. This suggests that family income can impact the learners' overall health and nutrition, which in turn affects their education. Both Nagararaju et al. (2019) and Li et al. (2019) suggest that adequate nutrition and a healthy lifestyle can positively influence cognitive development and, consequently, spelling and literacy skills. Conversely, ESL learners from low-income households may not have access to adequate food, which can have a negative impact on their health. Compromised health may in turn negatively affect their education, including their spelling and literacy development. The section below further elaborates on another SES factor, which is poverty

3.2.9 Poverty

The concept of poverty is multifaceted and challenging to precisely define due to its many varying factors, as demonstrated in the literature. Scholars such as Ebong and Fidelis (2013) describe poverty in terms of income and consumption: it occurs when individuals live below a certain threshold of income and consumption. Yakubu and Abbas (2013) define poverty as a state in which people lack basic necessities, including items like food, clothing, bedding, and shelter, as articulated by Shuaibu et al. (2018).

In line with Brandon (2018), these fundamental needs serve as the foundation for impediments to academic performance. It appears that learners from economically disadvantaged households may struggle academically. To support this assertion, Marrelaine (2020) confirms that impoverished parents often face difficulties in paying school fees for their children, potentially leading to temporary expulsion of ESL learners. Similarly, economically disadvantaged parents may struggle to provide the necessary learning resources for their children's effective education, as noted by Jensen (2013). In many cases, students from low-income households tend to attend public schools, while affluent families opt for

private institutions (Murnane & Reardon, 2018). Unfortunately, public schools often receive minimal resources and have limited access to highly qualified teachers, as observed by Raacdeeye (2021). After spending a day in a school that comparatively lacks resources, these learners return to homes without additional educational support, such as access to computers, televisions, radios, and various reading materials.

Given the above discussion, it can be argued that poverty may contribute to spelling challenges among grade 9 ESL learners due to potential shortcomings in parental guidance, access to resources, and the ability to pay school fees on time. After addressing the issue of socioeconomic status (SES), the next section will delve into motivation as another factor that may contribute to the spelling challenges faced by these learners.

3.2.10 Motivation

Researchers from various fields may offer differing definitions of motivation, yet a common thread runs through the literature concerning this concept. Essentially, motivation seeks to kindle a learner's will and desire to engage in activities that facilitate their learning. For instance, Ormrod (2008) characterises motivation as the state that impels individuals into action and guides them to remain engaged in activities essential for achieving their goals. Similarly, Vinoy and Kumar (2019) describe motivation as an inner state that energises, activates, and directs behaviour toward specific goals.

In the context of the English language, Nguyen (2019) specifies that motivation encompasses both the effort and the desire to attain language proficiency, coupled with positive attitudes toward the learning process. From these definitions, it can be deduced that motivation plays a pivotal role in motivating English language learners to perform at their best. This extends to their motivation to spell words accurately, recognising the indispensable role spelling plays in writing, a crucial aspect of critical literacy according to Vasquez (2014). Moreover, motivation can be categorised as either intrinsic or extrinsic, as noted by Maslow (1954) and Singh (2016). Intrinsic motivation, according to Legault (2016), arises from a natural human inclination to engage in activities perceived as interesting or enjoyable. Conversely, extrinsic motivation involves engaging in actions due to external influences such as social norms, peer pressure, authority figures, or the promise of rewards, as elucidated by Delaney and Royal (2016). For Delaney and Royal (2016), whether intrinsic or extrinsic, motivation is a vital driver of learners' engagement and performance. Consistent with this perspective, a lack of motivation can result in learners disengaging from their academic pursuits, ultimately leading to poor academic

performance (Mauliya et al., 2020). This suggests that a deficiency in motivation may contribute to the spelling challenges faced by grade 9 English language learners.

In light of the emphasis placed on motivation, it is worth noting that, as one saying aptly puts it, "there are three things to remember about education: the first one is motivation. The second one is motivation. The third one is motivation." In my opinion, this underscores the critical role motivation plays in addressing the spelling challenges of grade 9 English language learners. Motivating these learners has the potential to ignite their determination to spell words correctly, while a lack of motivation could indeed be a root cause of spelling errors.

3.2.10.1 Previous research on the role of motivation in language learning against performance

Numerous studies have been conducted to investigate the link between motivation and academic performance in language learning, among other factors. For example, in 2016, Alizadeh examined the role of motivation in English language learning and highlighted its crucial importance, which is sometimes overlooked by English as a Foreign Language (EFL) teachers. Furthermore, despite the various factors that can influence motivation, teachers can play a significant role in motivating learners to acquire a second or foreign language.

Similarly, in 2016, Hayikaleng and colleagues explored motivation within the context of learning English and concluded that motivation is a critical factor for the success of English language learners. In a similar vein, Nguyen's 2019 study on motivation in learning English found that participants in the study who performed well were highly motivated, with parental proficiency in English influencing this motivation. Likewise, in 2019, Purnama and colleagues investigated students' motivation to excel in learning English and discovered that grade 8 learners were motivated, with teachers playing a central role in enhancing their motivation.

In 2019, Dilshae and others investigated the impact of students' motivation for learning English on their achievements at the secondary level. Their results indicated a positive correlation between students' motivation and their achievement scores in English. In another study conducted by Mauliya et al. in 2020, the researchers examined factors contributing to poor academic performance among graduate English department students. They found that motivation, among various factors, played a role in poor academic performance, highlighting the importance of teachers' ability to motivate students. In a study carried out in Lesotho in 2022, Ntseli explored motivational learning strategies to improve scholastic performance in high schools. The study revealed that the challenges faced by high school learners in

Lesotho, including a lack of motivation, were influenced by negative teacher behaviour. The study recommended the implementation of motivational learning strategies, including positive teaching methods, styles, and behaviour, to enhance students' scholastic performance at the high school level. Based on the above empirical evidence, it can be argued that motivation may contribute to the spelling difficulties experienced by grade 9 English language learners. The following section further elaborates on the factors underlying these spelling challenges, with a focus on language policy in education. Before clawing into the impact of language policy in education on spelling, it is essential to first explore the nature of language and its significance in instruction.

3.2.11 Language policy

Before discussing the language policy in education, it is crucial to first examine the nature of language itself and its significance in instruction. By doing so, we can then draw conclusions about how the language policy in education might impact the outcomes of teaching and learning English as a Second Language (ESL) in Lesotho. Specifically, we will focus on academic performance, particularly in relation to the challenge of spelling.

3.2.11.1 Language

Language is a versatile concept applicable to various creatures, including humans, bees, birds, and crabs. However, this study specifically focuses on the aspects of language related to humans. Language, in this context, encompasses a range of definitions, including a set of sentences (Chomsky, 2002), a concept (Saussure, 1916), a form (Lyons, 1981), and a symbol (Chaer, 2003). It is a structured system comprising fixed and patterned components used for communication (Rabiah, 2012:2), as highlighted by Subri (2018). In the realm of human interaction, language takes on various forms, such as body language (Yin, 2014) and sign language (Adigun, 2019). It serves diverse purposes, from facilitating social exchanges among friends to functioning as a medium of instruction in classrooms, enabling effective information transfer between teachers and learners (Rabiah, 2012). Upon reflection, it becomes evident that language serves as a tool or vehicle through which people convey information to one another, whether orally or in written form.

3.2.11.2 Importance of language in instruction

Language as a medium of instruction, as articulated by Mustapha and Argungu (2019), refers to the language used by teachers when interacting with students. This language should be both understandable

and accessible to learners (Mustapha & Argugu, 2019). When teachers use a language that students can relate to, it often results in increased active participation in the learning process. This rationale underlies the Ministry of Education and Training's (MoET) decision to mandate the use of the mother tongue as the medium of instruction in grades one, two, and three. Young learners typically have a better understanding when taught in their mother tongue (Alimi et al., 2020). Conversely, when the language of instruction is foreign to the students, it can lead to communication difficulties and hinder effective learning (Alimi et al., 2020). Therefore, in my opinion, if students in the first three grades of primary school in Lesotho were exclusively taught in English, they might struggle to comprehend the teacher's instructions. This could result in limited or no response when interaction is needed, and even the exchange of feedback might be compromised. This underscores the significance of implementing appropriate language policies as a medium of instruction.

3.2.11.3 Language policy in education

At the heart of any education system lies a language policy, which serves as a framework guiding classroom instruction. Scholars have variously defined language policy and its role in education. Shohamy (2007) defines language policy as "concerned with decisions made about languages and their uses in society,"(p.4) while Kaplan (2011) characterises it as "a body of ideas, laws, regulations, rules, and practices intended to achieve planned language change in society, groups, or systems" (p.3). Concerning language policy in education, Ahmad and Khan (2011) describe it as a tool used to "express the national direction set for languages and their roles in education"(p.2).

Language policy in education encompasses decisions regarding the function of languages within an educational context, including which languages should be taught, when, for how long, by whom, for whom, and how (Shohamy, 2007). Phillipson and Skutnabb-Kangas (1996) see it as an instrument dictating how language should be accessed and function within an education system, while Spolky (2004) regards it as the state's conscious decision regarding its educational functions. Despite the role of the state in making these decisions, Liddicoat and Baldauf (2008) argue that contributions from grassroots levels are possible. However, the extent to which such contributions, particularly the ideas and experiences of learners, are considered remains a question. This is particularly relevant because the integrated curriculum (IC) in Lesotho places learners at the centre of the teaching and learning process, favouring a learner-centered pedagogy (Brauer and Ferguson, 2015).

In the Lesotho context, mother tongue, mainly Sesotho, is the medium of instruction in grades one to three, while English is used as the medium of instruction from the fourth grade onward (Lesotho Education Language Policy (LELP), 2019). The LELP's mandate is to improve language and literacy competencies by providing direction for addressing language issues in the Lesotho education context. This aligns with the Ministry of Education and Training's (MoET) stipulation that mother tongue is used as a medium of instruction up to class 3, and from grade 4 onward, English is used for effective communication. This choice to use mother tongue at the early stages of education is influenced by cognitive theories such as Piaget's (1926), which suggest that children first engage in a monologue before participating in a dialogue. This process is innate and activated in the Language Acquisition Device (LAD) (Chomsky, 1968). However, it should be noted that this decision may have consequences, such as first language (L1) interference in learning a second language, particularly English. This discussion ties into the Critical Period Hypothesis (CPH).

The Critical Period Hypothesis posits that there is an optimal period, typically before puberty, during which language learning is most efficient. If a person is not exposed to a language during this critical period, their ability to achieve native-like proficiency in that language may be compromised (Azieb, 2021). Therefore, the use of mother tongue as the sole language of teaching and learning (LOTL) in the early years may negatively affect some learners' acquisition of English as a second language (ESL). This suggests the importance of reviewing language policies to understand their long-term effects on learners. Furthermore, language policies that prioritise native languages in the early years may limit exposure to English, potentially hindering the development of strong English language skills and leading to errors in comprehension and communication (Rakolobe, personal communication). Learners may transfer grammatical structures or vocabulary from their native language into English, resulting in errors in syntax and pronunciation. Shohamy's (2011) research suggests that bilingual instruction can enhance performance in subjects like mathematics. However, the use of both languages in ESL classes may promote dependency on the native language (L1), making it harder for learners to develop proficiency in the target language. Language policies aimed at decolonisation should not impede the effective learning of English, which is considered an economic language in Lesotho.

In conclusion, the Lesotho language policy in education may have long-term counterproductive effects on ESL learning. Using both mother tongue and English as languages of instruction in the early grades could facilitate a smoother transition to ESL. Immersion, which combines both languages, could be

beneficial. However, there is a need for a balanced approach that addresses the potential pitfalls of excessive L1 reliance. Moreover, the language policy should consider the experiences and input of learners in its development and review to ensure its alignment with the integrated curriculum and to prevent unintended negative consequences. This approach aligns with the goal of ensuring inclusive and equitable quality education, as highlighted in the sustainable development goals. Ultimately, language policies should be flexible and responsive to the needs of learners, allowing them to draw on their multilingual resources for effective communication while recognising the critical importance of English proficiency in a global context.

3.2.11.3.1 Interlanguage

Larry Selinker (1972) coined the term "interlanguage" to describe a distinct linguistic system that emerges when a second language learner attempts to produce the target language (TL). Selinker's definition, as explained by Mahmood and Murad (2018), highlights that interlanguage reflects the abnormality of a second language learner's language despite their efforts to adhere to the linguistic rules of the second language (L2). Importantly, interlanguage is neither the learner's first language nor their second (Mahmood & Murad, 2018). In addition to Selinker's and Mahmood and Murad's definitions, Yule (1985) characterises interlanguage as "an interim system of L2 learners, which has some features of the L1 and L2 plus some that are independent of the L1 and L2"(p.^). Another perspective, presented by Markely (2023), suggests that interlanguage is the target language riddled with errors resulting from the inappropriate incorporation of aspects from the second language learner's native language while attempting to communicate in the second language. Markely notes that this is often achieved by using basic words that the learner already knows.

Considering these definitions, adopting Markely's (2023) perspective seems logical due to its clarity and comprehensiveness. Based on these definitions, interlanguage can be understood as an intermediate language that second language learners develop and use while in the process of learning a target language. While interlanguage may incorporate elements from both the learner's native and second languages, it cannot be classified as either. For example, grade 9 ESL learners might write the word "cloud" as "tlelaut." This suggests that "tlelaut" originates from their interlanguage because it does not belong to either Sesotho or English. It is also important to note that "tlelaut" does not exist in other minority languages spoken in Lesotho, such as Isizulu, Isixhosa, and Sephuthi. Even though there were

no Afrikaans speakers in the classroom, Afrikaans, as an immigrant language in Lesotho, does not include the word "tšelaut" in its vocabulary. Furthermore, interlanguage appears to give rise to cross-linguistic influence, which will be discussed in the following section.

3.2.11.3.2 Cross linguistic influence/ language transfer

The traditional understanding of cross-linguistic influence, often used interchangeably with the term "language transfer," seems to originate from the field of contrastive analysis. Cross-linguistic influence is a concept derived from the contrastive analysis hypothesis, which posits that the primary challenge in second language (L2) learning arises from interference factors stemming from the learner's native language (L1), making the L1 a significant source of confusion (Javadi-Safa, 2018, p. 190). Language transfer, as defined by Arabaski (2006), refers to the phenomenon where learners apply their existing language knowledge to facilitate the learning of a target language, thereby easing the process. Importantly, language transfer is a neutral term, meaning it does not inherently imply whether using native language knowledge in learning a target language is advantageous or disadvantageous (Arabaski, 2006). Valcea (2020) shares a similar perspective, asserting that language transfer manifests when second language learning is influenced by native language knowledge, resulting in language that is neither the learner's native nor target language. This transfer can be either positive or negative.

In positive language transfer, a learner's native language knowledge aids them in acquiring a second language. For instance, in the case of grade 9 ESL students in school X, their knowledge of Sesotho vocabulary may assist them in successfully acquiring English vocabulary (Amara, 2019). On the contrary, negative transfer, also known as interference, occurs when a learner's knowledge of their native language leads to errors in the target language as they inadvertently transfer incompatible aspects of the native language into the target language (Amara, 2019).

Phonology is an area where negative transfer often occurs (Odlin, 1989). Odlin's (1989) observation aligns with the argument presented in this study, which links the orthographic-based errors made by grade 9 ESL learners in school X to phonological aspects and the Lesotho language policy in education. This connection is reinforced by the fact that there is a conflicting and poorly enforced school language policy in Lesotho, which encourages students to prefer using Sesotho (their mother tongue) over English (Ekanjume-Ilongo, 2015, p. 1163). This preference, coupled with the obligation to use English as the medium of instruction, contributes to the development of interlanguage among learners and

consequently leads to cross-linguistic influence. In a dialogic-based ESL classroom, learners are prone to making errors resulting from cross-linguistic influence, ultimately jeopardising their critical literacy. This means they may struggle to actively engage in transformative agendas while using English proficiently. In this context, the Lesotho language policy in education seems to foster language contact. When two or more languages come into contact, linguistic phenomena such as interference, transfer, and borrowing become inevitable, potentially affecting the phonological structure and syllabic composition of words in the targeted language (Wei, 2020).

3.2.11.3.3 Appropriate policies to operationalise the use of language in instruction

As mentioned previously, there seems to be a pressing need for the thorough implementation and enforcement of policies that effectively govern the use of language as a medium of instruction. To reiterate, the Lesotho Curriculum and Assessment Policy gave rise to the Lesotho Educational Language Policy (LELP) in 2019 (Rakolobe, personal communication, April 21, 2023). In line with the review of the Curriculum and Assessment Policy, the LELP is also expected to undergo revisions. However, recent experiences have indicated that during a symposium held in early 2023 to review the Curriculum and Assessment Policy, the focus was primarily on clarifying the definition of mother tongue, especially in a context where other minority languages exist in Lesotho. Regrettably, the long-term implications of the language policy in education on the academic performance of ESL learners were somewhat overlooked.

In my perspective, this policy's failure to address its long-term impact on ESL learners' language proficiency can lead to spelling challenges, particularly due to the use of mother tongue as the medium of instruction in the early grades of primary school. These spelling challenges appear to evolve into obstacles in achieving critical literacy. Following the discussion on how the language policy in education may contribute to spelling challenges, the subsequent section delves into how carelessness may also play a role in the spelling challenges faced by ESL learners.

3.2.12 Carelessness

According to Nichols and Edlund (2020), carelessness refers to a lack of attention, diligence, or thoroughness in one's actions or behaviour. It is characterised by being inattentive, not taking necessary precautions, or failing to give proper consideration to the task at hand. Similarly, Sermsook et al. (2017)

argue that in the process of learning English, carelessness can lead to mistakes, errors, or accidents that could have been avoided with greater focus and attention to detail by the learner. For instance, a student may rush through a task or not pay close attention, resulting in careless mistakes. These mistakes often involve overlooking certain letters or missing key details in words (Bowling et al., 2016). In the context of spelling, carelessness manifests as a lack of focus (Nichols and Edlund, 2020). This implies that when a learner is distracted or not fully engaged in the task of spelling, they may not process words accurately, leading to misspellings. In the context of this study, carelessness may be evident when learners make avoidable mistakes in their academic assignments because they do not thoroughly check their work for errors. Having explored the factors contributing to spelling challenges, the following section will delve into potential interventions that can be implemented to address these challenges.

3.3 Intervention

An intervention refers to a deliberate and purposeful action or strategy taken to address a specific issue, problem, or situation (Morse et al., 2019). It involves stepping in to modify, improve, or change a particular condition with the goal of achieving a desired outcome (Brady et al., 2022). The decision to implement an intervention in this study was informed by critical literacy and the era of the fourth industrial revolution, as discussed in Chapter One. In the context of the fourth industrial revolution era, implementing interventions for grade 9 ESL learners who struggle with spelling holds significant importance.

As highlighted by M. Makumane (personal communication, March 20, 2023), this era is characterised by rapid technological advancements, making effective communication skills, including spelling proficiency, even more essential. Additionally, Xu et al. (2018) emphasise that the fourth industrial revolution era emphasises global connectivity. Clear and correct spelling, in my view, is crucial for effective communication with people from diverse linguistic backgrounds, as emphasised by Xu et al. (2018). Implementing interventions for ESL learners who struggle with spelling is essential not only for enhancing their language skills but also for fostering critical literacy. As discussed earlier, critical literacy goes beyond the basic ability to read and write; it involves analysing, questioning, and interpreting texts in a way that encourages a deeper understanding of the world, which is central to this study. In my opinion, addressing spelling challenges empowers ESL learners to take control of their language skills, fostering critical agency as learners actively seek to improve their communication

abilities. Among the practical interventions that may be implemented to address spelling challenges, phonemic-orthography was found to be suitable and is discussed in the following section.

3.3.1 Phonemic-orthography

Phonemic orthography, as defined by Alofi (2021), is a writing system in which each symbol or character represents a distinct phoneme, which is the smallest meaningful unit of sound in a language. In phonemic orthography, the spelling of words closely corresponds to their pronunciation, with each letter or character consistently representing a specific sound (Nayernia et al., 2019). This type of writing system aims to faithfully reflect the phonological structure of spoken language, making it easier for readers to understand and pronounce words based on their written forms (Ijalba & Obler, 2015). The discussion surrounding phonemic orthography appears to be closely tied to accurate spelling. For example, with phonemic orthography, grade 9 ESL learners can connect phonemes or sounds to their corresponding letters or graphemes. This connection enables them to spell words accurately by understanding the sound-symbol correspondence. Similarly, in terms of effective instruction, ESL teachers may use phonemic orthography as a structured approach to spelling instruction. This approach allows teachers to guide grade 9 ESL learners in understanding the systematic relationships between sounds and letters, ultimately leading to more effective learning outcomes, which are crucial in developing critical literacy.

In conclusion, incorporating phonemic orthography into spelling instruction lays a strong foundation for language skills, enabling ESL learners to navigate written language with precision. Phonemic orthography can be implemented through phonics approaches. As a result, the following section discusses phonics approaches that can expedite critical literacy, particularly concerning phoneme-grapheme associations.

3.4 Phonics approach

Despite the extensive body of literature addressing strategies to enhance literacy skills at the primary, secondary, and high school levels, with a particular focus on comprehension-based reading, there seems to be a notable lack of attention given to strategies aimed at improving pronunciation and spelling through reading. Therefore, this section aims to explore teaching and learning methods for literacy skills, specifically focusing on pronunciation and spelling. According to Saleh (2021), phonics is an instructional approach that has resurfaced and can be traced back to the first century. Saleh (2021) also

notes that the recent resurgence of phonics can be attributed to the shortcomings of whole language approaches. However, the researcher holds a differing viewpoint, suggesting that whole language approaches may be effective, but only after the teaching and learning of phonics. Phonics, as a critical aspect of literacy, is defined by Phajane (2014) as "a method for decoding written letters and spoken words." In this approach, learners are encouraged to decode words through their individual sounds rather than recognising entire words, as stated by Phajane (2014). In contrast, Kidd (2011) contends that this method overlooks valuable information. Nevertheless, Phajane (2014) argues that when learners master proper word pronunciation, correct spelling and comprehension naturally follow. In my perspective, the phonics approach is a method of teaching reading and spelling that emphasises the relationship between letters and their corresponding sounds in the English language. This approach is based on the understanding that letters represent specific phonemes, and by decoding these letter-sound associations, grade 9 ESL learners can effectively read and spell words.

Pronunciation and spelling, particularly in the context of learning English as a second language (ESL), have been subjects of research interest since the 1800s, despite appearing to be subtle areas of concern. Various approaches and methods have been developed over the years, including the direct method in the late 1800s and late 1900s, the audio-lingual method and oral approach in the 1940s to the 1950s, the cognitive approach in the 1960s, and the silent way, community language learning, and communicative approach in the 1970s and 1980s. Additionally, there were methods like grammar translation with reading-based approaches and naturalistic methods in the 20th century, as documented by Jam and Adibpour (2014). It appears that some of these approaches have resurfaced in modified forms in the 21st century. However, this section will focus on instructional methods related to phonics.

3.5 Phonics-related instructional methods

3.5.1 Intuitive-imitative approach

This approach, as highlighted by Arimilli et al. (2016), appears to strongly emphasise intuition and imitation. Indeed, it is grounded entirely in the belief that students possess the capability to listen to and replicate the rhythms and sounds of the target language. Consequently, it is believed that they can develop acceptable pronunciation without the need for explicit intervention, as pointed out by Jam and Adibpour (2014). Supporting this notion, the intuitive-imitation approach relies heavily on unaided imitation of models, as emphasised by Sharma (2021). Furthermore, Sharma (2020) underscores that

this approach assumes the availability, validity, and reliability of good models for students to listen to. These models include audio clips, audiovisual aids, songs, and rhymes, among other dependable resources, as mentioned by Arimilli et al. (2016). In contrast to explaining concepts explicitly, Smith (2017) suggests that the teacher's role in this approach is to present information to the learners. The learners, in turn, are expected to construct their own conceptual structures and conclusions in a manner they deem suitable and logical. This implies that learners are exposed to what they are expected to learn without explicit guidance. However, it is important to note that this approach is not without limitations, as pointed out by Jam and Adibpour (2014). One of its shortcomings is that it can lead to confusion when teaching consonants. This suggests that the intuitive-imitative approach may not be a standalone method and may require supplementation from other approaches. Consequently, the following section will delve into the analytic-linguistic approach.

3.5.2 Analytic-linguistic approach

This approach is rooted in the belief in learners' analytical capabilities. To elaborate, when employing this approach, the teacher furnishes learners with all the language rules, leaving it to the learners to analyse this information and attempt to produce sounds accordingly, as outlined by Arimilli et al. (2016). As argued by Jam and Adibpour (2014), there is a strong emphasis on explicit intervention in pronunciation pedagogy. This intervention involves teaching the correct pronunciation of sounds, intonation, stress patterns, the organs used to produce sounds, and the phonetic alphabet with its associated symbols. This is achieved through sound analysis with the goal of producing them accurately. Similarly, in a study conducted by Ghorbani et al. (2016), the intuitive-imitative approach was employed to improve learners' vowel perception, and the results were positive. However, in a study conducted by Alsofyani and Algethami (2017), the analytic-linguistic approach yielded negative results, as there was no significant difference between the pre-test and post-test scores. This suggests that the analytic-linguistic approach may not be comprehensive on its own and may benefit from supplementation with another approach. This leads us to the discussion of the integrative approach below.

3.5.3 Integrative approach

This approach combines elements of both the intuitive-imitative and analytic-linguistic approaches, as Arimilli et al. (2016) explain that it focuses on enhancing students' linguistic abilities by addressing

both segmental and supra-segmental features, while also utilising imitation to improve communication skills (p.110). In accordance with Jam and Adibpour (2014), learners engage in meaningful, task-based activities within this approach. Moreover, it consists of two levels: the micro level, which emphasises the practice of segmental and supra-segmental features, and the macro level, which places greater emphasis on the overall elements of communication to enhance discourse for communicative purposes (Jam & Adibpour, 2014). This approach plays a vital role in developing learners' intelligible speech and their ability to communicate effectively in a second language (L2). It achieves this by incorporating strategies for functionality, intelligibility, functional communicability, boosting self-confidence, speech monitoring, and speech modification (Hashemian & Fadaei, 2011). The integrative approach is contingent upon teachers having a clear pronunciation goal in mind, regardless of the subject matter they are teaching (Yates, 2014). It serves as a foundational pedagogical framework that promotes linguistic performance. Now that we have introduced the integrative approach, the following section will discuss the Lexical-linguistic approach.

3.5.4 Lexical linguistic approach

This approach equips learners with the knowledge and tools needed to improve their spelling of unfamiliar words (Oh, 2022). Within this approach, there is a partial embrace of explicit instruction in the teaching, learning, and acquisition of spelling skills. In fact, learners are provided with guidance on 'how it is done,' 'what it means,' and 'how they can do it themselves' (Ankucic, 2019). The analytic-linguistic approach proves beneficial, as Ankucic (2019) elaborates further, by offering learners the tools and reinforcement necessary to understand words beyond their surface. This stands in contrast to traditional methods that merely teach learners 'how to spell certain words briefly.' Undoubtedly, the successful ability of learners to spell a word depends on their capacity to apply the knowledge they have acquired. This application relies on their exposure to phonology, orthography, morphology, and etymology awareness (Debabi & Guerroudj, 2018). However, it is important to note that this study specifically focused on phonemic and orthographic awareness. Building upon the outlined phonics approaches, the following section will elaborate on language and literacy awareness strategies that teachers or researchers should be familiar with before implementing phonemic-orthography. These language and literacy strategies will then be imparted to grade 9 ESL learners as part of the phonemic-orthography implementation process.

3.6 Language and literacy awareness ploys

The section below outlines and discusses language and literacy awareness ploys that may be employed in the implementation of phonemic-orthography.

3.6.1 Phonemic awareness

Phonemic awareness involves recognising and manipulating individual phonemes, the smallest sound units in language, within spoken words (Hulme & Snowling, 2016). This includes the ability to isolate, blend, segment, and alter these sounds (Vetsch-Larson, 2022). Phonemic awareness is considered a crucial foundational reading skill and a fundamental component of early literacy development (Chen & Yeh, 2023). Proficiency in phonemic awareness also predicts future reading achievements, helping learners understand the connection between sounds and letters as they begin learning phonics and decoding techniques (Vazeux, 2023). To enhance spelling skills, ESL teachers can incorporate activities focusing on phoneme segmentation, blending, manipulation, and sound recognition (Paige et al., 2023). These activities not only strengthen spelling skills but also contribute to overall language development, reading proficiency, and effective written communication (Chen & Yen, 2023).

3.6.1.1 Phonemic awareness involves several key aspects:

Segmentation: This entails dividing a spoken word into its distinct phonemes, such as breaking "cat" into /k/ /ă/ /t/ (Alhumsi & Shabdini, 2016).

Blending: It involves combining individual phonemes to form a spoken word, like blending /k/ /ă/ /t/ to say "cat" (Al Otaiba, 2023).

Manipulation: This aspect allows for modifying a phoneme within a word to create a new word, such as changing /k/ in "cat" to /h/ to form "hat" (Hulme & Snowling, 2016).

Isolation: It relates to recognising the initial, middle, or final phoneme in a spoken word, for example, identifying the initial sound /d/ in "dog" (Paige et al., 2023).

Substitution: Involves replacing one phoneme with another to create a different word, like changing /m/ in "man" to /f/ to make "fan" (Alhumsi & Shabdini, 2016).

Recipients of phonemic awareness develop phonological sensitivity, as described by Jenner (2021). Phonological sensitivity refers to the ability to perceive, analyse, and manipulate the sounds of spoken language at various levels, including words, syllables, onsets and rimes, and individual phonemes (Paige et al., 2023). It is a fundamental skill for developing strong reading and spelling abilities.

Phonemic awareness is crucial because it raises learners' awareness of how sounds in words function (Carruth & Bustos, 2019). Assessable orally, phonemic awareness can lead to independent development of reading and spelling skills, enhancing orthographic abilities. Having discussed phonemic awareness, the next section explores phonological awareness.

3.6.2 Phonological awareness

Phonological awareness serves as a foundational skill for phonics, which entails understanding the correspondence between letters and sounds (Carruth & Bustos, 2019). Developing robust phonological awareness skills is essential for successful reading and spelling acquisition, as emphasised by Alhums and Shabdini (2016). It enables individuals to break words into their constituent sounds, a crucial skill for decoding words during reading and encoding sounds when spelling (Jenner, 2021). Effective phonological awareness instruction encompasses interactive and engaging activities targeting various components. These activities lay a strong literacy foundation by helping learners distinguish, blend, segment, and manipulate sounds at different levels, including syllables, onsets and rimes, and individual phonemes (Paige et al., 2023). Phonological awareness is, therefore, a critical pre-literacy skill and a cornerstone of reading and spelling development (Jenner, 2021). In addition to syllable awareness, phonological awareness includes rhyming awareness, which involves recognising words with matching ending sounds (Jenner, 2021). For example, grade 9 ESL learners may identify that "cat" rhymes with "sat." Furthermore, it encompasses onset and rime awareness, defined by Alhums and Shabdini (2016) as identifying the initial sound (onset) and the remainder of the word (rime). For instance, learners may recognise that the word "cat" has an onset "c" and a rime "at." Integrating phonological awareness exercises into spelling lessons can help grade 9 ESL learners grasp the phonemic structure of words, thus enhancing their spelling proficiency. This approach empowers learners to approach spelling with a solid understanding of the connections between sounds and letters and a deeper comprehension of word formation based on phonetic elements. Having discussed phonological awareness, the following section will illuminate orthographic awareness.

3.6.3 Orthographic awareness

Orthographic awareness is the understanding and recognition of spelling patterns, rules, and conventions within a writing system (Zarić et al., 2021). It encompasses how letters and letter combinations represent sounds, words, and meanings in a language (Ehri, 2014). This awareness is

particularly crucial in alphabetic writing systems like English, as noted by Miller (2019). Specifically, orthographic awareness involves understanding letter-sound correspondence, which allows readers and spellers to accurately decode words and encode sounds (Ehri, 2014). Another aspect of orthographic awareness, as identified by Cheema et al. (2023), relates to spelling patterns and rules. This entails recognising common spelling patterns, including silent letters, vowel combinations, consonant blends, and more (Pittman et al., 2023). Such awareness aids individuals in selecting the correct letters when spelling words (Kwok & Ellis, 2014). It enables grade 9 ESL learners to make informed spelling choices, even when words do not strictly adhere to phonetic rules. Moreover, when learners are aware of spelling patterns and rules, they can apply them to a wide range of words, including unfamiliar ones with similar patterns. Additionally, they can recognise irregular spellings and exceptions to the rules, understanding that some words require memorisation.

Orthographic awareness also encompasses syllable structure, involving the recognition of syllable types (e.g., open, closed, r-controlled) and their impact on pronunciation and spelling (won Lee et al., 2023). Morphology is another factor affecting orthographic awareness, as it involves understanding prefixes, suffixes, roots, and how they contribute to word meanings and spelling (won Lee et al., 2023). Recognising morphemes within words aids learners in breaking down words into meaningful units, benefiting both spelling and vocabulary development; resultantly, a robust vocabulary enables grade 9 ESL learners to make spelling choices based on context. Furthermore, orthographic awareness includes the ability to differentiate between homophones (words that sound the same but have different spellings) and homographs (words that are spelled the same but have different meanings), as highlighted by Roembke et al. (2023). This knowledge allows ESL learners to distinguish between homophones and select the appropriate spelling based on sentence context.

Orthographic awareness is a foundational skill for both reading and writing (Anastasiou & Griva, 2012). It enables efficient word decoding for readers and accurate word encoding for spellers. Developing strong orthographic awareness can make grade 9 ESL learners fluent readers, proficient spellers, and effective communicators in written language, enhancing critical literacy skills. ESL teachers can nurture orthographic awareness through explicit teaching of spelling patterns, exploration of irregular words, word analysis practice, and application in writing tasks. By doing so, they equip ESL learners with the necessary knowledge and skills to navigate the complexities of written language effectively.

3.7 Phonics instruction strategies

Instructional strategies, as defined by Albadi (2019), encompass the methods, styles, and techniques employed by teachers in the classroom to convey concepts and achieve specific objectives (p.14). In this study, the phonics instructional strategies chosen will be activity-based. According to Kudryashova et al. (2016), activity-based learning, in contrast to traditional methods, transforms content delivery by shifting from teacher-centered to learner-centered approaches. It places a strong emphasis on enhancing learners' skills, engaging them in tasks, and guiding them toward active thinking (Edwards-Groves & Grootenboer, 2015). Consequently, these strategies are learner-centric and are expected to challenge the learners, enabling them to develop into critical users of English as a Second Language (ESL). The following section elaborates on the strategies that the research intends to employ as interventions.

3.7.1 Read aloud

Read aloud is the practice of reading a text out loud with the intention of being heard by others who are listening at that particular moment. This definition aligns with Miller et al. (2018), who also describe read aloud as the act of reading a text aloud. Both learners and teachers participate in this activity. While read aloud may sometimes be perceived as less crucial in a reading class, it should be considered for inclusion in the English curriculum, as it enhances learners' reading abilities and positively influences their pronunciation, as emphasised by Jufri (2019). Importantly, as Witria (2020) points out, reading aloud allows students to assess the correctness of their pronunciation. If errors are detected, adjustments can be made with ease. Anjani (2018) similarly emphasises the active involvement of learners in pronunciation-focused tasks during read-aloud activities, with the teacher monitoring and providing corrections as needed.

The following section will incorporate insights from Hisrish and McCaffery (2021) and the perspectives offered by Okello (2021) regarding the practical application of the read-aloud strategy. It is essential to note that these concepts have been tailored to support the development of spelling skills among grade ESL learners.

3.7.1.1 Steps to follow when employing read-aloud strategy (Hirish & McMaffery, 2021; Okello, 2021)

Building upon the preceding discussion, it can be deduced that within the scope of this study, the read-aloud strategy for teaching spelling entails having grade 9 ESL learners pronounce words audibly. As

suggested by Maddox and Feng (2013), this method enables students to perceive the sounds and syllables within words, thereby facilitating the recognition of phonetic patterns and accurate spelling. Through active engagement with words through pronunciation, grade 9 ESL learners may internalise spelling rules and patterns more effectively, ultimately resulting in enhanced spelling accuracy.

In the implementation of the read-aloud strategy, a series of pivotal steps should be adhered to. The teacher will commence by carefully selecting appropriate texts that encompass a wide array of words exhibiting diverse spelling patterns and complexities. Subsequently, the text will be introduced, and its contextual aspects will be discussed. This will be followed by pre-reading activities designed to identify and deliberate on challenging vocabulary and potential spelling patterns. Furthermore, the teacher will model proper pronunciation, emphasising the correct enunciation of words while paying meticulous attention to syllable divisions and stress patterns. The entire class will then read the text collectively, fostering familiarity with its rhythm, flow, and pronunciation. Subsequent to this, individual students will take turns reading sentences or paragraphs aloud, with an encouragement to focus on both the sounds of words and their spelling. During the reading, words featuring specific spelling patterns or intricate phonetic elements will be identified, and these words, along with their corresponding spelling rules, will be discussed. Upon completing the reading, a selection of words pertinent to the spelling objectives will be chosen and dissected into syllables or phonetic components, with a focus on highlighting the connections between sounds and letters. Moreover, interactive activities for spelling practice will be meticulously designed based on the words encountered during the read-aloud session. These activities may encompass word sorting, word puzzles, or the creation of sentences employing the target words.

Additionally, a few sentences from the text will be selected, read aloud slowly, and ESL learners will be tasked with transcribing the words as demonstrated by the teacher. This exercise reinforces their capacity to convert auditory input into written form. In subsequent lessons, a review of the words introduced during the read-aloud session will be conducted, with continued spelling practice aimed at reinforcing the patterns and rules learned. The insights presented unequivocally affirm that reading aloud and teaching spelling are closely intertwined instructional techniques that greatly contribute to language and literacy development. When grade 9 ESL learners engage in reading aloud, they are exposed to a diverse range of words, sounds, and phonetic patterns, thereby nurturing phonological awareness; an essential skill for comprehending the connections between sounds and letters in spelling.

Furthermore, reading aloud provides ESL learners with opportunities to hear and differentiate between various phonemes and sound patterns, further enhancing their spelling accuracy. In consideration of the aforementioned points, it is evident that this strategy not only aids in identifying the learners' needs but also serves as a means to gauge the effectiveness of the intervention. While the read-aloud strategy constitutes a pivotal component of this study, the subsequent section will investigate into another equally significant strategy, namely, dictionary training.

3.7.2 Dictionary training

Dictionary training encompasses deliberate instruction and practice provided to individuals, often students, on effectively using a dictionary for various purposes, such as vocabulary enhancement, language comprehension, and the refinement of spelling and writing skills (Huang & Eslami, 2013). According to Huang and Eslami (2013), the primary objective of dictionary training is to equip learners with the skills and strategies needed to fully utilise a dictionary's potential. Another aspect of dictionary training, as highlighted by Liu (2014), involves teaching learners how to interpret pronunciation symbols and phonetic notations commonly found in dictionaries, which aids in correct word pronunciation. Moreover, dictionary training is closely intertwined with spelling.

Rather than simply instructing learners on spelling, it is encouraged that teachers guide them in using dictionaries to find words (How to Teach Your Child to Use a Dictionary | TheSchoolRun, 2022). By doing so, learners not only become familiar with how dictionaries function but also gain knowledge of correct word spelling and pronunciation (How to Teach Your Child to Use a Dictionary | TheSchoolRun, n.d.). In cases where learners do not have dictionaries, they can create their personalised dictionaries. Specifically, in their notebooks, they can design alphabet dividers and record new words (How to Teach Your Child to Use a Dictionary | TheSchoolRun, n.d.). Furthermore, Gorben (2023) advocates that dictionaries play a crucial role in teaching spelling by offering a wealth of information and guidance that aids learners in improving their spelling skills. Mataka (personal communication, 2023, May 15) emphasises the significance of dictionaries as orthographic references, as they provide correct word spellings, serving as reliable resources for learners. When learners encounter unfamiliar or challenging words, dictionaries can be used to verify correct spellings. In addition to orthographic references, Gorben (2023) asserts that dictionaries often include phonetic notations that help learners understand how to pronounce words accurately. This phonetic information can also guide them in spelling words according to their phonetic components. In my view, as per Gorben (2023)'s statement,

dictionaries offer phonetic guidance, which is particularly important for this study's phonemic-orthography intervention, as it links letters to sounds, making pronunciation equally vital.

Based on the aforementioned discussions, I believe that because dictionaries break down words into syllables, this may assist grade 9 ESL learners in recognising syllabic structures, ultimately aiding them in accurate spelling. Another perspective is that consistent use of a dictionary to check spellings can train these ESL learners to visually recognise correctly spelled words, enhancing their ability to identify misspellings. Additionally, while searching for correct spellings, grade 9 ESL learners would be exposed to new words, their meanings, and how they are used in examples, enriching their vocabulary.

3.7.3 Phonetic alphabet

The International Phonetic Alphabet (IPA), often referred to as the phonetic alphabet, is a standardised system of symbols utilised to represent the sounds of spoken language (Britannica, 2023). Its primary purpose, according to Britannica (2019), is to offer a consistent and precise method for transcribing the sounds of any language, irrespective of its writing system. Consequently, the phonetic alphabet finds application among linguists, language instructors, speech pathologists, and other professionals involved in spoken language, enabling them to precisely depict and analyse pronunciation (Rayhan, 2019). The diagram provided below offers an illustration of the IPA.

IPA Consonants for General American English
as used by the Cambridge Online Dictionary

		Place of Articulation							
		Front ←						→ Back	
numbers refer to positions on articulation diagram		Bilabial (both lips) 8 - 1	Labio-dental (lip + teeth) 8 - 2	Dental (teeth) 11 - 2 11 - 2 + 10	Alveolar (behind teeth) 11 - 3, 4	Post-Alveolar (behind alveolar-ridge) 11 - 4, 5	Palatal (hard palate) 12 - 6	Velar (soft palate) 13 - 7	Glottal (throat) 16
Airflow ↓	Stop (air is stopped then released)	p • b			t • d			k • g	• ʔ ¹
	Nasal (air passes through nose)	• m			• n			• ŋ	
	Fricative (air is constricted)		f • v	θ • ð	s • z	ʃ • ʒ			• h
	Affricate (stop + fricative)					tʃ • dʒ			
	Approximant (vowel acts as syllable boundary)				• r ²		• j	• w ³	
	Lateral Approximant (vowel acts as syllable boundary)				• l				

1. The glottal stop /ʔ/ is a common substitute for other consonants. Not used in most dictionaries.
2. In the dictionary, /r/ used for typographical/historical reasons. The correct IPA symbol is /ɹ/. Lips usually rounded when used as an initial consonant.
3. Lips are usually rounded.

Figure 6: International Phonetic Alphabet (IPA)

<https://www.internationalphoneticassociation.org/content/full-ipa-chart.25.10.2018>)

Building upon the preceding discussion and the IPA table provided above, we can illustrate the concept further. Let's take the word "cat" as an example and transcribe it using the International Phonetic Alphabet (IPA). In this case, the word remains "cat," while its IPA transcription becomes /kæt/. This transcription involves the use of specific symbols: /k/ represents the "k" sound, characterised as a voiceless velar plosive. Additionally, /æ/ symbolises the "a" sound, described as a near-open front unrounded vowel, while /t/ signifies the "t" sound, identified as a voiceless alveolar plosive. To clarify, this IPA transcription, "/kæt/," offers a detailed representation of the distinct speech sounds that compose the word "cat." Consequently, linguists and language learners alike can use this transcription to precisely reproduce the word's pronunciation, irrespective of their native language's writing system.

In this context, it becomes evident that instruction in the phonetic alphabet holds significant importance in spelling development due to its profound impact on comprehending the relationships between sounds and letters within a language. This suggests that the phonetic alphabet teaches ESL learners to recognise and distinguish individual phonemes within words, as emphasised earlier by Vazeux (2023) regarding phonemic awareness. Moreover, this knowledge assists grade 9 ESL learners in decoding unfamiliar words during reading and selecting the appropriate letters when spelling words. Undoubtedly, integrating the phonetic alphabet into spelling lessons not only enhances spelling accuracy but also fosters a deeper understanding of the intricate sound-letter relationships within the English language. This empowers grade 9 ESL learners to approach spelling with increased confidence and strategic thinking, nurturing lifelong language skills. Considering the IPA's association with pronunciation, the following section delves into how IPA training is expected to refine the learners' pronunciation.

3.7.4 Pronunciation

The pronunciation elements that are discussed in this section are three, namely; intonation, stress placement and articulation.

3.7.4.1 Intonation

Intonation, as defined by Xasanov (2023), encompasses the rise and fall in pitch within a person's voice during speech. According to Gandihoke and Singh (2023), it entails the patterns of high and low pitches in speech, and these patterns create a melody-like quality that can significantly impact the overall meaning of a sentence. Although intonation is primarily associated with speech patterns and

communication, it can also play a pivotal role in teaching spelling, especially in language acquisition and development. In the context of word segmentation, intonation can prove beneficial by assisting in the breakdown of spoken words into their constituent sounds or syllables (Xasanov, 2023). In my perspective, this can greatly aid grade 9 ESL learners in identifying the individual phonemes within words, a skill that is indispensable for accurate spelling. Moreover, it is worth noting that intonation often aligns with syllable divisions in spoken language (Xasanov, 2023). Educating students to recognise these divisions can facilitate the dissection of words into syllables, benefiting both pronunciation and spelling. Having explored the concept of intonation, the following section will examine into the topic of stress placement.

3.7.4.2 Stress placement

Stress placement, also referred to as word stress or syllable stress, involves emphasising a specific syllable within a word or a particular word within a sentence (Underhill, 1994). According to Liu (2017), in spoken language, certain syllables or words are pronounced with greater force, pitch, and duration than others. Consequently, this stress pattern plays a crucial role in communication, as it has the potential to alter the meaning and tone of a word or sentence (Yurtbasi, 2017). In the realm of spelling, Treiman et al. (2020) emphasise the significance of stress placement because it frequently determines the meaning of a word and distinguishes it from words that share similar spellings but possess distinct meanings. Additionally, Treiman et al. (2020) posit that in English, altering stress placement can result in changes in meaning, even when the spelling remains consistent. This implies that when spelling homonyms, understanding and practicing appropriate stress placement may aid learners in accurate spelling. For instance, consider the word "record." When stressed on the first syllable, it functions as a noun, "RE-cord," signifying something written down, according to Richards (1943). Conversely, when stressed on the second syllable, it serves as a verb, "re-CORD," meaning to document, as per Richards (1943). In this example, stress placement modifies both the word's grammatical category and its meaning, despite the spelling remaining unchanged. Thus, familiarity with and awareness of stress placement may assist grade 9 ESL learners in context-based communication. Following the discussion on stress placement, the subsequent section will address the topic of articulation.

3.7.4.3 Articulation

This section discusses the process of producing speech sounds using the articulatory organs and their role in spelling development.

3.7.4.3.1 Place of articulation

Place of articulation in pronunciation pertains to the precise location within the vocal tract where phonemes are generated (O’Grady et al., 1987). In addition to O’Grady et al. (1987), Shariq (2015) explains that it entails the coordination of various speech organs, including the tongue, lips, teeth, and vocal cords, to produce distinct sounds. Moreover, the place of articulation plays a substantial role in shaping the quality and attributes of speech sounds (O’Grady et al.), which, in my view, directly impacts pronunciation and, consequently, spelling.

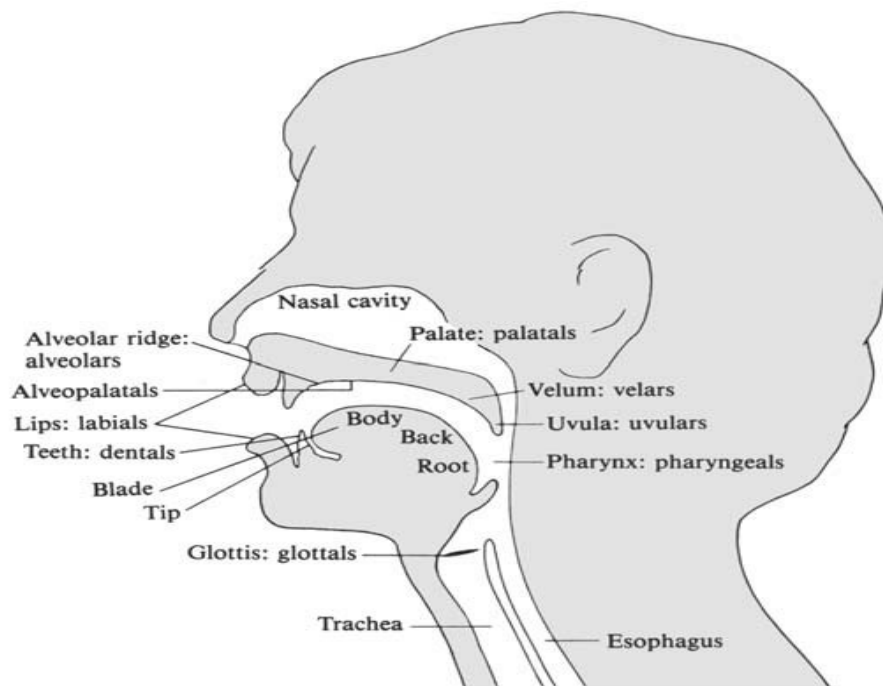


Figure 7: Places of articulation

(<https://www.internationalphoneticassociation.org/content/full-ipa-chart.25.10.2018>)

The diagram above provides a visual representation of the various places of articulation in relation to the speech organs. According to Shariq (2015), distinct speech sounds are generated by manipulating specific speech organs, including the tongue, lips, teeth, alveolar ridge (located behind the upper front teeth), palate (the roof of the mouth), velum (the soft part of the roof of the mouth), and glottis (the space between the vocal cords). Furthermore, O'Grady et al. (1987) assert that the place of articulation is intimately linked with the manner of articulation (how airflow is obstructed or modified) and the voicing (whether the vocal cords vibrate) of speech sounds. In this context, knowledge of which organs are associated with producing various sounds aids in achieving accurate pronunciation—a skill that directly pertains to spelling within the framework of phonemic-orthography. While the concept of place of articulation primarily pertains to speech sound production, it also holds significance in spelling instruction, particularly in languages like English, where the correspondence between sounds and letters is not always straightforward (O'Grady et al., 1987). For instance, consider the words "fat" and "vat." Upon close analysis, it becomes evident that in "fat," the initial sound is the voiceless bilabial plosive /f/. According to Shariq (2015), this sound is produced by bringing both lips together and then releasing the airflow, resulting in the word being spelled as "fat."

Contrarily, in "vat," the initial sound is the voiced bilabial plosive /v/. As described by Fasold and Connor-Linton (2006), this sound is also produced by bringing both lips together, but in this instance, the vocal cords vibrate as the airflow is released, leading to the word being spelled as "vat." In this example, the commonality in the place of articulation (bilabial) is evident for both words, but the differentiation in voicing (voiceless /f/ vs. voiced /v/) results in distinct meanings and spellings. Hence, it can be argued that understanding the place of articulation may assist grade 9 ESL learners in decoding unfamiliar words, thereby facilitating accurate pronunciation and spelling.

3.7.4.3.2 Manner of articulation

Manner of articulation in pronunciation pertains to how airflow is modified as it passes through the vocal tract to create phonemes (Fasold & Connor-Linton, 2006). This aspect, primarily concerned with speech sound production, is relevant in teaching spelling, particularly in languages where phoneme-grapheme correspondence (sound-letter relationships) is not straightforward (O'Grady et al., 1987). For example, homophones like "pear" and "pair" can be easily confused if one does not grasp the distinctions in their manner of articulation. While they sound the same, their distinct spellings and meanings arise from differences in the articulation of the first consonant, both pronounced with a long

"ea" sound. In this instance, "pear" and "pair" are homonyms, pronounced similarly but having different meanings and spellings. Therefore, the manner of articulation, especially the vowel sound, distinguishes these homonyms and accurately conveys their intended meanings. Consequently, teaching grade 9 ESL learners the differences in sounds produced with various manners of articulation may help them recognise spelling-affecting distinctions. After discussing the importance of phonetic-based awareness in spelling development, the following section focuses on one specific activity: syllable division.

3.7.5 Syllable division

Syllable division, also referred to as syllabication, involves breaking words into their constituent syllables (Ikromjonovna, 2023). To clarify, a syllable is a speech unit containing either a pure vowel sound or a vowel sound combined with adjacent consonant sounds (Larroque, 2023). Typically, it comprises a vowel sound (known as the nucleus) flanked by consonant sounds (referred to as onsets and codas). Nevertheless, variations in syllable structures exist, influenced by language and phonological patterns. Consequently, syllable division holds significance in comprehending word structure, aiding pronunciation, enhancing spelling, and fostering reading fluency (Genetti, 2019). Thus, a grasp of syllable division can contribute to improved spelling. Specifically, when students segment a word into syllables, they can discern letter patterns within each syllable, simplifying the spelling of longer or complex words (Larroque, 2023).

Building upon the above discourse, I consider the following examples of syllable division for the words "hat," "table," "butterfly," and "interesting": Hat: /hæt/ (1 syllable), Table: Ta: /tɑ/ + ble: /bl/; 'ta-ble' (2 syllables), Butterfly: But: /bʌt/ + ter: /tɜr/ + fly: /flaɪ/; 'but-ter-fly' (3 syllables), Interesting: In: /ɪn/ + ter: /tɜr/ + est: /ɛst/ + ing: /ɪŋ/; 'in-ter-est-ing' (4 syllables).

Based on these examples, when prompted to apply syllable division to the word "interesting," it is expected that grade 9 ESL learners would articulate /ɪn/ + ter: /tɜr/ + est: /ɛst/ + ing: /ɪŋ/, and subsequently spell it as "in-ter-est-ing." This example aligns with the earlier discussion, emphasising that teaching syllable division aids learners in developing phonological awareness, a crucial component of literacy skills. It furnishes them with a foundational understanding of word construction, facilitating effective communication, reading, and spelling. In my perspective, founded on the foregoing discussion, syllable division holds significant importance in spelling instruction, offering a systematic approach to deconstructing words into manageable segments. In context, mastering the art of dividing words into

syllables can empower grade 9 ESL learners to approach longer and more intricate words with greater ease and accuracy. As previously noted by Paige et al. (2023), recognising syllables heightens phonemic awareness, enabling learners to differentiate individual sounds within words. Consequently, this heightened awareness contributes to improved spelling, as they learn to associate specific sounds with corresponding letters. Furthermore, when encountering unfamiliar words, grade 9 ESL learners can decode them by breaking them into syllables. This decoding strategy supports spelling accuracy by enabling them to tackle challenging words incrementally. Having explored the concept of syllable division, the subsequent section delves into blending.

3.7.6 Blending

Blending in spelling involves combining individual phonemes to create whole words (Cardis & Fastama, 2023). Cheng and Chavers (2023) affirm that it is a fundamental skill in literacy development, where students seamlessly merge the individual sounds they have learned to form recognisable words. Blending is particularly crucial in phonics-based reading and spelling approaches, aiding in phoneme isolation (Pittman et al., 2023). Before blending, learners must first grasp individual phonemes, allowing them to segment words successfully. For instance, learners can segment the word "cat" into the sounds /k/, /æ/, and /t/, then combine these segmented phonemes in the word's order, resulting in /k/ + /æ/ + /t/ becoming "cat." In my view, blending functions inversely for spelling development. Grade 9 ESL learners begin with a word they wish to spell, segment it into phonemes, and then select the appropriate letters or letter combinations for each phoneme to successfully spell the word. With the discussion on blending complete, the next section will focus on mnemonics.

3.7.7 Mnemonics

Mnemonics are memory aids or techniques used to enhance the recall and retention of information (Kumari, 2023). Furthermore, these techniques rely on associations, patterns, or creative strategies to help individuals remember complex or abstract concepts, sequences, or data (Jeffrey, 2017). For Mataka (personal communication, 2023, February 21), mnemonics can be particularly useful for memorising lists, steps, facts, and other information that might otherwise be challenging to remember. An example of mnemonics can be acronyms (West, 2023), where a person creates a word or phrase where each letter represents the first letter of the items they want to remember (Jeffrey, 2017). For instance, "ROYGBIV"

is an acronym to remember the colors of the rainbow (Red, Orange, Yellow, Green, Blue, Indigo, Violet).

3.7.8 Chunking

Another effective strategy is known as chunking, as defined by Mizumoto and Nagata (2017). It involves breaking extensive information into smaller, more manageable segments, facilitating easier recall. Anisimov et al. (2018) highlight the value of chunking, particularly for teaching spelling to English as a Second Language (ESL) learners. This approach helps them deconstruct longer or complex words into smaller, more manageable components, fostering a systematic and accurate spelling approach (Powell & Aram, 2008). For example, in ESL spelling instruction, chunking can be applied to a word like "literacy," breaking it down into lit-er-a-cy, phonetically represented as lit: /lɪt/ + er: /ɛr/ + a: /ə/ + cy: /si/. Each chunk in this method corresponds to a syllable in the word "literacy." From my perspective, the use of chunking enables grade 9 ESL learners to approach spelling with a structured method, concentrating on smaller units before assembling them to form complete words.

In summary, chunking emerges as a pivotal strategy in spelling instruction, aiding students in breaking words into manageable units and streamlining the spelling process for enhanced efficiency and effectiveness. Having explored phonics-based strategies that can accelerate spelling skills for the critical literacy development of grade 9 ESL learners, the subsequent section will provide an empirical review of studies conducted with the aim of enhancing spelling.

3.8 Empirical review

An empirical review of studies conducted to enhance spelling has several objectives. These include identifying gaps, controversies, trends, and areas needing further research, establishing a robust theoretical framework, minimising redundancy, and providing context, especially where literature is scarce in investigating strategies for improving spelling in Lesotho. Below, I discuss the first study, followed by others. In their 2023 experimental research titled "On Looking Scrambled Game in English Spelling Teaching," Liando & Tatipang investigated the effectiveness of a scramble game intervention to enhance English spelling proficiency among students in Indonesia. The study revealed that using the scramble task significantly improved students' mastery of English spelling, notably reducing vocabulary writing errors. This gamified approach, conducted interactively, demonstrated its potential as a valuable tool in language education, aligning with broader literature advocating for innovative teaching methods.

This research contributes to discussions surrounding effective language instruction, particularly in spelling enhancement, offering insights that can benefit similar educational contexts beyond Indonesia.

Additionally, in the study by Carroll et al. (2023) titled "The Effect of SWI on Spelling and Vocabulary in Students Writing in the Middle Years of Primary School," an experimental research approach was employed to investigate the influence of implementing Structured Word Inquiry (SWI) on the spelling and vocabulary abilities of middle-year primary school students in Germany. The findings indicated a significant improvement in both student spelling and vocabulary skills. Moreover, these enhanced linguistic competencies displayed a positive transfer effect, contributing effectively to the development of broader literacy skills during secondary school education. This research contributes to the understanding of the potential benefits of incorporating SWI into language instruction, particularly within the context of primary education in Germany, with implications for pedagogical practices aiming to bolster spelling and vocabulary acquisition, thereby supporting students' overall language proficiency.

Likewise, in their 2021 study titled "Investigating the Efficacy of Using Error Analysis Data to Inform Explicit Teaching in Spelling," conducted in Australia, Daffern & Fleet employed the Triple Word Form Theory as a methodology. The aim was to assess the effectiveness of utilising spelling error analysis data as a means of assessment to enhance learning outcomes in spelling. The study's findings revealed that the intervention group, which underwent teaching informed by error analysis data, did not exhibit a significant difference in learning outcomes compared to the comparison group. This research highlights the complexities of using error analysis data for explicit teaching and spelling improvement, contributing to the ongoing discourse regarding effective assessment methods and instructional strategies in the context of spelling education.

Further, in the 2021 study titled "Implementing Backward Spelling Quiz in Teaching English Vocabulary at the Junior High School" by Habi et al., conducted in Indonesia, a quantitative research approach was employed. The study aimed to explore the impact of using the backward spelling quiz technique on students' vocabulary acquisition. The findings of the research revealed a significant difference in students' vocabulary achievement after being taught through the backward spelling quiz intervention. This intervention led to a significant improvement in students' vocabulary compared to their performance before the intervention. The study contributes to the field of language education,

demonstrating the effectiveness of innovative techniques such as the backward spelling quiz in enhancing students' English vocabulary acquisition at the junior high school level in Indonesia.

Moreover, in the study "ECRIMO, an Application to Train First Graders' Spelling: Effectiveness and Comparison Between Different Designs" conducted by Boggio et al. in 2023, an experimental design methodology was employed to assess the effectiveness of the ECRIMO educational application in enhancing spelling skills among first-grade students. The aim of the study was to investigate the impact of the ECRIMO application compared to traditional paper-based training methods. Surprisingly, the findings revealed no discernible added value of using the tablet-based ECRIMO application. The results demonstrated that there was no additional gain in students' learning when compared to the group that underwent traditional paper-based training. While the specific context of the study is not disclosed, these findings highlight the importance of critically evaluating the effectiveness of educational technology interventions and considering the nuanced outcomes they might yield in comparison to traditional methods.

More so, in their 2018 study titled "Teaching Spelling Through Games," Qamariah & Wahyuni employed a questionnaire-based methodology to explore students' responses to learning spelling through the use of games. The study was conducted in the context of Bungcala. The aim was to understand how students perceive the experience of learning spelling through game-based instruction. The findings indicated that a majority of the students expressed a positive emotional response, reporting feelings of happiness and enjoyment when participating in group-based games. Notably, the study did not involve a specific intervention beyond teaching through spelling games, focusing instead on evaluating students' reactions to this approach. This research contributes to the discussion surrounding the efficacy of gamified teaching methods and underscores the value of considering students' emotional engagement as an aspect of effective pedagogy.

Again, in their 2023 study titled "Improving Contextual Spelling Correction by External Acoustic Attention and Semantic Aware Data Augmentation," conducted by Wang et al., the authors aimed to enhance contextual spelling correction using an innovative approach. Although the specific methodology is not detailed, the study utilised a non-autoregressive (NAR) spelling correction model. The findings revealed that the improved method surpassed the performance of the baseline Automatic Speech Recognition (ASR) and Biasing System by a significant margin of up to 20.3%. Furthermore,

this method exhibited consistent improvements compared to the prior Contextual Spelling Correction (CSC) approach, even when considering different coverage ratios of bias lists. The research contributes to the field of spelling correction and natural language processing, offering insights into the effectiveness of utilising External Acoustic Attention and Semantic Aware Data Augmentation techniques within a NAR spelling correction model to achieve enhanced accuracy and stability in contextual spelling correction.

Similarly, in the study "Intensive and Explicit Derivational Morphology Training in School-Aged Children: An Effective Way to Improve Morphological Awareness, Spelling, and Reading" by Ardanouy et al. (2023), the authors aimed to directly measure the effects of morphological awareness training on school-aged children. The study utilised a pre-post group comparison methodology. The findings indicated that both roots and affixes were spelled more accurately after the intensive and explicit derivational morphology training intervention. Furthermore, the study highlighted the significant role that morphology plays in the development of children's literacy skills, specifically in spelling and reading. The research contributes to the understanding of effective pedagogical methods for enhancing morphological awareness, spelling, and reading abilities in school-aged children, emphasising the importance of explicit derivational morphology training alongside visuo-semantic control training.

By the same token, in the 2023 study titled "Investigating the Effect of Slate Boards on Improving Middle School Students' Spelling of Word Lists" conducted by Lemzaouak and Annasee, the authors aimed to explore the impact of using slate boards on enhancing the spelling skills of middle school students. The study employed a methodology involving control and experimental groups. The findings indicated that regular and structured use of slate boards had a significant and highly efficient effect in improving students' ability to spell newly encountered word lists. The study was conducted in the context of Morocco. Other than that, this research contributes to the field of education by highlighting the value of incorporating slate boards as a pedagogical tool to enhance students' spelling skills, particularly when working with word lists from their textbooks. The findings suggest the potential benefits of hands-on and interactive approaches in spelling instruction.

Correspondingly, in the study "A Digital Game-Based Training Improves Spelling in German Primary School Children: A Randomized Controlled Field Trial" conducted by Holz et al. in 2023, the authors

aimed to assess the effectiveness of a novel digital game-based spelling training designed for independent use at home. The study used a within-list controlled crossover treatment design methodology. The findings revealed significant training effects on both syllable stress awareness and spelling abilities, not only in the trained domain but also in untrained areas. The research was carried out in Germany, focusing on primary school children. This study contributes to the field of education by showcasing the positive impact of utilising digital game-based interventions, specifically the prosody training, to enhance spelling skills and syllable stress awareness in young learners. The results emphasise the potential of engaging and interactive approaches to foster improved literacy outcomes. Having deliberated on the previous studies, the section below expounds on the gap intended to be filled in this study.

3.8.1 Gap

Taking a comparative analytical perspective, the previous studies discussed various interventions for improving spelling skills, whereas the current study concentrates on the implementation of phonemic-orthography for critical literacy development. Aligned with the grade 9 English Language syllabus, this integrated curriculum aims to foster reading and writing skills, with phonemic-orthography targeting the concurrent development of pronunciation and spelling. These sub-skills are accelerated with the intention of gradually transforming these learners into critically literate ESL learners. In contrast to the reviewed studies, this research integrates five theories to establish a robust theoretical foundation. Cultural-Historical Activity Theory (CHAT) delves into cultural and historical factors that may contribute to spelling challenges. Language, Communication, and Teaching (LCT) inform the successful implementation of phonemic-orthography, while Communicative Language Teaching (CLT) provides a framework for incorporating communicative activities into phonemic-orthography. Constructivism outlines the role of grade 9 ESL learners in implementing this intervention, while behaviourism guides the management of its implementation. The integration of these theories revolves around the concept of synergic praxis, emphasising collaboration between the researcher and the learners for transformation, addressing a theoretical gap.

Similarly, while the reviewed studies employed a singular methodology, this research adopted a mixed-method research approach, blending quantitative and qualitative components. This approach allows for interaction and mutual reinforcement between the two components, yielding a more comprehensive

understanding of the outcomes and implications of the phonemic-orthography intervention, addressing a methodological gap. Unlike the reviewed studies, which primarily focused on short-term improvements in spelling skills, this study seeks to explore the potential long-term impact of phonemic-orthography intervention on critical literacy development. This may involve follow-up assessments to determine whether the gains in spelling skills lead to enhanced overall literacy skills over time. Notably, there is a paucity of knowledge in developing spelling skills, particularly in the context of Lesotho, with a lack of studies addressing methods to enhance spelling abilities. This signifies a knowledge gap.

In conclusion, building upon the earlier reviewed studies, this research effectively bridges the identified theoretical, methodological, and knowledge gaps.

3.9 Conclusion

This chapter explored the integration of critical literacy as an outcome within the framework of phonemic-orthography. It also examined potential factors contributing to spelling challenges, the proposed intervention, the phonics-based approach, strategies for implementing the intervention, and an empirical review of studies focused on spelling development. The following chapter will discuss the methodological aspects that guided this study.

CHAPTER 4

METHODOLOGY

4.0 Introduction

The previous chapter covered the foundational theories, literature review pertaining to research questions, and the proposed phonemic-orthography intervention, employing phonic-based approaches. In contrast, this chapter illuminates into the methodology. Methodology, as defined by Tracy (2013) and Creswell (2014), encompasses the devices and procedures for research, spanning from overarching assumptions to the detailed methods of data collection, analysis, and interpretation. It also encompasses aspects such as data generation procedures, validity, and ethical considerations, as highlighted by Biddle & Schafft (2015) and Cohen et al. (2017). Consequently, this chapter elucidates the methodology employed in the current study. It outlines the pertinent research paradigm, research design, participant details, sample selection methods, data collection techniques, and procedures, followed by an overview of the data analysis process. Ethical considerations and measures to ensure trustworthiness are then addressed, leading to a concluding summary. The subsequent section elaborates on the research paradigm.

4.1 Paradigm

The concept of a research paradigm, as defined by Bertram and Christiansen (2014), encapsulates the accepted framework for posing questions, conducting observations, data collection, and interpretation. It should be noted that while this description of a paradigm may have extensive acceptance, it is not universally uniform. Therefore, this study discusses the paradigm with respect to its epistemology, ontology, and axiology. Epistemology deals with the acquisition of knowledge and understanding of how individuals recognise their knowledge, ontology pertains to views concerning the nature of reality, and axiology focuses on the nature of values. This study is grounded in Pragmatist-Critical Realism (PCR), described by Heeks et al. (2019) as a novel research paradigm combining pragmatism and critical realism. PCR is based on socially-constructed experiences of an external, independent reality and aims to provide practical and emancipatory solutions to problems of inequality. In this study, a phonics-based approach incorporating phonemic-orthography was implemented to enhance the spelling and pronunciation skills of grade 9 ESL learners, addressing academic classification issues. PCR

combines pragmatism, critical theory, and realism to offer a comprehensive understanding of the world. Pragmatism emphasises practical experience and problem-solving, critical theory examines power dynamics, and realism emphasises empirical evidence. PCR recognises that knowledge is shaped by social and historical context but also acknowledges an objective reality.

Epistemologically, PCR posits that our knowledge of the world is influenced by our social and historical context while recognising the existence of an objective reality. This paradigm encourages ongoing reflection and engagement with new information. Ontologically, PCR acknowledges multiple levels of reality and their interconnectedness. It recognises the complexity of reality and the influence of social and historical context on our understanding. Axiologically, PCR emphasises ethical values and social justice in scientific research, considering the potential effects of scientific inquiry and technological innovation on individuals and society. Aligned with this perspective, this study employed a mixed-method research (MMR) approach, which will be discussed further in the following section. The choice to utilise this approach aims to inspire researchers to explore and embrace this methodology, addressing skepticism rooted in unfamiliarity and resistance to acknowledging the dynamic nature of the research landscape.

4.2 Research approach

Out of the three research approaches—quantitative, qualitative, and mixed method (Cohen et al., 2017)—the mixed method research (MMR) approach was deemed most suitable for this study. MMR combines both quantitative and qualitative research methods within a single study (Johnson & Onwuegbuzie, 2004). This approach allows for a more comprehensive understanding of complex phenomena, incorporating both numerical data and in-depth insights into people's experiences, attitudes, and perceptions (Creswell & Creswell, 2018). MMR is particularly valuable when the aim is to validate or contextualise quantitative findings (Creswell, 2014). The table below summarises the distinctive aspects that rendered MMR favorable for this study.

Table 3: Mixed method research aspects (Christensen et al. 2014)

Mixed research	
Scientific emphasis	Equal emphasis. Combines hypothesis/theory generation and testing
View of the world	Thought and behavior contain predictable and particularistic/contextual elements
Primary view of reality	Combination of objective, subjective, and intersubjective
Research objectives	Combination of objectives
Research purpose	integrate the general and the particular
Data	All data types are relevant: quantitative and qualitative data are both used in a single study
Results	Attempts to integrate general and particular, and produce "practical theory"
Final report	Mixture of statistics and qualitative data reporting

4.2.1 Mixed method research

Creswell (2014) outlines various types of mixed method research designs, which include convergent parallel, explanatory sequential, exploratory sequential, embedded, and a strategy known as transformative mixed methods. It is important to note that transformative methods "incorporate elements of the convergent parallel, explanatory sequential, or exploratory sequential approaches within a social justice framework to help a marginalised group" (Creswell, 2014, p. 278).

Each approach has its own strengths and weaknesses, and the choice of MMR for this study depended on the research questions, resource availability, and the study's overall objective. In this inquiry, the transformative mixed method approach was employed, incorporating elements of the explanatory sequential design due to its potential to enhance the critical literacy of grade 9 English language learners through the implementation of phonemic-orthography and phonics strategies.

4.2.1.1 Explanatory sequential design

The explanatory sequential design is a research methodology that follows a two-phase approach to data analysis (Dawadi & Giri, 2021). In the initial phase, quantitative data is collected and analysed using statistical methods (Biddle & Schafft, 2015). Subsequently, in the second phase, qualitative data is gathered to provide explanations or delve deeper into the quantitative findings (Creswell, 2014). This design is commonly used when a researcher seeks to test a hypothesis and then seeks to understand the reasons behind the results obtained, including any unexpected discoveries (18 - Mixed Methods, n.d.; Maarouf, 2019; Parvaiz et al., 2016). The diagram below illustrates the explanatory sequential MMR design adopted in this study.

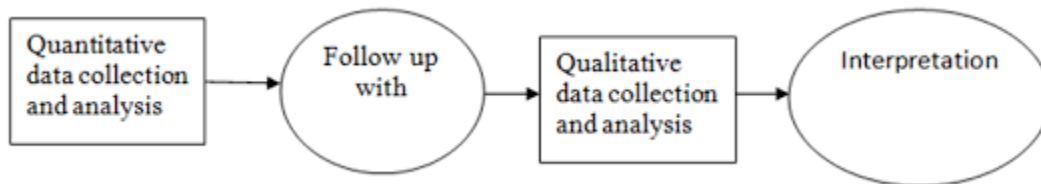


Figure 8: Explanatory sequential design Creswell & Plano Clark (2007, p.76)

In MMR, specific notations are employed to highlight the primary nature of the generated data (Schoonenboom & Johnson, 2017). For instance, QUAN-qual is utilised to signify that quantitative data takes precedence over qualitative data (K. Rakolobe, personal communication, April 21, 2023). Creswell (2014) further elucidates that certain symbols are used to indicate the integration of both datasets. Specifically, "an arrow \rightarrow indicates a sequential form of data collection where one form (e.g., qualitative data) builds or connects with the other (e.g., quantitative data)" (p. 279). Conversely, "double arrows \leftrightarrow indicate that the flow of activities can go both ways" (p. 279). The notion in this study is demonstrated below; formatted in an equation: $QUAN - qual$

The diagram below shows the symbolic-grounded integration of both databases in this study.



Figure 9: QUAN-qual notation

Similarly, the transformative explanatory sequential MMR employed in this study had a transformative nature. As previously mentioned, transformative explanatory sequential mixed methods involve both quantitative and qualitative data collection and analysis techniques to assess the impact of a specific intervention on individuals or groups (Creswell, 2014). In this context, the transformative aspect of this approach aims to bring about positive change in the lives of the research participants, specifically the grade 9 ESL learners at School X. The explanatory component indicates that the research begins with a quantitative phase followed by a qualitative phase to gain a deeper understanding of the results.

This choice proved advantageous as it uncovered both statistical and experiential evidence, providing a comprehensive perspective on the implementation of phonemic-orthography to enhance the critical literacy of grade 9 EL learners. The adoption of MMR enabled the generation, analysis, and integration of both qualitative and quantitative data in a single study. Quantitative methods were used for statistical data analysis, while qualitative methods were employed for descriptions and interpretations. By using both techniques, the study ensured triangulation and enhanced the reliability of the research findings (Biddle & Schafft, 2015). The use of MMR provided the study with the breadth and depth of data necessary for analysis. The systematic combination of methodologies resulted in a more comprehensive understanding of the research questions and hypotheses than would have been possible with each methodology separately (Deterding & Waters, 2021).

The use of this method allowed the researcher to gain a more comprehensive insight into the phonics-based strategies employed for implementing phonemic-orthography and accelerating the progress of grade 9 ESL learners. The goal of combining these two approaches was to leverage the advantages of both methodologies (Falqueto et al., 2020). Consequently, the application of this methodology ensured that the qualitative and quantitative data mutually reinforced and complemented each other. Furthermore, Tedmanson et al. (2012) illustrate that for a study to qualify as a mixed method design, the findings must be integrated to establish convergence for authenticity at the end of the process. This suggests that the use of a mixed method approach positioned the researcher to better understand the intricacies involved in spelling challenges and, therefore, provide a more balanced conclusion about the problem under study. It allowed for intelligent strategising in the implementation of the intervention. Supporting this view, Creswell (2014) argues that a mixed method approach is essential for a researcher who values the flexibility of qualitative research and the structured nature of a quantitative approach. It is anticipated that moving back and forth between qualitative and quantitative methods played a pivotal

role in accelerating the grade 9 ESL learners' pronunciation and spelling skills because the development of learners' pronunciation skills was nested in the implementation of phonemic-orthography.

Having explored the MMR design, the next section discusses the research design used in this study

4.3 Research design

4.3.1 Case study

Similarly, a case study was deemed the most appropriate method for the current study in line with the chosen design. A case study is a research method involving an in-depth analysis of a specific situation or case (Yin, 1983). In this approach, data is generated through various methods like interviews, observation, and document analysis, among others, to gain a profound understanding of the case (Rakotsoane, 2012). The analysis of a case study can inform decision-making, generate new insights, and guide the research (McLeod, 2019).

Case studies allow for a comprehensive exploration of a particular situation, offering rich and detailed insights not easily attainable with other research designs (Leedy & Ormrod, 2018). They provide a real-world context that grounds theoretical concepts and makes them more tangible and applicable (Cohen et al., 2017). Additionally, case studies prove highly valuable for investigating complex or multifaceted issues that cannot be easily understood through simple experiments or surveys, as highlighted by Maree (2016). Consequently, case studies are versatile and can reveal a wealth of information.

Furthermore, Leedy & Ormrod (2018) extol the virtues of using a case study to examine how a person or programme changes over time, often as a result of specific events or interventions. In this case, the progressive examination of the grade 9 ESL learners at School X after implementing phonics instruction aligns well with this paradigm, as argued by Heeks et al. (2018), who propose that PCR favours an abductive approach. According to Heeks et al. (2018), this approach follows an abductive reasoning process, which iteratively combines inductive and deductive reasoning between data and theory.

Given that this study had a transformative nature, a case study was considered crucial to support the core method used in this study, which is action research. The details of this method are outlined in the following section

4.3.2 Action research

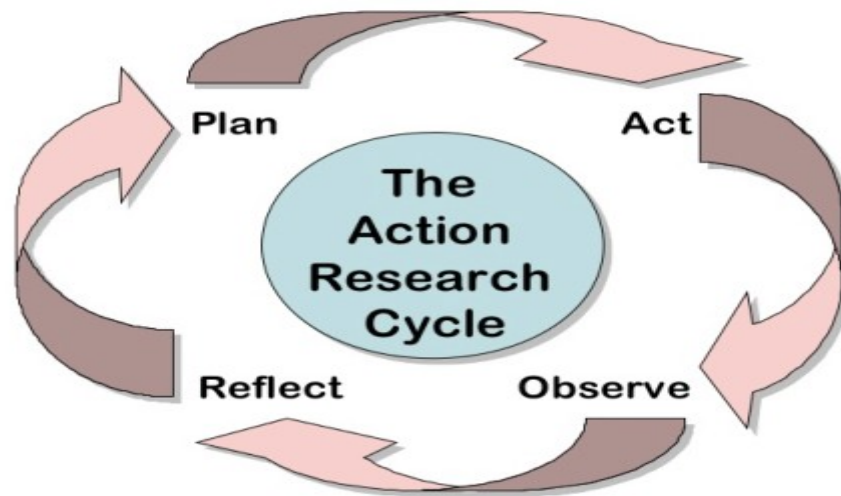


Figure 10: Action Research Cycle (Nelson, 2014)

Action research is a collaborative research methodology involving researchers and practitioners aimed at solving problems or enhancing practices within a specific context (Carr & Kemmis, 1986). It follows a cyclical process of planning, acting, observing, and reflecting, with the aim of implementing practical and positive changes based on research insights (Ferrance, 2009; Griffiths, 2013). In this study, participatory action research (PAR) was employed. PAR, as described by McNicoll (1999), focuses on research conducted to further non-oppressive actions, reduce exploitation, and facilitate social change within a particular community. It emphasises equal partnership between the researcher and participants (M. Makumane, personal communication, February 15, 2023), reflecting elements of emancipatory research advocated by Paulo Freire (T. Mataka, personal communication, March 24, 2023). Freire's concept that solutions should originate from the oppressed themselves underscores the active involvement of grade 9 ESL learners, as suggested by Makumane.

PAR, at its core, is a collective, self-reflective inquiry (de Vos et al., 2012) undertaken by the researcher and grade 9 learners. It seeks to understand and improve pronunciation and spelling skills through practice, with a reflective process closely linked to action. This process is influenced by historical, cultural, and local contexts and embedded in social relationships (Abildgaard et al., 2016). Reflective practice enables the researcher and learners to assess their own methods and develop new strategies to enhance teaching and learning.

Additionally, PAR involves collaboration between researchers and participants to address social challenges (M. Raselimo, personal communication, April 1, 2022), empowering individuals and communities to effect change (Rakotsoane, 2012). Its goal is to generate knowledge beneficial to both researchers and participants, developing strategies to address social inequalities and promote social justice (Bergold & Thomas, 2012). In the context of Lesotho's academic classification, where learners are categorised by academic abilities, PAR was deemed suitable to address social inequalities like academic classification and promote social justice, ensuring accessible epistemic practices for all learners.

However, PAR can be time-consuming and resource-intensive (de Vos et al., 2012). In response, I prioritised this research by reducing participation in some recreational activities. Resources were partly provided by my supervisor and fellow students. Furthermore, power imbalances between participants can threaten authentic collaboration (Terre Blanche et al., 2006). To mitigate this, I engaged grade 9 ESL learners from initial conceptualisation to final phonemic-orthography implementation, fostering a democratic and collaborative learning environment. This approach, in line with Martin and Rose (2005), created a democratic classroom where knowledge was jointly built, contributing to literacy development through improved spelling skills. Despite its challenges, PAR remains a valuable approach prioritising community engagement and empowerment.

That being said, the figure below demonstrates the action research phases that were employed in this study.

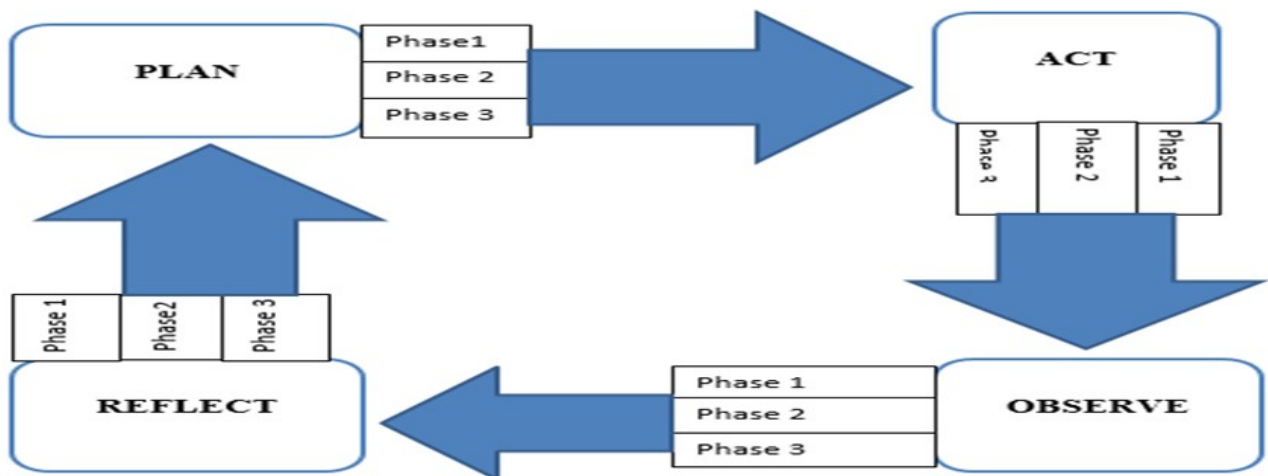


Figure 11: Action research phases adapted from Makumane (2018)

The above figure shows the three action research phases that were employed in this study; the diagnostic phase (phase 1), the transformative phase (phase 2) and the reflective phase (phase 3) respectively.

4.3.2.1 Diagnostic Phase

The diagnostic phase involves identifying and analysing a problem (M. Makumane, personal communication, February 15, 2023). This step is crucial for problem-solving as it helps pinpoint the root cause (Moons, 1996). Various data collection techniques, including questionnaires and pre-tests, were employed during this phase. Its goal is to gather sufficient information for a comprehensive understanding of the problem and to develop potential solutions. This initial phase examined the preconditions for spelling challenges in a Grade 9 EL class. While the transformative phase was initially planned to follow immediately, an unexpected intermediary phase emerged.

4.3.2.2 Intermediary Phase

The intermediary phase, occurring between the main phases (M. Makumane, personal communication, March 8, 2023), served as a prototyping stage between the diagnostic and transformative phases. It was instrumental in ensuring the success of phonemic-orthography implementation by identifying and addressing potential spelling issues before transitioning from the diagnostic to the transformative phases.

4.3.2.3 Transformative Phase

The transformative phase is characterised by significant change (Bedford, 2022). In this study, it entailed a shift in mindset, behaviour, and circumstances resulting in substantial improvements in how Grade 9 EL learners spelled English words. This phase was both exciting and challenging, relying on adaptability and resilience. It focused on implementing phonics as a solution to address academic classification by enhancing pronunciation and spelling skills. While spelling is a primary variable, pronunciation's importance is also acknowledged.

4.3.2.4 Reflective Phase

The final phase involved reflective practice, a period for contemplating, analysing, and evaluating experiences (Hamilton & Corbett-Whittier, 2013). Reflection was instrumental in making sense of Grade 9 ESL learners' performance post-phonemic-orthography implementation. It facilitated learning and growth for both the researcher and participants. The researcher encouraged learners to reflect on lessons, incorporating epistemic and social practices. This phase helped assess whether phonics implementation had transformed the initially diagnosed problem. The below table demonstrates how the researcher answered each research question through action research stages and data generation instruments.

Table 4: Research questions by action research cycle and data generation tools adapted from Makumane (2018)

Research questions	Action research stages	Data generation tools
What are the preconditions for spelling challenges in a Grade 9 ESL classroom?	Observe, plan	Questionnaires, tests, document analysis, reflective activity, reflective journal
How should phonics-based strategies be implemented to accelerate critical literacy while redressing academic classification of grade 9 ESL learners?	Plan, act, observe, reflect	Tests, observation, reflective journal
Why do learners behave the way they do after implementation of phonemic-orthography?	Plan, act, observe, reflect	Focus group

4.4 Population

The population refers to the group of individuals the researcher intends to study (Casteel & Bridier, n.d.). This group possesses specific characteristics of interest to the researcher. In this inquiry, the target population was all-girls high schools in Maseru. This choice was driven by the observed decline in academic performance in all-girls schools, particularly related to literacy skills.

4.5 Sample

A sample is a subset of the population under study (de Vos et al., 2012). Sampling allows for cost-effective research compared to studying the entire population (Casteel & Bridier, n.d.). It is also a practical and manageable approach (Sarantakos, 2000; de Vos et al., 2012). School X was selected out of the three all-girls high schools in Maseru for further study, and details about its selection and participants are provided below.

4.5.1 Sampling Technique and Sample Size

Sampling techniques are methods used to select a representative subset of a population for research purposes (Bertram & Christiansen, 2014). Random sampling involves selecting participants without bias or predetermined patterns and aims to ensure representativeness (Unrau et al., 2007). Non-random sampling methods, such as convenience sampling, do not involve randomisation (Rakotsoane, 2012).

The choice of sampling technique depends on factors like the population's nature, available resources, and research objectives (Rubin & Babbie, 2005). In this study, school X was selected using convenience sampling because of its proximity to the researcher, allowing easy access and minimal financial constraints. This proximity facilitated flexibility in moving between the campus and the research site as needed. Below is a map that demonstrates this close proximity in kilometres (km).



Figure 12: The distance between the campus and the research site

Furthermore, among the four grades available (grade 8, grade 9, grade 10, and grade 11), the grade 9 cohort was purposively selected due to its unique characteristics. Past experiences have shown a significant decline in academic performance among learners following the implementation of the integrated curriculum in Lesotho's primary schools. This decline is often attributed to a lack of teacher

training on the new curriculum, which may lead to teacher discouragement and demotivation in effectively educating learners who struggle to grasp the curriculum. Such a situation can be viewed as epistemic violence by the state, disrupting the teaching and learning process and adversely affecting the learners academically. Moreover, when these learners progress to grade 8, they must adapt to a new school environment and more advanced content, suggesting that grade 8 learners are still in the process of developing literacy skills. Consequently, grade 8 learners were excluded as potential participants in this study.

Conversely, grade 9 learners were considered ideal candidates for the study because they had one year of experience bridging their primary education and their current level of education. It was expected that this group of learners would have advanced literacy skills and greater proficiency in English compared to their grade 8 counterparts. In addition, school X comprised five grade 9 classes: grade 9 A, grade 9 B, grade 9 C, grade 9 D, and grade 9 E. From this pool of classes, the researcher employed a simple random sampling method to select one class. On one hand, the participants in this study included five EL teachers who were purposively selected. Out of the seven EL teachers in the school, these five taught in the five grade 9 classrooms. On the other hand, despite all learners in a particular grade 9 classroom undergoing the intervention, representatives from these classrooms were chosen to participate in a focus group. These participants were selected purposively, including those who performed exceptionally well and those who showed significant improvement despite previous difficulties. Subsequently, the sample size was further refined using a systematic sampling technique. This combined use of random and non-random sampling techniques aligns with the research approach adopted in this study, known as the MMR approach. The following section discusses the specific criteria and methods used for selecting these participants.

4.5.2 Sampling procedure

To emphasise, this study employed a mixed method research approach, encompassing both random and non-random sampling techniques for participant selection. The study focused on English language teachers and grade 9 EL learners. For the selection of a specific grade 9 class, a simple random sampling method was utilised, ensuring an equal chance for every member of the population to be chosen (Bertram & Christiansen, 2014). The process involved determining a sample size of one class, assigning each class a number (from one to five, representing grade 9A to grade 9E), and randomly

drawing one number from a container to select the corresponding grade. In the case of sampling for a focus group, systematic random sampling was applied. This technique entails dividing the population into equal-sized groups or clusters and then randomly selecting samples from each group (Terre Blanche et al., 2006). The focus group consisted of learners who excelled and those who exhibited improvement despite initially lower scores, specifically, learners who scored above the 50% benchmark in both the post-test and retest. The sample size of 32 was determined in accordance with the sampling guidelines outlined by Stoker (1985), which were adapted for this study.

Table 5: Guidelines for sampling (Stoker, 1985)

Population	Percentage suggested	No of respondents
20	100%	20
30	80%	24
50	64%	32
100	45%	45
200	32%	64
500	20%	100
1000	14%	140
10 000	4,5%	450
100 000	2%	2 000
200 000	1%	2 000

In sequence, I calculated the sampling interval, which, as per Rakotsoane (2012), is determined by dividing the total number of individuals by the sample size, resulting in a value of 1.40625. This value dictated the frequency at which individuals were selected from their respective groups, which was once. Following this, I randomly selected a starting point from a predefined list and recorded the participants' names. I then selected every second individual based on the sampling interval, effectively skipping only

one learner from the list, creating a systematic sample, as described by Rai (2018). Furthermore, school X was chosen through convenience sampling, which involves selecting subjects for their ease of access (Andrade, 2021). Similarly, the sample frame, comprising a specific grade 9 class, the focus group participants, and the EL teachers, was selected purposefully. Purposive sampling entails selecting subjects based on specific criteria to gain a deeper understanding of the subject matter (Khoza, 2016; Makumane & Fru, 2021; Matee et al., 2022).

Additionally, expert sampling and critical case sampling techniques were also considered. Expert sampling involves selecting subjects regarded as experts in the subject matter (Etikan & Bala, 2017). In this context, the five EL teachers were chosen for their expertise in the English language subject. Similarly, the critical case sampling was employed to select the grade 9 EL learners, as per Patton (1990). This method involves selecting subjects who are considered critical cases, capable of providing essential insights into the subject matter. These participants share attributes such as a lack of mediation tools and academic classification

4.6 Time of data generation

I conducted a pilot study as the initial step in my research, which proved invaluable in identifying and addressing issues with my data collection tools - an observation tool and a set of focus group questions. This pilot study allowed me to refine these instruments to ensure the utmost quality and accuracy of the final data. Additionally, it helped me assess the feasibility of my study's hypothesis, saving valuable time before committing to a full-scale investigation. Furthermore, the pilot study offered my research assistants an opportunity to address ethical concerns related to administering a questionnaire to learners, particularly regarding the disclosure of their family's socio-economic status and the need for parental consent. Since some learners resided in the school dormitory, a trusted colleague advised obtaining parental consent. To ensure ethical compliance and adhere to relevant regulations and guidelines, I requested parental consent at intervals, taking advantage of occasions when the parents of dormitory residents were present. This approach ensured the study's highest ethical standards.

In summary, the pilot study played a pivotal role in ensuring the quality, validity, and reliability of the data generated during the six-month data collection process, which consisted of three phases: the first

phase lasting three months, the second phase lasting two and a half months, and the final phase completing within one week.

4.7 Research site

The study was conducted at School X due to its accessibility to the researcher. Over the past five years, the school has seen a decline in its pass rate at grade 11 level, which is closely associated with the problem of illiteracy. The researcher discovered that this problem affects other lower grades as well. School X is an all-girls institution categorised as resource-deficient among schools in the country. Additionally, the school employs an academic classification system, reinforcing the study's basis in the legitimate code theory. This theory underscores the significance of offering accessible pedagogical activities to all learners, regardless of their unequal access to mediation tools like textbooks.

Table 6: Data generation matrix

	Document	Test	Questionnaire	Focus group	Reflective activity	Observation	Reflective journal
Participants	analysis		X		X	X	
EL teachers			X		X	X	
EL learners		X	X	X	X		
The researcher	X					X	X

The distinction here is that data generation methods refer to how data is acquired, like interviews and observations, whereas data generation tools encompass the technologies used for data generation, such as forms, cameras, and similar devices (M. Ayanwale, personal communication, May 15, 2023; R. Lebona, personal communication, May 4, 2023). In essence, data generation methods describe the approach to obtaining information, while data generation tools are the tangible instruments that facilitate the data acquisition process.

4.8 Data generation methods

4.8.1 Document analysis

In this study, document analysis was chosen as the method for data generation due to its capacity to encompass both interpretive and descriptive aspects, allowing for the incorporation of statistical data (Lindgren et al., 2020), making it suitable for this research. The tools utilised in this study included the grade 9 EL syllabus, the grade 9 ESL learners' scripts, the Curriculum and Assessment Policy (2009), the Lesotho Language Policy in education (2019), and the Lesotho Education Act 2010. Originally, the researcher had planned to review the English Language teachers' lesson plans at school X, but these plans were inaccessible for analysis. As a result, these documents were examined with the aim of comprehending the prevailing spelling challenges encountered by grade 9 ESL students. To address the potential lack of specific contextual information in document analysis, tests were employed to supplement the analysis process.

4.8.2 Test

Tests are a valuable tool for assessing learners' progress (Barton & Ryan, 2014). In this study, the pre-test identified critical areas of concern, while post-tests quantitatively demonstrated development following the implementation of phonics instruction. In addition to written tests (see appendix 1), I assessed grade 9 ESL learners' pronunciation progress through oral tests, employing test-retest for both pre-tests and post-tests. Tests offer several benefits, as asserted by Roy et al. (2023), who emphasise their objectivity. In this context, tests allowed for the quantitative measurement of grade 9 ESL learners' spelling skills in a standardised and objective manner. Moreover, tests, as suggested by Khoa et al. (2023), provide insight into current proficiency levels, which was evident in this study. Similarly, according to Qomariya et al. (2023), tests facilitate comparability, enabling the creation of a consistent benchmark for performance analysis before and after implementing the phonemic-orthography approach. Additionally, tests efficiently collect data from a large group of participants, making them suitable for classroom settings with multiple students. Furthermore, as noted by Kasnei et al. (2023), data collected from tests is conducive to statistical analysis, allowing for the identification of trends, patterns, and correlations in spelling skills within the context of the implemented approach. Finally, tests are suitable for baseline assessment, as the pre-test in this study served as a baseline, offering valuable insights into grade 9 ESL learners' initial spelling proficiency, which was then compared with post-test results to evaluate the effectiveness of the phonemic-orthography approach, leading to the rejection of h_0 .

However, as Behl (2022) points out, tests may have limitations due to their narrow scope, primarily measuring specific skills or attributes. For spelling skills, they may not fully capture the broader context of critical literacy development or the influence of various factors on language learning. Similarly, Mateo et al. (2022) argue that tests can introduce skill-based bias, where some learners may perform better due to test-taking skills rather than true improvement in spelling skills, potentially leading to misleading results. Additionally, tests may have limited depth, as they often do not allow students to explain their thought processes or provide qualitative insights into their learning experiences, missing potential areas of improvement. Furthermore, as articulated by Alamer (2022), tests may raise concerns about construct validity, as they might not fully measure the impact of the phonemic-orthography approach on critical literacy development. In this study, tests, particularly pre-tests, were found to be culturally biased, as they did not accurately measure the literacy skills of grade 9 ESL learners from diverse cultural backgrounds. Given the nature of the first research question, this cultural aspect was inevitable, leading to the administration of questionnaires to the learners.

4.8.3 Questionnaire

A questionnaire is a research tool consisting of a set of questions used to collect data from individuals (Questionnaire Design | Methods, Question Types & Examples, n.d.). According to Fareed et al. (2016), questionnaires are versatile tools for gathering data on opinions, attitudes, preferences, behaviour, and other relevant information from study participants. In this study, a structured questionnaire was utilised (see appendix 2). As explained by Bertram and Christiansen (2014), this type of questionnaire involves questions where respondents must choose answers from predefined options (73). Essentially, a structured questionnaire is a survey instrument with a predetermined series of questions, each accompanied by specific response choices (Rathi & Ronald, 2022). Participants encounter a consistent format and a predefined range of response options for each question (Popa et al., 2022). The aim is to collect quantifiable data that can be easily analysed and compared among respondents (Ghaddar et al., 2022). Response options can include multiple-choice selections, Likert scale ratings, yes/no answers, and more (M. Ayanwale, personal communication, December 12, 2023). According to Popa et al. (2022), data collected through structured questionnaires are typically quantitative, enabling statistical analysis and numerical representation.

Structured questionnaires offer advantages due to their uniformity. Kumari et al. (2020) assert that structured questionnaires ensure that all participants encounter the same questions and response options, reducing variations and enhancing the reliability of collected data. Similarly, Nguyen et al. (2019) emphasise their efficiency in large-scale data collection, as the standardised format expedites response gathering and reduces data entry and analysis time. Despite these advantages, structured questionnaires have limitations. Seyis (2020) notes that they may provide shallow exploration since they often miss the in-depth insights attainable through open-ended questions or qualitative research methods. In my view, participants' input is restricted to predefined choices, potentially failing to capture the full complexity of their perspectives and experiences. Additionally, Ghaddar et al. (2022) mention that predetermined response options can lead to inflexibility, making it challenging for grade 9 ESL learners and teachers to express sentiments and viewpoints beyond the provided selections. In recognition of this, the structured questionnaire allowed me to explore the cultural background of grade 9 ESL learners and facilitated the categorisation of generated data into quantitative categories, simplifying analysis through descriptive statistics.

However, Bertram and Christiansen (2014) highlight that "respondents may not understand the questions asked" (p. 79). To address this limitation, I personally administered the questionnaires to both ESL teachers and ESL learners, ensuring that I could provide clarification if needed and cater to their individual needs. Moreover, the predefined options in the structured questionnaire limited grade 9 ESL learners and ESL teachers from elaborating on the included items. For this reason, a focus group was considered complementary.

4.8.4 Focus group

A focus group is a type of interview involving a small group of participants' representative of a particular interest group in research (Rubin & Rubin, 2012). Similarly, according to Nguyen et al. (2021), focus groups are a qualitative research approach where a small group of participants engages in structured discussions led by a moderator on a specific subject or concern. In these discussions, participants are invited to share their opinions, thoughts, and experiences (Khoza, 2016). This method offers several benefits for gaining comprehensive insights and understanding participants' viewpoints (Nguyen et al., 2021). Furthermore, as per T. Mataka (personal communication, March 14, 2023), focus groups allow participants to express their ideas, viewpoints, and experiences using their own words, providing nuanced and comprehensive insights that structured questionnaires may miss. In addition to providing diverse perspectives, Williams et al. (2020) add that the group environment fosters active

engagement among participants, enabling them to build upon each other's ideas and contribute varied viewpoints, facilitating a deeper examination of the subject (Hunter et al., 2019). In my experience, this empowered the grade 9 ESL learners as they were able to share their opinions, which were attentively heard by both their fellow group members and me. However, despite the advantages of focus groups, there are potential disadvantages, as highlighted by Adler (2019), who notes that participants with stronger voices may dominate the conversation, potentially marginalising alternative viewpoints and hindering the free flow of ideas, particularly for less assertive participants (Koren, 2023).

In the study's procedure, as the interviews were structured, I began by piloting the tool (see appendix 3). Subsequently, I obtained parental consent (refer to appendix 4) and arranged a conducive environment for the discussion, ensuring that the learners understood the purpose of our session. Predetermined questions were asked, and participants provided independent answers. Additional information was shared based on responses from other participants. Conducting a focus group allowed me to gather in-depth data from the learners. With their permission, I recorded the discussion and later transcribed the audio. One challenge encountered in this study was the ESL teachers' reluctance to participate in an interview. Due to the explanatory sequential MMR approach, I had to complement their quantitative data with qualitative data. Consequently, I designed a reflective activity tool for the teachers, using the same questions intended for the interview.

4.8.5 Reflective activity

Reflective activity involves deep thinking about one's experiences and their relevance to personal and professional growth (Helyer, 2015). Similarly, Helyer and Kay (2015) describe it as a process where individuals or groups contemplate, analyse, and assess their thoughts, experiences, actions, or learning outcomes. This introspective consideration aims to gain deeper understanding, insight, and personal growth (Şener & Mede, 2023). Grade 9 ESL learners may use reflective activities to assess their learning, approach challenges, and gain insights, while ESL teachers can reflect on their performance, seek improvement, and acknowledge strengths and weaknesses. Such activities promote critical thinking, self-awareness, and informed decision-making.

In this study, ESL teachers used guided reflection prompts as a common reflective activity (see appendix 5). These prompts encouraged teachers to step back, view their experiences from various angles, and draw meaningful conclusions informing future actions. Specifically, this method fostered introspection and self-reflection among teachers, particularly regarding their contribution to grade 9

ESL learners' spelling challenges and whether they took measures to address them. Reflective activities offer various benefits for personal, professional, and educational development. Engaging in these activities helps individuals learn from both positive and negative experiences, enabling informed choices and behavioural adaptation (Gathu, 2022). Reflecting on mistakes or failures allows individuals to identify root causes and prevent repeating them (Gorski and Dalton, 2020). However, it is worth noting that reflective activities can be time-consuming, requiring dedicated time for introspection and analysis (Lin, 2019). Moreover, they are inherently subjective, influenced by personal biases, perceptions, and interpretations (Gathu, 2022). This subjectivity may impact the accuracy of insights gained.

To address the limitations of reflective activities, observations were considered as a suitable method to complement and provide a more objective perspective in this study.

4.8.6 Observation

This method involves the researcher visiting the research site to directly observe activities (Bertram & Christiansen, 2014). In this study, covert, unstructured, and structured participant observations were utilised.

4.8.6.1 Covert observation

Covert observations, as described by da Costa (2020), involve data collection without the participants' awareness. In other words, individuals being observed remain unaware of the study, as highlighted by Evans et al. (2022). Lugosi (2008) appreciates this approach for minimising behavioural alterations due to observer presence. However, covert observations raise ethical issues, especially concerning privacy and informed consent, as noted by Brancati (2018). Consequently, participant observation was considered a more appropriate method to address these ethical concerns while still gathering valuable insights.

4.8.6.2 Participant (unstructured) observation

Participant observation is a qualitative research method where the observer actively immerses themselves in the environment under study (Brancati, 2023). In this approach, researchers not only observe but also interact with the subjects, gaining insights into their behaviours, interactions, and experiences within the context (Wilson, 2023). This method is valuable because, as Morgan (2022) explains, the observer becomes a part of the group's activities and interactions, including conversations,

events, and daily routines. Nair (2022) further argues that participants tend to behave more naturally and authentically when the observer is integrated into the environment, leading to more genuine observations. However, participant observation has drawbacks, such as subjectivity and bias. Miceli and Posada (2022) note that the researcher's involvement in activities can result in biased interpretations and subjective perspectives, affecting the objectivity of findings. Ethical challenges, including balancing the roles of observer and participant, respecting privacy, and obtaining informed consent, may also arise (Lehtokunnas et al., 2022). To address the objectivity issue highlighted by Miceli and Posada (2022), structured observation was adopted.

4.8.6.3 Structured observation

Structured observation is a systematic data collection method in which researchers observe and record specific behaviours, events, or interactions based on predefined criteria (Martinko & Gardner, 2019). Unlike participant observation, structured observation concentrates on capturing targeted behaviours or variables in a controlled and standardised manner (Martinko & Gardner, 2019). This method often leans towards a quantitative focus, aiming to collect data suitable for statistical analysis, which aligns with the explanatory sequential MMR approach adopted in this study (Mohajan, 2020). Moreover, structured observation's standardised nature enhances data collection reliability, ensuring that multiple observers using the same criteria obtain similar results (Sharma, 2022). In this study, a checklist (see appendix 6) was used by four different teachers at school X, ensuring consistency in results due to the use of the same checklist. However, structured observation's focus on predefined behaviours or events may limit understanding of the broader context in which these behaviours occur. Additionally, the rigidity of predefined criteria may lead to the omission of behaviours not explicitly outlined, potentially resulting in incomplete data collection.

In this study, a combination of structured and unstructured observations was employed. For structured observations, an observation tool was designed and used by other teachers while observing the phonemic-orthography implementation. The tool featured predetermined categories presented as a checklist for the observers to focus on. In contrast, unstructured observations involved observing actions, behaviours, attitudes, and interactions of teachers and learners at school X without predetermined items. This approach provided insights into the broader school culture and revealed incongruities between participants' statements and actions. Data from covert and participant (unstructured) observations were documented in a reflective journal.

4.8.7 Reflective journal

A reflective journal is a form of personal writing allowing individuals to contemplate their experiences, thoughts, and emotions (Asmara, 2016). It serves as a valuable tool for professional development (M. Makumane, personal communication, February 1, 2023; T. Mataka, personal communication, May 15, 2023). Kessler (2023) defines it as a written record where individuals document their thoughts, experiences, observations, and reflections over time, frequently employed as a data collection method, especially in education. Reflective journals provide qualitative data by capturing individuals' thoughts and reactions to events or experiences in an open and expressive format (Alt et al., 2022). Moreover, reflective journals lack a strict structure, granting individuals the freedom to write openly (Kessler, 2023). Additionally, they offer the advantage of longitudinal tracking, enabling researchers to monitor the evolution of participants' thoughts and experiences over time, facilitating the observation of changes, patterns, and development (T. Mataka, personal communication, February 18, 2023). In this study, I recorded observations related to events in school X, interactions with teachers (see appendix 7), interactions with learners, and my own practices. It is important to note that the researcher herself played a crucial role as the primary data generation tool, providing clarifications and solutions to overcome limitations of other tools. These tools were used to triangulate data. Now, let's delve into the implemented intervention, phonemic-orthography.

4.9 Implementing the intervention

As reiterated earlier, an intervention is a purposeful method used to address a specific problem (Morse et al., 2019). In this research, the decision to implement an intervention was driven by the concepts of critical literacy and the fourth industrial revolution, as discussed in the first chapter. The intervention's significance lies in its aim to assist grade 9 ESL learners struggling with spelling, particularly in the context of the fourth industrial revolution era. During this era, rapid technological advancement underscores the need for proficient communication skills, including accurate spelling, as noted by M. Makumane (personal communication, March 20, 2023). Furthermore, Xu et al. (2018) emphasise that the fourth industrial revolution era emphasises global interconnectedness. I believe that accurate spelling, as highlighted by Makumane, is crucial for effective communication with individuals from diverse linguistic backgrounds, a point also stressed by Xu et al. (2018). Therefore, introducing interventions for ESL learners facing spelling difficulties becomes imperative not only for improving their language skills but also for fostering critical literacy. Critical literacy, as discussed previously,

extends beyond basic reading and writing; it involves analysing, questioning, and interpreting texts to promote a deeper understanding of the world, a central theme in this study.

In my perspective, addressing spelling challenges empowers ESL learners to master their language skills, nurturing critical agency as they actively strive to enhance their communicative proficiency. Among various pragmatic interventions, the phonemic-orthography approach emerged as suitable, as detailed in the following section.

4.9.1 Phonemic-orthography implementation

As explained in Chapter 3, the intervention employed in this study was phonemic-orthography. To implement this intervention effectively, the grade 9 ESL learners and I commenced with read-aloud activities. These activities were crucial for developing phonemic awareness, defined by Anjani (2018) as the ability to identify and manipulate individual phonemes in spoken words. Pronunciation practice within the read-aloud strategy ensured accurate sound identification, laying the foundation for understanding the phonemic-orthographic relationship. I also introduced mnemonics initially, although Mataka (personal communication, February 21, 2023) extolled their effectiveness, I observed they were confusing for our learners. Recognising the need for adaptability in teaching methods, I decided to pivot and instead introduced syllable division.

Syllable division proved powerful for breaking complex words into manageable units, enhancing spelling skills. I taught the "chin method," wherein learners gently rested their chin on their hand while pronouncing words to emphasise syllable breaks. This technique provided demonstrative and auditory cues for syllable counting, promoting phonemic awareness and decoding skills. Additionally, we incorporated puzzles as a group activity for syllable division, making learning engaging, interactive, and enjoyable. Furthermore, dictionary training was implemented to encourage independent learning and resource utilisation. Learners without dictionaries were encouraged to borrow from the library, which had 282 dictionaries available. This practice had a positive impact on both pronunciation and spelling skills, reinforcing the importance of accurate spelling and the phonemic-orthographic connection.

To address learners' confusion with "strange letters" in dictionaries, I introduced them to the International Phonetic Alphabet (IPA). Teaching IPA enhanced their phonetic knowledge and bridged the gap between phonemes and their graphical representations, reinforcing the phonemic-orthographic relationship. Throughout this intervention, the emphasis on the phonemic-orthographic connection played a pivotal role in helping grade 9 ESL learners understand the relationship between spoken

sounds and written symbols, enabling accurate spelling and word decoding. Adapting teaching methods and responding to learners' needs demonstrated an effective and thoughtful pedagogical approach. With the implementation of phonemic-orthography discussed, the next section explores data analysis.

4.10 Data analysis

Separate analysis of quantitative and qualitative databases was employed, following an explanatory sequential approach. Creswell (2014) outlines this approach, wherein the researcher first reports the quantitative results and then provides qualitative findings that explain the quantitative data. This study followed this three-phase procedure, beginning with reporting the quantitative results for planning the qualitative follow-up (Cohen et al., 2017). The second phase involved reporting qualitative findings (Mereba & Mekonnen, 2022), while the final phase explained how the qualitative findings contributed to understanding the quantitative results (Nel & Krog, 2021). This process included the use of descriptive statistics, thematic analysis, and inferential statistics to test the hypothesis.

4.10.1 Descriptive statistics

Descriptive statistics involve numerical measures to describe data (Ngussa & Centre, 2014). It encompasses methods for summarising, organising, and presenting data clearly, without drawing conclusions beyond the observed data (Fouad Ali et al., 2019). These measures include central tendency indicators (mean, median, mode) and measures of variability (range, variance, standard deviation) to provide insights into data's overall characteristics, patterns, and distribution (Ngussa & Centre, 2014). In this study, mean was calculated, representing the average of all data points (Levine, 2022). Measures of dispersion such as range, variance, and standard deviation were considered. Range indicates the difference between maximum and minimum values (Fouad Ali et al., 2022), while variance quantifies data spread as the average of squared differences from the mean (Mohamad, 2022). Standard deviation, the square root of variance, measures the average deviation from the mean. Percentages were also calculated to represent portions of a whole as ratios out of 100 (M. Ayanwale, personal communication, January 14, 2022). Microsoft Excel 2016 (version 16.0) and Strata17 were used for these calculations, presenting the dataset characteristics accessibly. With the descriptive statistics discussed, the following section elaborates on inferential statistics.

4.10.2 Inferential statistics

Inferential statistics is a branch of statistics that uses sample data to draw conclusions about a larger population (Asriral, 2022). These techniques allow researchers to make predictions, test hypotheses, and generalise findings based on observed data. It offers advantages in terms of hypothesis testing, helping validate or refine initial ideas, thus enhancing the credibility of conclusions (Shamout et al., 2022).

In this study, Analysis of Covariance (ANCOVA) was performed using Strata software in Statistical Package for the Social Sciences (SPSS) to ensure representative sampling and control for potential confounding variables (Wright, 2006). Strata software allows for ANCOVA analyses while accounting for covariate effects within different strata (Ye et al., 2023). The data preparation included organising the dependent variable, independent variable, and covariates. Strata were created based on a categorical variable, followed by separate ANCOVA analyses for each stratum, considering the covariates' effects on spelling skills and academic performance. ANCOVA results are typically assessed using the f-ratio, which quantifies differences between and within groups (Rouder et al., 2023). It is compared to a critical value from an F-distribution to determine statistical significance (van den Bergh et al., 2020). Alternatively, the p-value indicates the probability of obtaining observed results if the null hypothesis is true (M. Ayanwale, personal communication, December 10, 2021). In this study, the t-value and critical value were used alternatively. If the t-value exceeded the critical value, the null hypothesis was rejected in favor of the alternative hypothesis (h_a), indicating significant differences among group means. The predetermined significance level (α) was 0.05 (95%), chosen to balance Type I and Type II error risks. Having discussed inferential statistics, the following section delves into thematic analysis.

4.10.3 Thematic Analysis

Thematic analysis, as described by Lochmiller (n.d.), is a qualitative research method that seeks to identify, analyse, and report patterns within qualitative data. It is widely used for exploring and understanding the underlying meanings in various forms of data, such as text, visuals, or audio. Braun and Clarke (2012) outline the key phases of thematic analysis, including familiarisation with data, creating codes, identifying themes, studying themes, defining and labelling themes, and preparing the final report.

During the familiarisation phase, researchers immerse themselves in the data by reading, viewing, or listening to it multiple times to gain a comprehensive understanding of its content (Coker, 2021). In the initial coding stage, specific phrases, sentences, or data segments related to the research question are

identified and coded, with each code representing a distinct concept or idea (Scharp & Sanders, 2019). The next step involves generating themes by grouping related codes together to identify broader patterns of meaning within the data (Coker, 2021). Themes capture the essence of what is expressed in the data (Kiger & Varpio, 2020). Researchers review and refine these themes by comparing them to the data and codes, making necessary adjustments to accurately represent the data (Braun and Clarke, 2012). Once themes are defined and named, researchers provide clear definitions for each theme and assign meaningful names that encapsulate their content (Scharp and Sanders, 2019). Subsequently, researchers write a narrative that describes each theme, using data examples to support their findings. This narrative helps explain the significance of each theme in relation to the research question (Cohen et al., 2018).

To ensure rigor in the research process, thematic analysis often involves multiple researchers for validation, enhancing inter-coder reliability (Cohen et al., 2018). In this study, collaboration with a student from the same program but a different cohort was employed for validation. The data from the interviews in this study were transcribed using both automated tools like Amberscript and soni.ai, as well as manual transcription to ensure data authenticity. ATLAS.ti was employed for data analysis. Having covered data analysis, the next section discusses validity.

4.11 Validity

Validity in research signifies the accuracy and truthfulness of inferences drawn from study results (Christiansen et al., 2014; A. Ayanwale, personal communication, Dec 01, 2021). Lewis (2022) further defines research validity as the extent to which a study faithfully measures or reflects the intended concept or phenomenon. It also gauges the credibility, trustworthiness, and representativeness of research findings and conclusions (Flake et al., 2022).

As emphasised by Christiansen et al. (2014), validity is a pivotal element of research quality, ensuring the precision and significance of data-derived inferences. This study addresses various validity types, including internal, construct, content, cultural, and catalytic validity.

4.11.1 Internal validity

Internal validity pertains to a research study's ability to establish a causal relationship between the independent and dependent variables while minimising the influence of other factors (Cohen et al., 2017). Similarly, it addresses whether observed changes in the dependent variable are attributable to the manipulation of the independent variable rather than other confounding factors (Li & Frank, 2022). In this study, internal validity focused on confirming that the improvements in spelling skills and critical

literacy development among grade 9 ESL learners resulted from the implementation of phonemic-orthography, excluding the influence of other variables. Threats to internal validity, as identified by Rendon et al. (2023), include maturation, where learners' skills might naturally improve over time. Li and Frank (2022) also mention the threat of regression toward the mean, where learners with initially extreme scores tend to move closer to the average in subsequent measurements. To mitigate these threats, Johnson et al. (2019) recommend pre- and post-testing, which involves measuring learners' skills before and after the intervention. This baseline measurement helps assess the true impact of the intervention.

To ensure internal validity in this study, I used pre- and post-tests, randomised and controlled extraneous variables, such as intelligence quotient, which could have confounded the results. Additionally, I matched the research design to the research questions, ensuring that observed effects were genuinely due to the intervention and not influenced by confounding variables or alternative explanations.

4.11.2 Construct validity

Construct validity in education ensures that a test accurately measures the intended constructs, such as language proficiency, skills, or abilities (Huang & Hu, 2015). It assesses if the research methods and measurements effectively represent the theoretical concepts they aim to study (Hehman et al., 2019). In this study, construct validity is essential in assessing how well phonemic-orthography implementation, spelling skills measurement, and critical literacy development measurement align with their respective theoretical foundations.

To establish construct validity for phonemic-orthography implementation, I ensured that the intervention adhered to the theoretical understanding of phonemic awareness and orthographic principles. Clear instructions and continuous monitoring confirmed its faithful implementation. For measuring spelling skills, construct validity was ensured by selecting words of varying difficulty levels and developmental progression. A pilot assessment verified its ability to discriminate between different skill levels, including words with different syllable counts (see appendix 8).

In measuring critical literacy development, construct validity was maintained by defining the concept's relevance within the study's context. The database illustrated the interconnection between improved spelling skills through phonemic-orthography implementation and enhanced critical literacy development. Due to time constraints, this was more evident in functional literacy, as developing it is a

prerequisite for critical literacy. Addressing construct validity in this study bolsters confidence in drawing meaningful conclusions regarding the impact of phonemic-orthography on spelling skills and critical literacy development.

4.11.3 Content validity

Content validity, as explained by A. Ayanwale (personal communication, 2021, Dec 01), ensures that a measurement adequately encompasses all aspects of the concept being measured. Simply put, it confirms that all items in the instrument represent the intended constructs (Miller & Lovler, 2013). Thus, content validity assesses how well an assessment instrument aligns with its intended measurement goals. To ensure content validity for phonemic-orthography, I established alignment between the intervention's content and the principles of phonemic awareness and orthography, as discussed in chapter three.

I consulted my supervisor to evaluate test items, confirming their relevance and representation of the measured constructs. As Bolarinwa (2015) suggests, researchers should consult experts or relevant literature to ensure content covers pertinent concepts, such as phonemic and orthographic principles. For spelling skills assessment, I adhered to the semantic gravity and density within the Legitimation Code Theory (Maton, 2014) by selecting words spanning various difficulty levels, avoiding cultural insensitivity. To ensure content validity for critical literacy assessment, I designed tasks aligning with critical literacy development goals outlined in chapter three. These exercises engaged grade 9 ESL learners in critical thinking and text analysis.

Overall, upholding content validity ensured accurate measurement of the key concepts under investigation, that is, phonemic-orthography, spelling skills, and critical literacy. This enhances the credibility and relevance of the findings (Heale & Twycross, 2015) and supports the argument that changes in spelling skills and critical literacy development are genuinely attributed to the phonemic-orthography intervention.

4.11.4 Cultural validity

Cultural validity involves tailoring research to the culture and context under study, making it relevant and meaningful to diverse participants (Cohen et al., 2018). It strives to respect and acknowledge cultural perspectives and experiences. To maintain this validity in the study, all learners were engaged in a focus group, adhering to cultural norms of treating children equally in Basotho culture. Initially, a

systematic sampling technique was used to select the sample size, but I realised it left some learners out of the interview process. To avoid exclusion and ensure inclusivity, I interviewed the remaining learners, even though their data was not initially intended for use. This decision strengthened the validity of the study by providing additional insights.

Implementing the phonemic-orthography intervention required cultural sensitivity. Materials, activities, and examples needed to resonate with the learners' cultural backgrounds, using familiar words and examples. Diverse texts and narratives reflecting various cultural perspectives were incorporated. For instance, when assessing critical literacy, a text related to albinism (see appendix 9) was used. Multilingualism was also considered, acknowledging that learners had different language proficiencies. To address this, I allowed code-switching between Sesotho and English when needed and translated materials as required. Addressing cultural validity demonstrated respect for the grade 9 ESL learners' cultural backgrounds, enhancing the study's relevance and ethical research practices. It ensured that the intervention and assessments were meaningful within their cultural context.

4.11.5 Catalytic validity

Catalytic validity, within critical theory, signifies a framework's capacity to inspire positive societal change (Baines, 2007). A theory with catalytic validity can potentially shift social norms and practices (Cohen et al., 2017). This concept underscores that critical theory should not only analyse social issues but also propose solutions and avenues for transformative action (Baines, 2007). Given this study's foundation in PCR and its aim to promote socially just ESL pedagogical practices, catalytic validity was a crucial consideration. To maintain this validity, the research was designed to lead to action. Empowering grade 9 ESL learners to understand their practices aimed at enhancing their spelling, achieving critical literacy, and improving their English as a second language learning. This approach aligns with the catalytic validity principle of fostering positive change in society.

4.12 Reliability

Reliability in quantitative research entails achieving consistent results under varying circumstances, emphasising consistency, stability, and repeatability (Haynes et al., 2017). It also pertains to the uniformity of a researcher's approach across different researchers and projects (Haynes et al., 2017). In this study, reliability was ensured through a test-retest approach to guarantee consistent measurement over time and across multiple items without bias.

4.12.1 Test-retest reliability

Reliability, according to Jason et al. (2015), ensures the trustworthiness and dependability of obtained results (Paap & Sawi, 2016). To maintain reliability, I monitored the fidelity of the phonemic-orthography intervention by regularly observing sessions and collecting data on its adherence to the planned execution. In terms of assessment, both spelling skills and critical literacy tests were expected to yield consistent results to establish their reliability. Pre-tests and post-tests were employed, including phonemic (oral) and orthographic (written) tests, administered to the grade 9 ESL learners. These tests were given at two different points in time, and the results were compared to assess their consistency over time, aligning with the test-retest reliability method. This approach is in line with the research's adopted Mixed Methods Research (MMR) approach, emphasising triangulation.

4.12.2 Inter-rater reliability

I engaged five out of seven ESL teachers at school X to score and evaluate assessments after conducting a pilot study. To maintain consistency in scoring across different raters, I provided them with clear scoring criteria and guidelines. These raters independently assessed a subset of assessments, and we calculated the agreement between their scores, referred to as inter-rater agreement by Chaturvedi and Shweta (2015). Ensuring the reliability of this study's components, including intervention implementation and the assessment of spelling and critical literacy, bolstered the trustworthiness of the study's findings. This reliability instilled confidence that any observed changes in spelling skills and critical literacy development were not due to measurement inconsistencies but genuinely reflected the impact of the phonemic-orthography intervention.

4.13 Positionality

Positionality in research pertains to the researcher's perspective, identity, and relationship with the research subject and participants, involving elements of objectivity and subjectivity (Letherby et al., 2013). It encompasses the researcher's perspective, social position, and personal experiences that can influence their interactions, interpretations, and assumptions within the research (Simandan, 2019; Lin, 2015). My background, experiences, cultural identity, and language proficiency may impact my understanding and approach to phonemic-orthography, spelling skills, and critical literacy. Familiarity or unfamiliarity with certain linguistic aspects could shape how I designed the intervention and assessments.

Awareness of my own biases and beliefs is crucial for recognising positionality (M. Raselimo, personal communication, June 24, 2022). Personal beliefs about the effectiveness of phonemic-orthography may

unconsciously affect how I introduce the intervention, collect and analyse data, and interpret results. Reflexivity, as emphasised by Hyman (2013), involves ongoing self-awareness and critical reflection on how my positionality influences the research process. Actively reflecting on biases, assumptions, and their impact on decision-making is essential for maintaining rigor and ethical conduct. Transparently addressing my positionality's potential influence on the study's credibility is vital (M. Makumane, personal communication, April 3, 2023).

I operated as an 'insider,' even though I lacked tacit knowledge of the research site. Such insider status could challenge professional detachment and lead to a biased perspective (Holmes, 2020). Hyman (2013) suggests that self-reflection and evaluation can help mitigate these challenges, reducing bias, prejudice, and unfounded assumptions that may affect research practices and outcomes. Acknowledging the significance of positionality was vital, as my background and experiences could shape my data interpretation. I sought external perspectives by attending peer meetings and consulting my supervisor, who provided critical insights and helped address potential biases.

In conclusion, recognising my positionality and its potential impact enabled me to conduct more reflexive, balanced, and ethical research. Addressing biases throughout the research process enhanced the validity, credibility, and cultural sensitivity of the study on implementing phonemic-orthography for spelling skills and critical literacy development.

4.14 Ethical considerations

In this study, data collection adhered to the ethical principles outlined in Fleming and Zegwaard (2018). Ethical considerations are essential in all research, including action research. Initially, I obtained approval from my institution's head of department since this study involved human participants (Rakotsoane, 2012). Subsequently, I presented a formal introduction letter to the principal of School X (see appendix 10). It is important to note that before securing the introduction letter, I verbally informed the principal about my study and obtained permission for research within the school. Transparency is crucial (Moradi et al., 2019), so I openly communicated the research's purpose, goals, my role, affiliations, intentions, and potential outcomes. Cultural sensitivity was vital since this research was situated in Maseru. I respected local customs, traditions, and values, including obtaining permissions from the head of the English department, ESL teachers, and grade 9 ESL learners, all following approval from the principal.

Informed consent is an essential step, as emphasised by Connelley (2014). I ensured that all participants, including students, teachers, and administrators, fully understood the research's purpose, procedures, potential risks, benefits, and their right to participate voluntarily. Participation was entirely voluntary, without pressure or consequences for refusal or withdrawal, especially considering involvement of minors, parental consent was obtained (see appendix 4). Equally important, owing to the fact that some of these learners were assertive about their caregivers' lack of comprehending English, I drafted two consent form. One written in English and the other in Sesotho; this is backed by cultural validity that is explored in one of the upcoming section (see appendix 5). Confidentiality, as stressed by Wexler and Largent (2023), was a top priority. I guaranteed the anonymity of participants by using pseudonyms and ensuring that their information would not be traceable to them. Respect for participants, an ethical cornerstone (Govil, 2013), was maintained. Cultural, linguistic, and personal backgrounds were considered, and power dynamics were acknowledged. All participants were treated equally, fostering a participatory action research environment where every stakeholder had equal opportunities to engage and contribute.

By meticulously addressing these ethical considerations, I demonstrated a commitment to conducting respectful, responsible, and beneficial research for all involved in this action research case study on phonemic-orthography and critical literacy development.

4.15 Conclusion

This chapter focused on the methodological aspects that laid the foundation for this study. The discussion encompassed various elements, including the chosen paradigm, approach, research design, data collection and generation methods, data analysis procedures, considerations of validity, reliability, positionality, and ethical considerations. The chapter provided context by outlining the practical steps taken in the field during the research process.

CHAPTER 5

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

5.0 Introduction

The previous chapter thoroughly discussed the methodological aspects that guided this study, including the chosen philosophical perspective, research approach, and adopted research methods. In this chapter, we will present and analyse the data collected from various sources, such as tests, documents, focus groups, reflective journals, reflective activities, questionnaires, and observations. The data presented in this chapter was exclusively generated using the aforementioned data collection methods.

5.1 Data presented as per the action research phases and research questions

As this study takes the form of an action research case study, it is essential to present the results and findings in alignment with the methods of data generation. Specifically, this presentation is structured around the four action research phases (diagnostic, intermediary, transformative, and reflective), the three research questions, and a null hypothesis (h_0). These research questions are as follows: 1) What are the preconditions for spelling challenges in a grade 9 English Language classroom? 2) How can phonemic-orthography be effectively implemented to both enhance spelling skills and address the academic classification of grade 9 ESL learners? 3) What factors influence the behaviour of learners whose intervention in phonemic-orthography is informed by phonics approach strategies? Additionally, the null hypothesis (h_0) posits that there is no significant difference in performance between the pre-implementation and post-implementation phases of phonemic-orthography.

5.2 Action research phase: The diagnostic phase

RQ1: What are the preconditions for spelling challenges in a grade 9 EL classroom?

The diagnostic phase played a pivotal role in the decision-making process aimed at addressing the spelling challenges of grade 9 ESL learners. It served as the cornerstone for the development of

phonemic-orthography strategies, grounded in a thorough comprehension of the factors contributing to misspelled words. In practical terms, this phase involved the assessment of the grade 9 ESL learners' knowledge, skills, and areas of difficulty concerning spelling. Diagnostic assessments were employed to gauge their initial proficiency, allowing for customised instruction that targeted individual learning requirements, with the intent of achieving effectiveness.

5.2.1 Results from the quantitative phase

To emphasise, the chosen research design for this study was an explanatory sequential mixed methods approach. Consequently, the qualitative data played a complementary role to the quantitative data. In essence, the qualitative data was collected to provide explanations and context for the broader quantitative dataset. The subsequent section presents the data derived from the tests, which served as a primary baseline to ascertain whether these learners faced spelling challenges. It also delves into exploring the potential underlying factors contributing to misspelled words.

5.2.1.1 Pre-test

A pre-test consisting of two separate segments, namely a test and a retest, was administered to the 45 grade 9 ESL learners. Each of these tests comprised 24 items. The following are examples of words that the learners misspelled in both the test and the retest.

5.2.1.1.1 Test

Table 7: Test

WRONG SPELLING	CORRECT SPELLING	WRONG SPELLING	CORRECT SPELLING
/clouse/	Clause	/biliv/	Believe
/deases/	Disease	/dicided/	Decided
/compiting/	Competing	/futage/	Footage
/patisipent/	Participant	/juring/	During

5.2.1.1.2 Retest

Table 8: Retest

WRONG SPELLING	CORRECT SPELLING	WRONG SPELLING	CORRECT SPELLING
/sliver/	Silver	/travell/	Travel
/severa/	Several	/bored/	Board
/declearective/ decarative/	Declarative	/allowed/	Aloud
/bough/	Bought	/kip/	Keep
/organize/	Organise	/there/	Their

A pre-test consisting of two separate segments, namely a test and a retest, was administered to the 45 grade 9 ESL learners. Each of these tests comprised 24 items. The following are examples of words that the learners misspelled in both the test and the retest.

5.2.1.2 Learners' structured questionnaire

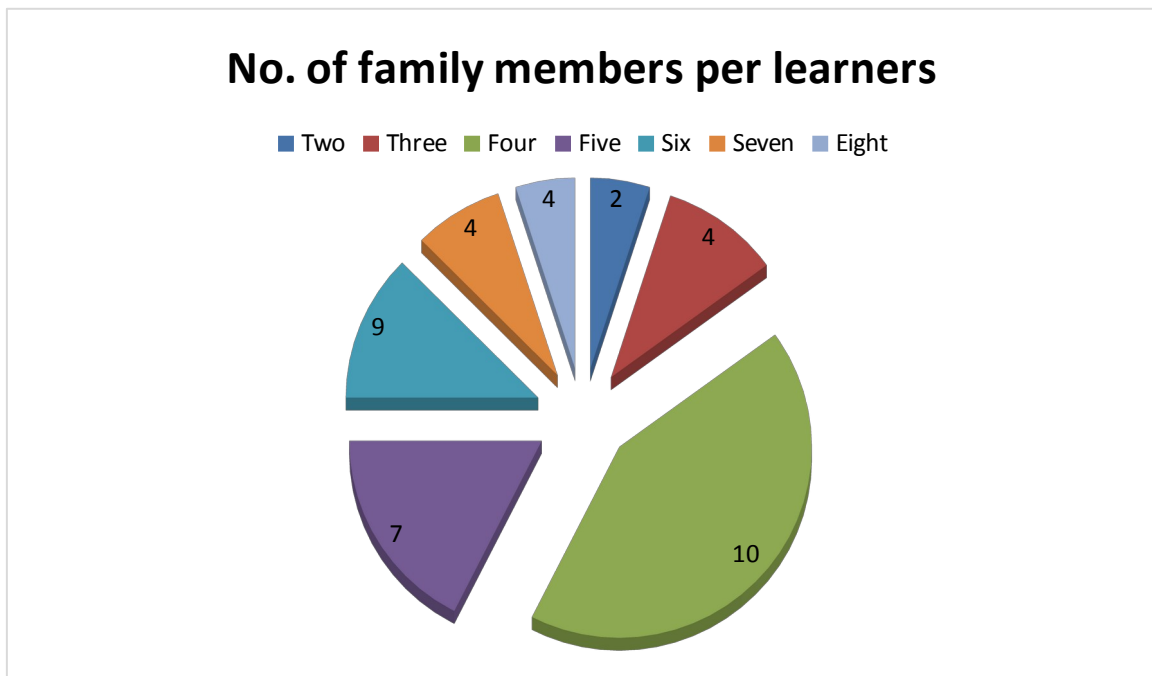


Figure 13: No. of family members per learners

The pie chart above illustrates that all 40 grade 9 ESL learners participated in the administered questionnaire. The results indicated varying family sizes among these learners. Specifically, 10 learners come from families of 4 members, 7 have 5 family members, 9 have 6 family members, 4 have 7 family members, 4 have 8 family members, 2 live with 2 family members each, and 4 come from families of 3 members. This data showcases a range of family sizes within the grade 9 ESL learner population. The most common family sizes are those with 4, 5, and 6 members, comprising 10, 7, and 9 learners, respectively. While family sizes of 2, 3, 7, and 8 members are also represented, they occur less frequently. Moving on to the number of caregivers per learner, the histogram below provides a detailed breakdown of this information.

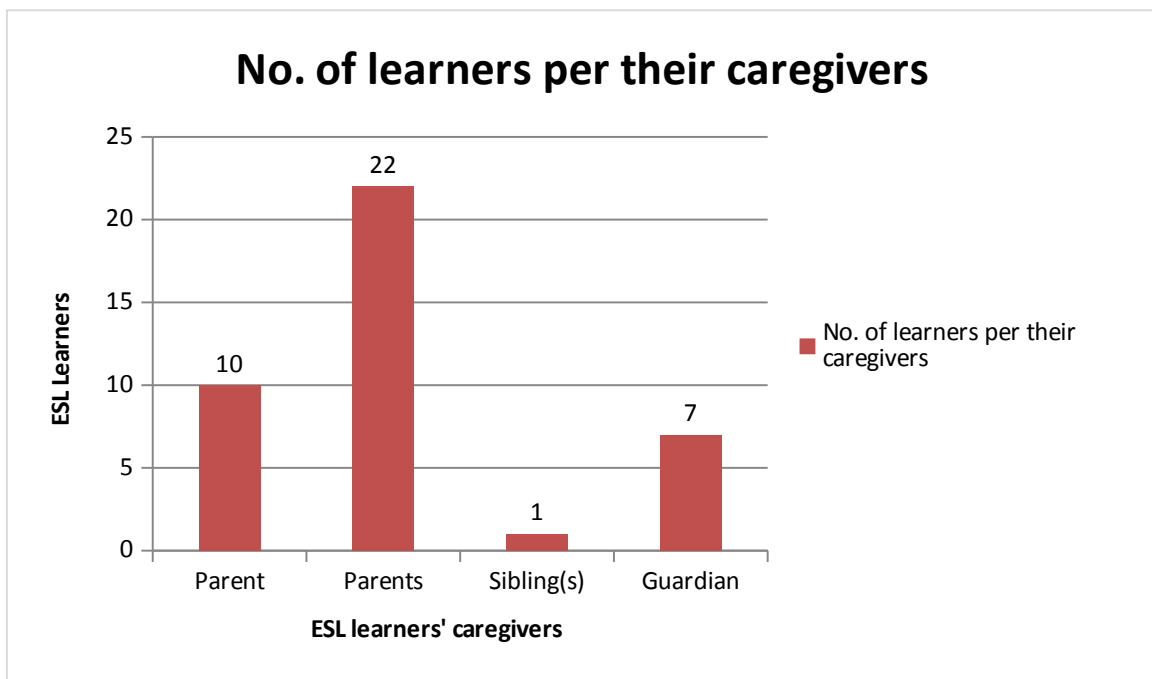


Figure 14: No. of learners per their caregivers

The histogram displays the distribution of caregivers among the grade 9 ESL learners. Out of the total of 40 learners in the study, the histogram categorises them based on their caregivers. Specifically, 10 learners are cared for by both of their parents, 22 learners are cared for by at least one parent (without specifying if it is the mother or father), 1 learner is cared for by their sibling(s), and 7 learners are cared

for by their guardian. This data illustrates various caregiver arrangements for the grade 9 ESL learners, with a notable proportion being cared for by a single parent. The smaller counts of learners cared for by both parents, siblings, and guardians indicate a diverse range of family and caregiving situations. With the caregiver distribution clarified, the subsequent pie chart below provides insights into the income status of the grade 9 ESL learners' caregivers.

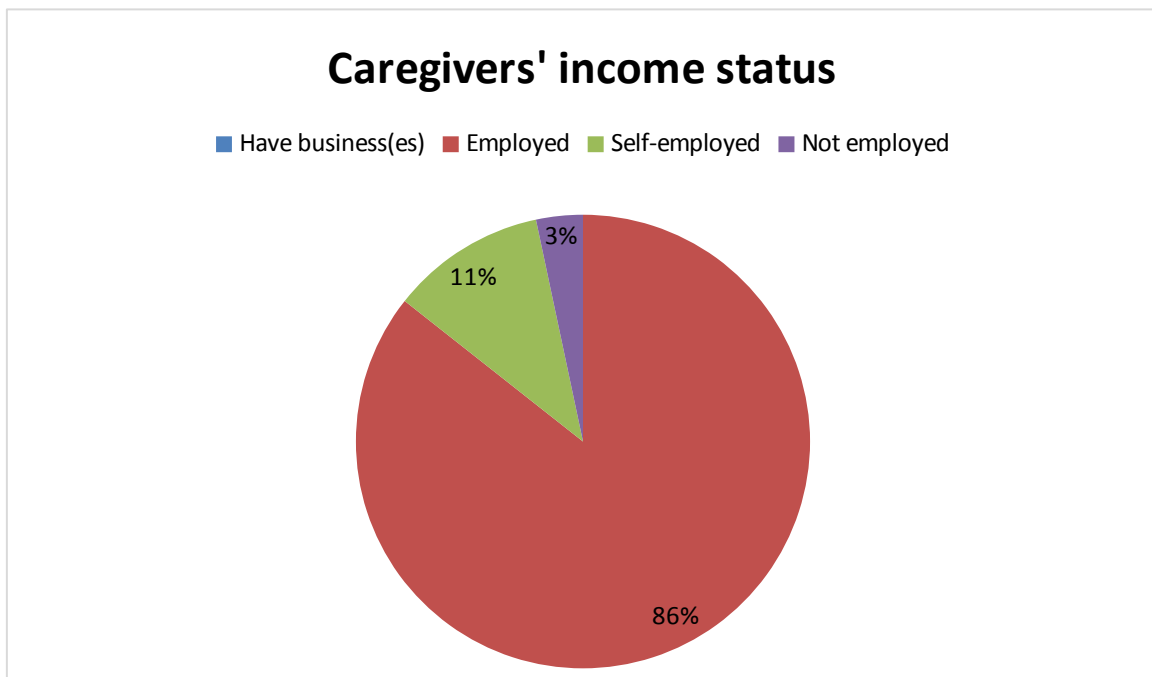


Figure 15: Caregivers' income status

The pie chart illustrates the various income sources for grade 9 ESL learners' caregivers. It categorises the income sources for these caregivers as follows: 86% of caregivers are employed, 11% are self-employed, and 3% reported that they are not currently employed. To emphasise, the majority of caregivers, representing 86% of the total, rely on employment as their source of income. This suggests that a significant portion of caregivers are likely engaged in various job roles. On the other hand, a smaller percentage, accounting for 11%, are self-employed. This category may encompass individuals who operate their own businesses or work on a freelance or contract basis. In contrast, only 3% of the respondents indicated that their caregivers are not currently employed, indicating that a small fraction of

caregivers are not engaged in formal employment. Additionally, the chart demonstrates that none of the caregivers are involved in any business ventures. This implies that the surveyed ESL learners' caregivers do not have any business interests.

With the presentation of the caregivers' income statuses concluded, the following section introduces the Likert scale ratings used to assess the responses from the ESL learners' structured questionnaire, which captured their family engagement and motivation levels.

Table 9: Likert Scale Rating

OPTION	ADDITIONAL OPTION	SCORE	RATING LEVEL
Strongly agree/ a lot/ always/ definitely/ extremely	Yes	5	Very high
Agree/ quite a lot/ very often/ probably/ likely		4	High
Neutral/ sometimes/ possibly/ moderately		3	Moderate
Disagree/ little/ rarely/ possibly not/ slightly		2	Low
Strongly agree/ very little/ never/ definitely not/ not at all	No	0-1	Very low

The table below demonstrates the EL learners' response with regard to their respective family members' ability to speak English **VERY WELL**.

Table 10: Learners' family members' ability to speak English very well

Learners' family members' ability to speak English VERY WELL	Frequency	Percentage (%)	Overall rating score	Mean score	Rating level
Strongly agree	5	12.5	25		
Agree	22	55	88		
Disagree	12	30	24		
Strongly disagree	1	2.5	1		
Total	40	100	138	3.45	Moderate

The table provides a summary of responses from 40 ESL learners regarding their family members' proficiency in speaking English. These responses are categorised into various levels of agreement. Among the 40 ESL learners, 5 strongly agreed that their family members speak English very well, 22 agreed, 12 disagreed, and 1 strongly disagreed with the statement that their family members speak English very well. The total rating score, calculated as the product of the response option and the number of ESL learners, was 138. Additionally, the total mean score, obtained by dividing the overall rating scores by the number of ESL learners, equalled ($\frac{\text{overall rating scores}}{\text{no. of ESL learners}}$ was 3.45).

Based on the Likert scale rating provided earlier, the mean rating score of 3.45 falls within the "moderate" range. This indicates that, on average, these ESL learners perceive their family members' ability to speak English very well as moderate. The moderate rating level suggests that the learners neither strongly agree nor strongly disagree regarding their family members' English-speaking abilities. The following section presents the ESL learners' responses concerning their families' support in providing them with all the English books they need for school.

Table 11: Mediation tools support

Mediation tools	Frequency	Percentage	Overall	Mean score	Rating level
------------------------	------------------	-------------------	----------------	-------------------	---------------------

(Books)		(%)	rating score		
Strongly agree	7	17.5	35	3.05	
Agree	12	30	48		
Disagree	18	45	36		
Strongly disagree	3	7.5	3		
Total	40	100	122	3.05	Moderate

The table above presents the responses of 40 ESL learners regarding their families' support in providing all the necessary English books for their education. Among these learners, 7 strongly agreed that their family members buy them all the required English books, 12 agreed, 18 disagreed, and 3 strongly disagreed with this statement. The total rating score for this item was 122. Furthermore, the mean score was calculated to be 3.05. In line with the previously explained Likert scale rating, the mean rating score of 3.05 falls within the "moderate" range. This suggests that, on average, ESL learners perceive their families' support in terms of purchasing all the necessary English books for their education as moderate. The moderate mean score indicates that the learners neither strongly agree nor strongly disagree regarding this aspect of support. Having presented the results concerning support for obtaining learning materials, the following section will present and interpret the results regarding the engagement of the learners' families in their English learning.

Table 12: Family engagement in ESL learners' school work

Family engagement in ESL learners' school work	Frequency	Percentage (%)	Overall rating score	Mean score	Rating level

Strongly agree	12	30	60		
Agree	23	57.5	92		
Disagree	4	10	16		
Strongly disagree	1	2.5	1		
Total	40	100	169	4.23	High

The table above illustrates the responses from the 40 ESL learners regarding their families' engagement in their English-based schoolwork. Out of these learners, 12 strongly agreed that their families are engaged in their English schoolwork, 23 agreed, 4 disagreed, and 1 learner strongly disagreed with this statement. The overall rating score for this item was 169, with a mean score of 4.23. According to the presented Likert scale rating, the mean rating score of 4.23 falls within the "high" range. This indicates that, on average, the ESL learners perceive their families as highly engaged in their English-based schoolwork. The high mean score suggests that the learners strongly agree that their families actively support their English learning and schoolwork. The table below presents the responses regarding the learners' general intrinsic motivation to learn ESL.

Table 13: General ESL learners' intrinsic motivation

General ESL learners' intrinsic motivation	Frequency				Percentage (%) On average	Overall rating score on average	Average Mean score	Rating level
	Item 1	Item 2	Item 3	Item 4				
Strongly agree	27	34	25	32	73.75	590		
Agree	11	6	15	7	24.375	116		
Disagree	2	0	0	1	1.875	6		
Strongly disagree	0	0	0	0	0	0		
Total	40	40	40	40	100	712	4.45	High

The table above displays the grade 9 ESL learners' responses regarding intrinsic motivation, which was measured using four items outlined in the questionnaire (see appendix). Among the responses, 73.75% strongly agreed, 24.375% agreed, 1.875% disagreed, and 0% strongly disagreed with the intrinsic motivation statements. To gain a more comprehensive understanding of this variable, which consists of

four different items, average rating scores and mean scores were calculated. The average rating scores were 590 for strongly agree, 116 for agree, 6 for disagree, and 0 for strongly disagree. The mean score for the four items related to intrinsic motivation was 4.45. This suggests that, on average, the grade 9 ESL learners exhibited high levels of intrinsic motivation according to the questionnaire items. The table below presents the results for extrinsic motivation.

Table 14: General ESL learners’ intrinsic motivation

General ESL learners’ extrinsic motivation	Frequency			Percentage (%)	Overall rating score	Mean score	Rating level
	Item 1	Item 2	Item 3				
Strongly agree	0	2	0	1.667	10		
Agree	0	2	2	3.333	16		
Disagree	9	28	10	39.167	94		
Strongly disagree	31	8	28	55.833	67		
Total	40	40	40	100	187	1.56	Very low

The table above presents the ESL learners' responses regarding their extrinsic motivation, which was evaluated using three items. These three items collectively generated a total of 120 responses. Among these responses, 1.666% strongly agreed, 3.333% agreed, 39.167% disagreed, and 55.833% strongly disagreed with the extrinsic motivation statements. The average rating score was 187, with an average mean score of 1.56. This average mean score indicates that the level of extrinsic motivation among the grade 9 ESL learners was very low, suggesting a lack of enthusiasm in this regard. Having presented the results obtained from the ESL learners' responses in the structured questionnaire, the following section presents the results from the ESL teachers' questionnaire.

5.2.1.3 ESL teachers’ questionnaire

In descriptive statistics, the calculation of the range offers insights into the dataset's spread or dispersion (Gupta, 2023). A larger range initially indicates a wider spread, whereas a smaller range suggests that

the data points are closely clustered. In addition to the range, standard deviation (SD) is another descriptive statistic that provides valuable information about a dataset's spread or dispersion (Gawali, 2021). It quantifies how much the data points deviate from the mean on average (McGuckian, 2017; Bhandari, 2020). A larger standard deviation signifies a wider spread, indicating that the data points are more dispersed from the mean. Conversely, a smaller standard deviation suggests that the data points are closer to the mean, indicating less variability. With the explanation of range and standard deviation, the following section presents the results from the ESL teachers' questionnaire. These results are presented using various measures of central tendency, including frequency, percentage, mean, SD, maximum (max) and minimum (min) values, and the range.

Table 15: The extent to which the grade 9 ESL learners encounter spelling challenges.

Option	Frequenc y	%	Mean	Sd	Max	Min	Range
Quite a lot	3	60					
A lot	2	40					
Total	5	100	2.5	0,707106781	3	2	1

The table above reveals that among the 5 ESL teachers surveyed, 3 believe that the degree to which grade 9 ESL learners face spelling challenges is quite significant, while 2 teachers stated that it is a lot. Moreover, the range for this data was determined to be 1.

A range of 1 implies that the data points in this dataset are closely clustered together since it is minimal, indicating minimal variability. This suggests that the dataset is consistent, and any predictions based on it are likely to be precise due to the limited variation among the data points. Additionally, this narrow range indicates the dataset's reliability.

Table 16: Lack of mediation tools contributes to encountering spelling challenges.

Option	Frequency	%	Mean	Sd	Max	Min	Range
Always	4	80					
Sometimes	1	20					
Total	5	100	2.5	2,121320344	4	1	3

The table above indicates that 4 ESL teachers believe that the absence of mediation tools always contributes to encountering spelling challenges, while 1 teacher indicated it happens sometimes. Furthermore, the table shows that the range for this data is 3.

A range of 3 suggests that the data points in the dataset have a moderate level of spread. This means that while the difference between the maximum and minimum values is relatively small, there is still some diversity among the data points. In practical terms, data with a moderate range can still provide reasonably accurate estimates (Gawali, 2021).

Table 17: L1 interferes with ESL spelling.

Option	Frequency	%	Mean	Sd	Max	Min	Range
Frequently	4	80					
Occasionally	1	20					
Total	5	100	2.5	2,121320344	4	1	3

The table above indicates that 4 ESL teachers believe that the Grade 9 ESL learners' first language (L1) frequently interferes with their English Language (EL) spelling, while 1 teacher had a slightly different perspective, stating that it occurs "occasionally." The range of 3 suggests that the data points in the dataset have some degree of spread. This means that although the difference between the maximum and minimum values is generally small, there is still some variability among the data points. Additionally, the standard deviation (SD) of 2.121320344 and the mean of 2.5 provide further insights into the dataset. The SD of 2.121320344 indicates a moderate level of variation from the mean, suggesting that there is some diversity in the teachers' responses. The mean value of 2.5 represents the average response among the surveyed teachers. In conclusion, the interpretation of the provided data suggests that the majority of ESL teachers believe that Grade 9 ESL learners' native language frequently interferes with their English spelling, with a slight variation in perspective from one teacher.

Table 18: Collaborative activities

Option	Frequency	%	Mean	Sd	Max	Min	Range
Yes	5						
Total	5	100	5	#DIV/0!	5	5	0

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The table above demonstrates unanimous agreement among all ESL teachers regarding the potential enhancement of Grade 9 ESL learners' literacy skills through collaborative activities involving both teachers and learners. The data reveals a range of 0. However, it is important to note that an error occurred when attempting to calculate the standard deviation (SD), resulting in the error message #DIV/0! This error typically arises when trying to divide by zero or when a value is equivalent to zero (Michaloudis, 2021). The range of 0 signifies complete consistency in the data, indicating that all ESL teachers share the same belief that collaborative activities, whether between teachers and learners or learners and teachers, can positively impact the literacy skills of Grade 9 ESL learners. This unanimous consensus among the teachers reflects a strong conviction regarding the effectiveness of such collaborative efforts in literacy development.

Table 19: Effectiveness of the English-speaking rule in developing literacy.

Option	Frequenc y	%	Mean	Sd	Max	Min	Range
Extremely	2	40					
Moderately	3	60					
Total	5	100	2.5	0,707106781	3	2	1

Table 19 presents the perspectives of 5 ESL teachers who participated in the survey regarding the effectiveness of the ESL speaking rule in school X for fostering literacy development in a Grade 9 ESL classroom. Two teachers consider the rule to be extremely effective, while three teachers regard it as moderately effective for this purpose. The calculated range of 3 suggests that there is some variability in the responses provided by the ESL teachers. Although the difference between the highest and lowest values is not substantial, there is still noticeable variation among their viewpoints. The mean response value stands at 2.5, representing the midpoint between "extremely effective" and "moderately effective." Furthermore, the standard deviation (SD) is approximately 0.707106781, indicating a moderate level of dispersion or variability in the teachers' responses. This suggests that while there is some consensus

among the teachers, there are also discernible differences in their perceptions of the ESL speaking rule's effectiveness in promoting literacy development.

Table 20: The grade 9 ESL learners are motivated to attain literacy.

Option	Frequenc y	%	Mean	Sd	Max	Min	Range
Yes	4	80					
No	1	20					
Total	5	100	2.5	2,121320344	4	1	3

Table 20 illustrates the perspectives of ESL teachers regarding the motivation of ESL learners in their classrooms. According to the table, 40% of the teachers believe that ESL learners are motivated to learn ESL, while 60% of them think that ESL learners lack motivation for learning ESL. The calculated range of 3 implies that there is some diversity in the responses provided by the ESL teachers regarding learner motivation. Although the difference between the highest and lowest values may not be substantial, there is noticeable variability among their opinions. Regarding the mean response, the average value is 2.5, positioning it midway between "motivated" and "not motivated." Additionally, the standard deviation (SD) was computed to be approximately 2.121320344, signifying a moderate level of variability in the teachers' responses. This suggests that while there is some consensus among the teachers, there are also observable differences in their perceptions of ESL learner motivation.

Table 21: Pronunciation and spelling skills development activities

Option	Frequenc y	%	Mean	Sd	Max	Min	Range
Yes	4	80					
No	1	20					
Total	5	100	2.5	2,121320344	4	1	3

In this section, table 21 presents the responses of ESL teachers to the question regarding the presence of activities aimed at developing pronunciation and spelling skills among grade 9 ESL learners. Out of the

5 ESL teachers surveyed, 4 teachers responded "yes," indicating their belief in the existence of such activities, while 1 teacher responded "no," suggesting a contrary opinion. The calculated range of 3 suggests some level of dispersion in the responses given by the ESL teachers concerning the availability of these activities. Although the difference between the highest and lowest values may not be extensive, there is noticeable variability among the data points. The mean response value was 2.5, positioning it at the midpoint between "yes" and "no." Additionally, the standard deviation (SD) was calculated to be approximately 2.121320344, indicating a moderate degree of diversity among the provided responses. This suggests that while there is a prevailing opinion among the teachers, there are also discernible differences in their perceptions regarding the existence of activities for developing pronunciation and spelling skills among grade 9 ESL learners.

Table 22: ESL learners’ literacy development stakeholders

Option	Frequency	%	Mean	Sd	Max	Min	Range
The school, the teachers, the learners and the parents	5						
Total	5	100	5	#DIV/0!	5	5	0

Table 22 displays the responses of ESL teachers regarding the key stakeholders involved in the collaborative development of literacy skills, particularly in the context of pronunciation and spelling. These identified stakeholders encompass the school, the teachers themselves, the learners, and the parents. The calculated range of 0 signifies that there is no variability among the responses provided. This implies that all data points are uniform and consistent, indicating unanimous consensus among the surveyed ESL teachers regarding the stakeholders responsible for literacy development. Additionally, the mean response value was 5, indicating that all ESL teachers surveyed unanimously selected the same set of identified stakeholders. However, the standard deviation (SD) calculation resulted in an error (#DIV/0!) and is, therefore, not interpretable. It is noteworthy that both the minimum and

maximum response values are 5, reaffirming the complete agreement among all teachers regarding the key stakeholders involved in literacy development.

5.2.2 Findings from the qualitative phase

To recap, the qualitative data was collected to provide a more comprehensive explanation of the quantitative data obtained in the initial phase, in line with the explanatory sequential Mixed Methods Research (MMR) design employed in this study.

5.2.2.1 ESL teachers' reflective activity

The questions used in the reflective activity were originally created for the semi-structured interviews. Due to concerns about being interviewed, these same questions were employed. They have been condensed and organised into themes based on the responses provided by ESL teachers, presented in chronological order.

This diagram depicts the responses of ESL teachers regarding the measures they implement to address the existing literacy challenges in school X. The identified themes encompass English club activities, spelling bee competitions, and poetry recitations during morning assemblies.

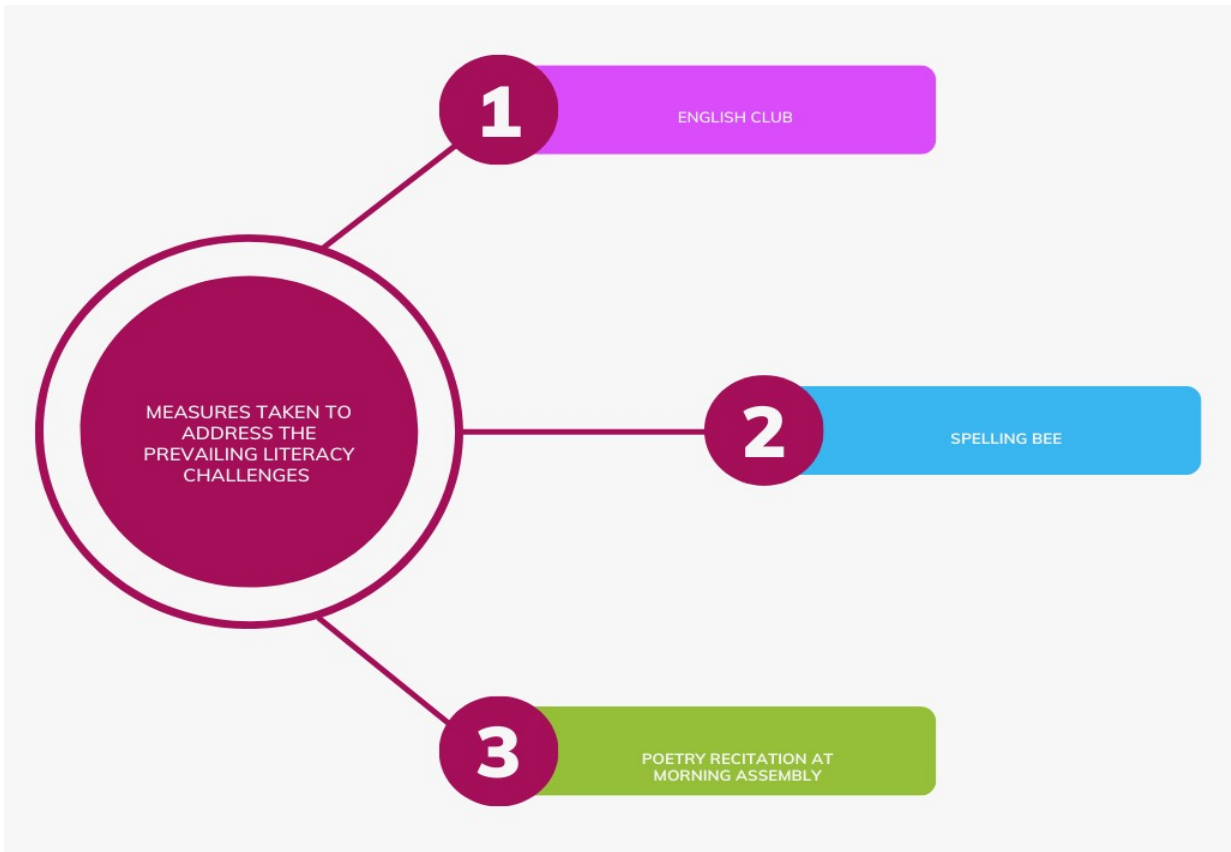


Figure 16: Addressing literacy challenges

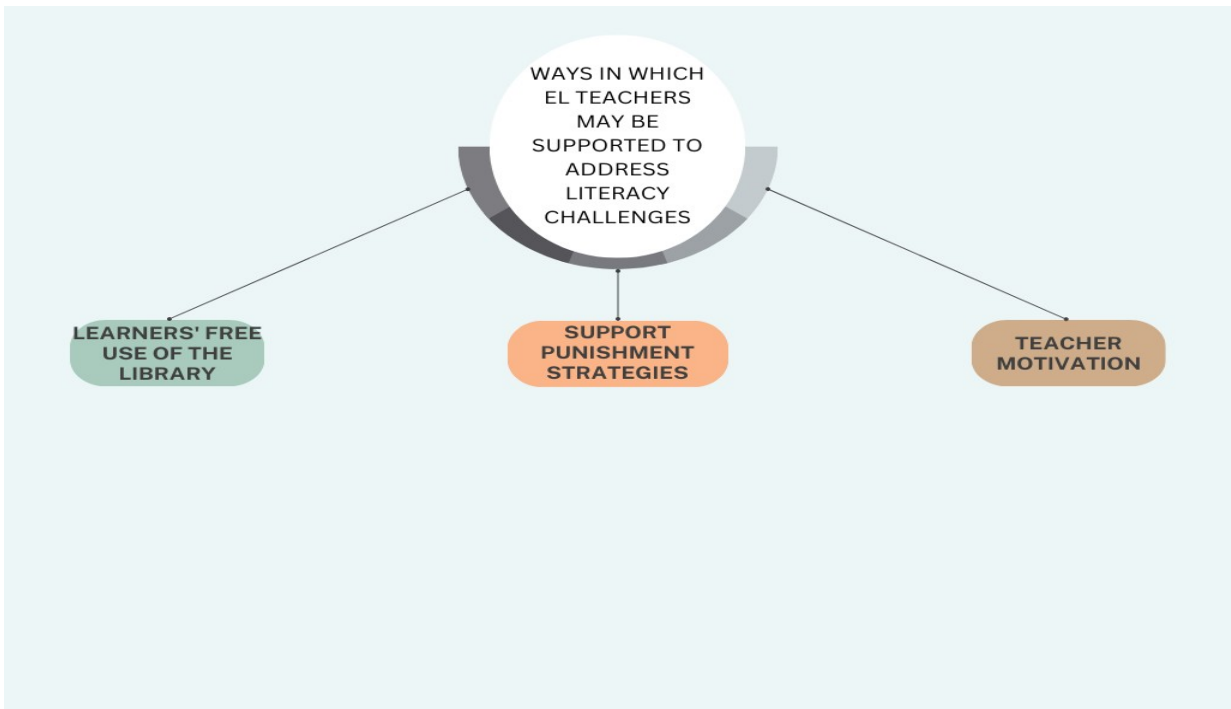


Figure 17: Addressing literacy challenges

The diagram above illustrates themes extracted from the responses of ESL teachers regarding ways they could be supported in addressing the current literacy challenges. These themes encompassed promoting learners' unrestricted use of the library, advocating for effective punishment strategies, and enhancing teachers' motivation.

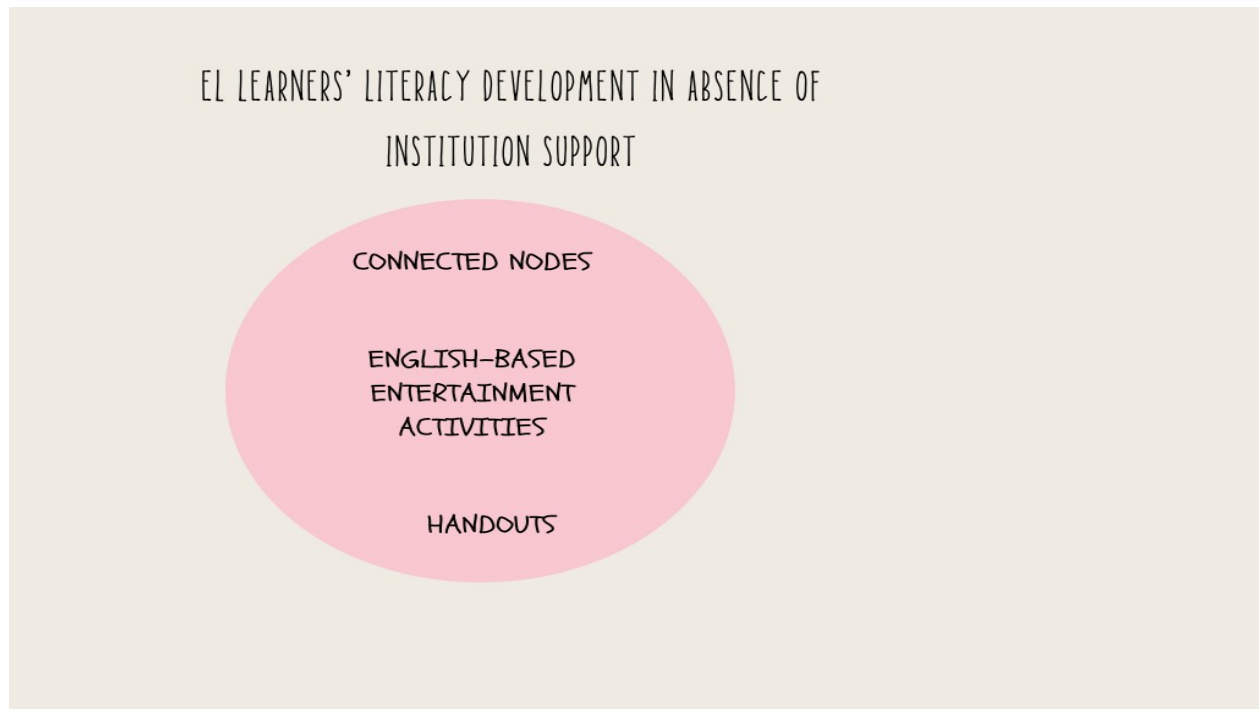


Figure 18: Literacy development strategies

The figure above displays the responses of ESL teachers regarding the strategies they might adopt to enhance learners' literacy in the absence of institutional support. The themes derived from the data related to this question included interconnected networking, English-based entertainment activities, and distributing handouts.

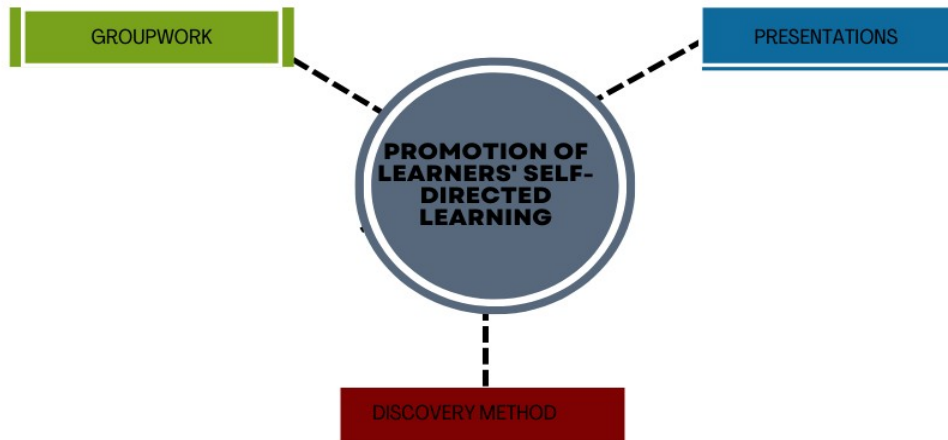


Figure 19: Promoting self-directed learning

The figure above illustrates the responses of ESL teachers regarding how they encourage self-directed learning among ESL learners. The themes derived from the data included group work, presentations, and the discovery method

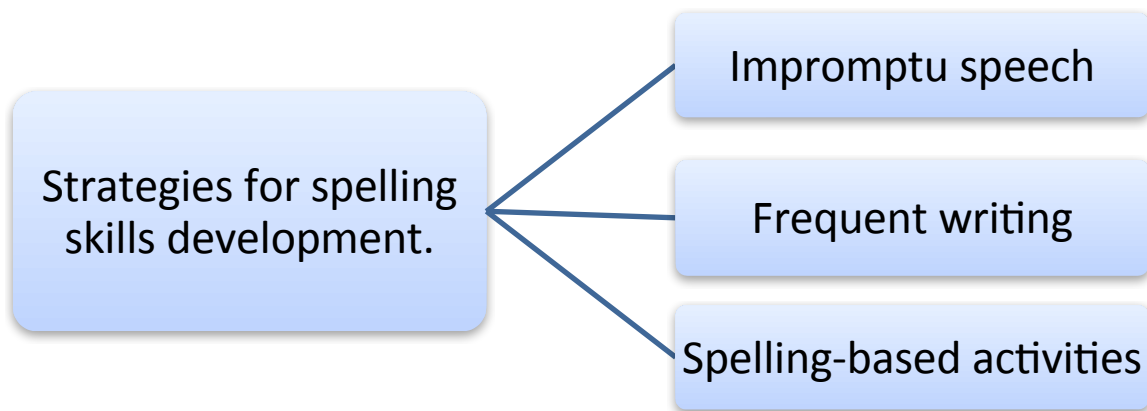


Figure 20: Spelling skills development strategies

The figure above illustrates the responses of ESL teachers regarding how they encourage self-directed learning among ESL learners. The themes derived from the data included group work, presentations, and the discovery method.

5.2.2.2 Reflective journal

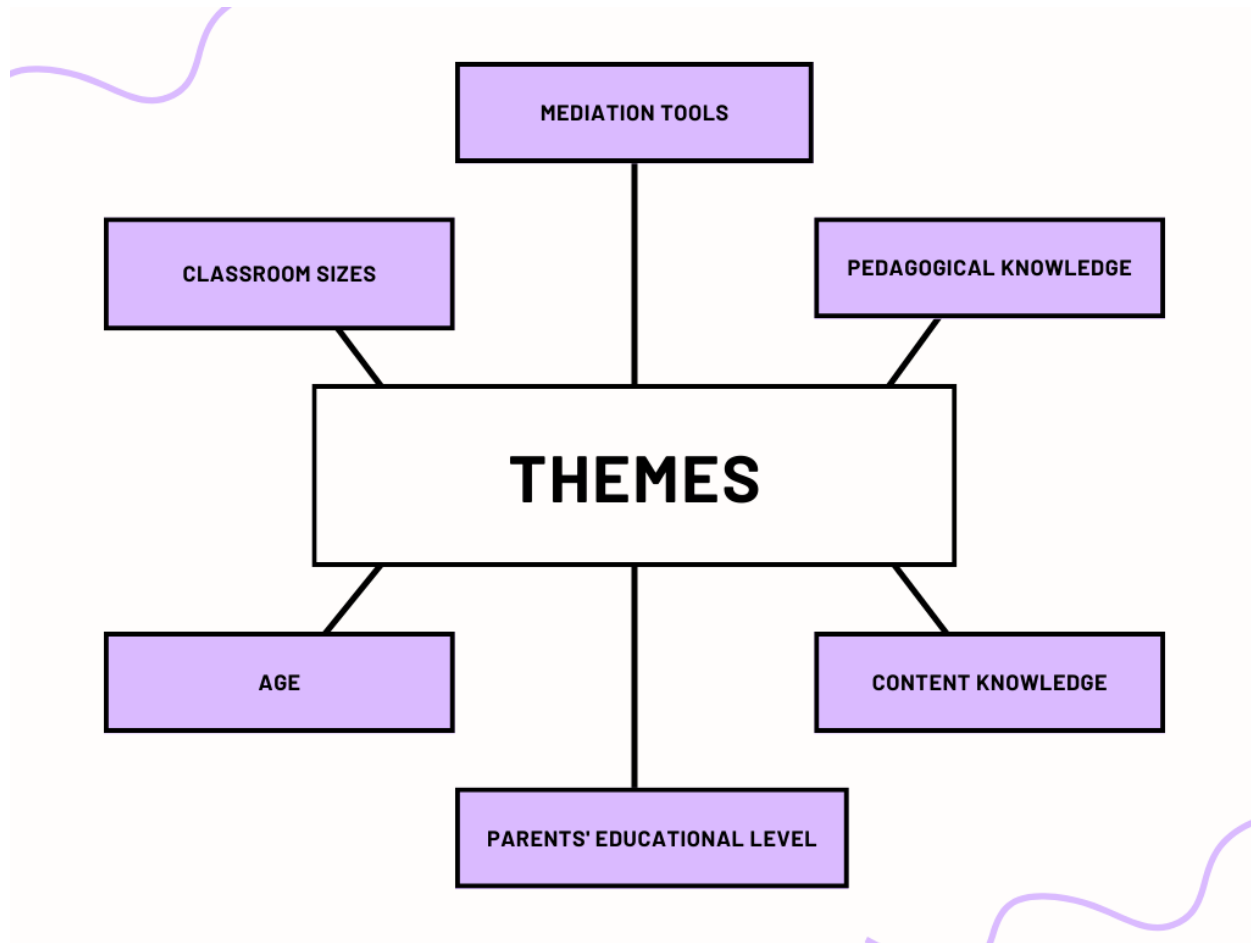
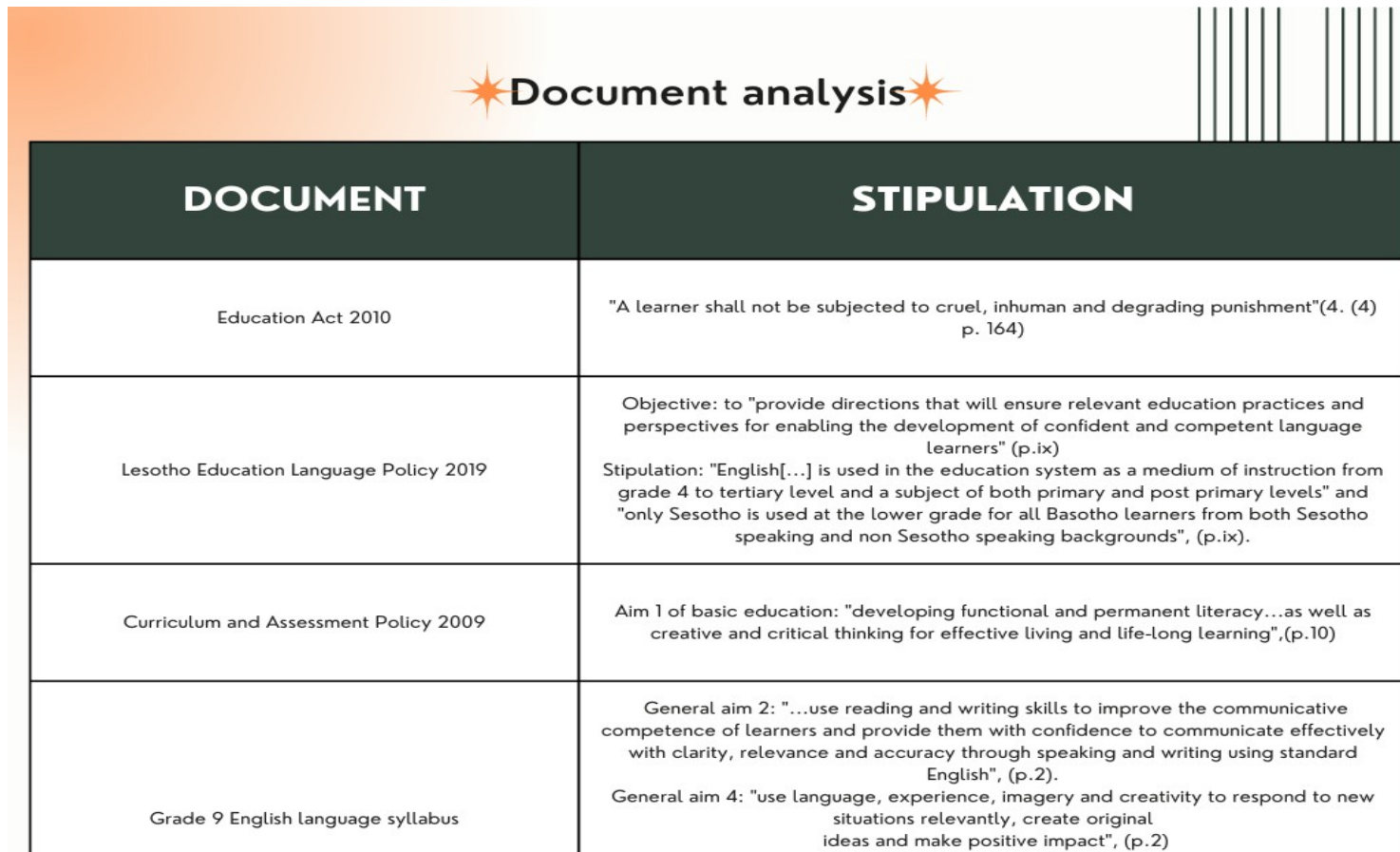


Figure 21: Reflective journal

The figure above illustrates the themes that emerged in the researcher's reflective journal. The researcher observed and noted that factors contributing to ESL learners' spelling challenges may include classroom sizes, age, parents' educational level, content knowledge, pedagogical knowledge, and the availability of mediation tools.

5.2.2.3 Document analysis



DOCUMENT	STIPULATION
Education Act 2010	"A learner shall not be subjected to cruel, inhuman and degrading punishment"(4. (4) p. 164)
Lesotho Education Language Policy 2019	Objective: to "provide directions that will ensure relevant education practices and perspectives for enabling the development of confident and competent language learners" (p.ix) Stipulation: "English[...] is used in the education system as a medium of instruction from grade 4 to tertiary level and a subject of both primary and post primary levels" and "only Sesotho is used at the lower grade for all Basotho learners from both Sesotho speaking and non Sesotho speaking backgrounds", (p.ix).
Curriculum and Assessment Policy 2009	Aim 1 of basic education: "developing functional and permanent literacy...as well as creative and critical thinking for effective living and life-Long learning", (p.10)
Grade 9 English language syllabus	General aim 2: "...use reading and writing skills to improve the communicative competence of learners and provide them with confidence to communicate effectively with clarity, relevance and accuracy through speaking and writing using standard English", (p.2). General aim 4: "use language, experience, imagery and creativity to respond to new situations relevantly, create original ideas and make positive impact", (p.2)

Figure 22: Analysed documents

The diagram above displays the documents that were analysed to establish a baseline for the preconditions contributing to the spelling challenges encountered by grade 9 ESL learners. Specifically, language interference was identified as a key factor through the analysis of the LELP data, as depicted in the diagram.

5.3 The intermediary phase

This phase acted as a transitional step that bridged the gap between the diagnostic and transformational phases of the study. Specifically, it helped assess the feasibility of implementing phonemic-orthography. Additional tests were administered to determine whether phonemic-orthography could be implemented as originally planned, considering new spelling-based challenges that arose. Furthermore, this phase allowed for a thorough examination of grade 9 ESL learners and their spelling challenges. It became evident that the successful implementation of this intervention required a significant number of lessons. This discovery led to discussions with other teachers, securing their commitment to utilising all

available free lessons. Given the impact of spelling on test scores, the tables below present the academic performance in this phase, focusing solely on test scores.

5.3.1 Phase I

Table 23: Phase I results

MARKS (%) OBTAINED	No. OF LEARNERS
70	1
60-67	08
50-57	15
40-47	12
30-37	02
20-27	02

The above table shows that the 40 ESL learners sat for this test. Of all learners, 1 got 70%; 8 obtained 60%-67%; 15 attained 50%-57%; 12 procured 40%-47%; 2 got 30%-37% while 2 got 20%-27%.

5.3.2 Phase II

Table 24: Phase II results

MARKS (%) OBTAINED	No. OF LEARNERS
80	1
70-79	2
60-69	2
50-59	3
40-49	6
30-39	10
20-29	11
10-19	5

The table above presents data from 45 grade 9 EL learners, with 40 of them participating in the recorded test. Among these 40 learners, the distribution of their marks is as follows: 1 learner scored 80%; 2 learners scored between 70% and 79%; 2 learners scored between 60% and 69%; 3 learners scored

between 50% and 59%; 6 learners scored between 40% and 49%; 10 learners scored between 30% and 39%; 11 learners scored between 20% and 29% and 6 learners scored between 10% and 19%.

Table 25: Misspelling of some words

They spell:	For:
<van>	<fan>
<televishin>	<television>

Table 25 provided illustrates a selection of words that grade 9 ESL learners incorrectly spell while trying to write them accurately. For instance, in an attempt to spell <fan>, they write <van>. Additionally, they write <televishin> instead of spelling <television>.

5.4 The transformative phase

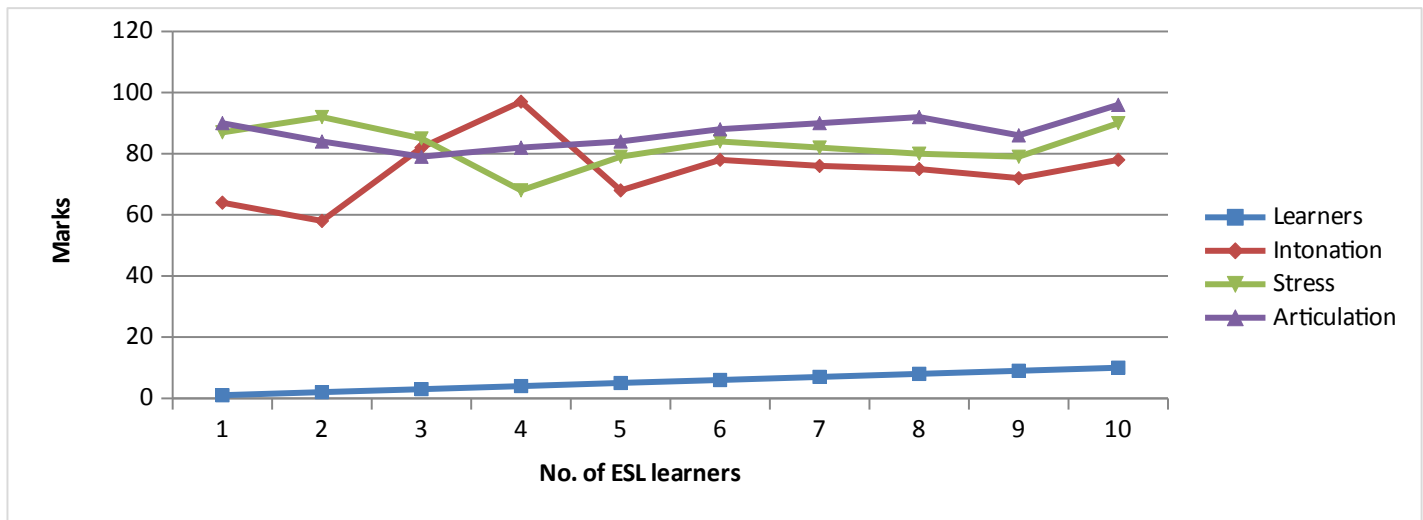
RQ2: How can the implementation of phonemic-orthography be optimised to concurrently enhance spelling skills and address the academic classification of grade 9 ESL learners?

Once the preconditions for spelling challenges were understood, it became essential to assess academic performance during the transformational phase, which marked the introduction of phonemic-orthography. In this phase, both, I and grade 9 ESL learners actively implemented phonemic-orthography by engaging in phonics-based activities that were considered suitable. This phase served as a testing ground to observe and evaluate the impact of phonemic-orthography on the grade 9 ESL learners within the context of this study. It provided an opportunity for all stakeholders, including myself and the learners, to learn from both successes and failures encountered during this phase.

Upon observing the effects of the employed activities, necessary adjustments were made. For instance, mnemonic strategies like rhyming appeared challenging for the grade 9 ESL learners, prompting the decision to abandon this approach in favour of chunking, which the learners embraced more effectively.

5.4.1 Results from the quantitative data phase

5.4.1.1 Oral test (phonemic)



The above scatter graph demonstrates the post intervention test scores of the 3 pronunciation aspects namely; intonation, stress and articulation (manner and place). Specifically, it shows that Learner 1 scored 64% (intonation), 87% (stress) and 90% (articulation). Learner 2 obtained 58% (intonation), 92% (stress) and 90% (articulation). Learner 3 attained 82% (intonation), 85% (stress) and 79% (articulation). Learner 4 got 97% (intonation), 68% (stress) and 82% (articulation). Learner 5 achieved 68% (intonation), 79% (stress) and 84% (articulation). Learner 6 scored 78% (intonation), 84% (stress) and 88% (articulation). Learner 7 obtained 76% (intonation), 82% (stress) and 90% (articulation). Learner 8 attained 75% (intonation), 80% (stress) and 92% (articulation). Learner 9 got 72% (intonation), 79% (stress) and 86% (articulation). Learner 10 got 78% (intonation), 90% (stress) and 96% (articulation). Having presented the oral test results for the first 10 set of learners, the following section presents the post intervention phonemic test for another set of different 10 learners.

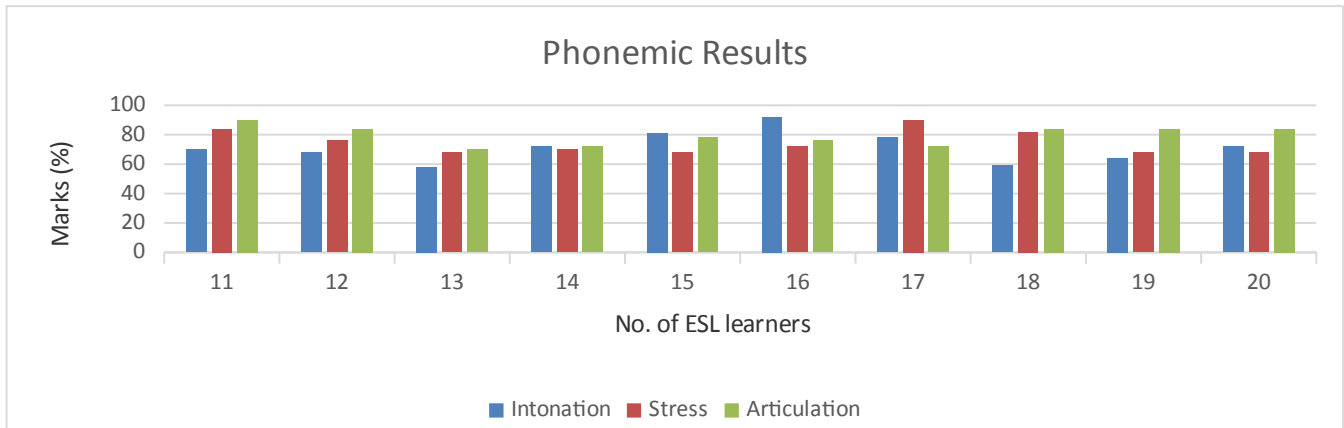


Figure 24: Phonemic test results 2

The graph above demonstrates that Learner 11 scored 70% (intonation), 84% (stress) and 90% (articulation). Learner 12 obtained 68% (intonation), 76% (stress) and 84% (articulation). Learner 13 attained 58% (intonation), 68% (stress) and 70% (articulation). Learner 14 got 72% (intonation), 70% (stress) and 72% (articulation). Learner 15 achieved 81% (intonation), 68% (stress) and 78% (articulation). Learner 16 scored 92% (intonation), 72% (stress) and 76% (articulation). Learner 17 obtained 78% (intonation), 90% (stress) and 72% (articulation). Learner 18 attained 59% (intonation), 82% (stress) and 84% (articulation). Learner 19 got 64% (intonation), 68% (stress) and 84% (articulation). Learner 20 got 72% (intonation), 68% (stress) and 84% (articulation).

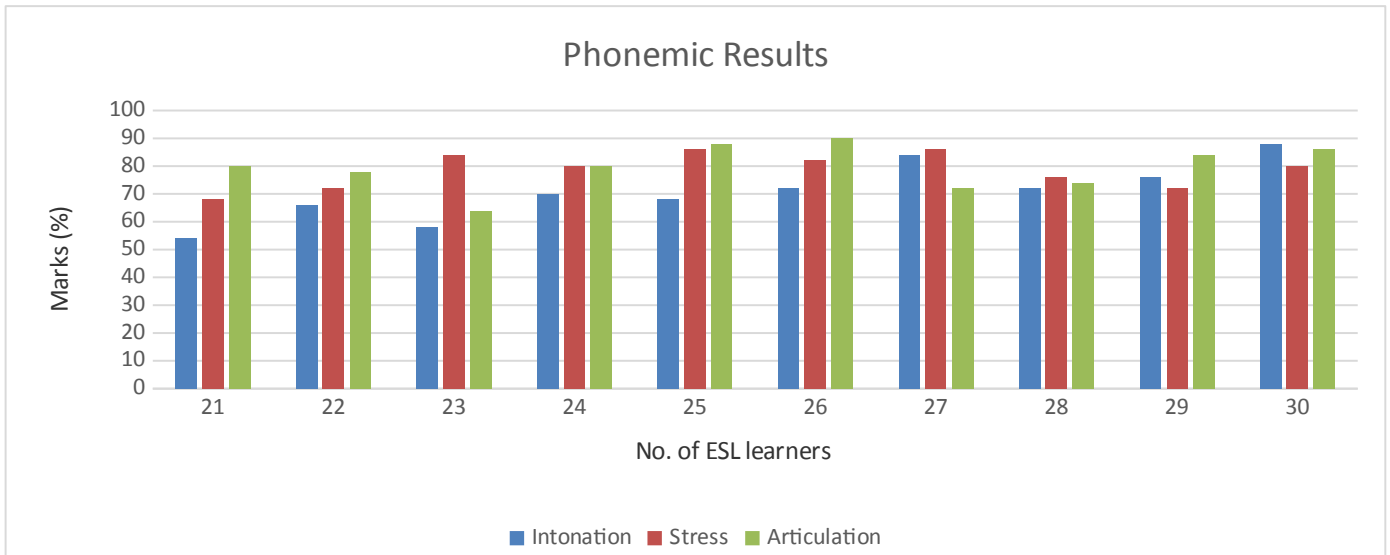


Figure 25: Phonemic test results 3

Figure 1 above demonstrates that Learner 21 scored 54% (intonation), 68% (stress) and 80% (articulation). Learner 22 obtained 66% (intonation), 72% (stress) and 78% (articulation). Learner 23 attained 58% (intonation), 84% (stress) and 64% (articulation). Learner 24 got 70% (intonation), 80% (stress) and 80% (articulation). Learner 25 achieved 68% (intonation), 86% (stress) and 88% (articulation). Learner 26 scored 72% (intonation), 82% (stress) and 90% (articulation). Learner 27 obtained 84% (intonation), 86% (stress) and 72% (articulation). Learner 28 attained 72% (intonation), 76% (stress) and 74% (articulation). Learner 29 got 76% (intonation), 72% (stress) and 84% (articulation). Learner 30 got 88% (intonation), 80% (stress) and 86% (articulation).

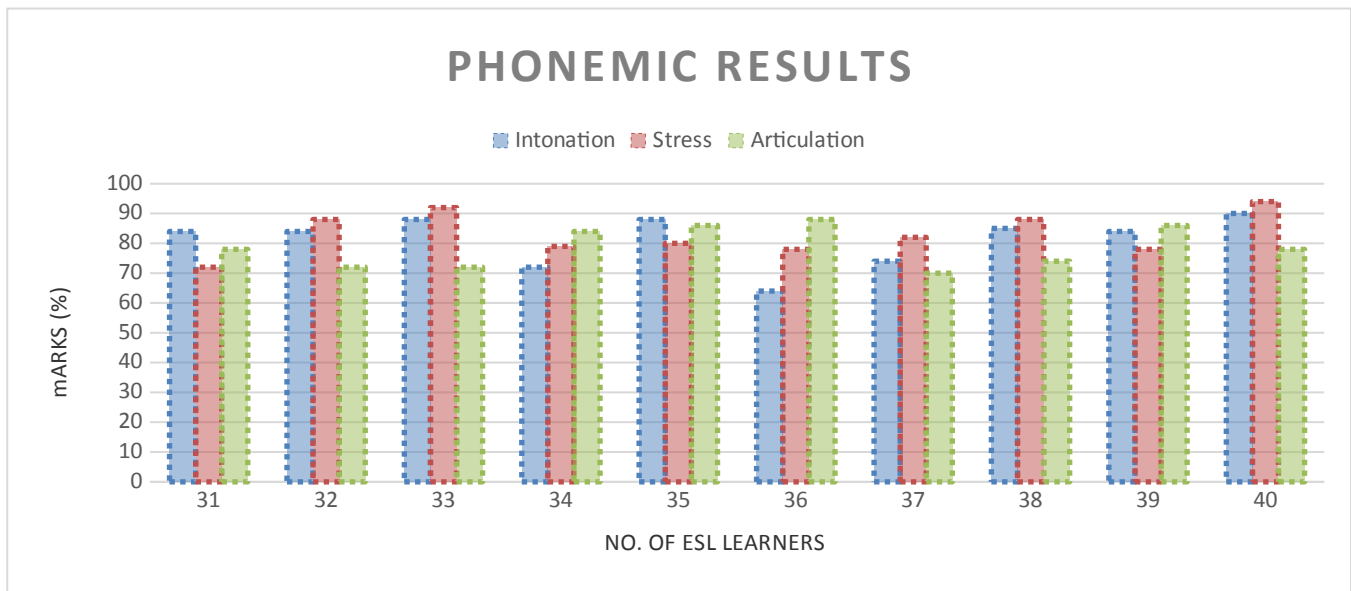


Figure 26: Phonemic test results 4

The above graph demonstrates that Learner 31 scored 84% (intonation), 72% (stress) and 78% (articulation). Learner 32 obtained 84% (intonation), 88% (stress) and 72% (articulation). Learner 33 attained 88% (intonation), 92% (stress) and 72% (articulation). Learner 34 got 72% (intonation), 79% (stress) and 84% (articulation). Learner 35 achieved 88% (intonation), 80% (stress) and 86% (articulation). Learner 36 scored 64% (intonation), 78% (stress) and 88% (articulation). Learner 37 obtained 74% (intonation), 82% (stress) and 70% (articulation). Learner 38 attained 85% (intonation), 88% (stress) and 74% (articulation). Learner 39 got 84% (intonation), 78% (stress) and 86% (articulation). Learner 40 got 90% (intonation), 94% (stress) and 78% (articulation).

5.4.2 Post test

5.4.2.1 Test (orthographic)

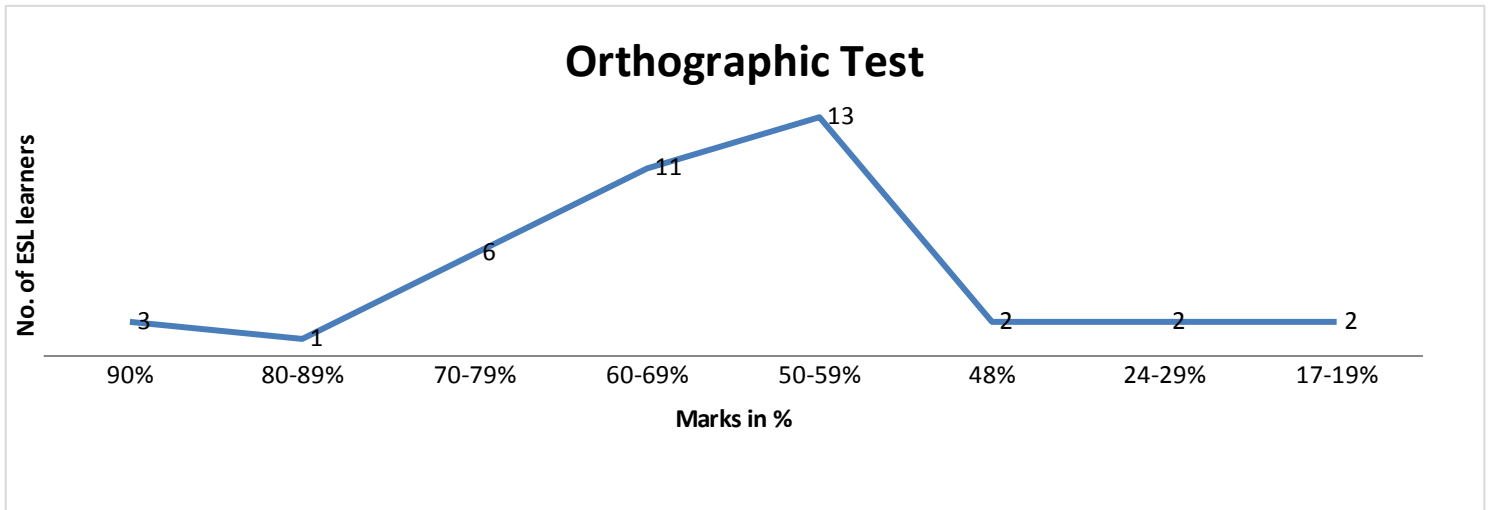


Figure 27: Orthographic test results

The graph above illustrates that out of the 40 grade 9 ESL learners, only 40 learners sat for a given test. 3 obtained 90%; 1 between 80% and 89%, 6 between 70% and 79%, 11 between 60% and 69%, 13 between 50% and 59% and while 2 attained marks that ranged between 48%. By extension, from the peak of the graph to its descending left side indicates that the majority of the learners obtained between 50% and 59%, followed by those who obtained between the range of 60% and 69% then the learners who attained between 80% and 89%. Further, the graph illustrates that 6 learners failed the test.

5.4.2.2 RETEST 1 (orthographic)

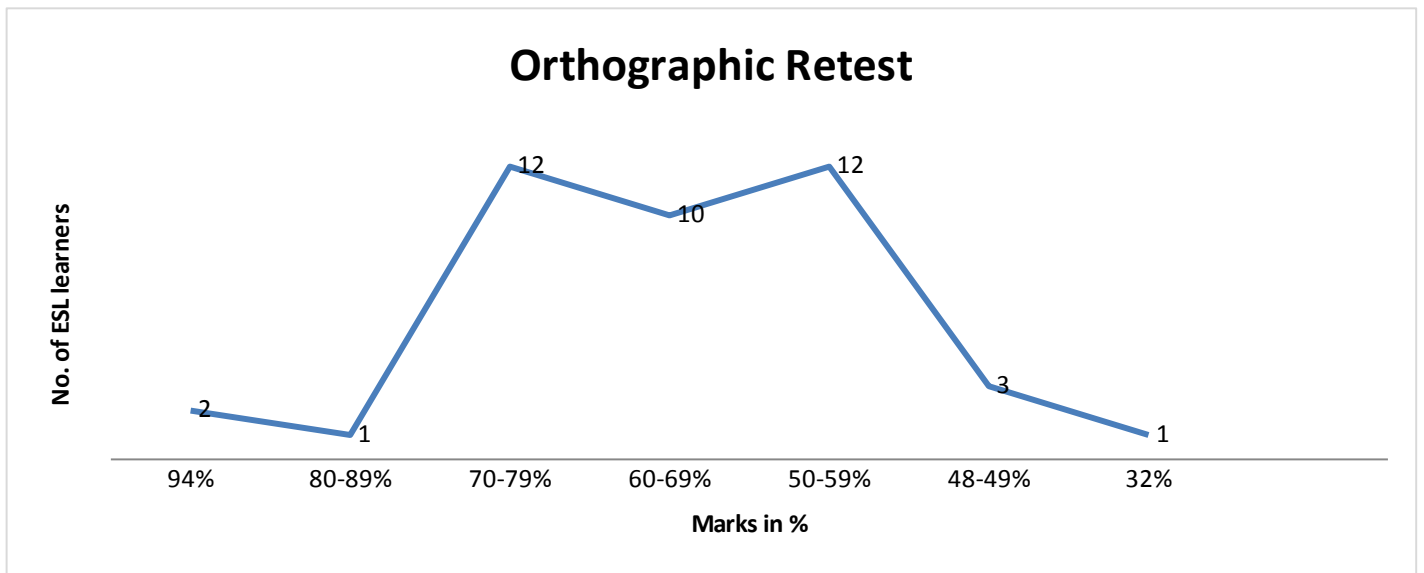


Figure 28: Orthographic retest results

The graph provides a visual representation of the performance of 40 grade 9 ESL learners on a test. This test was taken by all 40 learners, and the results are distributed across various score ranges. Specifically, 2 learners achieved exceptional scores of 94%, demonstrating a high level of proficiency. One learner fell within the 80% to 89% range, indicating a strong performance. A significant portion of the group, comprising 12 learners, scored between 70% and 79%, reflecting a consistent and commendable performance level. Another 10 learners achieved scores ranging from 60% to 69%, indicating a satisfactory level of understanding. Furthermore, 12 learners obtained scores between 50% and 59%, signifying a range where improvement may be needed but still demonstrating a basic grasp of the material. There were also 3 learners who secured marks of 48% to 49%. These results suggest areas for growth and development in their understanding of the subject matter.

The graph displays peaks and troughs, illustrating that the majority of learners fell into the 70%-79%, 50%-59%, and 60%-69% score ranges. It is notable that the highest peak corresponds to the 70%-79% range, indicating that a substantial number of learners performed consistently well in this range. It is worth noting that the graph also highlights the impact of a retest. In comparison to the initial test, there was a significant improvement in academic performance, as evidenced by the decrease in the number of learners who failed the retest. In summary, the graph provides valuable insights into the distribution of

test scores among grade 9 ESL learners. It reveals areas of strength and areas where improvement is needed, shedding light on the overall academic performance of the group.

5.4.3 Observation checklist

Table 26: Observation checklist

ITEM	YES	N O	FREQUENCY (n)	FREQUENCY (%)	MIN	MAX	RANGE
There is collective learning.	4	0	4	100	4	4	0
Abstract to concrete examples.	4	0	4	100	4	4	0
Concrete to abstract examples.	4	0	4	100	4	4	0
Teacher assists the learners.	4	0	4	100	4	4	0
Functional activities are performed.	4	0	4	100	4	4	0
Learner-learner interaction existence.	4	0	4	100	4	4	0
Teacher facilitates group work.	4	1	3	75	3	1	2
Use of mediation tools.	4	0	4	100	4	4	0
Repetition for clarification of challenging concepts.	4	0	4	100	4	4	0
Teacher demonstrates pronunciation.	4	0	4	100	4	4	0
Teacher motivates the learners.	4	0	4	100	4	4	0

The table presented above reveals that among the four teachers who utilised this checklist to assess the researcher, all of them assigned identical scores for all items, except for the teacher's capability to facilitate group work. For this specific item, only one teacher identified a deficiency in the teacher's capacity to oversee group work effectively. The scores for all other items had a uniform range of 0, indicating a high degree of consistency in the responses. However, the aforementioned item exhibited a range of 2, indicating a moderate dispersion of data points.

5.4.4 Findings from the qualitative data phase

5.4.4.1 Reflective journal

The themes below surfaced in my reflective journal. These themes explain the academic performance of the learners amid implementation of phonemic-orthography.

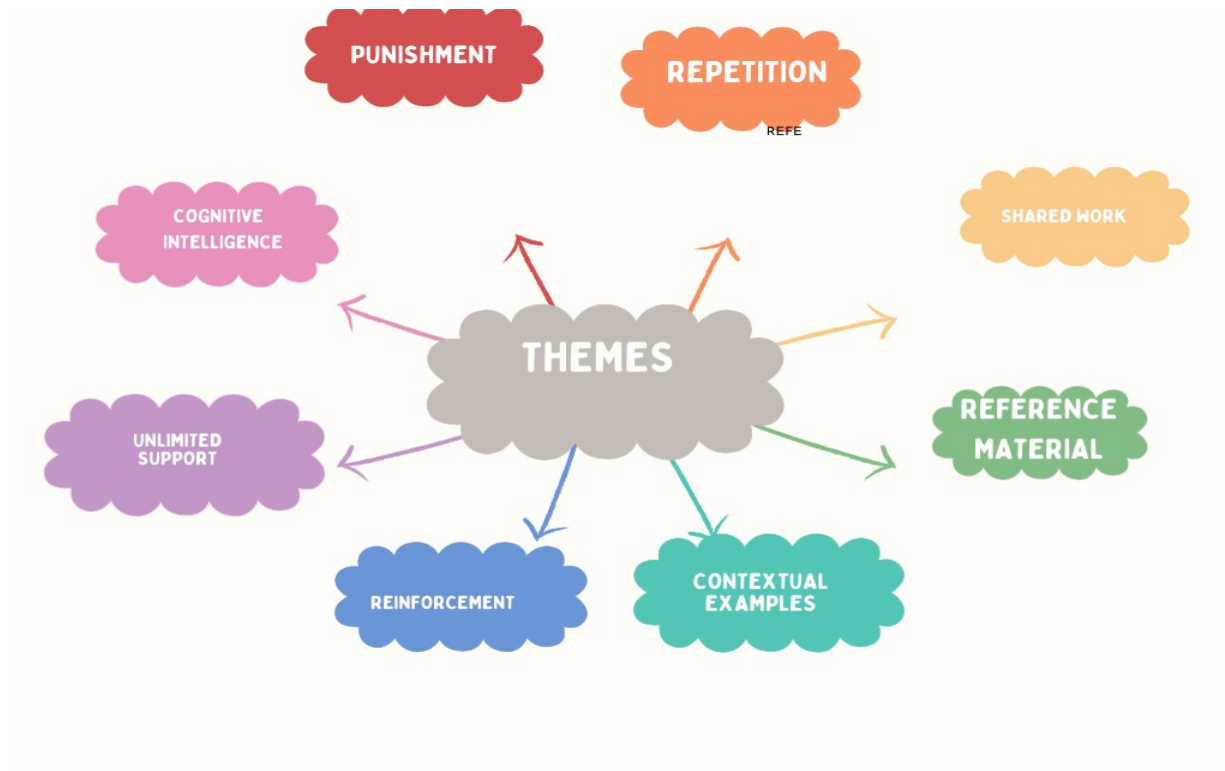


Figure 29: Reflective journal findings

The diagram depicted above symbolises the themes that are reflected in the researcher's reflective journal. These themes encompass punishment, repetition, collaborative effort, reference materials, contextual examples, reinforcement, extensive support, and cognitive intelligence.

5.5 The reflective phase

RQ3: Why will learners who have received phonemic-orthography intervention informed by phonics approach strategies exhibit the behaviours they do after the intervention?

This phase was crucial as it allowed the researcher and the grade 9 ESL learners to contemplate their experience with phonemic-orthography implementation. This served to solidify the knowledge acquired during the transformative phase. Through reflection, stakeholders had a chance to venture into the underlying implications of phonemic-orthography, the implementation process, and the roles of the researcher and the learners. Consequently, they reflected on their ability to learn from errors, improving spelling performance, and cultivating a culture of ongoing personal and professional development.

5.5.1 Results from the quantitative phase

5.5.1.1 Documents: Records

Table 27: Phonemic-orthography assessment (long vowel sounds)

Long vowel sounds	Sound	Phonetic-transcription	Orthography
"a"	/æ/	'rɛɪn	Rain
"e"	/ea/	'sɪt	Seat
"i"	/aɪ/	'paɪ	Pie
"o"	/oʊ/	'boʊ	Boat
"u"	/u:/	'blu	Blue

Table 28: Phonemic-orthography assessment (Schwa sound and R-controlled vowels)

Schwa Sound	Phonetic-transcription	Orthography
/ə/	ə'baʊt	About
	bə'nænə	Banana
	tə'meɪtəʊ	Tomato
	'tʃɒklət	Chocolate
Conclusion: They are now able to identify unstressed syllables and accordingly		

Controlled vowels	Sound	Phonetic-transcription	Orthography
"r"	/ɜr/	/bɜ:rd/	Bird
	/ɜr/	/fɜ:r/	Fur
	/ɜr/	/nɜ:rs/	Nurse
	/ɔr/	/kɔ:rn/	Corn
	/ɔr/	/fɔ:rk	Fork

Conclusion: They can now strictly follow the typical short or long vowel patterns

5.5.1.2 Findings from the qualitative phase

5.5.1.2.1 Focus group

This section presents the findings derived from a focus group session that served as an introspective exercise for grade 9 ESL learners. They engaged in reflection to uncover the root causes of their academic performance following the implementation of phonemic-orthography. This academic performance specifically pertains to the improvement of spelling skills to enhance critical literacy. The focus group was divided into three groups: Group A, Group B, and Group C. Theme 1: Teacher support in spelling development. The findings based on this theme are presented per groups.

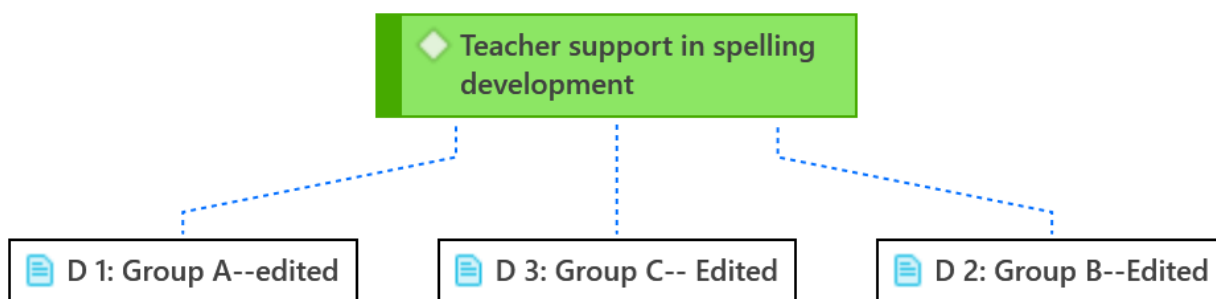


Figure 30: Teacher support in spelling development (TSSD)

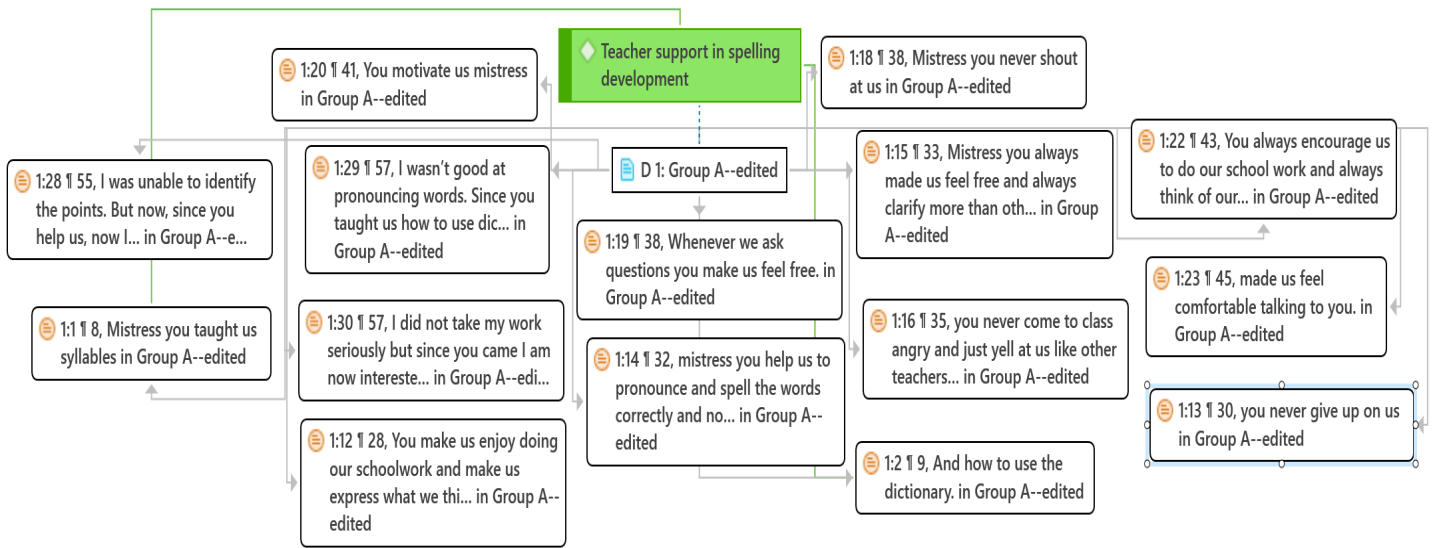


Figure 31: TSSD group A findings

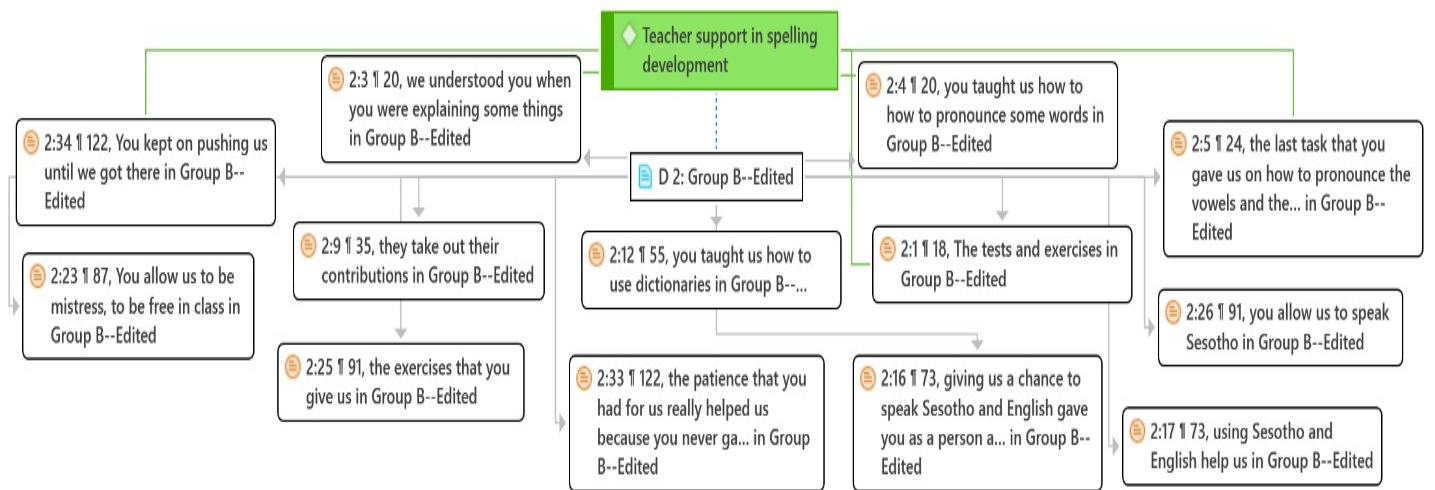


Figure 32: TSSD group B findings

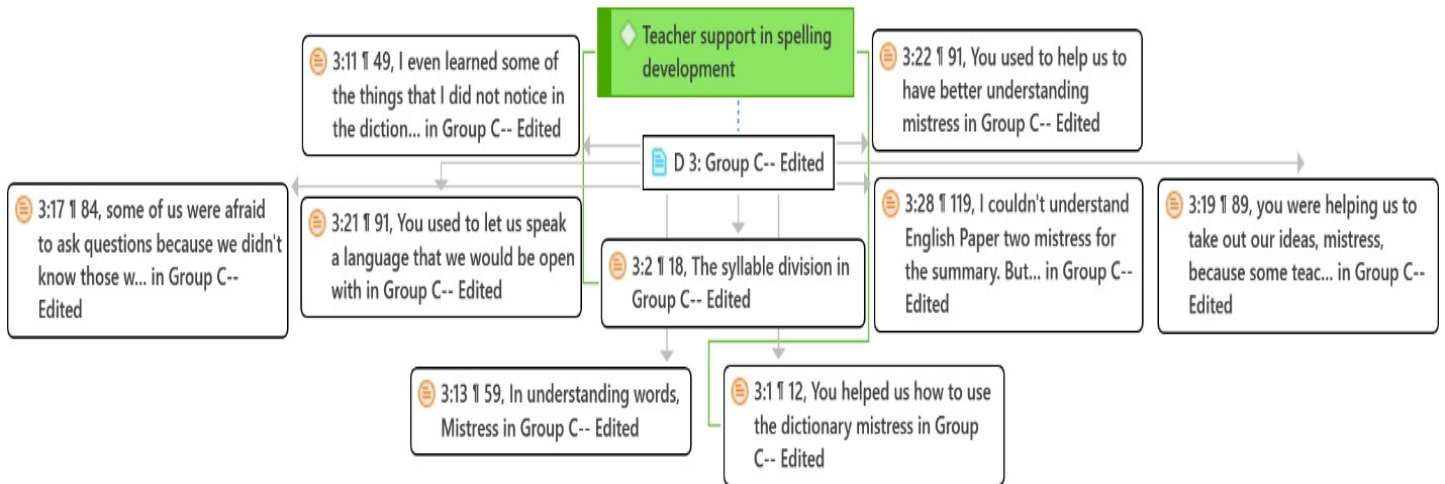


Figure 33: TSSD group C findings

Having presented the findings for the first theme, the section below expounds on the second theme, which is peer support in spelling development.



Figure 34: Peer support in spelling development (PSSD)

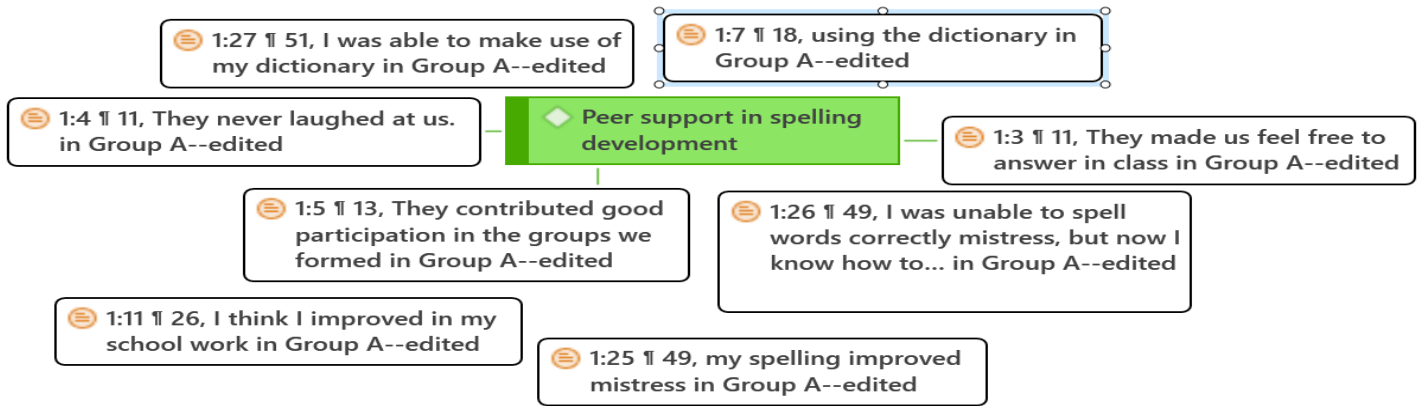


Figure 35: PSSD group A findings

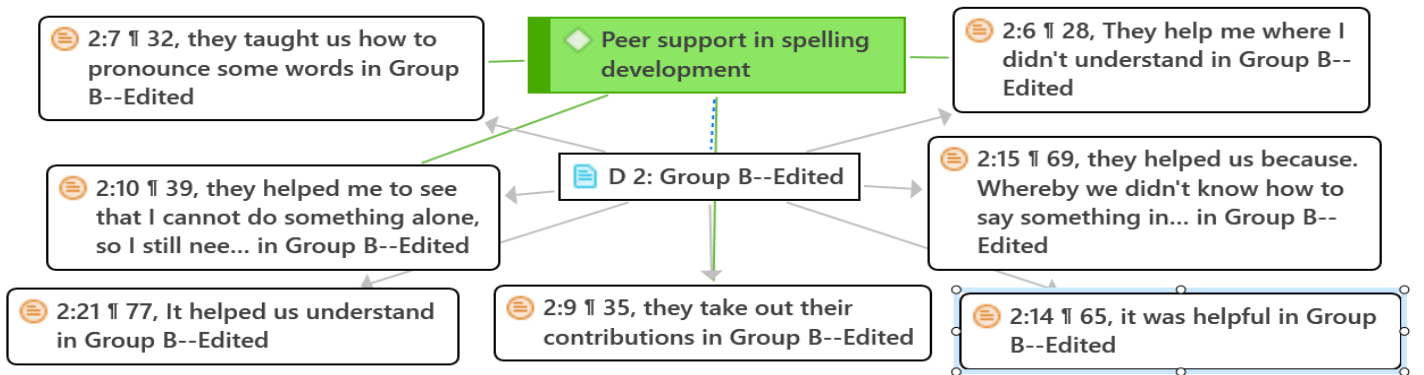


Figure 36: PSSD group B findings

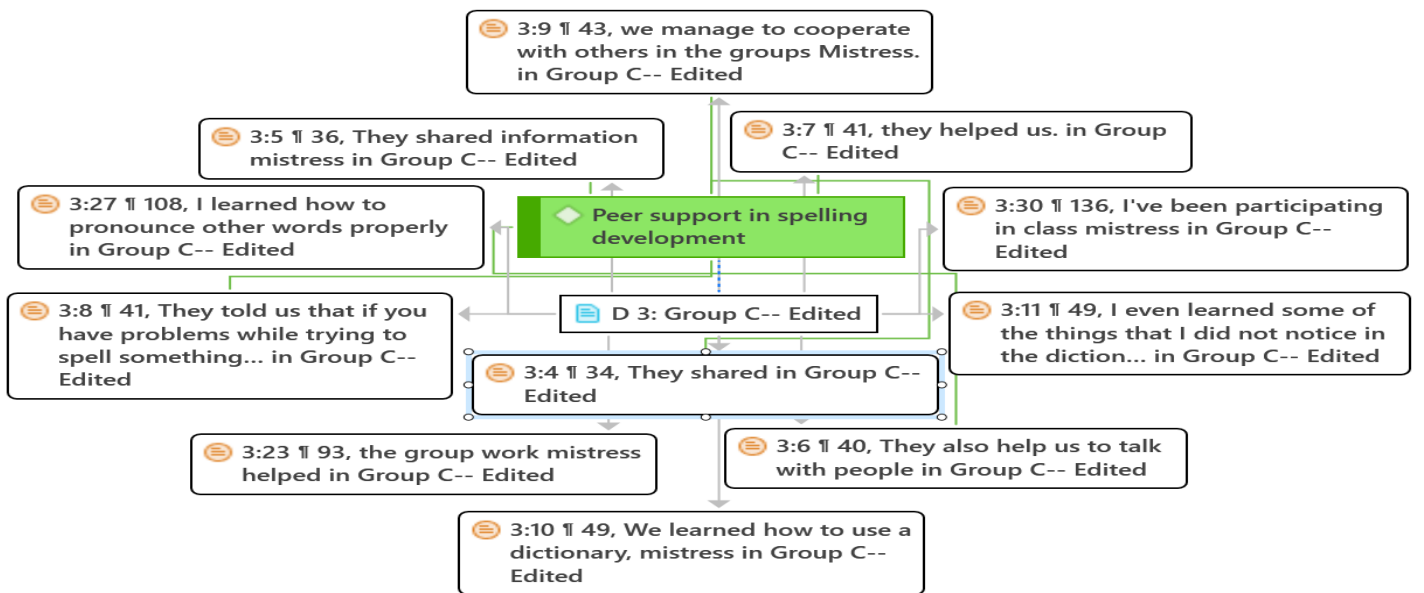


Figure 37: PSSD group C findings

To gain a deeper comprehension of the implications of implementing phonemic-orthography for grade 9 ESL learners, the other theme is introduced below: the utilisation of mediation tools.

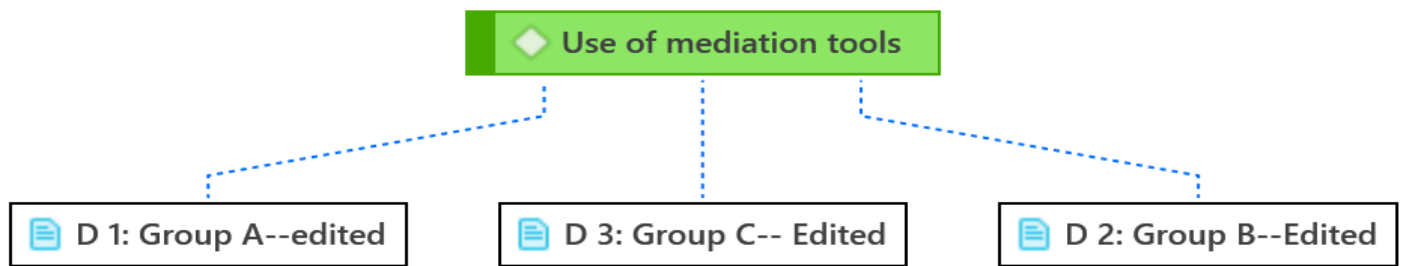


Figure 38: Mediation Tools (MT)

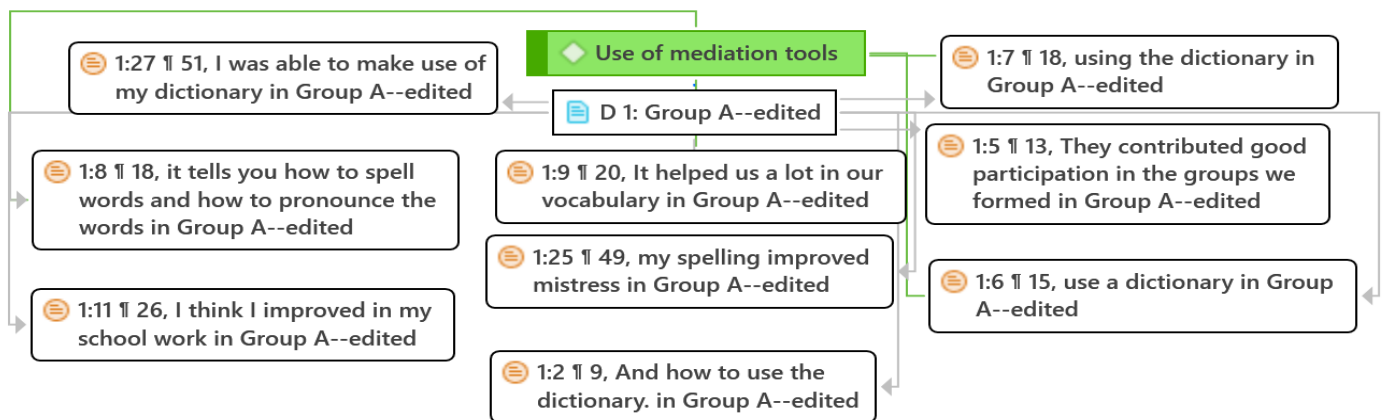


Figure 39: MT group A findings

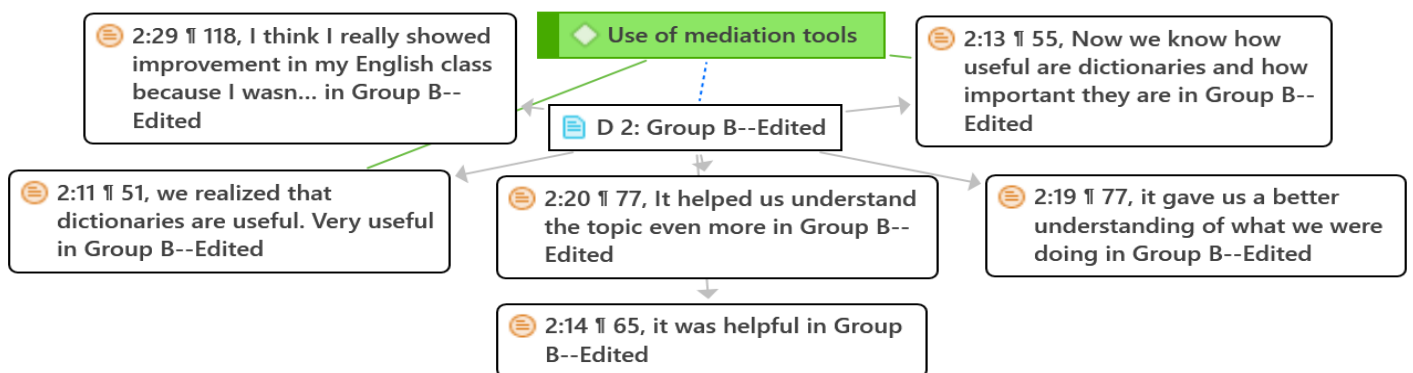


Figure 40: MT group B findings

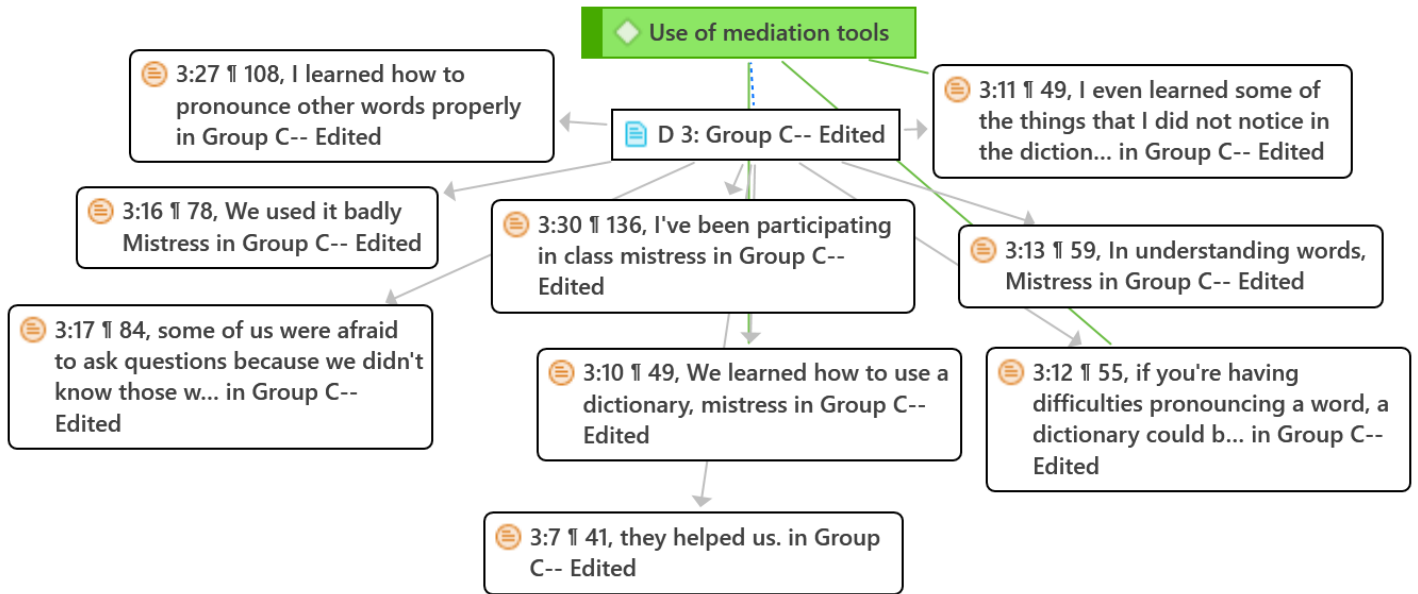


Figure 41: MT group C findings

Another theme that emerged is the effects of language use rules. This theme is depicted in the diagrams below.

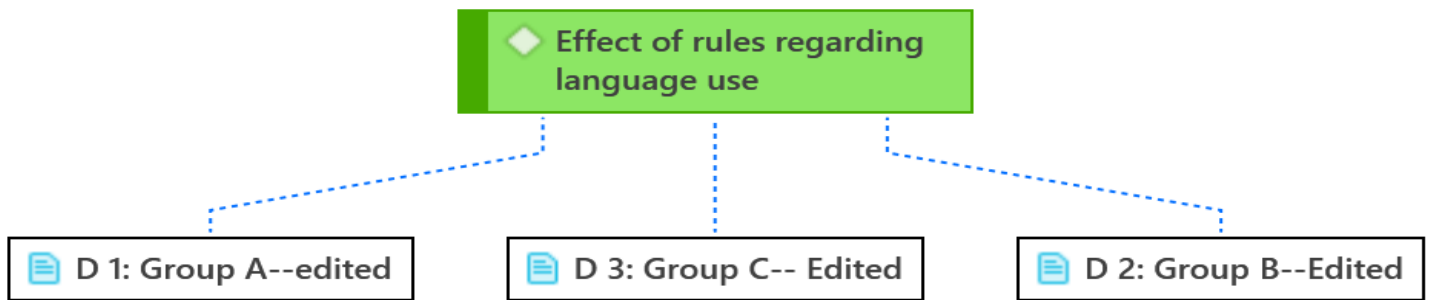


Figure 42: Language Rule Effect (LRE)

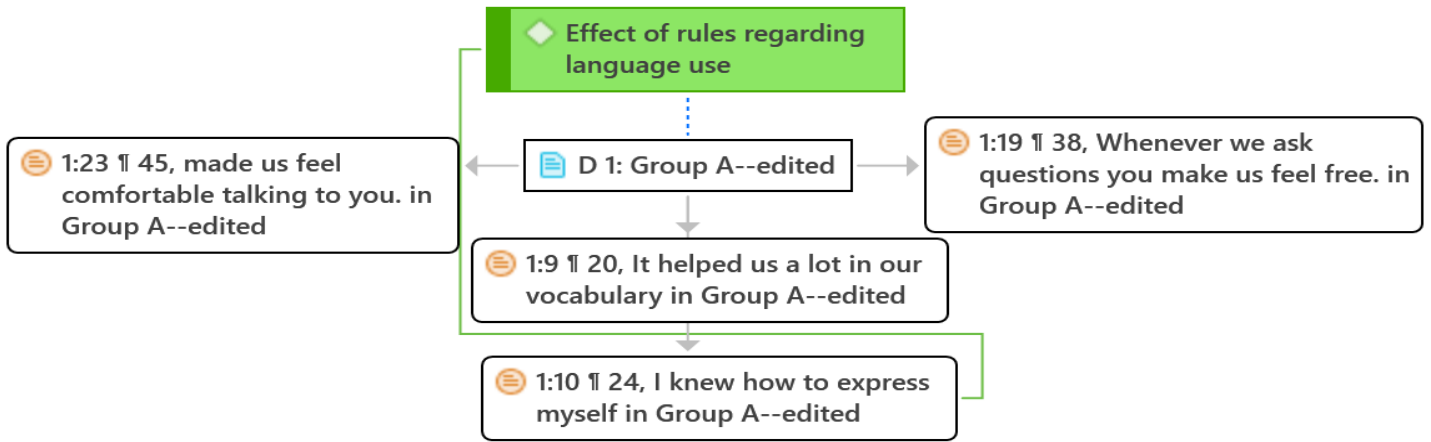


Figure 43: LRE group A findings

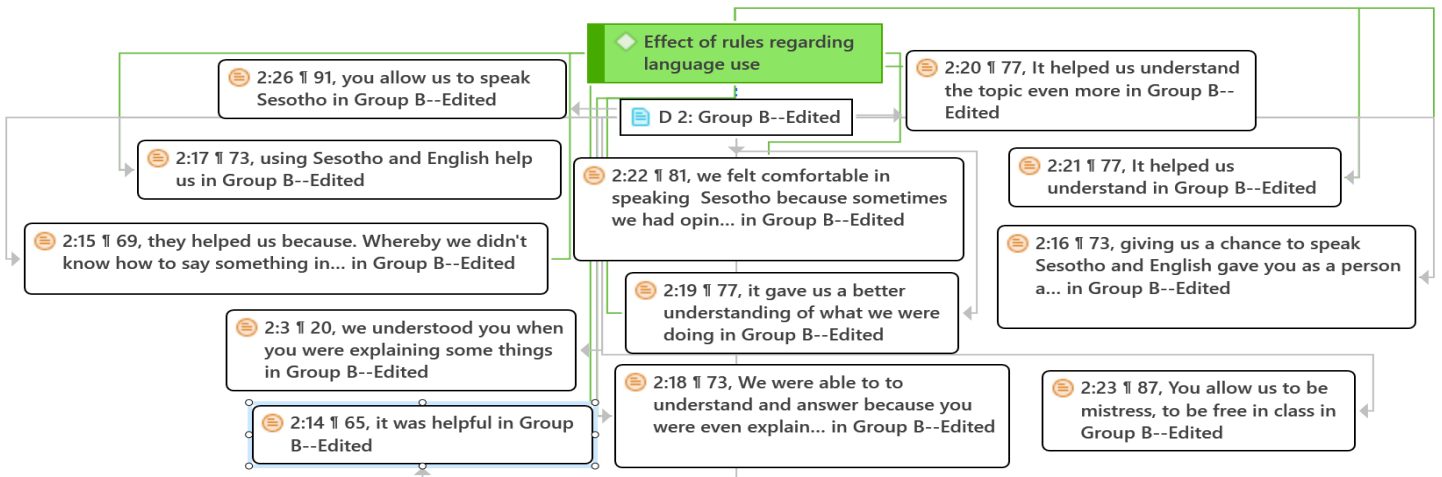


Figure 44: LRE group B findings

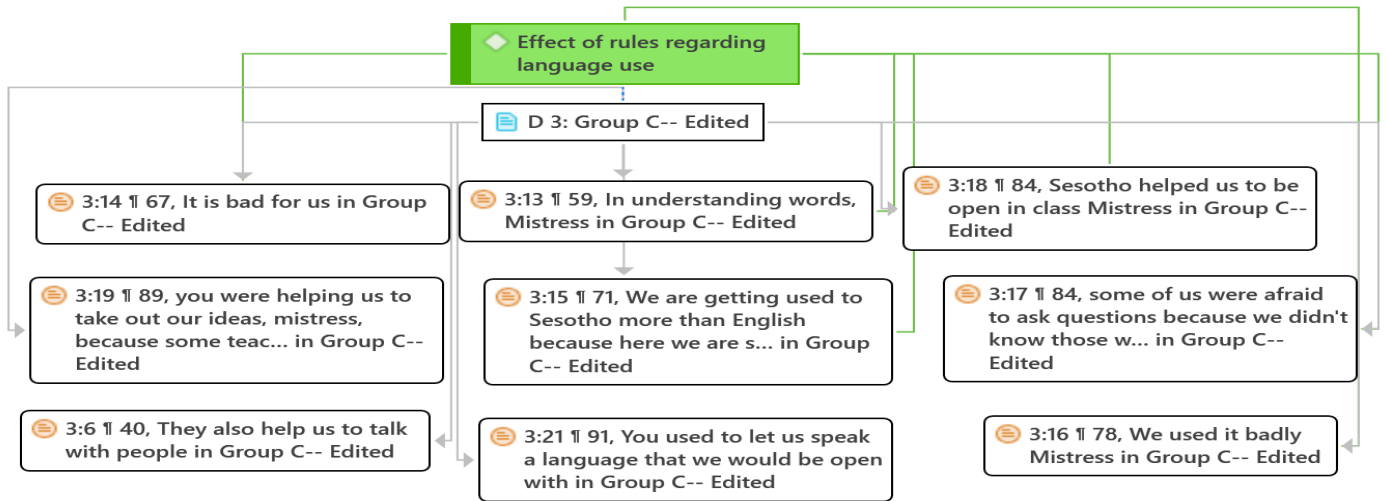


Figure 45: LRE group C findings

In addition to the discussed theme, the next theme is presented; that is, disparity between intervention and conventional methods of teaching and learning.

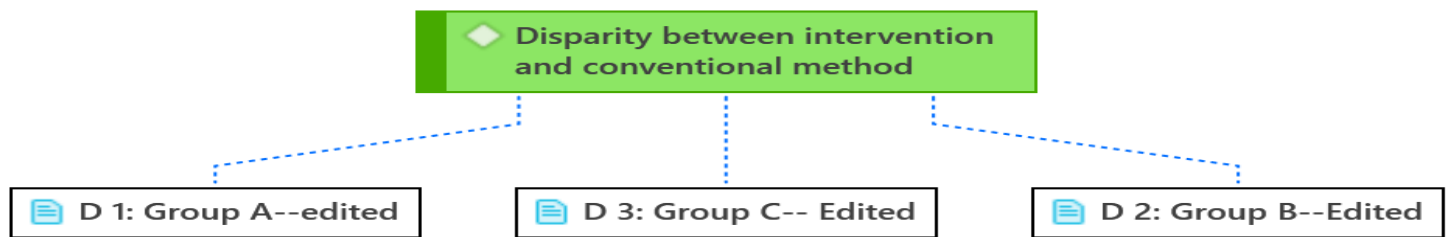


Figure 46: Intervention vs conventional methods (ICM)

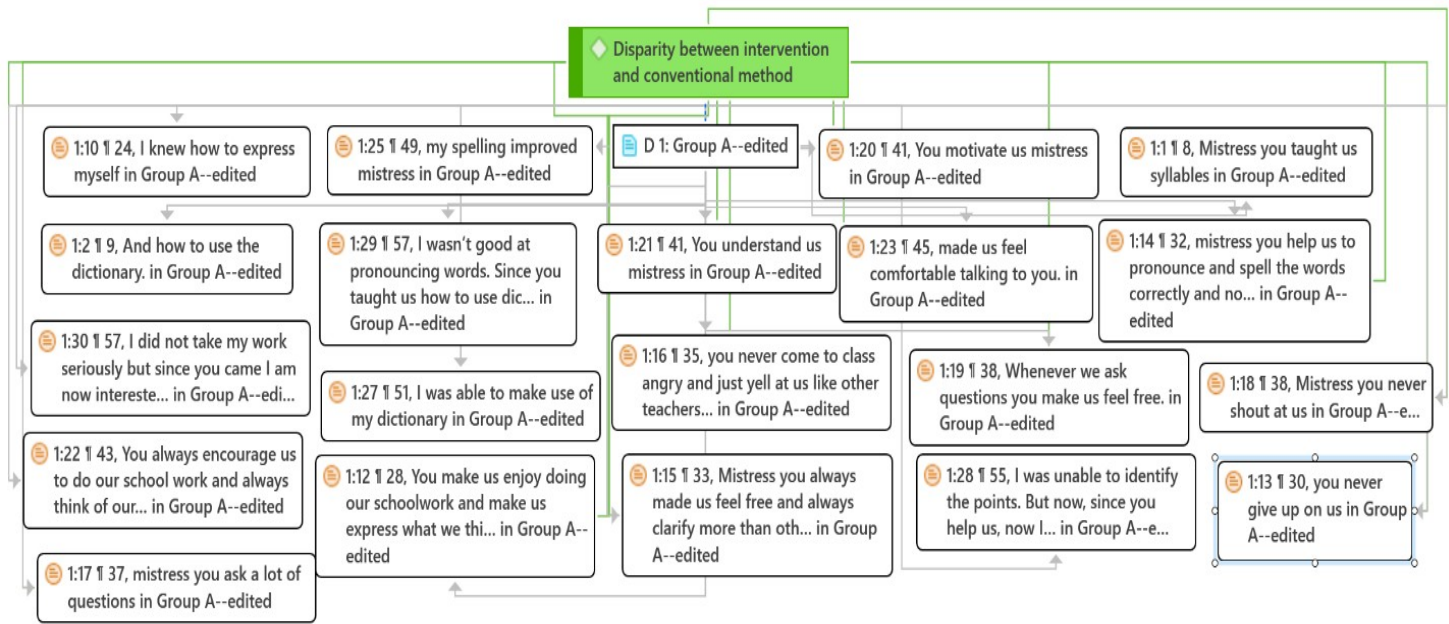


Figure 47: ICM group A findings

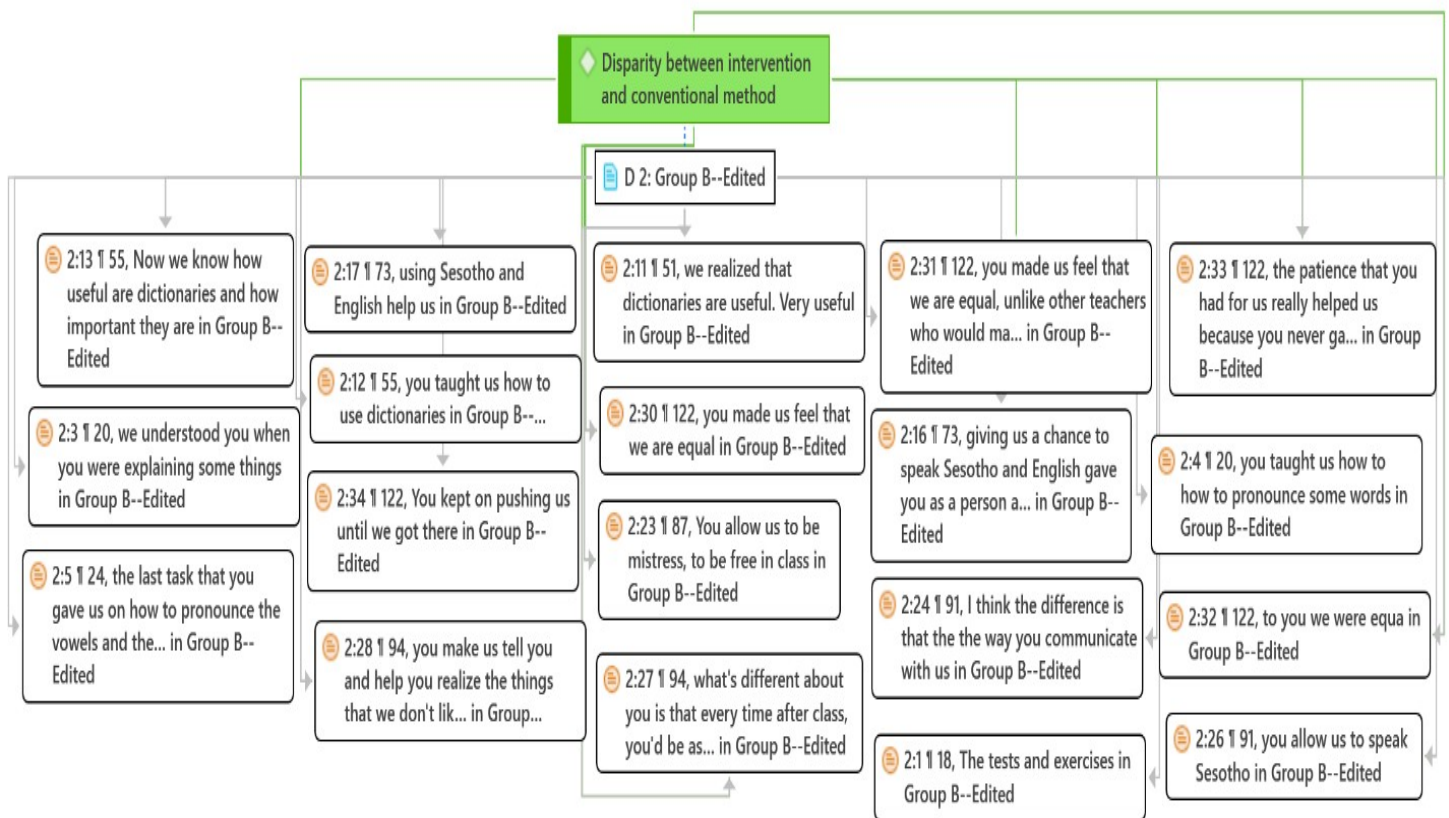


Figure 48: ICM group B findings

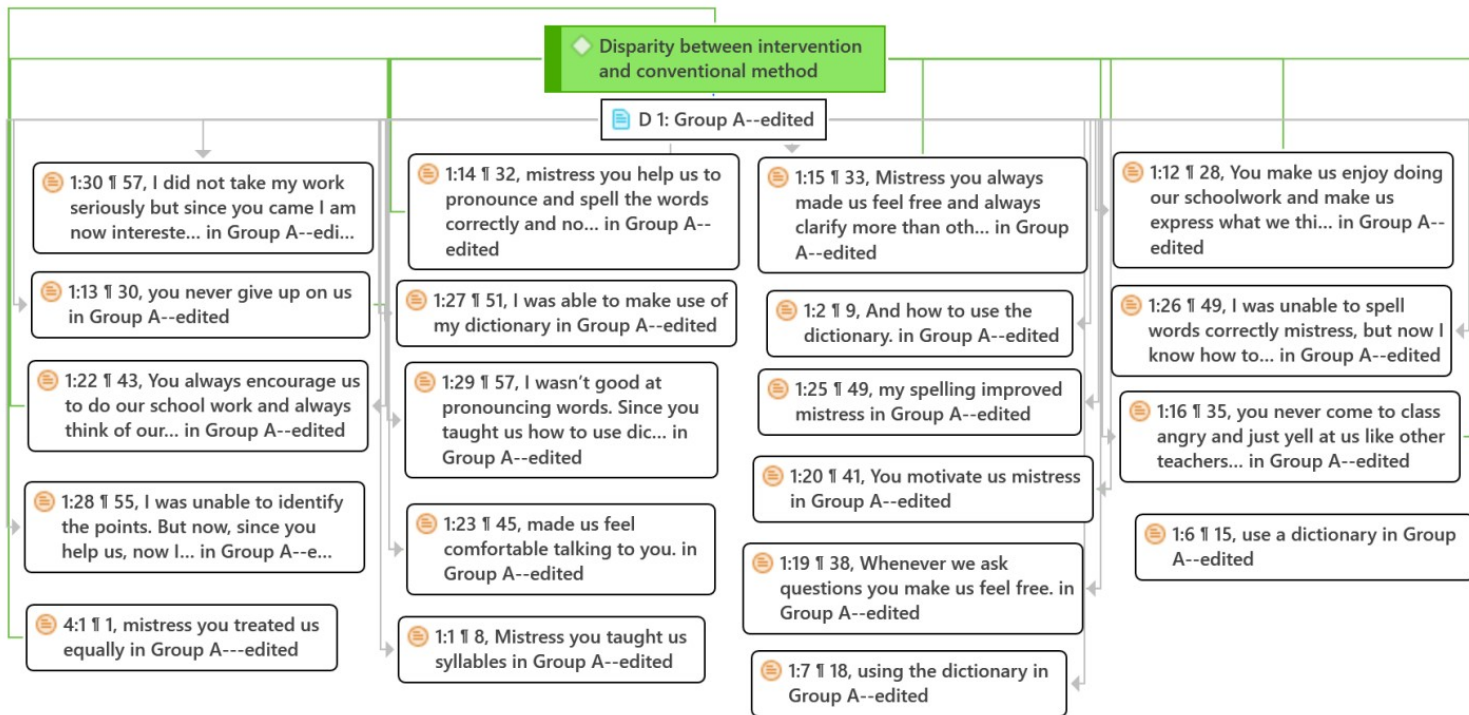


Figure 49: ICM group C findings

Having presented the fifth theme, the section below presents the last the last theme; that is, improvement post intervention.

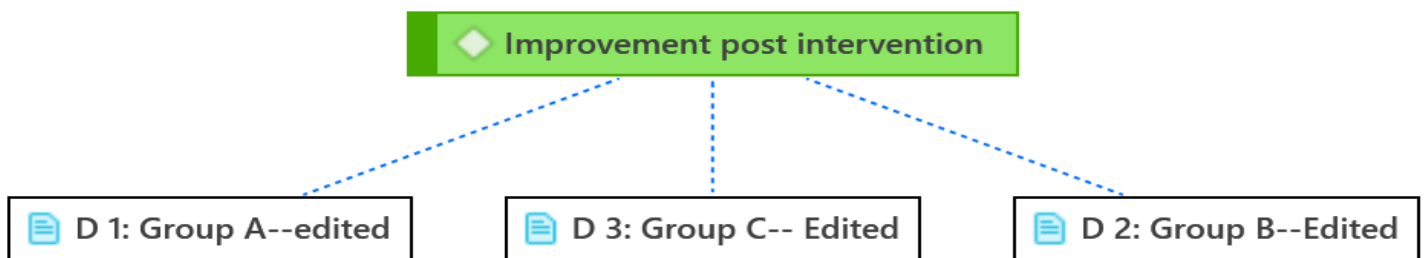


Figure 50: Improvement Post Intervention (IPI)

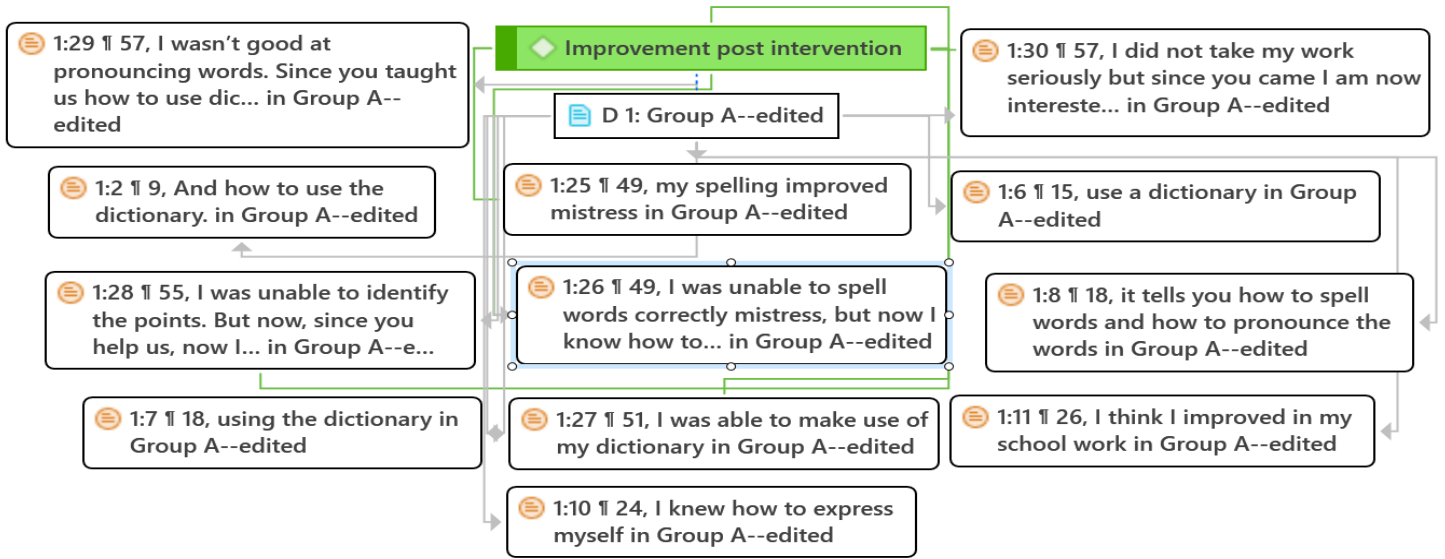


Figure 51: IPI group A findings

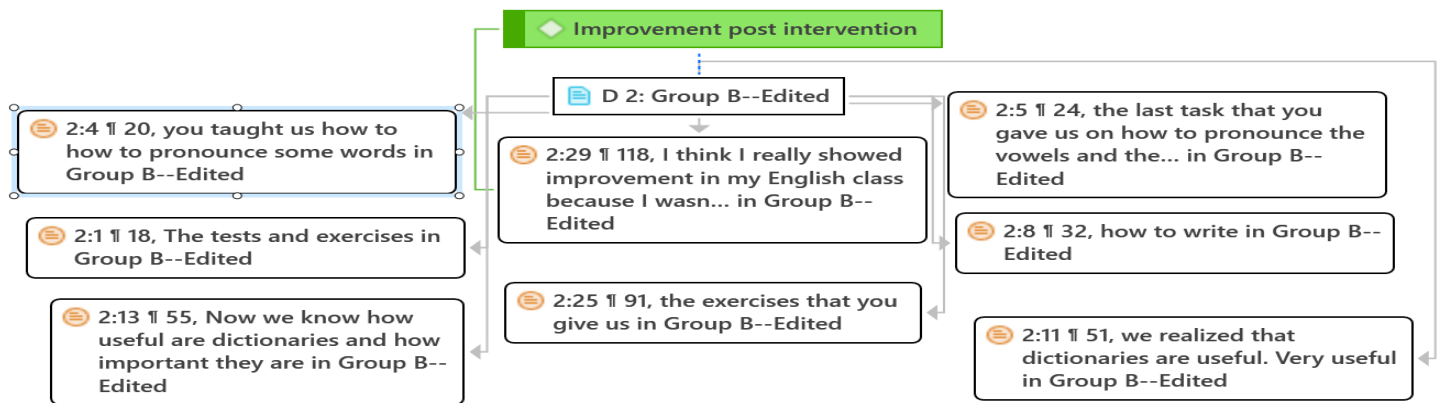


Figure 52: IPI group B findings

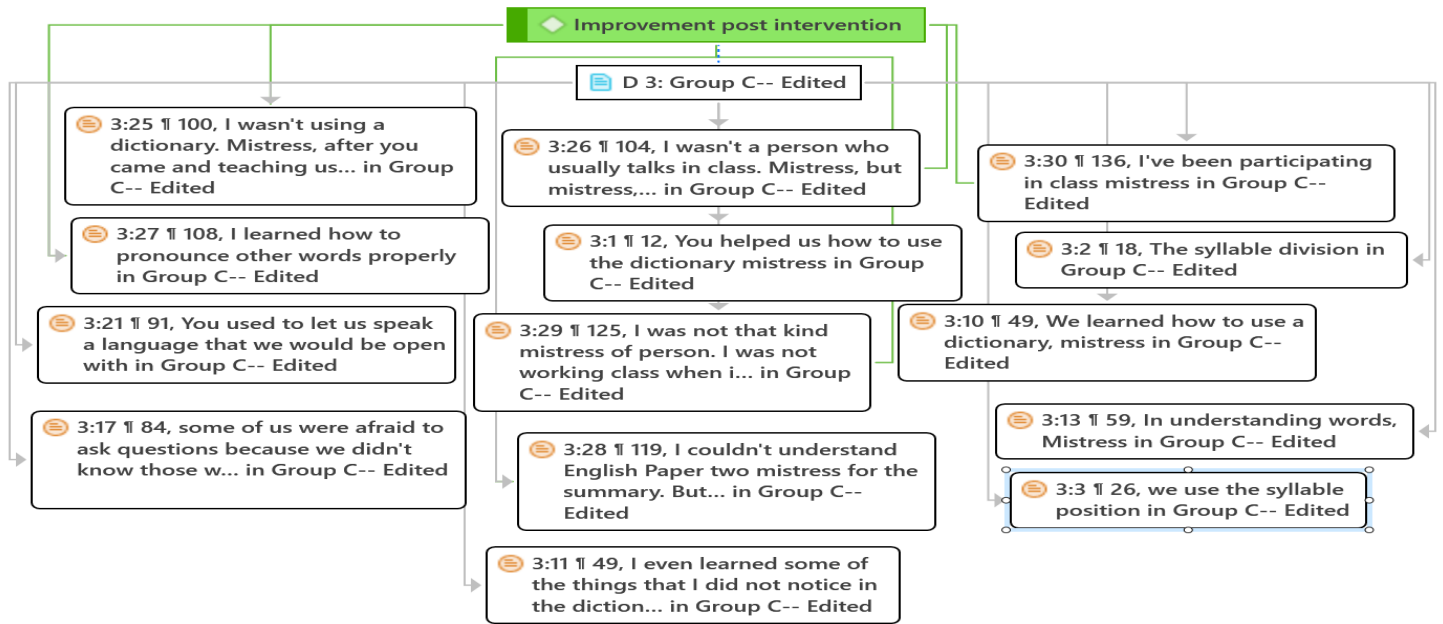


Figure 53: IPI group C findings

5.6 Hypothesis testing

(h_0) : There is no significant difference in performance between pre and post implementation of phonemic-orthography.

The table below demonstrates comparison of the pre-test' retest (group 1) and post-test's retest (group 2) results whereby the probability value (p-value) was calculated.

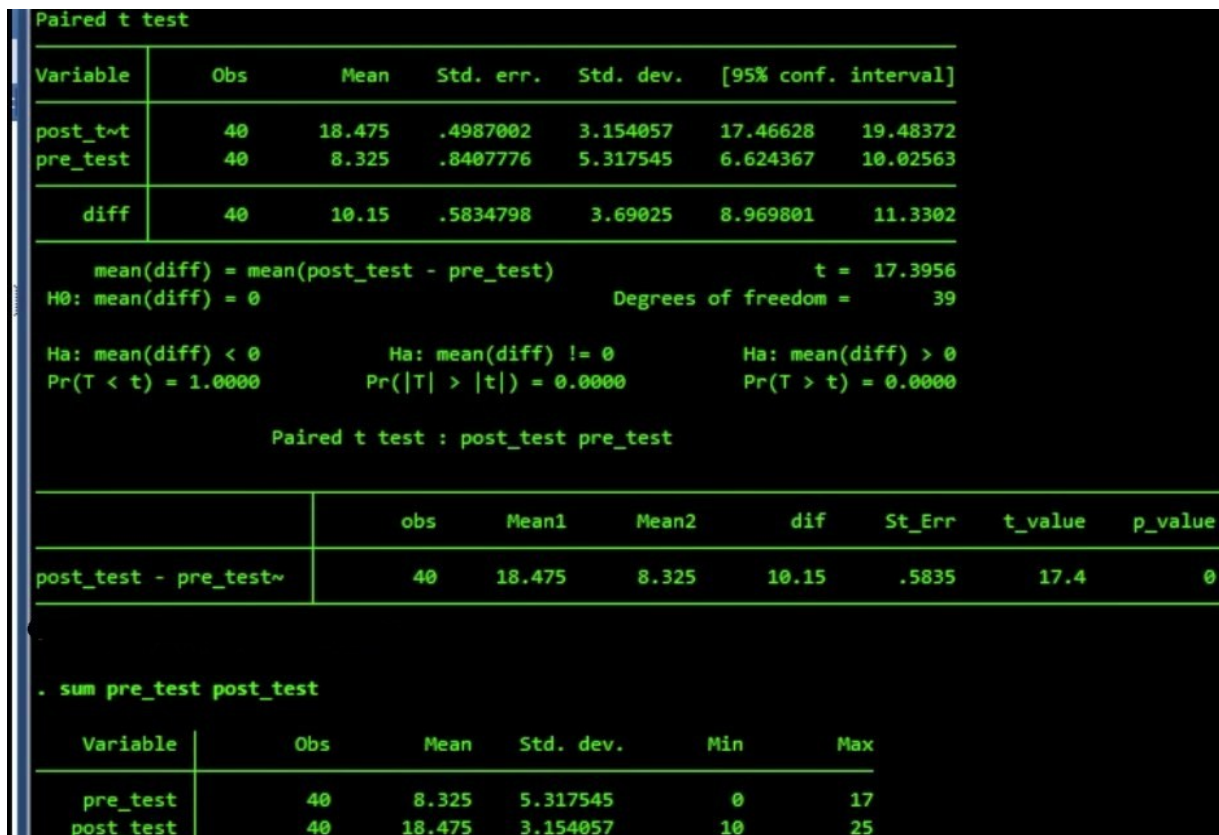


Figure 54: Paired sample t-test

5.6.2 Inferential statistics

The figure above illustrates a t-value of 17.3956, which measures the difference between the means of the pre and post-intervention groups relative to the variability within these groups. In hypothesis testing, a larger t-value, as indicated by Sand (2022), typically signifies a more substantial difference between the groups. Given the t-value of 17.3956, which is considerable, it suggests a significant disparity in academic performance between the two groups.

Based on this interpretation, a significance level (α) of 0.05 was employed to compare the calculated t-value to the critical t-value for the degrees of freedom (39) at that alpha level. Since the calculated t-value (17.3956) exceeds the critical t-value, the null hypothesis (h_0) was rejected. Rejecting h_0 implies that there is substantial evidence supporting a significant difference in academic performance between the pre and post-intervention groups. In simpler terms, the t-test provides enough evidence to reject the null hypothesis, indicating that the implementation of phonemic-orthography has indeed had a significant impact on performance. However, to make a definitive decision, I also considered the degrees of freedom, the p-value corresponding to the t-value, and the chosen significance level. These

factors collectively aided in determining whether the observed difference in academic performance is statistically significant or if it could have occurred by random chance.

Before concluding about h_0 , a significance level (α) of 0.05 was selected to strike a balance between Type I and Type II errors in hypothesis testing, following the rationale presented by Sand (2022). Sand (2022) argues that an α of 0.05 reduces the risk of Type I error (false positive), which is the probability of incorrectly rejecting the null hypothesis when it is true. Simultaneously, it reduces the likelihood of Type II error (false negative), which occurs when one fails to reject h_0 when it is actually false (Sand, 2022). Having determined the α and the t-value, the below figure outlines the conclusion.

Table 29: Null hypothesis rejection

H_0 : There is no significant difference in performance between pre and post implementation of phonemic-orthography
$\frac{t\alpha}{2} = 1.96$
t-value = 17.3956
Conclusion: Reject h_0

Source: Own Calculation

The presentation above indicates that the null hypothesis (h_0) was rejected because the t-value (17.3956) exceeded the critical value (1.96), which is denoted as $t > 1.96$. Consequently, the alternative hypothesis (h_a) was accepted, signifying a significant difference in performance between the pre and post-implementation of phonemic-orthography. After discussing the hypothesis testing, the following section elaborates on the descriptive statistics presented in the figure above.

5.6.2 Descriptive statistics

The pre-test results, as depicted in the figure, indicate that at the study's outset, the grade 9 ESL learners had an average score of 8.325, with scores exhibiting significant variation around this mean. At variance, the post-test results demonstrate a notable improvement, with the grade 9 ESL learners achieving an average score of 18.475. This suggests that, on average, participants' scores increased following the implementation of phonemic-orthography. Additionally, the standard deviation for the post-test is lower compared to that of the pre-test, implying that the post-test scores are more tightly

clustered around the average, indicating reduced variability. Furthermore, the minimum score in the post-test (10) surpasses the minimum score in the pre-test (0), indicating that even the lowest post-test score is higher than the lowest pre-test score. Similarly, the maximum score in the post-test (25) exceeds the maximum score in the pre-test (17), indicating that participants achieved higher scores after the intervention.

In summary, these findings suggest that the intervention had a positive impact on the participants' scores, with post-test scores displaying a higher average and less variability compared to pre-test scores. This improvement indicates that the intervention likely contributed to enhancing academic performance.

5.7 Acceleration of spelling skills

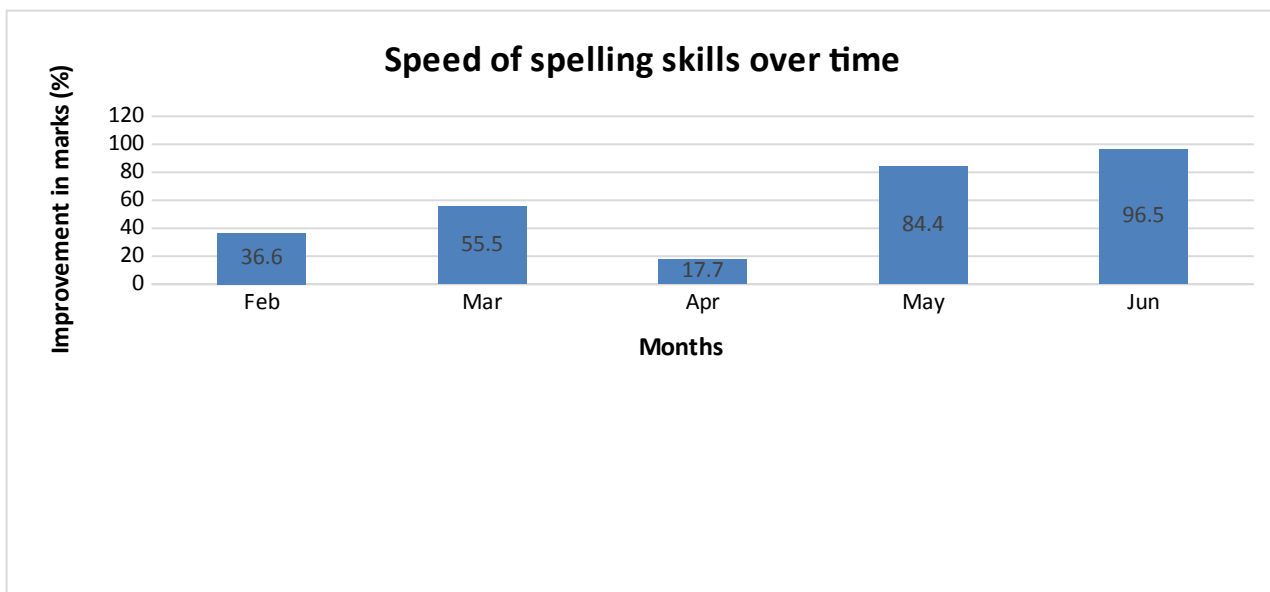


Figure 55: Acceleration of spelling skills

The graph above illustrates the progress of spelling skills among grade 9 ESL learners over time. The study's findings, as presented in Figure [insert figure number], indicate a substantial improvement in spelling skills as the months from February to June progressed. While the lowest percentage, 17.7%, for the acceleration of spelling skills was recorded in April, the highest was observed in June at 96.5%. In February and March, the proportions of spelling skill acceleration were 36.6% and 55.5%, respectively.

5.8 Conclusion

This chapter has presented the results and findings obtained from both the quantitative and qualitative datasets. After thorough analysis, the results and findings have been organised according to the various action research phases, namely the diagnostic phase, intermediary phase, transformative phase, and

reflective phase. Both datasets have addressed the three research questions and the null hypothesis as outlined in the first chapter. Furthermore, in alignment with the study's title, which focuses on the intervention's impact on accelerating spelling skills, the final section of this chapter has verified that phonemic-orthography indeed accelerates spelling, as evidenced by the speed of academic performance improvement among ESL learners over time.

CHAPTER 6

DISCUSSION OF FINDINGS

6.0 Introduction

The preceding chapter provided an exposition and interpretation of the results and findings that were derived from the data generated and subsequently analysed within this study. In this section, we engage in a comprehensive discussion of these results and findings. Our discussion is anchored in the context of data generation, primarily revolving around the research questions and the null hypothesis (h_0). Furthermore, we explore how these findings align with the action research cycle phases employed in addressing the research questions and testing h_0 throughout the study, encompassing the diagnostic phase, intermediary phase, transformative phase, and reflective phase.

6.1 The diagnostic phase

RQ1: The preconditions for spelling challenges.

This section probe into the themes that emerged from the data generated to address the research question, "What are the preconditions for spelling challenges?" As a reminder, this study utilised exploratory sequential mixed methods research (MMR) approach. Consequently, the discussions in this study adhere to a sequential progression, where the initial focus is on quantitative data, followed by qualitative data that elaborates further on the quantitative findings.

6.1.1 Eye dialect

The results from both the initial pre-test and the retest revealed that grade 9 ESL learners often misspell certain words due to eye dialect. For instance, instead of writing "animals" (/ˈænəməlz/), some students write "/animulz/," "deseas" instead of "disease" (/dɪˈzɪz/), and "there" (/ðɛr/) in place of "/their/." This use of eye dialect had a negative impact on the learners' academic performance, as misspelling words resulted in deductions from their scores. Consequently, eye dialect emerges as a contributing factor to the spelling challenges faced by grade 9 ESL learners. This finding aligns with Demirezen's (2021) perspective that eye dialect contributes to spelling errors and mistakes.

In an effort to understand the reasons behind the use of eye dialect, the reflective journal notes revealed that the researcher engaged in informal conversations with the learners, during which one student disclosed, *"it is sexy mistress. That's how the Nigerians talk these days,"* and another added, *"and you now mistress, these days it is time for Naija. Their songs are nice, they speak nicely, and they are hot mistress."* It can be inferred that some of these learners are drawn to the trendy Naija culture. Upon reflection, it becomes evident that some of the spelling mistakes they make can be linked to their use of nonstandard spelling to represent word pronunciation. This perspective is in line with Britannica's (2016) and Brett's (2009) views that eye dialect is often associated with a person's attempt to be humorous. However, in this study, it could be argued that the learners are not necessarily trying to be funny but are rather imitating this cultural trend.

As a result, it was discovered that the issue of eye dialect leads to confusion in spelling. For instance, when these learners encountered nonstandard spellings in their written texts, it created uncertainty about the correct spelling of certain words. Additionally, their habit of using nonstandard spelling hindered their ability to communicate effectively in an academic setting where standard spelling is typically expected.

6.1.2 BrE vs AmE

The tests administered in this study revealed that some words were misspelled by grade 9 ESL learners due to the challenges of deciding whether to spell a word according to British English (BrE) or American English (AmE). For example, some learners spelled "traveling" instead of "travelling" and "organize" instead of "organise." These findings are consistent with the views of Hala-Hala (2021) and Selepe (2016), who argue that due to Lesotho's historical ties to Britain, the English used in Lesotho, both orally and in writing, has its roots in British English. This suggests that, in the Lesotho context, spelling words in AmE is equivalent to misspelling them. This aligns with the perspective of Migge and Lèglise (2007), who assert that British English gained prestige in the educational system of Lesotho due to historical colonisation influences. Therefore, it is pedagogically logical for BrE to be favoured over other varieties of English in the Lesotho education system. Moreover, these results corroborate existing evidence, as noted in Crystal (2000), regarding the distinctions between BrE and AmE in terms of doubled consonants and suffixes. For example, in BrE, consonants are doubled (e.g., "travelling"), while in AmE, the opposite is true (e.g., "traveling"). Similarly, in BrE, the suffix "-our" is used in words like "colour," while in AmE, "-or" is employed (e.g., "color").

Another contributing factor to spelling challenges was identified as homophones. As highlighted by Oxford Dictionaries Language Matters (2016), even though two words may be pronounced similarly, variations in BrE and AmE pronunciation can determine whether a word should be spelled in accordance with BrE or AmE. This variation may be related to intonation, stress patterns, and other factors. Expanding on the observations made in Oxford Dictionaries Language Matters (2016), it was noticed that grade 9 ESL learners often misspelled certain words due to the presence of homophones. For example, some learners spelled "allowed" for "aloud" and "bored" instead of "board." During an investigation into this issue, a learner in the reflective journal remarked, *"Mistress, li ea ts'oana, li ea ferekanya ka hloohong eaka" (Mistress, they sound the same, so their spelling becomes confusing)."*

This observation suggests that since homophones share the same pronunciation, there were no visual cues to distinguish their spellings in the exercises undertaken by the grade 9 ESL learners. Therefore, when writing from memory, these learners spelled "board" as "bored" based on its sound, and it appears that they were unsure about the correct spelling, leading them to choose the wrong homophone. This underscores the issue of overreliance on pronunciation. To clarify, as Brengelman (1970) previously stated in chapter 3, English spelling can be irregular, and some homophones do not adhere to consistent spelling rules. Consequently, some learners heavily relied on pronunciation and selected a homophone with a similar sound but an incorrect spelling.

6.1.3 Carelessness

Some of the pre-test results indicate that one of the reasons grade 9 ESL learners misspell certain words is due to carelessness. For example, it was observed that some learners spelled "sliver" instead of "silver," "severa" in place of "several," and "declearative" and "decarative" instead of "declarative." These instances can be classified as acts of carelessness because they represent mistakes that could have been avoided.

To provide further context, these learners were taking a test where the aforementioned words were already written in the question paper (see appendix 11). However, when answering the questions provided, they misspelled words that were right in front of them. This pattern aligns with the findings of other scholars. In particular, Sermsook et al. (2017) argue that carelessness during the process of learning English can lead to avoidable mistakes, errors, or accidents that could have been prevented with more attention and attentiveness to detail. In this context, if the grade 9 ESL learners had been

more careful, they likely would not have misspelled words that were clearly written in a passage they were reading.

These results are further supported by Bowling et al. (2016), who found that learners sometimes rush while writing, leading to careless errors. Specifically, they may fail to notice certain letters or overlook crucial details in a word.

6.1.4 Linguistic interference

The results in Chapter 5 revealed that some learners spell certain words differently from the standard English spelling. For example, they write "kip" for "keep," "biliv" for "believe," "dicided" for "decided," "futage" for "footage," "juring" for "during," "patisipent" for "participant," and "compiting" for "competing." These findings are consistent with previous studies and point to the impact of language policy in education, particularly the language of instruction.

As per the Lesotho Educational Language Policy (LELP), Sesotho is the medium of instruction in grades one to three, and English becomes the medium of instruction from the fourth grade onward. This transition from Sesotho to English as the medium of instruction appears to influence the spelling challenges of grade 9 ESL learners. This finding supports the work of Markely (2023) and Valcea (2020), who suggest that language policies in education, especially those that encourage native language use, can lead to language mistakes related to interlanguage and cross-linguistic influence. Regarding interlanguage, the words mentioned are evidence that the words produced by these learners as a result of misspelling are neither Sesotho nor English, as Markely (2020) points out. For instance, "juring" is a mixture of both languages. In terms of cross-linguistic influence, as emphasised by Valcea (2020), this occurs when learners carry over language knowledge from their native language into the target language. In this study's context, it may be argued that grade 9 ESL learners experience negative transfer, leading to errors in English spelling due to the influence of Sesotho phonological features that manifest in orthographic features not found in either Sesotho or English. Additionally, some teachers' pronunciation habits may contribute to this, as they may pronounce "juring" as /'dʒʊərɪŋ/ instead of /'dʒɔːrɪŋ/. Learners may emulate their teachers, which further explains why they misspell certain words. These findings align with those of Nguyen (2022), who highlights that learners may become overly reliant on their native language, hindering their progress in acquiring the target language and making it harder to develop proficiency in the target language.

It is important to note that Lesotho's language policy in education was reviewed in 2023. In the previous version, Sesotho was identified as the mother tongue, with no mention of other minority languages being considered as mother tongues for learners from those ethnic groups. This was confirmed in Kolobe and Matsoso's (2020) study, which identified other languages such as isiXhosa and Sephuthi. In the revised policy, minority languages are given due recognition and inclusion. However, the policy does not address the potential repercussions of using the native language as a medium of instruction in the early years of primary education. This means that the negative effects of interlanguage and cross-linguistic influence due to the use of the mother tongue as a medium of instruction may still persist.

This argument is in line with the Critical Period Hypothesis (CPH). Siahian (2022) explains that CPH specifies the optimal time frame for effective language learning, but Singleton and Lesniewska (2021) argue that it does not apply in this study, as it focuses on second language learning rather than second language acquisition. Azieb (2021) also associates CPH with language learning instead of language acquisition, showing that exposing a child to language learning enables them to learn the language quickly. There seems to be convergence in the results, as all four ESL teachers, in their questionnaire responses, confirmed that the learners' L1 (native language) frequently influences their English language (EL) spelling, while one ESL teacher mentioned that it occasionally does.

6.1.5 Socio-Economic Status

Another potential contributing factor identified through the questionnaires is the socio-economic status (SES). The existing literature consistently recognises SES as a significant determinant that can impact a learner's academic performance, including their spelling and literacy skills. Based on the literature reviewed in this study, SES encompasses various dimensions such as income, education, occupation, and access to resources, all of which collectively shape an individual's economic and social standing within society (Carson, 2021; Gobena, 2018; Baker, 2014; Gaur, 2013). Therefore, some of the findings in this study have revealed that SES is indeed one of the factors contributing to the spelling challenges faced by grade 9 ESL learners.

6.1.5.1 Large households

Regarding the number of family members per learner, it was observed that some learners live in households with 7, 8, or 9 family members, which is considered high, as noted by Carson (2021). These findings suggest that certain learners reside in larger households, a factor often linked to lower socio-economic status (SES) and limited financial resources, as per Carson (2021). Similarly, Eklund and

Sadowski (2023) emphasise that larger households may experience increased competition for resources, potentially leading to reduced access to educational materials and suitable learning environments. For instance, one learner shared with the researcher an anecdote that aligns with Eklund and Sadowski's (2023) observation, stating, *"Mistress, it is because my father always tells me that he has to pay school fees for my two little sisters who are in crèche."*

With limited financial resources, larger households may face challenges in meeting their economic needs effectively (Rambika & Krishnamoorthy, 2019). The United Nations (2021) also acknowledges that larger households can impact resource access. Consequently, grade 9 ESL learners from larger households may encounter difficulties in accessing essential resources such as books, educational materials, and quiet study spaces due to higher demand and competition among family members. This scarcity can limit the learners' exposure to reading materials and educational support crucial for developing spelling and literacy skills.

Consistent with the literature, the results from the learners' questionnaires indicate that the mean score regarding family support in providing all necessary mediation tools was 3.05, indicating a moderate level of support. However, it is worth noting that 52.5% of these learners disagreed or strongly disagreed that their families provide them with all the necessary books for learning ESL. This supports Eklund and Sadowski's (2023) viewpoint that larger households may have busier and more chaotic schedules, leaving less time for parents or caregivers to engage in educational activities with ESL learners. This is further corroborated by journal entries where another learner expressed experiencing a heavy workload after school, stating, *"Hare tsoa sekolong mosebetsi o mongata mistress, ke kha moroho ebe ke lata patsi ebe kea pheha; hare geta mono keebe kese ke khathetse"* (*I am assigned a lot of chores when I come from school mistress: I prepare vegetables, fetch wood and then cook; I am normally tired upon completion of those tasks*).

Additionally, it was found that 22 learners live in households headed by both parents, but one learner mentioned that despite living with both parents, they are divorced. The reflective journal documented that this learner faces challenges related to school-based needs, as they are sometimes caught in disputes between their parents about financial support. This highlights that even if a learner resides with both parents, a lack of cooperation between them can affect the learner's ESL education, as evidenced by the spelling challenges faced. Furthermore, 10 learners live with either one of their parents, 7 learners live with guardians, and 1 learner is cared for by a sibling. It is commonly observed that learners under the

care of guardians may not receive the same level of support as they would from their biological parents. Child-headed households may also face significant challenges. In summary, household sizes and caregivers, as variables related to socio-economic status, may contribute to the spelling challenges encountered by grade 9 ESL learners.

6.1.5.2 Poverty

Similarly, the income status of the learners' caregivers revealed that none of them are engaged in business ventures. Three percent of the learners indicated that their caregivers are not employed in any capacity, while 11% stated that their caregivers are self-employed, with the majority being sole-traders such as street vendors. Furthermore, 86% classified their caregivers as employed, with some working as domestic workers. These findings suggest that a significant portion of these learners resides in households with low socio-economic status (SES), and this economic situation appears to adversely affect their ESL learning, specifically their spelling skills. This affirms Jensen (2013)'s findings that economically disadvantaged parents may struggle to provide the necessary learning resources for their children's effective education; in this case necessary spelling mediation tools such as dictionaries.

Family income, a component of SES, plays a pivotal role in determining learners' access to educational resources and opportunities. The low family income highlighted in this study may lead to limited access to technology, educational materials, and extracurricular activities, all of which can contribute to enhanced spelling and literacy development. According to the National Center for Education Statistics (NCES) (2021), higher family income is associated with better access to technology, including computers, tablets, and the internet. In the context of the fourth industrial revolution (4IR), these technological resources serve as valuable tools for advancing the literacy development of grade 9 ESL learners. Without access to these resources, learners are more likely to face spelling challenges. Furthermore, the use of technology is emphasised in the curriculum aims of secondary education outlined in the Curriculum and Assessment Policy Statement (CAP) (MoET, 2009). Low income can also impact learners' health, which in turn affects their education, as noted in Ren et al.'s (2019) study. Health-related complications, when left untreated due to financial constraints, can disrupt a learner's education and contribute to spelling challenges. Brandon (2018) similarly highlighted that poverty-related factors serve as foundational obstacles that hinder academic performance.

Another revelation from the researcher's reflective journal is that some learners miss content and general pedagogical practices due to being temporarily expelled from school for non-payment of school fees.

These learners returned to school after varying intervals, ranging from days to weeks, with one learner returning after a month. During a conversation with the researcher, this specific learner mentioned, *"My aunt is trying, mistress. She has no money; she is not working. Even I could see that she had no money to pay for me."* These findings align with Marreline's (2020) study, which illustrates that financially disadvantaged parents often struggle to cover their children's school fees, leading to disruptions in their education. Economically disadvantaged parents may face difficulties affording essential learning costs, hindering their children's effective learning. In conclusion, poverty, as an aspect of SES, appears to have a negative impact on learners' spelling challenges. Learners from impoverished households encounter barriers such as limited access to learning resources, inadequate nutrition, and potential disruptions in their education due to financial constraints.

However, it is essential to note that this conclusion contradicts the perspective of Angel and Carter (2009). According to Angel and Carter (2009), being financially disadvantaged cannot necessarily be attributed to poor academic performance among learners. They highlight the example of Ben Carson, a renowned pediatric neurosurgeon of African American descent, who grew up under the care of a financially disadvantaged, uneducated, and single mother. Despite their financial challenges, Ben's mother supported her children's education and went to great lengths to provide her son with eyeglasses that played a crucial role in his academic success. Ben's exceptional journey illustrates that poverty alone cannot be blamed for spelling challenges; parents' determination and support for their child's education can make a significant difference, even in financially challenging circumstances.

6.1.6 Lack of parental guidance

The literature review underscores the significant role of parental education level in shaping a student's academic performance. Parents with higher levels of education are more likely to provide enhanced support, engage in educational activities at home, and supply the necessary learning materials for their children, ultimately leading to improved spelling and literacy skills. However, this study has uncovered that some learners lack the guidance and support typically associated with well-educated parents.

For instance, one learner expressed, *"Mistress, my mother admits that she is not well-versed in what I am learning. She mentioned leaving school during break time."* Another learner shared, *"My brother works as a taxi operator and returns home very late, making it difficult for him to assist me."* Yet another learner stated, *"Mistress, I live with my grandmother, who has never attended school. She can only teach me how to sing and how to behave. I cannot seek help from my mother because she always*

tells me that she left school to clear her mind, and it seems like I am taking her back to school, mistress." Consistent with previous research, these findings align with the notion that learners with less educated or uneducated parents tend to exhibit lower academic performance compared to their peers whose parents have higher levels of education, as reinforced by Amhad (2013). Conversely, Idris and Amhad's (2020) study revealed that parents with higher levels of education are more actively involved in their children's educational activities at home, resulting in better academic performance for their children.

To further support this argument, one learner shared, *"My dad asks me daily, mistress, to tell him what I have learned. He insists that I must learn something new every day."* This emphasises that parental guidance, stemming from parental education, plays a pivotal role in addressing the spelling challenges faced by these learners. Additionally, Asad Khan et al. (2015) concluded in their study that parental education is the most reliable indicator of a student's academic success.

6.1.7 Inadequate content and instructional strategies

During interactions with ESL teachers, it became evident that inadequate content and instructional strategies are among the contributing factors to the spelling challenges faced by ESL learners. One ESL teacher expressed, *"How do you manage to teach such a tricky concept? Do they really enjoy it? Ah, it's beyond me!"* Another teacher inquired, *"What's the secret to making it enjoyable for these learners? Ah, I couldn't do it!"* And yet another teacher shared, *"I often think about teaching spelling, but I'm unsure where to start. What I do know is that teaching spelling is quite challenging. Actually, it's really challenging."* These insights suggest that some ESL teachers may lack Pedagogical Content Knowledge (PCK). When ESL teachers do not possess a solid understanding of phonetics, phonology, orthography, and effective teaching methods, it can hinder ESL learners' ability to acquire accurate spelling skills, particularly advanced orthographic skills. These findings align with Shing et al.'s (2015) assertion that the absence of adequate PCK can have adverse effects on students' academic achievements.

However, it is important to note that contrasting perspectives exist regarding the impact of Pedagogical Content Knowledge (PCK) on learners' academic performance. For instance, one ESL teacher mentioned, *"I introduced them to basic spelling rules, including short vowels, long vowels, and consonant clusters."* This teacher appeared to have knowledge of strategies for improving spelling skills. Nevertheless, further investigation revealed that despite possessing this knowledge, the teacher lacked confidence in effectively implementing these strategies. This gap between knowledge and

confidence adds complexity to the discussion. This is substantiated by Msamba et al. (2023), who outlines the struggle to select appropriate instructional strategies for teaching ESL effectively; which contributes to the ESL learners' spelling challenges despite having a teacher who is well vested in PCK.

These findings indicate that educators' confidence and self-assurance are crucial factors in translating their pedagogical knowledge into practical teaching methods. This appears to emphasise that the application of pedagogical techniques is as significant as possessing the knowledge itself. Moreover, it was discovered that various factors, such as limited teaching experience, insufficient professional development opportunities, and the challenges presented by classroom dynamics, could contribute to these teachers' hesitancy in applying their PCK effectively.

The disparity between Shing et al.'s (2015) findings and the current study highlights the intricate relationship between PCK and academic performance. It underscores the importance of not only possessing pedagogical knowledge but also having the confidence and ability to apply it effectively in real teaching situations.

6.1.8 Mediation tools

The results reveal that the mean score for family support in providing mediation tools, such as books (Vygotsky, 1978) to ESL learners was 3.05, indicating a moderate level of support. However, it is noteworthy that despite the moderate mean score, 52.5% of these learners disagreed or strongly disagreed with having access to essential ESL mediation tools, including prescribed textbooks and dictionaries. This statistic highlights that more than half of the learners lack the necessary mediation tools, and this deficiency is linked to spelling challenges. In supplement, Kozulin (2018)' study revealed that the mediation tools are used to aid the teaching and learning process in which the teacher and the learners work together to achieve a common goal. In this case, absence of mediation tools can be linked to spelling deficiency.

Supporting this observation, ESL teachers also indicated in their questionnaires that the absence of mediation tools contributes to spelling challenges, with four teachers stating it always does and one teacher acknowledging it sometimes does. Within the framework of Culture-Historical Activity Theory (CHAT), these findings underscore how the absence of crucial mediation tools can hinder ESL learners' spelling abilities. The lack of prescribed textbooks and dictionaries can be viewed as a constraint that limits learners' interactions with written language, constraining their full exploration, a concept

consistent with the core principles of CHAT, which highlight the dynamic interplay among individuals, tools, and outcomes.

In line with CHAT principles, mediation tools play a pivotal role in facilitating individuals' interactions with their environment (Engeström, 1996b). Consequently, the absence of mediation tools like prescribed textbooks and dictionaries impedes ESL learners' access to and engagement with relevant content. Furthermore, the concept of the Zone of Proximal Development (ZPD) within CHAT is closely related to the presence of mediation tools. To elucidate, Engeström et al. (2005) affirm that mediation tools act as supportive structures connecting a learner's existing skills with their potential capacities. Insufficient mediation tools can limit learners from reaching their ZPD, hindering their progress toward realising their full learning potential (Wood, Brunner & Rose, 1976). This emphasises that grade 9 ESL learners could achieve more in developing their spelling skills with the aid of appropriate tools designed to target their development.

Additionally, CHAT, with its historical perspective, ties mediation tools to the historical context (Karanasios and Allen, 2014). In the context of this study, historical factors contribute to the lack of mediation tools, including socio-economic factors mentioned earlier. Factors such as low income influence the availability and quality of textbooks and dictionaries, ultimately affecting ESL learners' spelling challenges over time. This intricate relationship among mediation tools, historical factors, and learners' spelling abilities reinforces the idea that the accessibility and quality of educational tools are crucial components in facilitating effective learning and academic performance.

6.1.9 Motivation

Motivation, both intrinsic and extrinsic, emerged as a contributing factor to the spelling challenges faced by grade 9 ESL learners. The following sections examine the results, first addressing intrinsic motivation and then examining extrinsic motivation.

6.1.9.1 Intrinsic motivation

The revealed average mean score for learners' intrinsic motivation was 4.45, signifying a high level of inherent enthusiasm for learning English. This high level of intrinsic motivation has the potential to positively impact their spelling and overall academic performance, aligning with Howard et al. (2021)'s findings that intrinsic motivation is linked to student success. However, despite the high intrinsic motivation, the grade 9 ESL learners' academic performance, particularly in spelling, does not reflect this enthusiasm. In fact, their performance falls below the expected standard due to misspelling words,

resulting in deductions in their overall scores. While intrinsic motivation is challenging to measure directly, the observed discrepancy may be attributed to a form of response bias. To mitigate this, multiple validation methods were employed to ensure the reliability and validity of the responses. Furthermore, it became evident that intrinsic motivation alone may not be sufficient to achieve the desired spelling proficiency and critical literacy skills. Therefore, it was imperative to explore the role of extrinsic motivation in contributing to the spelling challenges faced by grade 9 ESL learners.

6.1.9.2 Extrinsic motivation

The overall mean score for this item was 1.56, indicating a low rating on the Likert scale. In accordance with Delaney and Royal (2016), extrinsic motivation refers to the drive to perform tasks based on external rewards or pressures. The low mean score for this variable suggests that grade 9 ESL learners struggle in spelling due to the absence of strategies motivated by external factors. Mauliya et al. (2020) support this, stating that low levels of this motivation can negatively impact learners' engagement, effort, and persistence in improving their spelling abilities, as found in Purnama et al. (2019)'s study on student motivation in learning English. Additionally, another study by Mauliya et al. (2020) examined the lack of motivation factors affecting graduate English department students' poor academic performance. It revealed that poor academic performance cannot solely be attributed to students' mistakes but should also be linked to teachers' ability to motivate students. This lack of teacher motivation contributes to the learners' ongoing spelling struggles, as observed in school X, where the ESL teachers' opinions on learner motivation varied despite the low mean score.

To further complicate matters, the lack of external recognition and motivation for spelling practice led to disengagement and a dismissive attitude among learners. This resulted in a lack of practice and frequent spelling mistakes. Ntseli (2022) also explored motivational learning strategies in Lesotho and identified teachers' negative behaviour as a contributor to learners' motivational challenges. Therefore, teacher motivation plays a crucial role in learners' academic performance, particularly in spelling. Moreover, it is not just teachers but also parents who play a vital role in motivating learners. According to Ryan and Deci (2020), support from both teachers and parents is essential for fostering motivation. Nguyen (2019) found that learners with motivated parents performed well in learning English. However, despite a moderate level of family members' ability to speak English very well, the learners continued to face spelling challenges. This may be due to a lack of parental involvement in their learning, as some learners reported their parents' inability to assist them with their schoolwork.

In cases where parental involvement is moderate, learners can receive support and guidance in their spelling practice, such as reinforcement of spelling rules, feedback on errors, and encouragement for regular practice. However, the varying degrees of parental involvement suggest that some parents are not engaged in their children's learning, which can contribute to spelling difficulties. Furthermore, extrinsic motivation affects ESL teachers as well, as highlighted by one teacher who mentioned a lack of motivation and institutional support. This lack of motivation can lead to reduced teacher effectiveness, which in turn impacts learners' academic performance, particularly in spelling. This creates a cyclic process with negative outcomes.

Given these findings and insights into the spelling-based literacy challenges faced by grade 9 ESL learners, it was essential for the researcher to seek input from ESL teachers to develop effective strategies that consider factors hindering spelling proficiency from both learners and teachers.

6.1.10 Approaches to addressing the prevailing literacy challenges

In their reflective activity, the ESL teachers mentioned employing different strategies to tackle literacy challenges, such as engaging in English clubs, organising spelling bees, and overseeing poetry recitations during morning assemblies. However, the information in the reflective journal contradicts these statements. It was explicitly recorded that the researcher was the sole facilitator of the club throughout the research process. Contrarily, I encounter difficulties in endorsing these findings due to the evident disparities.

6.1.10.1 Required Support

The ESL teachers emphasised the importance of granting students unrestricted access to the library. One ESL teacher stated, "Students should be allowed to access the library at any time." This implies that limited library access could contribute to the spelling challenges faced by the students. It was noted that School X's library contains 282 dictionaries and a wide variety of books spanning different genres, including subject-based books, novels, and recipe books. This underscores the idea that restricted library access deprives ESL learners of the opportunity to utilise essential mediation tools, particularly dictionaries, especially for those who don't possess them. In line with Qureshi (2021), within the framework of CHAT, these mediation tools play a crucial role in advancing toward the Zone of Proximal Development's goal. They serve as aids in conjunction with activities involving more knowledgeable individuals, ultimately helping learners overcome their spelling difficulties.

6.1.10.2 Responsibility of stakeholders

All teachers unanimously agreed that the responsibility for developing literacy skills, specifically pronunciation and spelling, is shared among the school, teachers, learners, and parents. This perspective aligns with the principles of CHAT, which, in its analysis of historical and contextual changes, emphasises the importance of collective human engagement (Bennett et al., 2015). Furthermore, the integration of the theories that underpin this study revolves around the concept of synergic praxis, which involves collective engagement in activities aimed at addressing the spelling issues faced by grade 9 ESL learners. This consideration significantly influenced the approach to implementing phonemic-orthography. Having explored the factors contributing to spelling challenges, the subsequent section delves into the data generated during the intermediary phase.

6.2 The intermediary phase

It was revealed that some of the grade 9 ESL learners were misspelling words like "fan" as "van" and "television" as "televishin," among others. As more data were collected during the intermediary phase, patterns, trends, and recurring themes related to spelling development began to emerge. These patterns guided me in making informed decisions about implementing phonemic-orthography. For instance, I considered teaching these learners the International Phonetic Alphabet (IPA) as it was essential for them to understand that the spelling of "fan" is linked to the phonetic transcription /fæn/ and "van" is phonetically transcribed as /væn/. In these transcriptions, the symbols represent the phonetic sounds in each word: /f/ and /v/ represent the initial consonant sounds, /æ/ represents the vowel sound in the first syllable, and /n/ represents the final consonant sound.

Furthermore, to differentiate between the /sh/ sound in "shoes" and the similar sound in "television," the intermediary phase allowed me to teach the grade 9 ESL learners that "shoes" is transcribed as /ʃuz/ while "television" is transcribed as /'telə,vɪzən/. The symbols represent the phonetic sounds in each word: /ʃ/ represents the /sh/ sound in "shoes," /z/ represents the final consonant sound, /ju:/ represents the /sh/ sound and the /oo/ sound in "shoes," which is a close back rounded vowel, corroborating Shariq (2015)'s findings that different speech sounds are produced by manipulating specific speech organs.

Regarding /'telə,vɪzən/ for "television," the symbol /' / indicates primary stress on the first syllable, /ə/ represents the schwa vowel sound, /z/ represents the "zh" sound, /,v/ represents the /v/ sound in the middle of the word, /ɪ/ represents the /i/ sound, /e/ represents the /e/ sound, /l/ represents the /l/ sound, and /ən/ represents the /uh/ sound, with the final /n/ sound. This successful grapheme-phoneme

association to distinguish between words with similar phoneme sounds aligns with Britannica (2019), which explains that IPA is designed to provide a consistent and precise way to transcribe the sounds of any language, regardless of its writing system. Additionally, Paige et al. (2023) emphasise that this awareness is crucial for understanding how letters correspond to sounds, which is essential for accurate spelling.

Overall, the results from the intermediary phase allowed for cross-referencing and informed the implementation of phonemic-orthography based on emerging insights. The following section discusses the results and findings from the transformative phase.

6.3 The transformative phase

RQ2: Implementing phonemic-orthography to simultaneously accelerate spelling skills and redress academic classification of the grade 9 ESL learners.

6.3.1 Learning Progression

The ESL teachers discussed their pedagogical approach, which involved transitioning between abstract and concrete examples. This instructional method starts with theoretical concepts and progressively connects them to practical, real-world situations. For instance, the researcher's reflective journal documented the use of contextual examples in implementing phonemic-orthography. When analysed through the lens of Legitimation Code Theory (LCT), specifically using the concepts of semantic gravity and semantic density, this approach gains more significance. It demonstrates how the researchers deliberately designed the learning process, guiding grade 9 ESL learners through a well-structured pathway that bridges the gap between abstract theoretical concepts and tangible real-life applications. These findings align with LCT's assumption that commencing with theoretical concepts, which typically possess higher semantic gravity due to their abstract nature, lays the groundwork for comprehension (Maton, 2016; Maton, 2014). This approach also corresponds to the concept of scaffolding learning, where educators gradually lead students from familiar and concrete concepts to more intricate and abstract ones.

To emphasise, semantic density refers to the complexity and intricacy of the content: as the transition from abstract to concrete examples unfolds, semantic density also evolves. These findings are corroborated by Maton (2014), who suggests that learners initially encounter content with lower semantic density through concrete and straightforward examples. This is further supported by Blackie (2014), who found that using familiar examples helps students grasp fundamental ideas before gradually

introducing higher semantic density, represented by the shift to abstract concepts. This carefully structured progression ensures that students systematically build their understanding, a fundamental aspect of scaffolding learning.

The practice of moving between concrete and abstract examples appears to incorporate an element of scaffolding. Recognising that some ESL learners may grasp abstract concepts more readily while others benefit from tangible, concrete examples, this approach accommodated a broader range of learning preferences. It reduced the potential for learners to be classified solely based on their ability to grasp one approach over the other. Additionally, it seems to mitigate stigmatisation and promote inclusion. Below is an outline of the grade 9 ESL learners' academic performance after the implementation of phonemic-orthography, which simultaneously accelerated spelling skills and addressed their academic classification.

6.3.1.1 Academic performance

In the provided phonemic (oral) assessment, the test was divided into sections that focused on intonation, stress, and articulation. All participating grade 9 ESL learners successfully passed this assessment, as each of them achieved a score exceeding 50% for all three components. Similarly, in the orthographic (written) test, only 5 learners did not pass in the initial test, and during the retest, the number of students who did not pass decreased to 4.

The achievement of scores exceeding 50% for all three components in the phonemic assessment suggests a significant level of competence and mastery in the assessed oral skills. Correspondingly, in the orthographic test, the fact that only 5 learners did not pass the initial written test indicates that the majority of the students demonstrated a satisfactory level of competence in their written language skills. The observed improvement during the retest, with the number of learners who did not pass decreasing to 4, suggests that the students responded positively to feedback or additional preparation. This improvement potentially indicates their willingness to learn from their mistakes and their commitment to improvement. This upholds Delaney and Royal (2016)'s findings that intrinsic motivation is a key ingredient of learners' engagement and performance. Compatibly, in Mauliya et al. (2020)'s study, it was found that motivation lead to learners' engagement in academics, which leads to improved performance in their studies.

6.3.2 Tool-mediated collaboration

The researcher's reflective journal documented the use of shared reference materials in the instructional process. Furthermore, observations made by other ESL teachers who witnessed the implementation of phonemic-orthography indicated the presence of collective learning. This concept of collective learning implies a collaborative educational approach where ESL learners engage in shared learning experiences. Additionally, all teachers noted the utilisation of mediation tools, including dictionaries, textbooks, and supplementary reference materials. The combination of these two ideas can be described as tool-mediated collaboration. These findings align with the perspective of CHAT theory regarding how tools mediate collaborative interactions. The collective learning environment facilitated by the use of tools influenced interactions and collaborative efforts related to spelling improvement. These results support established knowledge, particularly Engeström et al. (2005)'s notion that CHAT emphasises the role of mediation tools in facilitating human activity. Moreover, these observations are in line with the scholarly consensus that mediation tools are employed to support the teaching and learning process, where teachers and learners collaborate to achieve common educational goals (Kozulin, 2018). Lastly, they are consistent with the findings of Niemi and Mutisilta (2016), who suggest that mediation tools may encompass visual documents and activities used within the classroom. The issue of activities will be further explored in the following section.

6.3.3 Functional activities

The results obtained from the observation checklist indicate that all ESL teachers recognised the involvement of both the researcher and ESL learners in activities. This emphasis on functional activities implies that the learning experiences were intentionally designed to have practical applications and relevance. These findings align with widely accepted educational principles, particularly those associated with the Communicative Language Teaching approach (CLT). For instance, Spada (2007) found that functional activities enhance communicative competence by emphasising real-life communication and meaningful interactions in the target language. Therefore, the more the grade 9 ESL learners engage in spelling-based functional activities, the more competent they become in exercising correct orthography. Functional activities encompassed task-based learning, which is a fundamental aspect of CLT as highlighted by Hymes (1972). The findings of this study illustrate that task-based spelling activities encouraged engagement and active participation among learners, motivating them to apply spelling rules in tasks that mirror real communication needs. Furthermore, in line with Hymes

(1972), CLT promotes the integration of language skills. Thus, the results of this study suggest that functional activities required the grade 9 ESL learners to utilise multiple language skills, including listening, speaking, reading, and writing, while practicing spelling in context.

6.3.4 Reinforcement

As noted in the reflective journal, the researcher utilised reinforcement techniques to encourage desired behaviours rather than resorting to punitive measures with the grade 9 ESL learners. This approach aligns with the principles outlined in the Lesotho Education Act of 2010, which stipulates that "a learner shall not be subjected to cruel, inhuman, and degrading punishment" (MoET, 2010, section 4(4)). This idea is cemented by Rakolobe and Tlali (2022) who advocate for a non-degrading punishment to learners. Consequently, it can be argued that the selection of humane reinforcement strategies effectively moderated the undesired behaviour of these learners. Having explored the implementation of phonemic-orthography for the dual purpose of accelerating spelling skills and addressing the academic classification of grade 9 ESL learners, the subsequent section delves into the reflective phase. Here, the perspectives of the ESL learners shed light on why they performed the way they did following the implementation of phonemic-orthography.

6.4 The reflective phase

RQ3: The reasons behind the grade 9 ESL learners' performance post implementation of phonemic-orthography.

During this phase, the grade 9 ESL learners had the chance to reflect on what happened during the implementation of phonemic-orthography. Their reflections were subsequently connected to their improved performance.

6.4.1 Teacher support in spelling development

The ESL learners were questioned about the researcher's support in their spelling skills development. The following section delves into the three themes that arose from the data gathered during the focus group discussions. It is worth noting that these learners were divided into three groups for the sake of conducting manageable interviews.

6.4.1.1 Teacher Support and Encouragement

One ESL learner from group A expressed, "*You motivate us, teacher.*" These findings resonate with the study by Hayikaleng et al. (2016), emphasising the significant impact of teacher motivation on learners'

success. Furthermore, their study underscores motivation as a crucial factor in learners' achievement in language learning. Consequently, this study's findings corroborate these insights by highlighting how the researcher's motivation positively affected the grade 9 ESL learners.

Another learner from the same group stated, *"You always encourage us to do our school work."* This response aligns directly with Nguyen's (2019) investigation into motivation in English language learning, where Nguyen found that highly motivated learners performed well. This alignment is evident as the grade 9 ESL learners' acknowledgment of being encouraged and motivated by the teacher reflects how motivation influences their engagement and performance in school work. Additionally, this finding underscores the role of teacher encouragement, echoing the recommendation from Ntseli's (2022) study to implement motivational learning strategies in Lesotho.

6.4.1.2 Student Engagement and Empowerment

In group B, one learner responded, *"You allow us to speak Sesotho,"* while in group C, another learner mentioned, *"You used to let us speak a language that we would be open with."* These responses align with Paulo Freire's concept of empowerment in education. Freire emphasised the importance of dialogue (Freire, 1970), and permitting grade 9 ESL learners to use Sesotho or a language in which they feel comfortable aligns with Freire's idea of a dialogue-based education that encourages a dynamic exchange of ideas and perspectives, promoting active and participatory learning. Empowerment is a central theme in Freire's work (Giroux, 1983), and allowing these learners to use a language they are at ease with empowers them to express themselves freely and confidently, consistent with Freire's belief that education should foster learners' voices to share their thoughts and experiences. These findings also align with Freire's notion that pedagogy should encourage democratic participation in education. Consequently, allowing grade 9 ESL learners to use their language of choice promotes democratic classroom interactions, where all voices are valued, creating an environment in which ESL learners actively contribute to their own learning. These findings have further implications discussed in the following section.

6.4.1.3 Cultural Sensitivity and Inclusivity

The responses *"You allow us to speak Sesotho"* and *"You used to let us speak a language that we would be open with"* align with some of the principles of Cultural-Historical Activity Theory (CHAT). According to Engeström (1987), CHAT acknowledges that activities are situated within a cultural context. Therefore, permitting grade 9 ESL learners to speak Sesotho recognises and respects their

cultural background, which is an essential aspect of CHAT. According to the assumptions of this theory, the inclusion of cultural diversity enriches the authenticity of learning experiences.

Furthermore, in CHAT, language is considered a tool. Allowing these learners to use Sesotho or a language they are comfortable with signifies the utilisation of language as a tool to facilitate learning, supporting the concept that tools mediate human activity and shape the learning process.

6.4.1.4 Effective Teaching Methods

One learner in group B attributed improved academic performance to *"the tests and spelling exercises you provide, teacher."* Communicative Language Teaching (CLT) emphasises the importance of language learning in real-life communication (Kotut, 2017). Therefore, the tests and exercises mentioned in this finding align with this principle, offering grade 9 ESL learners' opportunities to apply their spelling skills in practical contexts. These activities contribute to meaningful language use and promote the integration of spelling into communication.

Another learner in group C mentioned *"syllable division."* This finding aligns with the research of Xasanov (2023) regarding the benefits of teaching learners to recognise syllable divisions. Xasanov's findings also emphasise that understanding syllable divisions can have positive effects on pronunciation and spelling, specifically aiding in spelling accuracy. This finding, *"syllable division,"* indicates that the researcher employed an approach involving teaching grade 9 ESL learners about syllable divisions, aligning with Xasanov's findings.

Similarly, the finding *"Mistress, you taught us syllables"* highlights the researcher's explicit instruction of fundamental linguistic concepts related to spelling. This demonstrates the researcher's Pedagogical Content Knowledge (PCK) in breaking down complex language structures into manageable components for learners to grasp. This finding reinforces the idea presented by Shing et al. (2015) that effective PCK involves presenting concepts like syllables and phonemes in ways that are accessible and meaningful to learners.

6.4.2 Peer support in spelling development

The ESL learners were queried about the researcher's support in developing their spelling skills. The following section delves into the three themes that arose from the data generated during the focus group discussions.

6.4.2.1 Positive Social Interaction and Collaboration

In this sub-theme, we recorded responses such as *"They never laughed at us," "They actively participated in our group activities," "They helped me realise I can't do everything alone,"* and *"We successfully collaborated with others,"* among others.

In summary, these sub-themes highlight the positive social interactions and collaborative dynamics among these peers during spelling development. They encompass elements such as mutual respect, active participation, and the recognition that working together leads to better results. These findings align with certain aspects of Cultural-Historical Activity Theory (CHAT). CHAT emphasises the influence of cultural and social contexts on learning (Forsgren et al., 2016). Therefore, these findings underscore the importance of a supportive and collaborative culture within the group. Consequently, peers who refrain from ridicule and actively participate create an environment in which learners feel secure and empowered to engage in shared activities.

Similarly, the notion that *"They helped me realise I can't do everything alone"* relates to the concept of the Zone of Proximal Development (ZPD). According to CHAT, learners often achieve more when guided and supported by peers within their ZPD (Qureshi, 2021), which represents the gap between what they can do independently and what they can achieve with assistance. This finding illustrates how these peers help bridge this gap. Moreover, *"We successfully collaborated with others"* and *"They helped me realise I can't do everything alone"* reflect collaboration, a fundamental aspect of CHAT and constructivism theory. Collaborative activities involve collective efforts and shared responsibilities, aligning with the idea that learning is enhanced when learners work together (Qureshi, 2021; Fernando & Marikar, 2017). Consequently, the recognition by grade 9 ESL learners that collaboration is essential for success underscores the emphasis of CHAT and constructivism on cooperative efforts.

6.4.2.2 Linguistic and Pronunciation Assistance

A sub-theme, such as *"They taught us how to pronounce some words,"* emerged from the generated data, focusing on the linguistic and pronunciation support provided by peers. This finding aligns with constructivism theory, particularly its collaboration principle (Fernando & Marikar, 2017). In this study, peers not only share information but actively contribute to improving pronunciation skills, reinforcing the idea that learning from one another enhances language proficiency. Similarly, the response *"They helped me realise I can't do something alone, so I still need other people"* aligns with the scaffolding principle. According to Utami (2016), effective scaffolding involves gradually reducing support as

learners become more capable. In the aforementioned finding, the support provided by peers in teaching pronunciation acts as a temporary scaffold. Over time, these learners are expected to internalise correct pronunciation, reducing the need for constant guidance. Additionally, the grade 9 ESL learners appear to recognise that working together strengthens their abilities.

6.4.3 Use of mediation tools

The ESL learners were asked about the use of mediation tools to improve their spelling. The following section discusses their responses related to this theme.

In response, one learner from group A mentioned, *"I was able to make use of my dictionary,"* while another learner from the same group said, *"It helped us a lot with our vocabulary."* Meanwhile, a learner from group C added, *"I learned how to pronounce other words properly."* These findings align with CHAT's principle of mediation tools, as highlighted by Engeström et al. (2005). According to CHAT, tools play a significant role in mediating learning and cognitive processes. The finding *"I was able to make use of my dictionary"* reflects the concept of using a tool (the dictionary) to support learning. Furthermore, the dictionary served as a mediation tool that assisted the grade 9 ESL learners in accessing information, understanding word meanings, and improving spelling and pronunciation.

CHAT also emphasises the collaborative nature of tool use (Engeström, 1987). In this context, the finding *"It helped us a lot with our vocabulary"* suggests that the dictionary, as a tool, is shared among learners and contributes to their collective learning experiences. This aligns with CHAT's perspective that tools can foster collaboration and shared learning. Moreover, these findings support the idea that using a dictionary can relate to the Zone of Proximal Development (ZPD) concept in CHAT. By utilising a dictionary, the grade 9 ESL learners can access information that may be slightly beyond their current knowledge level. This alignment with the ZPD concept demonstrates how the dictionary functions as a tool for scaffolding the learners' vocabulary expansion.

6.4.4 Effect of rules regarding language use

In school X, a language-based rule mandates that all learners should communicate exclusively in English while on the school premises. However, recognising that some learners may not be proficient in English, the researcher introduced a new rule allowing them to code-switch between English and Sesotho when they face difficulty expressing themselves solely in English. Consequently, the study aimed to assess the impact of this new classroom-based rule on the students' academic performance.

Responses from the students included statements such as *"Using Sesotho and English helped us understand the topic better," "We comprehended your explanations when you used both languages," "Allowing us to use Sesotho and English boosted your confidence as an instructor," and "Some of us were hesitant to ask questions because we didn't know certain English words, so this approach helped us."*

The finding, *"Allowing us to use Sesotho and English boosted your confidence as an instructor,"* aligns with the cultural identity aspect of Cultural-Historical Activity Theory (CHAT) as outlined by Engeström (1987). In this study's context, permitting grade 9 ESL learners to use their native language enhanced their sense of identity and belonging. The confidence gained from effective communication supported their engagement in learning. Additionally, language, serving as a cultural and communicative tool, plays a central role in CHAT. These findings demonstrate how the choice of using both Sesotho and English as languages of instruction serves as a mediation tool that facilitates understanding, communication, and comprehension of complex concepts.

Regarding the Zone of Proximal Development (ZPD), a concept emphasised in CHAT, the findings *"We comprehended your explanations when you used both languages" and "Allowing us to use Sesotho and English boosted your confidence as an instructor"* seem to relate to it. Using a familiar language scaffolded learning by enabling the grade 9 ESL learners to understand explanations and express themselves, supporting gradual progress. These findings further resonate with Nelson Mandela's quote: *"If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language, that goes to his heart."*

However, there were contrasting findings. For instance, three learners from group C expressed, *"It is bad for us,"* while another learner stated, *"We used it badly."* One learner added, *"We are getting used to Sesotho more than English because here we are speaking it even when we know how to say something in English."* These findings are consistent with Nguyen's (2022) study, which suggests that learners may become overly reliant on their native language, hindering their progress in acquiring the target language and making it harder to develop proficiency in the target language. Similarly, Mart (2013) noted that students with the ability to express themselves in the target language might still resort to their native language when communicating with the teacher.

6.5.5 Disparity between intervention and conventional methods of teaching

The ESL learners were asked about the differences between the intervention-based teaching methods they experienced and the typical teaching methods they were accustomed to. The following section discusses their responses accordingly.

One learner said, *"You taught us syllables," while another mentioned, "The last test you gave us on how to pronounce the vowels."* These findings can be discussed in relation to Pedagogical Content Knowledge (PCK) within the context of teaching spelling. PCK refers to the specialised knowledge that teachers possess about how to effectively teach specific content areas. The statement *"You taught us syllables"* reinforces the idea highlighted by Safitri et al. (2020) that the teacher provided explicit instruction on a fundamental linguistic concept related to spelling. This demonstrates the teacher's PCK in breaking down complex language structures into manageable components for the grade 9 ESL learners to understand. Effective PCK in this study involved the researcher's knowledge of presenting concepts like syllables and phonemes in ways that were accessible and meaningful to the learners.

Additionally, the response *"The last test you gave us on how to pronounce the vowels"* reflects the teacher's use of assessment as part of their PCK. This indicates the researcher's awareness of the importance of diagnosing specific phonetic challenges that the grade 9 ESL learners might face and then tailoring instruction to address those challenges. Moreover, Ibrahim's (2016) study highlights the requirement for teachers to possess deep subject-matter knowledge. In line with this, the findings suggest the researcher's linguistic expertise in explaining syllables and vowel pronunciation. Explaining these concepts effectively demands an understanding of phonology and language structure, enabling the researcher to provide clear and accurate explanations.

Other responses included *"You never shout at us"* and *"You never come to class angry and just yell at us like other teachers."* These findings align with behaviourism theory, which supports the idea of modifying behaviour through reinforcement (Chen, 2023). These findings suggest that the researcher's behaviour served as a positive model, influencing how the grade 9 ESL learners behaved. The researcher's consistent calm demeanour reinforced the expectation of respectful and attentive behaviour, promoting a more positive classroom atmosphere. However, this finding contradicts Duchesne et al.'s (2014) claim that environmental factors such as punishment, rather than cognitive processes, shape behaviour.

Another learner disclosed, *"You made us feel equal."* This finding implies that the researcher engaged in a legitimation practice that recognised and legitimised the learners' perspectives and experiences. By creating an environment where every learner's contributions were valued equally, the researcher engaged in a legitimation practice that challenged traditional hierarchies and empowered learners to participate actively in the learning process, resulting in a more equitable distribution of semantic gravity, as highlighted earlier. This finding aligns with the core tenets of Legitimation Code Theory (LCT), which advocate for equitable knowledge practices that acknowledge diverse voices (Maton, 2014). It reflects an approach that reduces hierarchical differences, promotes equitable participation, and emphasises clear communication that values the perspectives of all participants, corresponding to a lower semantic density according to Maton (2014).

Equally important, the responses *"You make us tell you and help you realise the things that we do not like that you do"* and *"What's different about you is that every time after class you would be asking us to write reflections"* were noted. These findings agree with Paulo Freire's notions. Freire (1970) emphasised the importance of reflection as a means to promote critical consciousness, which involves critically examining one's own experiences, actions, and the larger social context. As discussed in the preceding chapters, Freire's pedagogy emphasises dialogical reflection, where learners engage in a dialogue with themselves, their peers, and their educators to critically analyse their experiences. The finding *"You make us tell you and help you realise the things that we do not like that you do"* reflects this dialogical process: by sharing their feelings and concerns, the grade 9 ESL learners engage in reflection and open a space for dialogue with the stakeholders in this study.

Similarly, Freire introduced the concept of *"naming the world"* as a way to engage learners in critically analysing their experiences. The same finding *"You make us tell you and help you realise the things that we do not like that you do"* aligns with this concept. The grade 9 ESL learners are naming their experiences, expressing what they do not like, and engaging in reflection to understand the underlying reasons, thereby enabling the researcher to improve their teaching-related practices. Again, Freire's pedagogy aims to empower learners to become critical thinkers and agents of social change (Freire, 1970). Both findings emphasise how the intervention encourages learners to voice their thoughts, feelings, and perspectives, aligning with Freire's goal of empowering learners to reflect on their experiences and engage in transformative action.

6.5.6 Improvement post intervention

In this theme, one learner stated, *"My spelling improved, mistress."* When examining this in the context of Basil Bernstein's framing, framing refers to the degree of control that educators have over the presentation and organisation of knowledge (Bernstein, 1996). In this case, the statement *"My spelling improved, mistress"* suggests that the researcher provided a structured framework for learning, specifically related to spelling improvement. The researcher implemented phonetic and orthographic-based strategies, methods, and activities to enhance spelling skills, effectively framing the learning experience.

Additionally, Bernstein (1996) describes classification as the way knowledge is categorised and structured within educational contexts. In this finding, the learner's statement reflects a change in their classification regarding spelling proficiency. The learner transitioned from a lower level of spelling ability to a higher one, demonstrating a shift in their classification. This aligns with Bernstein's concept of classification, which pertains to how learners are grouped based on their knowledge and skills. Furthermore, other learners mentioned, *"I've been participating in class, mistress"* and *"I was not the kind of person who talked in groups, but now I can talk."* These findings are consistent with constructivism theory, which posits that learners are active participants in their learning (Vygotsky, 1986). The statement *"I've been participating in class, mistress"* highlights the learner's active engagement in constructing their understanding by interacting with ideas, peers, and the researcher. Therefore, this aligns with constructivism's perspective of learners as active knowledge constructors.

Similarly, another learner said, *"I was unable to spell words correctly, mistress, but now I know how to spell them,"* while a different one added, *"I was unable to identify the points, but now, since you've helped us, I can."* These findings also align with constructivism theory. According to Amineh and Asl (2015), constructivism emphasises that learners bring their prior experiences and cultural contexts to their learning. These findings reflect the learners' personal journeys and the construction of meaning based on their unique context. Learners actively connected new knowledge about correctly spelling words and identifying points with their past abilities.

Having considered the learners' perspectives, it is essential to highlight that I encouraged the learners to reflect on a daily basis. As both a researcher and a teacher, I gained valuable insights from their reflections as well (see appendix 11).

6.6 Hypothesis testing

The acceptance of the alternative hypothesis, indicating a significant difference in performance between the pre-implementation and post-implementation phases of phonemic-orthography, aligns with the concept of intervention as defined by Brady et al. (2022). An intervention involves taking steps to modify, improve, or change a specific condition with the aim of achieving a desired outcome. In this context, the implementation of phonemic-orthography served as the intervention to enhance spelling skills. Furthermore, the implementation of phonemic-orthography represents a modification of the teaching approach, introducing a new method that emphasises phonemic awareness and spelling. Accepting the alternative hypothesis suggests that this modification resulted in improved performance, indicating that the grade 9 ESL learners likely enhanced their spelling skills as a result of the introduced intervention. The acceptance of the alternative hypothesis implies the effectiveness of the intervention. This aligns with the assessment of interventions as methods to bring about positive change. The collected and analysed data indicate that the intervention led to observable and measurable improvements in the desired outcome, which is accelerated spelling, contributing to the development of critical literacy.

6.7 Conclusion

This chapter effectively examines the results and findings analysed, presented, and interpreted in the previous chapter. The database consists of responses and observations used to address the three research questions and test a previously stated null hypothesis (h_0). Some of these results and findings align with the existing body of literature, while there are also differences between the findings of this study and the literature. With this in mind, the next chapter will provide a comprehensive conclusion for this study as a whole.

CHAPTER 7

CONCLUSION AND RECOMMENDATION

7.0 Introduction

The previous chapter examined the study's results and findings in relation to the existing literature, addressing the initial research questions and assessing how well the results aligned with each question and the achievement of the research objectives. Additionally, it discussed the testing of h_0 , which literature similarly supported its rejection. This chapter now offers a comprehensive conclusion, explores pedagogical implications, provides recommendations, acknowledges study limitations, suggests avenues for future research, and includes personal reflections.

7.1 Conclusion

In today's interconnected world, ESL education is of paramount importance, serving as a gateway to effective communication and active participation in a globalised society. ESL learners, hailing from diverse linguistic and cultural backgrounds, embark on a journey to master the English language, striving for proficiency that transcends basic comprehension and encompasses critical literacy and intellectual empowerment. However, a persistent challenge they face lies in achieving spelling proficiency, which poses implications not only in language mechanics but also in academic achievement and broader cognitive development.

This study examined the implementation of phonemic-orthography as a potent tool for enhancing spelling proficiency and, in turn, fostering critical literacy development. The findings unequivocally demonstrated that phonemic-orthography expedites the acquisition of spelling skills while also playing a pivotal role in nurturing critical literacy competencies. By shedding light on how ESL educators can effectively leverage phonemic-orthography, this research enriches the pedagogical strategies available to Lesotho language instructors. Furthermore, empowering ESL learners through improved spelling capabilities advances their critical literacy skills and underscores the importance of an inclusive educational approach that transcends academic classifications that may have hindered progress.

The implications of this research extend beyond the classroom. The revelation that literacy development must follow an emancipatory approach emphasises the essence of holistic education. Without such an approach, even the most well-intentioned efforts in literacy enhancement may falter. Therefore, the

insights gleaned from this study should serve as a call to action for educational practitioners, policymakers, and researchers to align their efforts with an emancipatory vision of literacy education. Looking ahead, the pathways illuminated by this research lay the foundation for a more inclusive and effective pedagogy, one that not only accelerates spelling skills but also nurtures critical literacy skills essential for navigating the complexities of the modern world.

7.2 Pedagogical implications

The findings of this study underscore the effectiveness of phonemic-orthography in enhancing both spelling skills and critical literacy development. ESL teachers can now incorporate these strategies into their teaching methodologies, recognising them as powerful tools for accelerating spelling proficiency while nurturing broader literacy skills. This highlights the need for individualised instruction that acknowledges and addresses the unique needs of grade 9 ESL learners, allowing instructors to cater to diverse skill levels and learning styles, ultimately creating a more inclusive and effective learning environment.

Another implication, echoing the importance of an inclusive approach to education, aligns with the principles of Freire (1970) and Bernstein (1996). ESL teachers can adopt practices that go beyond traditional academic classifications, ensuring that all learners, regardless of their backgrounds or initial skill levels, have access to educational opportunities that promote critical literacy development. Additionally, beyond spelling proficiency, the study emphasises the role of spelling skills in cultivating broader critical thinking, analytical, and interpretive skills among ESL learners. Curriculum developers can leverage spelling as a gateway to fostering these essential skills in ESL learners.

Furthermore, this research contributes to the professional growth of ESL teachers by enriching their pedagogical toolkit with innovative methods to engage and inspire learners, ultimately leading to enhanced educational outcomes. It also bridges the gap between research and practice by demonstrating the practical applicability of phonemic-orthography in ESL instruction, allowing teachers to base their instructional approaches on empirical evidence. The implication that literacy development should follow an emancipatory approach aligns with the principles of holistic education advocated by Freire (1970). ESL teachers can embrace this perspective to ensure that literacy instruction encompasses not only language skills but also critical thinking, empowerment, and social engagement.

In summary, the pedagogical implications of this study offer a transformative perspective on ESL instruction, highlighting the potential for ESL teachers to empower ESL learners through the integration

of phonemic-orthography strategies into their teaching practices. This research sets the stage for more inclusive, effective, and research-driven approaches to fostering critical literacy development in diverse educational settings.

7.3 Recommendations

In this study, the primary factor contributing to the grade 9 ESL learners' spelling challenges was identified as a lack of motivation. To mitigate the impact of low extrinsic motivation on spelling, educators and parents can encourage intrinsic motivation by designing more engaging and relevant spelling exercises that align with learners' interests and goals. This can be achieved by offering positive feedback and recognition for spelling improvement, even without external rewards, which can foster a growth mindset by emphasising that spelling skills can be developed through effort and practice. Additionally, creating a supportive and motivating learning environment that values spelling proficiency through diverse teaching methods and resources can further enhance the learning experience. This recommendation aligns with that of Nguyen (2019) and emphasises the importance of ESL teachers motivating their learners. Nurturing such an environment may inspire ESL learners to take a more active interest in improving their spelling skills, resulting in improved outcomes and a stronger foundation in written communication.

The literature review in this study underscores the importance of aligning language policy in education with the integrated curriculum to enhance effective learning. Integrating both the mother tongue and English as languages of instruction in the early years can potentially ease the transition when learners switch to using English. However, the spelling challenges faced by the grade 9 ESL learners in this research are influenced by various factors, including the Lesotho Language Policy in Education (LELP), particularly interlanguage and cross-linguistic influence. Therefore, the findings of this study suggest the need to consider the experiences and perspectives of ESL learners in policy-making. Understanding how language policy affects learners in the long run can help identify potential areas for improvement and support their language learning journey.

Based on the insights from this study, educational institutions and the National Curriculum Development Centre should consider integrating phonemic-orthography strategies into ESL curricula. These strategies can be seamlessly incorporated into language arts and literacy instruction, providing ESL learners with a foundation in both spelling skills and critical literacy development. Moreover, offering specialised training and professional development opportunities for ESL teachers to familiarise

themselves with phonemic-orthography techniques is essential. Workshops, seminars, and online courses can enhance the proficiency of in-service ESL teachers in implementing these strategies effectively in their classrooms. Additionally, teacher training institutions in Lesotho may consider including these strategies as part of their curriculum to prepare pre-service teachers adequately.

Furthermore, educational assessment frameworks should adapt to encompass a broader perspective on literacy, including critical literacy skills developed through phonemic-orthography. Traditional assessments focused solely on spelling accuracy may need to be complemented by evaluations that consider critical thinking, analysis, and interpretation. To support these changes, stakeholders can develop educational resources, such as textbooks, workbooks, and digital tools, that incorporate phonemic-orthography activities. These resources can assist ESL teachers in structuring engaging lessons and activities that promote both spelling proficiency and critical literacy and provide guidance on how to assess ESL learners accordingly.

In line with this study's findings, collaborative learning approaches that utilise peer interactions to reinforce phonemic-orthography concepts should be considered. Group activities, peer review exercises, and collaborative projects can enhance students' understanding of these strategies while promoting active engagement. When working with ESL learners, it is essential to recognise their diverse linguistic and cultural backgrounds. ESL teachers should adapt phonemic-orthography strategies to be sensitive to these variations, creating an inclusive environment that respects individual learners' unique experiences.

Additionally, involving parents, caregivers, and the community in ESL learners' education is crucial. Collaborative efforts between ESL teachers and parents, caregivers, and the community can reinforce phonemic-orthography strategies beyond the classroom. Providing resources and workshops for parents can create a holistic learning environment that extends the benefits of ESL education beyond school boundaries, ultimately benefiting ESL learners.

7.4 Limitations

This study's findings are derived from a specific sample of ESL learners in a particular educational setting, namely school X. The limited sample size and potential lack of diversity within this sample may affect the generalisability of the results to broader ESL populations with varying linguistic backgrounds and educational contexts, as pointed out by Sutradhar (2021). Additionally, this study was conducted over a relatively short period of six months, which could limit the assessment of long-term effects. Therefore, conducting longer-term observations could provide a more comprehensive understanding of

how phonemic-orthography strategies influence spelling skills and critical literacy development over extended periods.

Furthermore, although efforts were made to control variables that could influence the outcomes, it was challenging to account for all potential confounding factors. External variables, such as individual learning styles and prior educational experiences of the grade 9 ESL learners, were not fully considered. Additionally, attitudes, which were not thoroughly explored, could also be significant factors. Moreover, the assessment of critical literacy skills might be subject to some degree of subjectivity, and the tools used to measure these skills might have limitations in capturing the full scope of critical thinking and analysis fostered by the intervention. For instance, before the development of critical literacy, substantial time was dedicated to enhancing the learners' functional literacy, which left limited time for the development of critical literacy skills.

The study primarily focused on the immediate impact of phonemic-orthography, which may limit insights into the long-term sustainability of the observed effects. A longitudinal study design could address this limitation by tracking participants' progress over an extended timeframe. Additionally, concerning external validity, the findings of this study might be more applicable to school X and the specific profile of grade 9 ESL learners involved. Consequently, the transferability of results to other contexts, such as different age groups or educational levels, may be uncertain.

Lastly, it is important to acknowledge the absence of adequate comparison groups in this study. While the impact of phonemic-orthography strategies was discussed, the lack of direct comparison with other instructional methods or control groups could limit the ability to assess the relative effectiveness of these strategies.

7.5 Suggestion for further research

In the first chapter, it was established that spelling, as a sub-skill of writing, has often been neglected in ESL curriculum and instruction. Although ESL curricula acknowledge the importance of spelling development, it is observed that the emphasis on this aspect is lacking, especially considering that in the Lesotho context, the success or failure in ESL is often determined by spelling abilities as indicated in the examiner's report. Furthermore, spelling instruction predominantly relies on commercial texts, with minimal focus on innovative spelling instruction methods. Additionally, there appears to be a scarcity of studies, particularly related to spelling in ESL, and even fewer addressing critical literacy.

Consequently, this study aimed to simultaneously enhance spelling skills and critical literacy development among ESL learners, highlighting the need for more research in this domain.

To advance the findings of this cross-sectional study, future research should adopt a longitudinal approach. A longitudinal study would enable the tracking of ESL learners' progress over an extended period, offering insights into the long-term sustainability of the benefits observed in this study. Additionally, researchers are encouraged to explore the applicability of phonemic-orthography strategies in diverse educational settings, with varying learner populations and at different language learning stages. Ongoing research can refine these strategies and uncover new insights into their effectiveness.

Furthermore, comparative analyses should be considered as a means of advancing this study. Researchers in the field of English language and linguistics education should conduct comparative studies directly comparing the effectiveness of phonemic-orthography strategies with other spelling instruction methods or educational interventions. This comparative approach could provide a clearer understanding of the unique contributions of phonemic-orthography to spelling and critical literacy development. Moreover, researchers should expand their investigations to include a broader range of ESL learners, encompassing different age groups, linguistic backgrounds, and educational levels. Such an approach could shed light on how the effectiveness of phonemic-orthography strategies varies across diverse profiles of ESL learners.

For those seeking to extend this study, teacher training efficacy should be a focal point. Researchers should investigate the impact of providing ESL teachers with specialised training in phonemic-orthography techniques. Subsequently, they should assess whether such training enhances ESL teachers' ability to effectively implement these strategies and influences ESL learners' spelling skills and critical literacy development.

Cultural and contextual adaptation should also be explored in future studies. Researchers can investigate how phonemic-orthography strategies can be adapted to suit various linguistic and cultural contexts. This adaptation might involve modifying the strategies to align with different language structures and considering the potential impact on critical literacy development. Additionally, research extensions should probe the long-term literacy impact of phonemic-orthography strategies. Researchers can examine whether the enhancement of spelling skills through these strategies has a broader impact on overall literacy skills, including reading comprehension, writing, and communication.

Lastly, a neurocognitive study approach is recommended. Researchers could collaborate with neurocognitive experts to explore the neurological mechanisms underlying the efficacy of phonemic-orthography strategies. This approach has the potential to provide valuable insights into how these strategies affect language processing and critical thinking skills. Importantly, it should be noted that many Basotho researchers tend to favour basic research over action research. Therefore, any future study aiming to build upon the current research should consider incorporating a longitudinal action research approach.

7.6 Reflection

Embarking on the journey of conducting my thesis has been a transformative experience deeply aligned with my dedication to empowering ESL learners to become critically literate individuals. The initial motivation behind this thesis was crystal clear: to equip ESL learners with a powerful tool that could amplify their critical literacy development. This drive stemmed from my desire to bridge the gap between language proficiency and critical thinking skills, igniting my passion for this project. I wholeheartedly believed that introducing phonemic-orthography techniques would empower these learners to engage more effectively with complex texts and ideas.

However, the path to realising this vision was far from smooth. Initially, the absence of sponsorship in the first year posed a significant obstacle. This financial challenge tested my determination and resourcefulness, pushing me to explore alternative avenues for funding my studies. Beyond financial constraints, I faced moments of personal health setbacks, accompanied by doubts about continuing this journey. The thought of officially withdrawing from the endeavour crossed my mind, and the immense weight of the undertaking seemed almost insurmountable. It was during these vulnerable moments that I realised the profound depth of my commitment. Overcoming illness while remaining dedicated to my research became a testament to my resilience and the paramount importance of the cause I was pursuing.

Throughout the research process, I gleaned invaluable insights into the intricacies of academic investigation. The case study approach I adopted demanded a multifaceted perspective, requiring me to navigate the challenges of working within a specific school environment while upholding the integrity of my research design. This journey further underscored the significance of adaptability, patience, and effective communication in the research process. As I pursued into the action research, I witnessed a transformation within the classroom first hand. ESL learners, once distant from the nuances of the

English language, began to engage more profoundly with phonemic-orthography. Their spelling skills improved, and, more importantly, their confidence in critically engaging with texts blossomed. The profound impact of this journey on the students affirmed the significance of the path I had chosen.

Looking ahead, I envision multiple avenues for further exploration. The insights gained from this case study lay a solid foundation for potential expansion to other classrooms, schools, and even languages. This journey has heightened my awareness of the immense potential that lies at the intersection of language learning, critical literacy, and innovative pedagogical approaches.

In conclusion, conducting my thesis has been a profoundly personal and academic experience. It has imparted invaluable lessons on perseverance, the strength of conviction, and the capacity for meaningful impact even in the face of adversity. This journey has fortified my unwavering commitment to empowering ESL learners, ensuring their voices are heard, and their critical literacy skills are cultivated. As I move forward, I carry with me the lessons learned and the resilience developed during this transformative endeavour.

7.7 Conclusion

This chapter has engaged in a comprehensive discussion covering the conclusion, pedagogical implications, recommendations, limitations, and suggestions for future research. The foundation for this discourse has been the results and findings of the present study.

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APPENDICES

Appendix 1: Test

$$\left(\frac{18}{25}\right) = 72\%$$

Passage 1

*

1. The English language has been the common language of the world for decades. It is now impossible to find a country where learning English has not become a norm. While there are some people who would like to stick with their native language and who prefer not to learn English, the benefits of learning mastering English go beyond the four corners of ones' own country. English is the most spoken language around the world. It is estimated that there are 380 million native speakers and 300 million that use English as a second language and an additional 100 million who use it as a foreign language. This is the case because English is needed in workplaces and schools. Other than this, English is easy to learn. Similarly, English is enjoyable. In as much as learning English is beneficial, it should not be overlooked that it has challenges as well.

2. Learning English widens your understanding. By understanding a person's culture, for example, you can avoid situations which could cause misunderstandings. Being able to understand other cultures through language can help you to bridge a gap between different cultures, which would be a powerful tool in today's modern world. Studying English language will give you a unique opportunity of stepping outside the boundary of your everyday life. Experiences of other cultures through studying English language will greatly shape your identity and heighten your self-awareness.

3. If you master English language you will enjoy travelling more. Even if you are not going to an English-speaking country, it is very likely that locals will understand you if you speak English. To clarify, whenever you wish to travel to a foreign country, you have to communicate in case you get lost. If you do not know the language of the country where you intend to go, just try communicating in English and you will be understood right away. Furthermore, having studied English, you will feel comfortable in ordering food and clothes online. This is because the main language that is used in online shopping is English. This way you will be able to read instructions and guidelines without hassle.

4. Through English, you can discover and relate to entertainment from around the world. Many of the famous movies and songs are written in English. For instance, if you think about it deeply, would you be able to fully enjoy Billie Eilish or Rihanna new 'hits' if you did not get an

SECTION 1: Reading for Ideas

Read passage 1 in the insert and answer all the questions below in order set.

1 (a) Notes

[15 marks]

Identify and write down the benefits and challenges of learning English language.

USE THE MATERIAL FROM PARAGRAPH 2 TO PARAGRAPH 6.

At this stage, you need NOT use your own words.

To help you get started, the first ONE is done for you in each section of notes.

You will be awarded up to 15 marks for content points.

Benefits	
• Learning English widens your understanding.	
• By understanding a person's culture.	
* It gives a person a unique opportunity of stepping outside the boundary of one's everyday life.	
• English language greatly shape one's identity.	
• It heightens one's self-awareness.	
• If one masters English language, one will enjoy travelling more.	
• Having studied English, makes one feel comfortable in ordering food and clothes online.	
• One can discover to entertain entertainment from around the world.	
• One can relate to entertainment from around the world.	
• English is a tremendous asset for one's professional career.	
• It helps students to develop better vocabularies.	
• Learning English requires the great amount of exposure and in most cases, it is limited.	
• English trainers are not competent in English so it takes time for a trainee to learn this language.	

SECTION 1: Reading for Ideas

Read passage 1 in the insert and answer all the questions below in order set.

1 (a) Notes

[15 marks]

Identify and write down the benefits and challenges of learning English language.

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- It helps students to develop better vocabularies.
- Learning English requires the great amount of exposure and in most cases, it is limited.
- English trainers are not competent in English so it takes time for a learner to learn this language.

Challenges

- Learning English requires the great amount of exposure.
- Some learners of English do not network with other users of English.
- English may depend on the family background.
- Some of the learners of English who do not afford tools that may help them learn English effectively may suffer.
- Some learners have negative attitude towards English.
- English takes a longer time to learn because of its irregular system compared to many native languages such as Swahili.
- If a person is not willing to learn it, learning this language may be a long and tiring journey.

12

(b) Summary

Now use your notes to write a summary in which you state the benefits and challenges of learning English language as outlined in the passage.

This time you will be awarded up to 5 marks for using your own words wherever possible and for accurate use of language.

Your summary, which must be in continuous writing (not note form), must be no longer than 160 words, including the 10 words given below. Begin your summary as follows:

Learning English language can serve as an opportunity because it is the most most spoken language that helps people to know one another's culture. It gives a person to an unique opportunity of stepping outside the boundary of one's everyday life. It also greatly shapes one identity and heightens one's self-awareness. A person must master English if he or she wants to travel because it is very likely that locals will understand one when one speaks English. Because the main language that is used in online shopping is eng English, having studied English makes one feel comfortable in ordering food and clothes. Even though English is this helpful, it also has challenges. Some learners who do not afford tools that may help them learn effectively may suffer. English takes a longer time to learn because of its irregular system compared to many native languages such as Gesotha. So if a person is not willing or encouraged to learn English, learning this language may be a long and tiring journey or a waste of time.

Welp done!

This is your first attempt and I am impressed. Keep it up!

No of words [[62]

5

2 From your reading of **paragraph 1**, decide which **two** of the following statements are **FACTS**.
Tick the appropriate boxes.

- (a) English is easy to learn. ~~X~~
- (b) English is needed in workplaces and schools.
- (c) English is the most spoken language around the world. ~~X~~

2/1

3. Identify and write **one** opinion from paragraph 1.

English language has been a common language of the world for decades. ~~X~~

4. From your own knowledge and experience, give **two** reasons why it is beneficial to learn English. Do not refer to specific examples in the passage.

(a) One reason is

English is easy to learn
It has help to communicate with other people from different cultures. ~~X~~

(b) Another reason is

It helps people from different cultures and districts to communicate. ~~X~~

Total for Section 1 [25]

Appendix 2: ESL teachers' questionnaire



Phonemic orthography interventionist strategy

Dear Respondent

You are invited to participate in my study titled "Phonemic Orthography as an Interventionist Strategy to Accelerate Literacy through 'Phonics Approach' in a Grade 9 English Language Class: An Action Research Case Study in one High School in Naseru". Five people will be asked to complete a survey that asks questions about the preconditions for spelling challenges in a grade 9 English Language classroom. It will take approximately 5 minutes to complete the questionnaire.

Your participation in this study is completely voluntary. Further, there are no foreseeable risks associated with this project. It is very important for me to learn your opinions. Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. Your information will be coded and will remain confidential. If you have questions at any time about the survey or the procedures, you may contact Lipolelo Thamee at +27 656 28 3038 / +266 5770 8757 or by email at lipolelothamee977@gmail.com.

Thank you very much for your time and support.

Please place a mark [x] in the appropriate box that best describes your response for EACH question.

Sex

- Male
- Female
- Other

What is the range of your age?

- Above 50
 - 46-50
 - 41-45
 - 36-40
 - 30-35
-

What is your highest teaching qualification?

- Diploma
 - B.Ed
 - Masters
 - PhD
-

How many languages are you fluent in?

- Two
 - More
-

How long have you been teaching in a bi/multilingual classroom?

- More than 20 years
 - 16-20 years
 - 11-15 years
 - 6-10 years
 - 0-5 years
-

Ability to correctly pronounce and spell words contributes towards literacy development.

- Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly agree
-

To what extent do grade 9 English Language learners encounter spelling challenges?

- Very little
 - Little
 - Neutral
 - Quite a lot
 - A lot
-

Lack of mediation tools such as textbooks and dictionaries contributes to encountering spelling challenges.

- Never
 - Rarely
 - Sometimes
 - Very often
 - Always
-

The grade 9 English Language learners' first language interferes with their English Language spelling.

- Never
- Somewhat
- Rarely
- Occassionaly
- Frequently

Teacher-teacher, teacher-learner and learner-learner collaborative activities may enhance the grade 9 English Language learners' literacy skills.

- Definitely not
- Possibly not
- Possibly
- Probably
- Definitely

The English Language speaking rule in your school is effective in developing literacy in the grade 9 English Language classroom.

- Not at all
- Slightly
- Moderately
- Likely
- Extremely

The grade 9 English Language learners are motivated to attain literacy.

- No
 - Yes
-

There are activities that the learners engage in to develop their pronunciation and spelling skills.

- No
 - Yes
-

"The English Language learners are central to their learning", in the context of your school, is the curriculum ambitious?

- No
 - Yes
-

In your accord, who should take responsibility for developing English Language learners' literacy through pronunciation and spelling?

- The school, the teachers, the learners, the parents
 - The school and the teachers
 - The teachers and the learners
 - The teachers
 - The parents
 - The learners
-

Appendix 3: ESL learners' questionnaire

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The grade ESL learners' questionnaire for the study titled: **“Utilising Phonemic-Orthography to Accelerate Spelling Proficiency for the Development of Critical Literacy Skills in a 9th Grade ESL Classroom: An Action Research Case Study Conducted at a Secondary School in Maseru.”**

N.B Please do not write your name.

Please provide an appropriate answer for the following questions.

1. How many are you in your family?

Please tick and appropriate answer with [×]

2. I am looked after by my:

Parent

Parents

Sibling(s)

Guardian

3. The person/ people who look after me:

Have business(es)

Are employed

Are not employed

Self-employed

Please tick [×] in a relevant column.

Item	Strongly agree	Agree	Disagree	Strongly disagree
My family members speak English very well				
My family buys me ALL English books I need in school				
My family checks my English work and help me with assignments				
I really like English				
Studying English is necessary to me because it will enable me to communicate with people from all over the world				
I am studying English so that I can understand English-speaking movies, videos, TV or radio				
I am studying English so that I can be able to study in university				
I am forced to study English				
I am studying English to make my family and my teachers happy				
I do not really like English				

Appendix 4: Focus group discussion tool

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Good morning colleagues

My name is Lipolelo Thamae. I am a postgraduate student from the National University of Lesotho. You are invited to participate in my study titled **“Utilising Phonemic-Orthography to Accelerate Spelling Proficiency for the Development of Critical Literacy Skills in a 9th Grade ESL Classroom: An Action Research Case Study Conducted at a Secondary School in Maseru.”** The purpose of this study is to implement what we call phonemic orthography to speed up your spelling skills, thereby develop critical literacy. That is everything that we did in class in short. So, the first thing that I need to assure you is that if you agree to participate in this study, I will protect your identity at all costs. I will not mention your names. I am just going to use the ideas to represent your experiences. So this is 100% voluntary. You are not forced to participate in this: I am only asking you to help me. And after recording, this is what is going to happen; I am going to listen to this audio, write everything down, destroy the audio, and use what I have written.

1. How did I (the researcher) assist you towards improving your pronunciation which helped in developing your spelling?
2. Can you explain the contribution of other learners that eventually improved your spelling?
3. I encouraged you to use dictionaries: I even printed some exercises for you. How was that helpful?
4. We had rules that included using both English and Sesotho where you were not able to communicate in English only. How did that affect your learning?
5. How was the way I teach different from other teachers'?
6. How did you generally improve since I started teaching you?

Appendix 5: Parental consent

Dear Parent/Guardian,

Re: Parental consent for learners' participation in a research study

I hope this letter finds you well. My name is Lipolelo Thamae, and I am a student currently pursuing my Master of Arts in Education at the National University of Lesotho. I am conducting a research study as part of my academic requirements, and I am writing to seek your consent for your child's participation in the study titled **“Utilising Phonemic-Orthography to Accelerate Spelling Proficiency for the Development of Critical Literacy Skills in a 9th Grade ESL Classroom: An Action Research Case Study Conducted at a Secondary School in Maseru.”**

The aim of this research is to investigate the effectiveness of implementing phonemic orthography as a method to enhance spelling skills and critical literacy development among Grade 9 English as a Second Language (ESL) students. The study intends to explore how this approach impacts the students' learning process and literacy abilities. If you grant permission for your child to participate, they will be involved in classroom activities where the phonemic orthography approach will be applied. The study will entail observations, assessments, and educational interventions aimed at improving spelling and critical literacy skills. Your child's identity will remain confidential, and any data generated will be used solely for research purposes.

Participation in this study may benefit your child by potentially enhancing their spelling skills and critical literacy abilities. There are no known risks associated with participating in this research beyond those encountered in regular classroom activities. Your child's privacy is of utmost importance; as a result, all generated data will be kept confidential and reported anonymously. Further, it is important to make you aware that participation in this study is completely voluntary. So, if you agree to allow your child to participate in this study, please sign the consent form attached to this letter and give it to your child to return it to school. If you have any questions, concerns, or require further information, please do not hesitate to contact me at +266 5777 8757 (call)/ +27656 28 3038 (WhatsApp).

Thank you for considering your child's participation in this research. Your support is greatly appreciated.

Sincerely,

Lipolelo Thamae

Consent Form

I, _____ am the parent/guardian of _____, a student in Grade 9 at school X. I have read and understood the information provided in the above letter regarding the research study titled "Implementing Phonemic Orthography to Accelerate Spelling Skills for Critical Literacy Development in a Grade 9 ESL Class: An Action Research Case Study in One High School in Maseru." I hereby grant permission for my child to participate in the study.

I understand that participation is voluntary and that my child may withdraw from the study at any time without consequence. I am aware that any data collected will be treated confidentially and reported anonymously.

I have had the opportunity to ask questions and have received satisfactory answers.

Parent/ Guardian's full names _____

Parent/Guardian Signature _____

Relationship with a child _____

Date _____

(Consent form in Sesotho)

Motsoali / Mohlokomeli ea ratehang,

Re: Tumello ea batsoali bakeng sa ho kenya letsoho hoa baithuti thutong ea lipatlisiso

Ke tšepa hore lengolo lena le tla le fumana hantle. Lebitso la ka ke Lipolelo Thamae, 'me ke moithuti hajoale ke ntse ke etsa Master of Arts in Education Univesithing ea Naha ea Lesotho. Ke ntse ke etsa lipatlisiso e le karolo ea boithuto baka, 'me ke ngolla ho kopa tumello ea hao bakeng sa ho nka karolo hoa ngoana oa hau thutong ena e bitsoang "Ho Kenyellelsa Mongolo oa Mantsoe ho Potlakisa Tsebo ea Mopeleto (spelling) ele ho ntlafatsa ho Bala le ho ngola Sehlopheng sa (borobong) 9 sekolong sena."

Maikemisetso a patlisiso ena ke ho fumana katleho ya ho kenya ts'ebetsong thutapuo ya medumo e le mokhoa oa ho matlafatsa bokhoni ba mopeleto le nts'etsopele ya tsebo e hlokolosi ya ho bala le ho ngola hara baithuti bana. Boithuto bona bo ikemiselitse ho hlahloba hore na mokhoa ona o ama ho ithuta hoa baithuti joang. Haeba o fana ka tumello ea hore ngoana oa hao a kenye letsoho, o tla kenya letsoho mesebetsing ea sehlopheng moo ka mokhoa oa ho ngola mantsoe a fonomic (phonemic) o tla sebelisoa. Boitsebiso ba ngoana oa hao bo tla lula e le lekunutu.

Ha ho na likotsi tse tsejoang tse amanang le ho kenya letsoho phuputsong ena. Ho feta moo, ho bohlokoa ho u hlokomelisa hore ho nka karolo lipatlisisong tsena ke boithaopo ka ho fellelseng. Kahoo, haeba o lumela hore ngoana oa hao ho nka karolo phuputsong ena, ka kopo tekana foromo ya tumello e hokeletsoeng lengolong lena mme o e fe ngoana oa hao hore a e busetse sekolong. Haeba o na le lipotso, matšoenyeho, kapa uohloka tlhaiso-leseling e batsi, ka kopo se be leqe ho ikopanya le nna ho +266 5777 8757 (call)/ +27 656 28 3038 (WhatsApp).

Ke leboha ho nka karolo hoa ngoana oa hau lipatlisisong tsena. Tšehetso ea hau e ananeloa haholo.

Ka botšepahi,

Lipolelo Thamae

Foromo ea Tumello

Nna, _____ ke motsoali kapa mohlokomeli oa _____, moithuti oa sehlopha sa 9. Ke balile mme ka utloisisa tlhahiso-leseling e fanoeng lengolong le ka holimo mabapi le phuputso ena. Ka hona ke fana ka tumello ea hore ngoana oa ka a nke karolo phuputso ena.

Kea utloisisa hore ho nka karolo ke hoa boithaopo le hore ngoana oa ka a ka ikhula phuputso neng kapa neng ntle le liphelelo. Kea tseba hore litaba tsohle mabapi le liphuputso tsena etlaba lekunutu, mme e tlaleheloe ntle le lebitso la ngoanaka.

Ke bile le monyetla oa ho botsa lipotso 'me ke fumane likarabo tse khotsofatsang.

Mabitso felletseng a motsoali/Mohlokomeli _____

Motekeno oa Motsoali/Mohlokomeli _____

Likamano le ngoana _____

Letsatsi (date) _____

Appendix 6: Reflective activity

Participant's pseudonym _____

School's pseudonym _____

Questions	Teacher's reflections
1. What have you (as an English Language teacher) done to address the prevailing literacy challenges?	
2. Do you have sufficient support from the school management and your colleagues? If yes, please explain. If not, please state ways in which you can be supported to address the learners' literacy challenges?	
3. How would you help your learners to develop their literacy skills in the absence of institution support?	
4. Integrated curriculum is learner centred, thus it is all about division of labour between a teacher and a learner. On this basis, what do you do to promote learners' self-directed learning?	
5. In an external examination, the English Language learners are penalised for misspelling words. What do you do to develop spelling skills? If you have not done anything, what would you do?	

Appendix 7: Structured observation (checklist)

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Observation checklist

Name of the study: “Utilising Phonemic-orthography to Accelerate Spelling Proficiency for the Development of Critical Literacy Skills in a 9th Grade ESL Classroom: An Action Research Case Study Conducted at a Secondary School in Maseru.”

General objective of the study: To establish how n interventionist actions research case study grounded in phonemic-orthography can accelerate spelling skills for critical literacy development in a grade 9 ESL classroom.

Date _____ Time _____

Class _____ Topic _____

Educator’s name _____

No	Criterion	Y	N	Comments
1	Learning was collective.			
2	The teacher moves from abstract to concrete using familiar examples.			
3	The teacher moves from concrete back to abstract using familiar examples.			
4	When the learners do not understand, the teacher assists them.			
5	The teacher generates interaction in which functional activities are performed.			
6	There is learner-learner interaction.			
7	The teacher facilitates pairs and or group work.			
8	The lesson is supported with teaching aid materials such as text books, dictionaries, charts etc.			
9	Does the teacher engage in and encourages repetition for better understanding of challenging concepts?			
10	Does the teacher demonstrate how to pronounce words in a correct manner?			
11	Does the teacher acknowledge the learners’ efforts and motivate them? (Positive reinforcement)			

Appendix 8: Reflective journal

I was in the Staffroom, casually chatting with other teachers. They were amazed at how I was attempting to develop the spelling skills of the learners. I tried to explain to them and one teacher said "oh o matho wa di phonetics wena", Another added "me ke sa e batle hampe phonetics, e thata hampe rtheeno". A different ES teacher asked "ngobanani o tona jwang ho ruta rthe rthe thata tje? Hape o e ruta jwang hore bana ba e be ba qetella ba e - enjaya tje? ah nna lekgate". I explained and the other one said "Nna ke e nahane ko Sora Spelling, fela ke e utlwe ke ipofisa na ebe nka gata kae. Nthwe ke e hlakomatseng ke hore ha ho bobebe ho ruta Spelling. Ehle ha hore lahle lohlang".

Appendix 9: Syllable division (construct validity-based assessment)

To complete the above puzzle, critically think of the appropriate words and fill the above grid in unshaded boxes. You have been provided with clues that describe the words and a number of syllables per word. Use your knowledge of syllable division (the chin method) to complete the task.

Clues

Down

- You kick it.
- You are in it now.
- You live in it.
- You use it in the lab.
- A continent you live in.
- It is a fruit and a colour.

It is a word with:

- 1 syllable
- 2 syllables
- 3 syllables
- 3 syllables
- 3 syllables
- 3 syllables

Across

- You write in them. 1 syllable
- You write with it. 1 syllable
- When you are not feeling well, you are? 1 syllable
- Giving food to someone or something. 1 syllable
- You can read, watch movies or type with it. 2 syllables

- Doing something again. 2 syllables
- It transports sick people. 3 syllables
- You apply it in Mathematics. 3 syllables

Memo

The learners have not been provided with any words; they are expected to think critically and identify the following words.

Words: ball, books, pen, ill, feed, classroom, laptop, redo, ambulance, apartment, chemical, addition, Africa, orange

Appendix 10: Critical literacy (cultural validity-based assessment)

Carefully read the paragraph below and answer the questions that follow.

BORN IN THE SHADE

They were born in a small village in Roma-10 years ago. At first, the grandparents refused to accept them. "A double curse," their grandfather had called them. Mpho and Neo lived with the condition of albinism. Their mother feared for their safety because they were different from others in their family. She watched them all day and night fearing that they would be kidnapped because muti-makers from other villages paid well for organs of people who live with albinism. Besides that, they were taunted by the villagers and shunned by their grandparents. Even other children did not want to play with them. Sometimes some of the old ladies would point at them and cackle some nonsense. Their mother always warned Mpho and Neo to stay away from the older people and never accept anything from strangers. (Adapted from Mothebesoane et al., 2020)

1. Do you think what the treatment that Mpho and Neo got is fair or unfair?

The treatment was unfair to Mpho and Neo...

2. Why do you think it is fair or unfair? (Fully discuss)

The treatment was unfair because Mpho and Neo were taunted and shunned by the villagers and their grandparents because of who they are. Mpho and Neo were also discriminated and living in fear because they were scared of being kidnapped by the villagers for muti.

3. What do you think should be done to stop the prejudice against people with albinism?

Anyone who prejudice a person with albinism should be punished or be arrested in order to serve justice and for free living of people with albinism.

Carefully read the paragraph below and answer the questions that follow.

BORN IN THE SHADE

They were born in a small village in Roma-10 years ago. At first, the grandparents refused to accept them. "A double curse," their grandfather had called them. Mpho and Neo lived with the condition of albinism. Their mother feared for their safety because they were different from others in their family. She watched them all day and night fearing that they would be kidnapped because muti-makers from other villages paid well for organs of people who live with albinism. Besides that, they were taunted by the villagers and shunned by their grandparents. Even other children did not want to play with them. Sometimes some of the old ladies would point at them and cackle some nonsense. Their mother always warned Mpho and Neo to stay away from the older people and never accept anything from strangers. (Adapted from Mothebesone et al., 2020)

1. Do you think what the treatment that Mpho and Neo got is fair or unfair?

The treatment that Mpho and Neo got it is unfair.

2. Why do you think it is fair or unfair? (Fully discuss)

I think it is unfair because other children did not want to play with them and some of the old ladies, they just wanted Mpho and Neo & feel that they are the albinism. ~~Some people~~ Some people wanted Mpho and Neo feel that they are different from other people and it's not fair.

3. What do you think should be done to stop the prejudice against people with albinism?

I think we should treat albinism like other other people. We should also stop kidnapping them because they also have right to live like us.

Appendix 11: Introductory letter

THE NATIONAL UNIVERSITY OF LESOTHO

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



P.O. Roma 180
Lesotho
Southern Africa

FACULTY OF EDUCATION

09th January 2023

The Principal
St. Mary's High
Maseru

Dear Principal

A letter of introduction to undertake research

This letter serves to introduce **Reitumetse Ramone** – a Masters student in the Faculty of Education at the National University of Lesotho (NUL). She is undertaking research on *“Utilising Phonemic-Orthography to Accelerate Spelling Proficiency for the Development of Critical Literacy Skills in a 9th Grade ESL Classroom: An Action Research Case Study Conducted at a Secondary School in Maseru”* The study requires her to interview the relevant participants and possibly observe lessons at Masowe High School. Other data collection methods may also be used as the study dictates. Kindly accord the student the necessary assistance to enable her to conduct this study which has the potential to generate useful data and information in the field of education.

Your cooperation and assistance are most highly appreciated.

Sincerely,



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

Appendix 12: Carelessness

2. Write your own sentences using any five of adjectives given below.

Spicy Pizza
* Dark room
* Thoughtful friend
Exhausted doctor

* Playful
* Dangerous
* Several people
Six girls

1. Rhea was such a thoughtful friend.
2. We all went through the dark room.
3. Oh! that car is dangerous than I thought.
4. When the bus stoped ^{SP} several ^{SP} people were sleeping.
5. A playful child is the happiness of every parent.

2. Write your own sentences using any five of adjectives given below.

Spicy Pizza
Dark room
Thoughtful friend
Exhausted doctor

Playful
Dangerous
Several people
Six girls

- I bought spicy Pizza for my friend.
- The tall man got out of the dark room.
- Lisemeb has been a thoughtful friend.
- Most clients say she is always the exhausted doctor.

Appendix 13: ESL learners' reflection

What I like about you is that

- You try by all means that we understand.
- You treat us fairly.
- You allow us to ask you questions wherever we don't understand either in Sesotho or English.
- You encourage us.
- You don't discriminate us at all.

Reflection of today's lesson Likes.

- I like the moment when she explains because she tries her best for us to understand.
- I like when we participate during her lessons.
- I like her pronunciation of words.
- I like the way she treats us.
- She tells when we are doing bad things.

Dislikes.

- She sometimes gets out of the class when ~~we~~ we made her angry.
- We sometimes don't like when she comes to class.
- We sometimes don't do her work.
- We sometimes give her attitudes.

Reflection of today's lesson 24/04/2023

1. I enjoyed today's lesson because you made sure that we understood what you taught us.

2. You were so friendly that we were able to ask question when we couldn't understand.

3. I enjoyed today's lesson because you ~~also~~ chose us individually in order to check wheather we all understand.

4. I enjoyed today's lesson because you told us to learn from our mistakes.

Appendix14: The researcher's reflection

I was ~~upset~~ upset that most of the learners did not do their homeworks. I stormed out of the class. I should not have done this. Next time I will be conversant about the consequences of not doing the ESL tasks.

Appendix 15: Similarity index

Thamae Lipolelo (201305214) Thesis

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