ASSESSING THE AUTHENTICITY OF THE SACMEQ REPORTS ON LITERACY AND NUMERACY IN LESOTHO'S BASIC EDUCATION

BY

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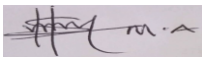
DECLARATION

I, Maipato Charlotte Khoase (200705185), declare that the research titled "Assessment of authenticity of SACMEQ reports on literacy and numeracy in Lesotho's basic education" is my original work. I have independently written this work under the guidance of my supervisor. All sources used to in this research have been appropriately acknowledged using references. Furthermore, I confirm that this work has not been previously submitted at any academic institution for qualifications. As such, I accept full accountability for the content presented in this work.

CERTIFICATION

This is to certify that this thesis has been thoroughly reviewed and approved to meet all the requirements set by the Faculty of Education, National University of Lesotho, for the award of Masters in Education (M.ED).



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DEDICATION

I dedicate this study to my GOD, my parents, and my husband. I sincerely appreciate their unwavering support and encouragement. Furthermore, I want to deeply express my gratitude to you for the financial support that has enabled this academic journey possible. Thank you .

ABSTRACT

Countries in southern and eastern Africa introduced a large body assessment called the SACMEQ consortium in 1995. It assesses the literacy, numeracy and HIV/AIDS Knowledge of learners and teachers in Grade 6 in member countries. Since the first assessment, which was hosted by Lesotho in the year 2000, literature has reported on the outcomes of the assessments. The theoretical underpinning of this research draws from the Generalisability Theory while the interpretivism paradigm guided this study. Though studies reporting on SACMEQ were quantitative The authenticity of the SACMEQ reports on literacy and numeracy in Lesotho Basic Education was assessed in the current study using a qualitative approach to find in-depth information on how these reports addressed the needs of Basotho and the factors that influence the authenticity of those reports. The study used historical design methodology and data generated from an in-depth semi-structured interview of purposively selected participants from the Ministry of Education and Training and the educational private sectors. Besides, data was also from the Lesotho SACMEQ II, III, and IV reports, through a document analysis strategy. The data was analysed using inductive content analysis. Results showed Lesotho struggled to reach educational standards, consistently performing below the margin (500) in SACMEQ studies, indicating a gap for holistic addressing Basotho needs.

Lesotho's participation in the SACMEQ programmes has been questioned due to challenges in authenticity, despite slight improvement in SACMEQ IV reports. The study recommends that authenticity should not compromise data quality assurance factors, as Lesotho failed to meet expectations, despite ensuring authenticity fully during reporting.

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ACRONYMS

IIEP	International Institute of Educational Planning
NAEP	National Assessment and Evaluation Progress
MIC	Multiple Indicator Cluster Surveys (MIC).
TIMMS	Trends in International Mathematics and Science Study
PIRLS	Progress in International Reading Literacy Study
SACMEQ	Southern and Eastern African Consortium Educational Quality
UNESCO	United Nations Educational, Scientific and Cultural Organization
DBESA	Department of Basic Education in the Republic of South Africa
SDG	Sustainable Development Goal
EFA	Education For All
HIV/AIDS	Human Immune Deficiency Virus/ Acquired Immune Deficiency Symptoms
SCC	SACMEQ Coordinating Council
ACER	Australian Council for Education Research (ACER)
RSA	Republic of South Africa
MoET	Ministry of Education and Training
NCDC	National Curriculum Development Centre
ESSP	Educational Sector Strategic Plan
BTL	Break Through to Literacy
ECOL	Examination Council of Lesotho
REDCOL	Research and Evaluation Department Examination Council of Lesotho
PSLE	Primary School Leaving Examination
GT	Generalizability Theory
CTT	Classical Test Theory

CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1 Introduction

The Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ), established in 1995 is a well-established regional organisation that conducts cross-national educational assessments in various countries in Africa. This study critically assessed the authenticity of reports by the SACMEQ on the quality of literacy and numeracy in the basic education in Lesotho. Once assessments are done, SACMEQ publishes reports, which serve as valuable resources for policymakers, educators, and researchers. However, the authenticity and reliability of these reports need to be examined critically to ensure the accuracy of their findings, and this is crucial because researchers and stakeholders have raised concerns regarding their accuracy and reliability. Consequently, this study seeks to evaluate the validity and credibility of the reports by the SACMEQ, particularly on the basic education in Lesotho, focusing on the assessment of literacy and numeracy skills. By examining the methodology, data generation, analysis, and interpretation employed by the SACMEQ, this study aimed to provide a comprehensive assessment of the authenticity of the reports.

An autonomous and non-profit organisation called SACMEQ works to raise standards on the education of nations in Southern and Eastern Africa (Makuwa, 2012). Specifically, as noted by this author, the consortium evaluates literacy and numeracy skills of learners in Grade 6, concerning large-scale assessments of their academic accomplishments. Matei et al. (2022) posit that these assessments allowed every member country to keep an eye on the quality of its educational system by identifying factors that concerned the academic performance and students' learning outcomes. It was a debate in a workshop that was held in 1992 that spurred the founding of SACMEQ. The facilitators of this workshop were from the Zimbabwe Ministry of Education and Culture, and the International Institute of Educational Planning (IIEP) directorate of the United Nations Educational, Scientific, and Cultural Organisation (UNESCO). The conversations held by these entities resulted in training aimed at enhancing the members' ability to design lessons while maintaining high standards of instruction in schools. However, their main goal was to assess the standard of instruction in primary schools in Zimbabwe, incorporating training and research

initiatives from the Ministry's educational planning section and offering insightful policy recommendations. Following this workshop, participants were compelled to establish SACMEQ, which was to assess the educational environments and performance levels of instructors and learners involved in literacy and numeracy (Chetty et al., 2017).

Moreover, seven ministers of education from Kenya, Malawi, Mauritius, Namibia, Tanzania, Zambia, and Zimbabwe formally founded the SACMEQ in 1995. Following its founding, it grew to a point where, in 1997, it was formally registered with 15 ministries of education (from Uganda, Zambia, Zimbabwe, Tanzania (Mainland), Tanzania (Zanzibar), Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, and Kenya (Matei et al., 2022). At the moment, 16 ministries of education are involved, from the countries shown in Figure 1.1.

Figure 1.1: SACMEQ MAP (SACMEQ V reports).

Intending to facilitate the growth of quality education in Southern and Eastern Africa, SACMEQ focused on providing data that was essential for use in monitoring educational quality; and

improving the research capacity and technical skills of educational planners (Haimbodi, 2019). Matei et al. (2022) substantiated the following SACMEQ's aims that are in use even today:

- To provide training opportunities that will shape the technical capacity of the SACMEQ Ministries of Education to monitor and evaluate the conditions of schooling and the quality of their education systems;
- To undertake cooperative educational policy research to generate information that decision-makers can use to plan the quality of education;
- To utilise innovative information dissemination approaches and a range of policy dialogue to ensure that SACMEQ research results are widely discussed, debated, and understood by all stakeholders and senior decision-makers.

To promote the development of high-quality education in Southern and Eastern Africa, SACMEQ concentrated on two areas: enhancing the research abilities and technical proficiency of educational planners and supplying vital data for monitoring educational quality (Haimbodi, 2019). Matei et al. (2022), significantly explained that the following SACMEQ objectives are still in use today.

- to offer training programs that will develop the technical proficiency of the SACMEQ Ministries of Education in monitoring and assessing the quality of their respective education systems;
- to conduct cooperative educational policy research to produce data that policymakers can use to plan the quality of education;
- to make use of creative approaches to information dissemination and a variety of policy dialogues to guarantee that the findings of SACMEQ research are extensively discussed, debated, and comprehended by all relevant parties and senior decision-makers.

To improve the quality of education, SACMEQ developed a system used to track and assess skills on literacy and numeracy at the foundational level in Grade 6. The researchers were also given technical training to enable them to produce baseline data for educational planners. The holistic instructional approach's inputs, procedures, and educational outcomes forced SACMEQ to monitor and evaluate the quality of education (Makuwa, 2012). Despite the fact that the assessment conducted by the SACMEQ during the first phase focused on literacy, the outcomes revealed by

the nations that took part were encouraging (Jopo et al., 2011a). The justification for these remarkable outcomes could indicate that the training was helpful, and that the assessment method was used correctly. Chetty et al. (2017), however, claim that the motivation behind all these initiatives was to address Sustainable Development Goal 4 (SDG4), notably objective 6, which is titled "Ensuring quality on universal literacy and numeracy", as well as the Education for All (EFA) campaign.

While the SACMEQ was launched in Zimbabwe through ideas of officials involved in the education system of that country, it was to be expected that it would be based in that country. However, since it was founded, through to December 31, 2014, SACMEQ was housed at IIEP in Paris, France. Currently, it is situated in Gaborone, Botswana (Matei et al., 2022), and the SACMEQ Coordinating Center (SCC) oversees that the projects for this consortium. The SCC has created tools that are useful in gathering research data, including literacy and numeracy test items and Human Immune Virus/Acquired Immune Deficiency Virus Symptoms (HIV/AIDS) surveys. Of noteworthy, some of the instruments are given to learners in Grade 6 in order to prepare for end-of-level assessments for lower basic levels. It has been observed that the instruments and methods employed were comparable to those of the SACMEQ II project in 2000 and the SACMEQ IV project in 2013. For reasons of legitimacy, the instruments are kept confidential, making them inaccessible (Karogo et al., 2018).

It was through careful examination of the textbooks, syllabi, and curricula utilised in SACMEQ member nations that served as the foundation for the development of the testing instrument for literacy and numeracy (Jopo et al., 2011a). Recently, the instruments were used to administer three tests: HIV/AIDS, literacy, and numeracy tests. Even though these test assessments relied on the content domain, the skill levels and strategies needed for the activities being assessed, there was no indication that the ability of learners were observed (Postlethwaite & Kellaghan, 2008). These tests were validated using modern item response theory techniques. Most countries, including Lesotho, joined the SACMEQ during its second phase in 2000 as a result of improvements shown by nations that participated in the first phase. In the second stage, the survey was modified to include a numeracy test, with domains for numbers, measurements, and space data while the third survey involved the HIV/AIDS test because of the global pandemic health problem. The primary objective was to evaluate the degree of awareness that educators and learners had on the illness.

Scaled scores and competency levels were the basis for the test results. Scaled scores were displayed with a mean of 500, a standard deviation of 100, and scores expressed as percentages. The Rasch model guided competency levels in score description. This was intended to allow insightful comparisons, inside and across the nations. The emphasis was on the abilities that could be learned hierarchically, moving from lower to higher proficiency levels (Jopo et al., 2011b).

Moreover, within SACMEQ, sample selection was carried out by the representatives from the ministry of education of each nation, who based their decisions on whether or not to include members of the target population of grade six learners. At least five percent of the target group could have been excluded from surveys (Postlethwaite & Kellaghan, 2008). These authors also reported that a detailed sample frame is essential because it enables a reader to grasp the goal, calculate sampling weights, and determine standard errors of a study. A sample frame should include the names of schools, their centre numbers, the number of students, and extra information such as location and status. These allow researchers to use the data gathered to compare the quality of education in the participating countries. According to Omsumu et al. (2005), the first survey involving 1,000 school administrators, 3,000 teachers, and 20,000 grade six learners from seven ministries of education was conducted in 1995. Though, SACMEQ performed five surveys over a 6- to 7-year period, the study focused only on the programmes from the SACMEQ II, III and IV. This resulted in a significant increase in participation (Makuwa, 2012). For SACMEQ IV, the survey was comprised of 1072 school principals and 49590 learners. Similarly, for Lesotho, a summary on the number of participant school principals, teachers, and learners, is shown in Table 1.1.

Table 1.1: SACMEQ database of samples in Lesotho in 2000, 2007 and 2013. (Lesotho SACMEQ II, III & IV reports).

SACMEQ	School Principals	Teachers	Learners
II	177	0	3155
III	182	316	4240
IV	198	401	3727

The reports published by the SACMEQ highlighted the strengths and weaknesses in the performance of countries and regions that were assessed. They were by each member state to set the path for major policymakers' documents to assess their policies, provide clear direction, and implement improvements accordingly. Matei et al. (2022) argued that reports by the SACMEQ served as significant resources for policymakers, educators, and researchers since they did not only reveal the level of achievement but also accomplishment-related issues. This allowed stakeholders to identify functional strategies for improvement. Aside from that, the reports of these surveys managed to set agendas for government members' action on topics linked to baseline indicators for educational inputs, general conditions of schooling, equitable assessments for human and material resource allocations among schools, and learners' literacy level. For ACARA (2015), research findings by the SACMEQ had a substantial impact on information discussion and decisions about the members' educational systems. As a result, member states analyse the findings and take requisite actions. However, it is significant for researchers to critically examine the validity and credibility of Lesotho's SACMEQ results to ensure the accuracy of their findings.

1.1.1 Importance of Authenticity Assessment

The concept of authenticity is considered relevant by numerous scholars in various fields as it enables them to propose alternative interpretations of authenticity, including originality and staged existential (Nune at al. 2022), among others. Despite diverse interpretations of authenticity, this study deemed the term authenticity as crucial, therefore the researcher relied on the consensus achieved among scholars that authenticity is the state of being genuine, real, and truthful (Lehman

et al., 2018). The creation of authenticity in and through instructional design is an important signal because it is based on ethical and conceptual considerations, aspects of education that are highly controversial. According to Bialystok (2017), detecting authenticity in education is based on truth, reality, ethics, and, ultimately, educational goals. These characteristics can be found in non-human elements of educational processes such as curriculum, pedagogy, assessment, tasks, and educational technology, among others.

It was critical to assess the authenticity of reports from SACMEQ on Lesotho in this study, since the researcher was able to follow the most relevant educational activities in light of some external reality. Based on Bialystok (2017), assessing authenticity in education requires taking into account multiple assumptions concerning epistemology, ontology, and ethics within the notion under consideration. The presumptions were founded on the following questions:

1. How can information regarding learning or accomplishment of pupils be obtained?

2. How can strategies use to acquire information be evaluated for accuracy?

Instructional designers made a strong commitment to authenticating educational processes to provide a favourable learning environment that fits social objectives (Bialystok, 2017). The detailed examination of methodologies and processes used in educational assessment was most helpful in discovering areas for improvement in the assessment of literacy and numeracy in the basic education of Lesotho. This became a fruitful study as verification processes regarding the authenticity of those reports for Lesotho were displayed (Bialystok, 2017). The verification process, which describes the assessment of some truth or fact, was based on three concepts: *consistency* between Lesotho's SACMEQ reports' authenticity and key informants' expression, *conformity* to the norms of its social category, and *connection* to a person, place, or time (Lehman et al., 2018).

Furthermore, the study was directed by literature, which indicates two guiding instruments for assessing authenticity: an authenticity inventory and an authenticity scale. These instruments measure constructs directly. The authentic inventory assesses reliability based on self-awareness, unbiased processing, behaviour, and relational orientation (Gregoire et al., 2021). Furthermore, these writers stated that authenticity scales assess validity. The scales are divided into three subscales: self-alienation, accepting external influences, and true living. The authors of the

authenticity scale describe three construct dimensions: a composite score, an average of elements, and total authenticity scores. They investigated whether different scores or a single composite score were more suited for determining genuineness. As a result, assessing authenticity in reports by SACMEQ on Lesotho is a major concern, so the following factors must be considered: sources and credibility, methodology and data generation, data analysis and interpretation, internal and external validity, and comparison with other national and international assessments. ion

These parameters facilitated a better understanding by determining the accuracy and credibility of the findings. To clarify, improving the reliability and trustworthiness of educational evaluations aids in fostering transparency in reports, so biases in the report's conclusions are addressed promptly and without hesitation. Aside from that, uniformity across sources boosted trust in the authenticity of SACMEQ reports. In general, these elements are considered authentic and reliable sources of information, notwithstanding rigorous study. These elements are generally regarded as authentic and dependable sources of information, although critical analysis was required before making any conclusions from these reports. This encouraged the Ministry of Education in Lesotho to join SACMEQ solely to ensure the authenticity and validity of their data before using it for international benchmarking and comparative analysis.

1.1.2 Factors Fostering Lesotho to Join SACMEQ

Lesotho was a colonial country and is one of the world's least developed countries. It is located in south-east Africa and is landlocked inside the Republic of South Africa (RSA). This country is a mountain kingdom comprised of ten districts. Before colonialism, Lesotho had an indigenous education system that promoted life orientation in various situations and used varied processes. However, during the colonial era, Basotho were exposed to schooling that prepared them for the labour market, where education was regarded as a prerequisite for obtaining formal sector positions that paid well and allowed people to live comfortably (Mokotso, 2022). This author furthered that the content was completely disproportional and provided in an extremely shallow manner to sustain and ensure that the oppressed never achieve mental freedom (Haimbodi, 2019). The authors show that during the German colonial era, the missionaries were responsible for native education, establishing schools in rural areas and offering reading, writing, and basic numeracy skills with the sole purpose of spreading Christianity widely. Similarly, in neighbouring South Africa, the education system was divided into three sectors, with black education focusing on acquiring a basic level of comprehension (Haimbodi, 2019). As part of their efforts to transition

away from colonialism, these countries have established a variety of educational initiatives and policies to foster a suitable and productive atmosphere for quality education. Lesotho, for example, has joined SACMEQ to standardise its education system to that around the world.

Furthermore, Lesotho's involvement in non-national assessments was regarded as a significant step toward improving educational quality. Some countries in eastern and southern Africa have joined regional and international assessment projects such as SACMEQ, Trends in International Mathematics and Science Study (TIMMS), and Progress in International Reading Literacy Study (PIRLS) to improve and enable a conducive environment for quality education around the world (Mullis & Martin, 2016). Lesotho, for its part, has only joined SACMEQ. SACMEQ, as a large-scale assessment organisation tasked with improving literacy and numeracy performance in Southern and Eastern Africa, performed admirably throughout its initial survey. Lesotho learned about the SACMEQ when it was formed (Jopo et al., 2011a), and indicated its willingness to take part in the first survey, although it failed due to financial restrictions. When the financial problem was resolved, the country took part in the second survey.

The regional SACMEQ assessment was intended to provide members with a benchmark for comparison. Lesotho began participating in SACMEQ activities in 2000, during the second phase, with only grade 6 pupils assessed (Mothibeli & Maema, 2005). All school types (church, community, private, and government) participated. The assessment was available in English, the national language of instruction. The goal was to ensure functional literacy and numeracy abilities among the Basotho nation (Jopo et al., 2011a). Besides that, Lesotho’s participation in SACMEQ was one of the strategies employed by the Ministry of Education and Training (MoET) to provide a criterion through which progress in education would be measured and benchmarks with neighbouring countries (Matei et al., 2022). Furthermore, it participated in the third phase, which took place in 2007, and teachers were assessed. Maema and Mohale (2017) reported that data were generated from a representative sample of 4240 standard 6 learners, 316 teachers, and 182 registered primary schools for the third survey. Its most recent participation was in 2013, during the fourth survey.

SACMEQ is an international assessment that appears to be well-organised, therefore its establishment and management require skilled research specialists (Postlethwaite & Kellaghan, 2008). It is commonly known that the Examination Council of Lesotho (ECOL) prepares,

administers, moderates, and grades all public examinations in Lesotho. These examinations are primarily used to select learners for the next level of study (Matei et al., 2022). In Lesotho, however, the National Curriculum Development Centre's (NCDC) Testing and Evaluation division was in charge of monitoring and evaluating SACMEQ surveys. This body is in charge of preparing and pre-testing objects to determine their psychometric qualities. Examination results in Lesotho are analysed to provide relevant input to the NCDC, inspectorate, schools, and other interested parties (Jopo et al., 2011a). SACMEQ's monitoring and evaluation in Lesotho was held during the first week of the eight months, with the focus on addressing common curriculum subjects across all participating members to provide for general schooling circumstances and quality of education at the basic level globally. SACMEQ's assessments appear to benefit Lesotho the most, as it routinely participates in the surveys undertaken.

1.1.3 Benefits of Lesotho in SACMEQ

Numerous benefits are reported by members of the SACMEQ from its programmes. Makuwa (2012) only highlighted five of them, categorising them as short-term (focused on outputs) and long-term (addressing outcomes);

1. These programmes use research products and methods to guide judgments about the current state of education and emerging trends.

2. Trained educational planners and researchers use surveys to provide evidence for monitoring and evaluating education quality in various policy research settings.

3. Improved transmission of SACMEQ information resources through the Internet, meetings, and targeted publications, reaching a diverse spectrum of stakeholders.

4. These programs help ministries of education create and implement evidence-based policies to improve education quality and schooling conditions.

5. These programs provide accurate and comprehensive data on learners' educational achievements and schooling conditions, allowing ministries and stakeholders to evaluate and compare educational interventions over time.

According to Matei et al. (2022), Lesotho gains particular advantages from membership in the SACMEQ program, such as improved writing confidence, training seminars, practical facilities, and easy communication. Lesotho's educational performance improves and local projects gain

from the increased research, writing, and knowledge sharing that results from this. Frequent writing also improves analytical and research skills, which helps one comprehend Lesotho's educational requirements on a deeper level. In support, Mothibeli and Maema (2005) reported that Lesotho benefited much from the training sessions. This was demonstrated by the filing of its first report with clean data, as well as the ministry's use of EMIS software, which allowed it to improve data accuracy. Aside that, the work of the SACMEQ, which provides online reports for comparing the success levels of teachers and students, is essential to the National Assessment Structure (Mothibeli & Maema, 2005). In order to better understand Lesotho's education stakeholders and enable them to assess and address curriculum flaws, the organisation creates improvement initiatives (Matei et al. 2022). The global dissemination of national assessment reports aids stakeholders in developing plans to raise learners' performance, and international assessment describes educational accomplishments across various systems (Postlethwaite & Kellaghan, 2008).

After Lesotho participated SACMEQ in 2000, assessment strategies were developed for the national monitoring of Grades 4 and 6, which focused on ensuring that learners achieve the fundamental skills of numeracy and reading to become lifelong learners. The Examination Council of Lesotho (ECOL) and the National Assessment of Educational Progress (NAEP) perform a survey every two years in grades 4 and 6, resulting in a report (Research and Evaluation Department Council of Lesotho (REDCOL), 2015). The NAEP is a body that generates data on pupils' basic literacy and numeracy ability levels. Its goal is to characterise and evaluate the quality of pupils' learning outcomes as demonstrated by schools using data from ECOL-administered tools. Furthermore, educational planners are supported in identifying societal education system criteria and making improvements as needed (REDCOL, 2015). Similarly, the SACMEQ initiative provides an opportunity for Lesotho's education ministers to examine and rebuild the country's educational system. This is seen in how this country exchanges ideas and applies what it has learnt to strengthen its local education system in order to align its improvement goals with those of other countries and current educational trends. That is why Matei et al. (2022) emphasised that, based on the data acquired, Lesotho's Ministry of Education and Training sets out to achieve the country's educational goals.

The Ministry of Education established the Educational Sector Strategic Plan (ESSP) 2005-2015 in 2005 to develop and implement policies seeking to ensure the acquisition of functional

literacy among all Basotho and the development of productive, high-quality human resources via education and training (Jopo et al., 2011a). Break Through to Literacy (BTL) was launched by Lesotho's Ministry of Education in the early 2000s to improve educational outcomes on reading and writing in the lower grades. The MoET implemented this strategy to ensure that the education system met regional and international standards. However, the obstacles faced by SACMEQ in Lesotho piqued the researcher's interest to assess the veracity of these allegations.

1.1.4 Implementation challenges for SACMEQ assessments in Lesotho.

Lesotho seems to be reaping multiple benefits from SACMEQ, however, using SACMEQ evaluations to sustain the progress in educational quality is a long-term process that may not be immediately apparent. Due to Lesotho's unique landscape, the accuracy and completeness of data gathered may be compromised as some areas are hard to reach, thus jeopardising financial support (Jopo et al. 2011a). Matei et al. (2022) emphasised the necessity of instructional activities that are contextually and culturally appropriate for Lesotho's SACMEQ assessment methods. They pointed out that exercises given to trainees frequently lack clear directions, which restricts the application of skills that have been learnt. Allowing individual officers to fully participate in project activities was another shortcoming they pointed out.

Even though SACMEQ advocated regional assessments of identical curricula, it was challenging because curriculum coverage was not their primary concern. Rather, knowledge and skill acquisition was. This made determining the skills and knowledge required for the contemporary era problematic because the countries' social and economic system backgrounds were not considered (Postlethwaite & Kellaghan, 2008). They went on to say that the examinations administered were too demanding and did not effectively distinguish between the achievements of pupils in less developed countries like Lesotho and Malawi. Since international and national assessments share many procedural aspects, some countries improve their learners' performance by incorporating items from international assessments into their national assessments, allowing them to compare their results to those of other countries.

Since data generation, quality, and truthfulness are critical for meaningful analysis, interpretation of results, and application of findings to improve activities, errors or a lack of standardisation in data generation jeopardise the accuracy and reliability of the results (Karib, 2016). Thus, any profitable change in the educational system may be questioned. To maintain

continuity and consistency, the SACMEQ ought to undertake many evaluation cycle surveys. These assessments are undertaken on a regular basis to monitor changes in educational quality over time. To achieve this, educational assessments must be implemented effectively, with strong political will and administrative assistance (Singer et al. 2018).

1.1.5. Literacy and Numeracy in Lesotho

The national assessment literacy surveys had been done in the past, but they were solely based on an analysis of the Primary School Leaving Examination (PSLE) results that were monitored and evaluated by the NCDC. According to literature, literacy and numeracy have long been a major difficulty in Lesotho, as in 1985, the literacy performance rate was 47% (Ziegahn & Sakoane, 1985). However, by 1993, the average performance was 70% for Sesotho, 33% for English, and 50% for mathematics. These score assessments reveal that the percentage scores remained stable from 1990 to 1992. In 1993, a markedly high percentage of passes was reported. Unfortunately, a downward trend began in 1994 and has not improved. Conversely, major gains in literacy and numeracy rates may take some time. Numeracy focuses on number reading, discrimination, addition, and pattern recognition, whereas literacy focuses on word identification, literal questions, and inferential questions (de Neve, Moshoeshoe and Bor, 2022). Literacy performance appears to be low at the lower basic level, ranging between 16% and 17%, but is 94% in higher grades. Numeracy, on the other hand, remains unimpressive, with less than 10% attained in lower classes and only a 2% rise in upper grades.

Low literacy and numeracy proficiency rates, in comparison with other countries, prompted numerous African governments, including Lesotho, to mobilise for universal access to education (Lekhetho, 2022), hence improving educational quality. According to Thokoa (2022), crucial areas such as numeracy face significant challenges as a result of Lesotho's generally poor quality education supply. Furthermore, there is scant data on learning outcomes in literacy and numeracy. In SACMEQ surveys, the second project covered 40,000 standards six learners, 5,300 teachers, and 2,000 primary school heads, including Lesotho schools. (Chetty, 2017). Its average literacy and numeracy scores were 451 and 447, respectively, which were lower than the margin. According to SACMEQ III data, Basotho learners scored lower points in literacy and numeracy; averaging 468 points in literacy and 477 in numeracy respectively, while the average for the 13 competing countries was 514 points, with Zambia and Malawi scoring below Lesotho. Lesotho scored 511 in literacy and 514 in numeracy on the fourth survey (Chetty et al., 2017).

Figures 1.2 and 1.3 have summarise the overall literacy and numeracy performance in Grade 6 in Lesotho's SACMEQ and NAEP surveys.

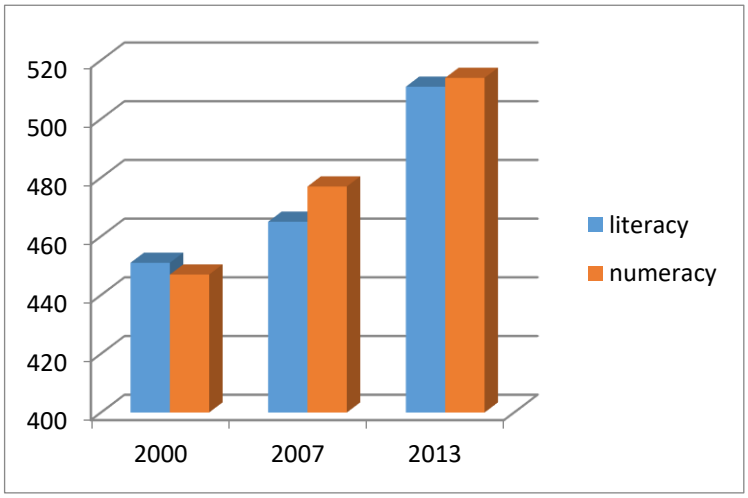

Figure 1.2: Lesotho's performance on literacy and numeracy in SACMEQ surveys from 2000 to 2013 (Lesotho SACMEQ IV report by Maema & Mohale, 2017)

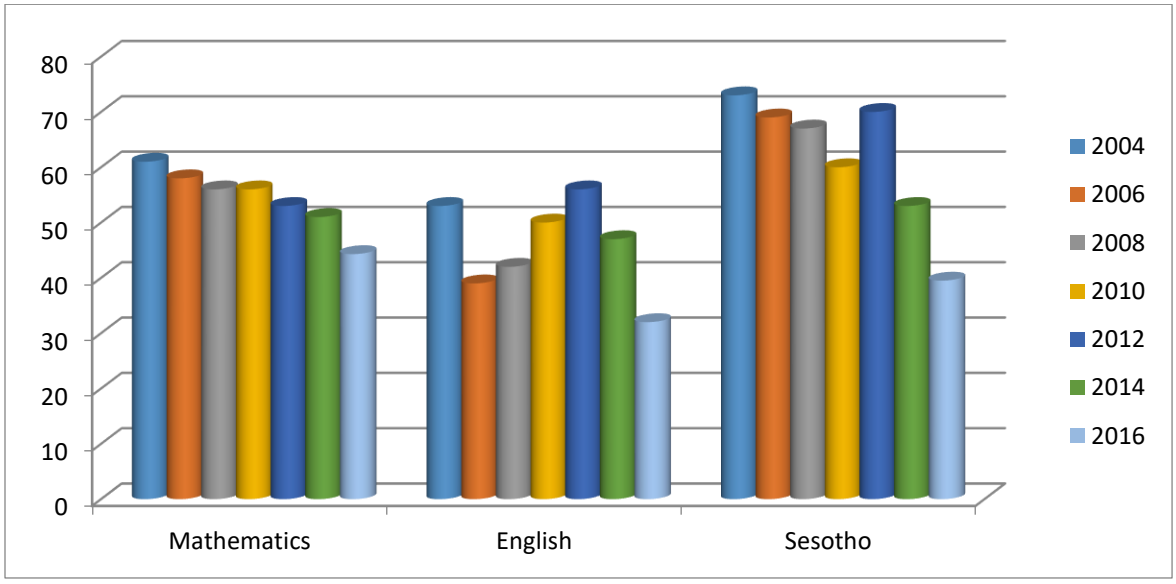

Figure 1.3 above displayed the summary of performance for Lesotho National Assessment Surveys from 2004 to 2016 (by *Research and Evaluation Department Examination Council of Lesotho (REDCOL) 2016).*

The data above may easily lead to a conclusion regarding the two entities because they monitor and evaluate identical abilities in Lesotho, but the results are incongruent. SACMEQ has shown a little improvement in literacy and numeracy skill development: literacy performance climbed from 451 to 468 and 468 to 511, while numeracy increased from 447 to 477 and 477 to 514, according to Chetty et al. (2017)' study. Lesotho, on the other hand, has shown a pattern of declining numeracy proficiency in the NAEP when compared to that shown in reports by the SACMEQ. In 2010, the numeracy outcomes were 56%; 53% in 2012 (REDECOL, 2016), and 44.8% in 2016. Since joining SACMEQ, Lesotho has shown a minor improvement in reading and numeracy skill development, according to the (Chetty et al. 2017). On the contrary, the country's performance did not meet the national evaluation, as it showed a pattern of declining numeracy performance in NAEP (REDCOL, 2016) when compared to SACMEQ report results. Studies conducted in Lesotho and in other countries raise concerns with the underperformance indicated by SACMEQ and NAEP, which pose a challenge to improving educational quality (Matei et al., 2022). Much work has not been done in this area of study.

The study focuses on assessing the authenticity of SACMEQ reports on literacy and numeracy in Lesotho's basic education quality, and specifically on the following:

- SACMEQ's impact on Lesotho's basic education system quality.
- Lesotho's performance in SACMEQ.
- Factors influencing the authenticity of SACMEQ reports regarding Lesotho's basic education quality.
- The trustworthiness of the results of SACMEQ reports.

1.2 Problem Statement

Lesotho has reported unimpressive literacy and numeracy achievement outcomes, particularly at the end-of-level assessments in grade 7. This is confirmed by the high numeracy and literacy failure rate in the ECOL's end-of-level and national examinations. Given the importance of educational quality assessments, they should demonstrate continual development and ensure that the educational needs of learners and society are properly met. Similarly, the involvement of policymakers, educators, and researchers, and comparisons with other national and international assessment organisations aid in understanding their perspectives and interests in

authenticity assessment. Lesotho joined assessment bodies such as SACMEQ to adapt and apply various techniques intended to boost educational quality. This was ineffective because performance in those monitored and measured skills decreased regularly in the national examinations and end-of-level assessments. Subsequently, while tracking the findings shown in Lesotho SACMEQ II, III, and IV reports, it was discovered that Basotho's expectations about their education system have increased as they exhibit a little improvement in literacy and numeracy skills, although remaining below the margin.

It is critical to consistently align with the operations carried out in assessing the authenticity of such reports. On that note, the SACMEQ's examination of the accuracy, consistency, and transparency of data acquired helps to ensure relevant data and insight into the education system's strengths and deficiencies as presented in the reports. Similarly, to gain a better understanding of the accuracy and genuineness of the findings presented in these reports, the researcher concentrated on the methodology used, sampling sizes, data generation instruments, data analysis and interpretation techniques, internal and external validity, and alignment with other available educational data sources in Lesotho. Aside from that, a systematic review of the authenticity of such reports, as well as a comprehensive examination of how the data acquired impacted the quality of basic education in Lesotho, help to establish successful and inclusive educational systems. It is, therefore, vital to underline that meaningful conclusions in literacy and numeracy performance cannot be reached in Lesotho's basic education without a defined focus on them. Thus, the primary goal of this study was to assess the authenticity of the SACMEQ reports on literacy and numeracy in Lesotho's basic education system.

1.3 Main research question

This study assesses the authenticity of SACMEQ reports on literacy and numeracy in Lesotho's basic education. To respond on this question, the research objectives and questions listed below are addressed.

1.4. Research Objectives

To investigate this issue, the following objectives will be addressed:

1. To investigate the worthiness of SACMEQ on Lesotho's education system.

2. To determine factors indicating Lesotho's performance regarding the assessment in SACMEQ reports.

3. To identify factors influencing the authenticity of SACMEQ reports.

4. To determine the authenticity and accuracy of results presented in SACMEQ reports.

1.5 Research Questions

The study intends to address the questions that follow.

1. Does monitoring and evaluation of literacy and numeracy in basic education quality implemented by SACMEQ address Basotho's needs?

2. How is Lesotho performing in the assessment of literacy and numeracy in the SACMEQ reports?

3. What are the factors influencing the authenticity of SACMEQ reports regarding Lesotho's basic education quality?

4. How trustworthy are the results of SACMEQ reports?

1.6 Scope of the Study

This study assessed the authenticity of the SACMEQ reports II, III and IV on literacy and numeracy on the quality of basic education in Lesotho. The data generation was limited to the study's variables and the sampling of three reports by the SACMEQ on Lesotho and four important information from the Lesotho Ministry of Education. This study's conclusion focused solely on the reports by the SACMEQ, which documented perspectives of key informants that were questioned.

The study did not investigate the reasons and impacts of Lesotho's poor literacy and numeracy performance in SACMEQ assessments. The achievements addressed did not incorporate the achievements of teachers.

1.5 Significance of the Study

The primary goal of doing educational assessment research is to improve education by evaluating the authenticity of the reports produced by SACMEQ on the quality of Lesotho's education system. The potential to improve the authenticity, trustworthiness, and reliability of

reports by the SACMEQ on literacy and numeracy in the basic education system in Lesotho is important. The assessment of authenticity of educational reports is critical for making informed decisions specifically on Lesotho's SACMEQ reports. Assessing the authenticity of reports by the SACMEQ offers a chance to improve study and assessment procedures. Furthermore, the study seeks to evaluate the genuine state of literacy and numeracy levels in the basic education system of Lesotho using authenticity assessments. Again, recognising the components that contribute to determining the authenticity of reports by the SACMEQ allowed the researcher to identify potential limitations and biases.

The study is beneficial to educational scholars, educators, and the Ministry of Education in Lesotho, particularly in the basic level departments. That is, Basotho developed an education system to meet their needs in accordance with the contemporary world norms. Based on empirical facts intended to be provided, the researcher believes that every stakeholder in the education system may have had a better understanding of how Lesotho performed in literacy and numeracy at the basic level worldwide, as reported in SACMEQ reports. Furthermore, the study's findings are intended to help educational researchers and curriculum developers make educated decisions concerning literacy and numeracy activities in order to improve the quality of education. Aside from that, the government developed a program that especially addresses the improvement of basic education system standards, with a focus on literacy and numeracy as educational foundations. Finally, the study aims to create awareness in the Ministry of Education about the country's academic performance in literacy and numeracy, allowing for the development of potential solutions to solve such issues and improve educational quality.

1.7 Definition of Terms

1.7.1 *Conceptual Definition of Terms*

Quality education: This has to do with the provision of meaningful, worthwhile and responsive skills and knowledge at the basic level to individuals and social needs. This includes all conducive and productive instructional activities on learners' cognitive development, values and attitudes in nurturing creativity and emotional development.

The authenticity of SACMEQ reports: It is all about the multiple judgments on how valid and reliable is the data presented on SACMEQ reports.

Linguistic and literacy education: This has to do with data gathered on skills, knowledge and attitudes provided on foundations of language reading, writing and speaking.

Numeracy and mathematics education: The gathering of data on creativity in computing, interpreting and integrating content with the real world.

Assessment: It refers to the process of gathering information about how genuine and accurate the data presented by SACMEQ reports about learners' performance on literacy and numeracy.

Evaluation: The judgment made on the value of the quality of basic education within the curricula of literacy and numeracy in SACMEQ members

Monitoring: It is concerned with the regular collecting and analysing of information about student performance on literacy and numeracy in SACMEQ, and provision of the intervention towards achievement of stipulated objectives.

Student performance in SACMEQ: This is all about the scores of learners obtained on literacy and numeracy tests during the surveys conducted by SACMEQ.

Reliability: It is all about the degree to which the measurement instrument in SACMEQ surveys provided similar results over the time it is employed.

Validity: refers to how well the SACMEQ reports results among the surveys conducted represent true findings among similar bodies other than the study.

1.8. Literature Review

1.8.1 Theoretical Framework

Generalizability theory (GT) is the theory underpinning the study. This theory arose because of the Classical Test Theory's (CTT) shortcomings, prompting other researchers to use it when assessing the validity of learners' data evaluation (Parveen & Showkat, 2017). It is regarded as an extension of CTT (Cankoy & Ozder, 2016). Generalisability theory is concerned with the determination of performance while evaluating multiple sources of variation on the accuracy of multiple sources of variation, the accuracy of behavioural measurement, and various sources of measurement errors (Shavelson et al., 2015). The use of GT in SACMEQ reports on literacy and numeracy performance concerns research judgments made at the domain level for generalisability coefficient and index dependability (Huebner & Lucht, 2019). GT distinguishes between sources of variance in factor analysis GT and factors in experimental design models.

In this study, the researcher used GT's basic conventions to analyse the trustworthiness of numerous source measurements in reports by the SACMEQ. For reports, this is to increase the quality of literacy and numeracy instruction in Lesotho's basic school. The main purpose of this study, however, was to determine the authenticity of SACMEQ data on Lesotho's quality of basic education in Lesotho. These reports cover data from monitored and reviewed generic items, test forms, dependability (Huebner & Lucht, 2019) events, and administration, among other literacy and numeracy topics. In this context, generalizability theory calls into question the value of SACMEQ reports in terms of scope, usefulness, accuracy, and their relationship to a theory about Lesotho's basic education quality. The relationship between generalizability theory and the authenticity of SACMEQ reports is discussed further in the chapter's section on the worthiness of SACMEQ reports. The researcher postulates that it was meant to integrate the validity and reliability of the assessed performance. The reason for this is that the quantity and parameters of variable sources, as well as tasks or items within the performance, are among the characteristics that influence individual performance. The clarity and correctness of performance-related items and activities help to make the individuals' performances obvious while also outlining the subtleties that highlight individual variations (Uzun et al., 2018).

1.8.2 Conceptual Review

Quality education seems to be a subjective concept and the understanding of it may differ from individuals, however, various definitions regarding quality education existed which testifies the complexity and conceptual character changes as well as social, economic and environmental context (Thinley, 2021). It however, emanated from the concerns related to learner's performance, especially within the context of global rankings such as TIMMS, PIRLS and SACMEQ (Ayesha, 2019). Depending on the education system reforms similar and common set of education policy are applied globally as to acquire the status of global education policies (GEP) (Verger & Altinyelken, 2018). For the study, the concern is within the data reported by SACMEQ regarding literacy and numeracy which will align with the SDG4 target 4.6 as it outlined that by aiming to ensure that all youth and sustainable proportion of adults achieve literacy and numeracy skills by 2030 among others (A4ID, 2022). For Spaull (2011), numeracy test measured learner's capability to understand and apply procedures, knowledge and mathematical understanding as individuals and as members of a wider community. These tests covered mathematical domains which were common in mathematical classrooms in Southern and Eastern Africa.

Furthermore, defining authenticity produces a great deal of misunderstanding. However, several authors define it in accordance with their own specialties. For Cameron and Rossler (2016), this notion represented oneness and integrity. Tatsuki (2006) defines authenticity as genuineness, realness, truthfulness, validity, reliability, credibility, and legitimacy; yet, they believe that this word is generated by the interaction of users, situations, and texts. For Lehman et al. (2018), the concept of authenticity is defined by three key concepts: consistency, conformity, and connection. That is, there is coherence between an individual's external expression and its internal values and views, adherence to social categories established by assigned entities, and link to a person, place, and time as claimed. Similarly, the creation of formative constructs established authenticity by requiring multiple judgements on originality, accuracy, connection, integrity, legitimacy, and competency (Nunes et al., 2021). The idea of authenticity in this study happened to be consistent with the authors' definition, as they focus on genuineness, accuracy, consistency, and trustworthiness among stakeholders, situations, and texts in Lesotho's SACMEQ reports.

1.8.3 Empirical Review

Furthermore, the quality of education in SACMEQ is thought to be established not just by examining literacy and numeracy skills, but also by the activities of researchers in member nations. Policymakers use the information from SACMEQ member reports to make informed decisions concerning curriculum development, teacher training, and educational resource allocation (Awich, 2017). Botswana's socioeconomic condition has evolved dramatically throughout the years as a result of policy and strategy reviews for educational development (Chabaditseli et al., 2018). Similarly, in Kenya, educational sector policies aligned with the evaluated policies have had remarkable results. That is, in order to execute SACMEQ 1 recommendations, the Free Primary Education policy was established as the primary policy. The SACMEQ 11 examined problems related to quality education. SACMEQ 111 focused on enhancing instructional procedures, increasing parental and community involvement in quality education, and improving learning outcomes, particularly reading and numeracy (Karogo et al., 2018). Aside from Kenya and Botswana, Lesotho strengthened its education system after participating in SACMEQ 11 by establishing and executing policies from ESSP 2005 to 2015. The primary goal was to ensure that every Basotho acquired functional literacy and developed productive, quality human resources through education and training. Again, the Parliament of Lesotho passed the new Education Act, which mandated that primary education be not only free but also compulsory, 59 combined schools

were built to accommodate the FPE cohort in secondary schools, and the Education Quality Enhancement Project (Education 111) was implemented (Jopo et al., 2011a).

Lesotho has established national assessment procedures to monitor and evaluate the quality of its education system at several time points. Regardless of the importance of children's performance in enhancing educational quality, there are a variety of measuring flaws that affect learners' performance, hence SACMEQ members' performance changes regularly (Maema & Mohale, 2017). Ideally, I feel that the performance of learners in Lesotho has been influenced by a variety of internal and external issues inside the education system, including political and socioeconomic factors. However, the SACMEQ reports are based on the child's history and educational variables, as summarised in the study.

At this point, accuracy matters most for making informed judgements based on the data provided; team leaders and data collectors manually checked instruments during training and before data creation (Awich, 2017). In this regard, establishing the accuracy of the data obtained from Lesotho's SACMEQ reports in this study is critical to maintaining the reliability and consistency of the information presented. However, the emphasis topics include accuracy, instrument consistency, data security, and data completeness, among others. The SACMEQ body structured the data generation into three phases: preparation, implementation, and post-mortem.

When verifying the authenticity of SACMEQ reports, factors such as relevance, usefulness, and comparability must be examined in addition to data correctness. Lesotho and other member nations used similar SCC-planned methods when collecting data for SACMEQ studies (Awich, 2017). Kenya and Seychelles, on the other hand, varied at one point because the tests were translated into their respective languages of instruction (Kiswahili, Portuguese), even if the meaning remained the same because the domains were not changed (Karogo et al., 2018). As a result, accessible data production methods are critical to ensuring that these comparisons are meaningful and trustworthy, allowing policymakers to identify best practices and areas for development for the greater population (Chimombo, 2005). To clarify, the findings may not apply beyond the specific sample from which the data was taken, therefore comparability is critical for identifying best practices, areas for improvement, and discrepancies in educational achievements among member countries. Subsequently, I agree with these authors that presenting valid SACMEQ reports allows Lesotho to gain international recognition for their reliability and validity, which

fosters collaboration with other regional and global educational organisations, resulting in the exchange of best practices to further improve educational quality.

Literatures reveals that, several data analysis procedures used in SACMEQ reports are crucial for appropriately interpreting assessment results and generating valuable insight to guide educational policies and practices. Data analysis in these reports is based on the pupils' and teachers' performance which was analysed through the use of Rasch model item response theory. This theory focuses on the responses of pupils to test items in SACMEQ assessments on literacy and numeracy ability, and proficiency levels of learners (Creswell et al., 2015). Besides this theory, the analysis procedures used in SACMEQ reports often include a variety of statistical procedures for the extraction of valuable insights from the collected data.

To continue, it has been noted that in reports of the SACMEQ, data analysis appears to be synonymous with result interpretation; thus, analytic methods, data visualisation and descriptive analysis procedures, multilevel modelling techniques, and comparative analysis have been used to interpret the data generated (Creswell at al., 2015). This is demonstrated by ACARA (2015) and Maema and Mothibeli (2005), who state that the performance is reported as a mean score scaled through Rasch Model 4 of Item Response Theory and as percentages, however, for the sake of analysis, these scores and percentages are disaggregated by region, gender, school location (rural/urban), and socioeconomic status (low/high). ACARA (2015) went on to say that, for the sake of transparency, explanations of how results were derived in any statistical techniques were applied, with a focus on discussing strengths, weaknesses, and areas for improvement within the education systems of participating countries in data. This allows stakeholders to examine the veracity of the data-based findings. This is pertinent to the study since reports by the SACMEQ on Lesotho first evaluated and interpreted data results using tables, maps, charts, graphs, and narratives to summarise key findings clearly and understandably.

1.9 Methodology

1.9.1 Research Paradigm

Interpretivism Paradigms is the philosophical orientation guiding the study. This paradigm is adopted due to its inclusive nature (Thanh & Thanh, 2015), hence, each participant's response contributed to the discovery of the truth. understand the participants' experiences while assessing the accuracy and authenticity of the SACMEQ reports, which served as the study's baseline. For

that matter, four key informants from the Ministry of Education and Training while sharing their experiences, opinions, and beliefs about the value of SACMEQ reports, allowing me to gain a better understanding. The extensive examination of reality was based on Basotho's need for cultural diversity, social background and contextual elements, being addressed, and the methodology employed to compile the report data.

1.9.2 Research Designs

Based on McCombes (2019) findings, the research design refers to the framework for the researcher to plan his/her research and answering his/her research questions. The aim of the study is to assess the authenticity of SACMEQ reports on literacy and numeracy in Lesotho's basic education quality. Based on the extensive examination of the analysed documents within the study, the researcher intends to employ the qualititative approach. Prashant (2013) therefore, considers qualitative research as the systematic enquiry which seeks to build a holistic, largely narrative, and descriptive to inform the researcher's understanding of the phenomena.

Amongst the five types of qualitative research designs namely phenomelogy, ethnography, case study, grounded theory and historical design (Hoover, 2021). The researcher uses historical design as it deals with the extensive examination of the people, events and past documents, and relate them to the present and future. Furthermore, this design is subjected to external criticism that is concerned with the authenticity and genuineness of the data (credibility), and internal criticism that examines the accuracy of data (dependability and transferability).

1.9.3 Sampling and Sampling Techniques

A sample is a group of individual who actually participated in the researcher' study (Murphy, 2016). Based on the study, purposeful sampling, therefore, the selection in this study is based on reports II, III, and IV issued by the SACMEQ on Lesotho. The study selection team is also meant to interview four key informants at Lesotho MoET as they have pertinent experiences with education programmes, hence accuracy is to be maintained,

1.9.4 Methods of Data Collection

Kabir (2016) views data collection as a process of gathering and measuring information on variables of interest in an established systematic fashion that enables one to answer the stated research questions, test hypothesis and evaluate outcomes. While conducting the study, the researcher uses in-depth semi-structured interviews and document analysis qualitative data

generation approach as they focus on information and context. The data generated is based on the questions guiding the interview and analysis on documents.

1.9.5 Method of Data Analysis

Data analysis is the significant stage of the research process. According to Import (2019), data analysis refers to the process of collecting and organizing data in order to draw conclusion from it using analytical and logical reasoning with the aim of finding meaning in data as to make informed decisions. For the researcher to understand why the how authentic are the SACMEQ reports regarding Lesotho's basic Education quality specifically on addressing the individual needs of Basotho and of the country as a whole, and on the factors influencing the authenticity of those reports by specifically focusing on the accuracy, consistency and transparency of the data generated. Inductive Content Analysis (ICA) with Atlas.it is therefore, employed. ICA is a qualitative method of analysing data acquired from written transcripts of verbal interactions or documents created in written form Vears & Gillam (2022). The researcher while analysing data is guided by ICA steps stated by these authors where one first organises data from Lesotho SACMEQ reports and interviewees' responses, aligning with based on the formulated questions. The researcher then comprehends the organised data identifying big-picture meaning units. Thirdly, development of subcategories and fines grained code being done. To complete the process, refine of the fine grained subcategories is made.

1.9.6 Ethical Consideration

Ethical consideration refers to the way the individuals are affected by the values and principles that address questions of what is good or bad in human is ethical consideration (Bryman & Bell, 2007). These authors' ethical considerations emphasise the significance of research participants. They, further, emphasise the importance of providing a brief summary of the study, protecting participants, knowing research aims, procedures, and potential outcomes, voluntary involvement, and the opportunity to withdraw at any point. Participants should be informed about the study's goal, methodology, and potential hazards, and they should have the option to withdraw at any time.

1.10. Thesis Outline

This section entails the structure of this study.

Chapter 1: outlined the broad overview of the study. The research problem, study objectives the purpose and the scope of the study were introduced.

Chapter 2: reviews the literature on how authentic are the SACMEQ reports regarding Lesotho's basic Education quality. It furthered by investigating on the factors influencing the authenticity of those reports by specifically focusing on the accuracy, consistency and transparency of the data generated.

Chapter 3: focuses on the research methodology employed which resumes with the research paradigm underpinning the study, research design and the data generation methods, trustworthiness and rigors, the description of data analysis techniques and ethical consideration.

Chapter 4: presented data generated and analyses of data.

Chapter 5: provided the discussion, conclusion and the findings as well as recommendations of the study.

1.11. Conclusion

This chapter presents a detailed summary of the investigation, including the research problem, supporting evidence, aim, objectives, significance, study structure, theoretical framework, and relevant literature.

CHAPTER 2

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 Introduction

This chapter places the current study on Lesotho's basic education quality on literacy and numeracy skills with specific reference to SACMEQ reports' authenticity. Andrus (2020) considered literature review as a way of acknowledging the previous researchers' work and assuring that their work has been received by using it as a base for conducted research. Informed by generalizability theory, the study, intended to assess the SACMEQ reports' authenticity on literacy and numeracy in Lesotho's basic education quality. Literacy and numeracy were addressed as pillars of education, hence, the quality of education globally specifically on literacy and numeracy skills is the challenge haunting every society including Lesotho. For that, SACMEQ plays a major role in uplifting the society about its education system quality on literacy and numeracy skills holistically at basic level. The literature reviewed in this chapter focussed on the following subheadings from these four sections, namely theoretical frameworks, conceptual framework, empirical review of literature, and appraisal of gaps in the review.

2.2. Theoretical Framework

For the theoretical framework, this section defines the standpoint of the generalizability theory and the assumptions regarding this theory in this study. While resuming this section, the researcher discusses the application of generalizability theory in SACMEQ reports regarding literacy and numeracy performance, fundamental ideas, GT design and interpretation of GT, GT application, and its linkage to the study. Finally, it is concluded by presenting the justification of generalisability as a theoretical framework for this study.

2.2.1 Generalizability Theory (GT)

Reports by the SACMEQ serve an important role in monitoring and evaluating the quality of education. As a result, it is consistent with psychometric theories, which measure observable and non-observable psychological dimensions (Revelle, 2017). Psychometric theories are comprised of statistical theories such as item response theory, classical test theory, and

generalizability, among others. In this research, the emphasis is on generalizability theory, which may be used to measure, analyse, and enhance the psychometric features of scores into several causes of variance (Shavelson, et al., 2015; Vispoel et al., 2018). The word generalisability in research denotes the extent to which the study's findings may be applied to a wider sample or population (Parveen & Showkat, 2017). The concepts of generalizability and external validity are concerned with the application of the conclusion drawn from the study's findings while addressing the issue, 'Do the measurements retain the truth for the general population?' Furthermore, external validity applies to studies in which internal validity and judgment on study findings apply to a specific group of people based on interactions with selection and treatment, test and treatment, history and treatment, and multiple threat treatments (Parveen & Showkat, 2017). It is consequently carried out based on the internal validity findings.

Continually, Viapoel et al. (2018) see this theory as a widely accepted complete framework for portraying score dependability. Heurbner and Lucht (2019) refer to GT as a contemporary, prominent, and wide structure for assessing measurement reliability. It is, therefore, defined as measurement reliability (dependability or consistency). The measurement errors recognised by Viapoel et al. (2018) are specific factors - consistently responding to particular tasks unrelated to the construct being measured, transient - stable factors affecting scores within a particular occasion (motivation, illness fatigue etc.) but not across occasions, and random-response error reflects factors affecting score within the occasion of administration (mood, effort, attention, memory). The integration of these multiple sources of errors assists in effecting GT into indicating the scoring consistency. Furthermore, this study takes a distinct approach by focusing on the integration of the two definitions of GT reliability and measurement validity, both of which are relevant to the study; however, more emphasis is placed on reliability. Reliability addresses external objections to measurement, whereas validity addresses internal criticism. The generalizability theory is ideally suited to this study since the researcher intends to utilise the supporting principles of validity and reliability to analyse the authenticity of reports by the SACMEQ on the quality of education in Lesotho, particularly at the basic level.

2.2.3 Designs of GT

The GT design has proven significant in the psychometrics domains for analysing and comprehending measurement accuracy and authenticity. For Briesch et al. (2013) and Teker

(2019), GT designs are classified as completely crossing and nested inside other aspects. Fully crossing design examines multiple times scored by various raters, whereas nested design examines one occurrence rated by different raters. Subsequently, these designs can be processed in a fixed or random way. The primary motive for the study was to learn more about the many causes influencing the authenticity of SACMEQ reports on data generated and analysed, and the procedures for measuring literacy and numeracy outcomes, notably in Lesotho's education system. For that matter, taking these contextual elements into account, GT provided a more accurate and appropriate estimate of measurement reliability on these reports. The specified rater and events displayed are liable to change. A fully crossed design was employed to aid the researcher in assessing and understanding the many elements that contribute to the authenticity of the SACMEQ reports in Lesotho as they contributed to the study's vivid structure by studying numerous sources of measurement variability in unique ways.

2.2.4 Interpretation of the Reliability Coefficient

The reliability coefficient from GT design is appropriately interpreted when the emphasis is mostly on the assumptions about sampling, independence, measurement scale, and underlying score structure. To clarify these assumptions, Vispoel et al. (2018) emphasis relied on:

- *Sampling* – assuming the exchangeability is appropriate in the current context, as alternate jobs and occasions may fulfil the same objective.
- *Independence* – the experience of answering to one element of an assessment do not impact responses to other parts, and an individual's score does not affect another's score.
- *The measurement scale* - is used implicitly to calculate GT coefficients using means and variance. The scales used in GT were continued with an equal-interval scale, which was then combined with a Likert-style scale designed for surveys. These scales have been combined into an ordinal scale, which is used to calculate variance components and reliability estimates.
- *The underlying score structure* – essential - tau - equivalent is used to account for mistakes and variations between items.

Subsequently, this study was the first to deploy the generalisability theory in Lesotho. It intended to analyse the methodologies used during the interpretation of data for the quality of basic education in Lesotho, particularly that concerned with literacy and numeracy performance, as well as the usefulness of such reports in addressing the needs of the Basotho. This view is consistent

with the idea that this theory can provide outcomes based on whether data generated from learners, are reliable measurements of real teaching competence by an instructor (Cankoy & Ozder, 2016). These pioneers emphasised that GT enables the detection of many measurement errors in the learners' judgments of teaching quality to be investigated. The findings were therefore, realistic and economically attainable since they relied on the nature of the degree of mistakes discovered during the sampling of the intended universe (Vispoel et al., 2018).

To generate people that play a productive role society, the majority of the world's three countries must address literacy and numeracy in their basic education systems. This researcher applied generalizability theory because they were concerned about the credibility of findings on reading and numeracy performance, as assessed by the SACMEQ in Lesotho. Based on the generalizability hypothesis, the dependability of score interpretations are determined by the kind and size of measurement errors identified and estimated from many sources that influence learners' performance (Shavelson et al., 2015). That is, the scope of GT application extends beyond data collection on standardised scores, and competencies and measurement mistakes that affect the learners' success are included. GT has been selectively presenting results for measures of individual differences (Vispoel et al., 2018). This conceptual technique enables the researcher to assess the authenticity of SACMEQ reports by relying on aggregated data from items, events, test forms, administration, and backdrop.

2.2.5 Application of Generalizability Theory (GT)

Every GT application interacts with a population-wide sample of measurement items (Huebner & Lucht, 2019). As a result, knowing the aim, assessment methodology, and data structure of a project by the SACMEQ, is critical. In 2005, Webb and Shavelson (2005) emphasised that the Generalizability (G) study is designed to separate and estimate as many aspects of measurement errors as is reasonably and economically feasible. This helped the researcher to determine the scope of the study in a variety of ways, as well as data collection, processing, analysis, and interpretation of the results. The second stage is the decision (D) study, which uses the interpretations to get the most reliable measurements and choose the optimum measurement design (Cankoy & Ozder, 2016). This clarifies why the use of GT in evaluation may be limited by the findings' reliability, validity, and usefulness for the research. Furthermore, the decision (D) study is concerned with the practical application of measurement techniques and is based on data generated from a G study to create a measurement procedure that minimises error

for a specific goal (Webb & Shavelson, 2005). For Huerbner and Lucht (2019), the D-Study is used to determine the maximum number of conditions for each characteristic in order to optimise dependability. Webb and Shavelson (2005) justified this by emphasising that the measurement of interest is represented by task, occasion, and person. To calculate reliability, two factors were used: the generalizability coefficient and the index of dependability. Task and occasion were considered first, followed by person and task/item (p×i). This choice of a good generalizability coefficient assisted the researcher in addressing the study questions and variable sources at hand.

Webb and Shavelson (2005) expanded on the idea that judgments might be based on behavioural assessment in two ways: comparatively (norm-referenced - rank order of individuals) and absolutely (criterion or domain referenced - performance level independent of rank). Applying this theory in this study is crucial since the decisions were consistent with the Vispoel et al.'s (2018) notion. The major emphasis is that the generalizability theory provides a comprehensive framework for quantifying multiple sources of measurement errors, the most relevant instruments of the general reliability and dependability of individual scores, and validity coefficients that precisely detect measurement errors. Furthermore, integrating the generalizability coefficient and index consistency provides a clear picture of how the reports presented their data.

2.2.6 Linkage Between GT and Authenticity of SACMEQ Reports

GT was employed in this study because it is a current, powerful, and widely applicable technique for evaluating the reliability, validity, and generalizability of SACMEQ reports (Huerbner & Lucht, 2019). This information is critical for ensuring that the evaluations provide consistent and accurate results, which add credibility to the reports by the SACMEQ. Uzun et al. (2018) emphasised that the capacity to make error-free measurements determines how near the value received from the measurement outcomes is to the genuine value of the measured attribute. As a result, measurement findings are always subject to inaccuracy.

Furthermore, Vispoel et al. (2018) explained that the assessments use GT score consistency indices. These assessments might be based on absolute amounts of scores (criterion-referencing) or relative variations in attributes of interest (normal-referencing). In this scenario, generalizability theory is useful in assessing the consistency and comparability of outcomes across assessment administration methodologies. As a result, most reports by the SACMEQ include cross-country comparisons and any conclusion formed regarding relative performance adds to the authenticity

assessment. For educational reports to be authentic, they must contain accurate and dependable data. GT for the reliability of measurements or assessments used in SACMEQ reports is primarily focused on assisting researchers in ensuring that measuring equipment is consistent and reliable since they contribute to the reports' authenticity. Validity at this stage refers to how the evaluations in the SACMEQ reports measure what they claim to measure. At this stage, GT is critical for verifying the assessment in SACMEQ reports by assisting in the identification of sources of error that may impact the validity of the measurements inside SACMEQ.

Moreover, the generalizability theory allows us to predict how well the findings on reports by the SACMEQ may be applied to different educational situations or groups. GT enables researchers to investigate how contextual elements impact measurement outputs, ensuring the credibility of these reports. Understanding these aspects could aid in ensuring that the examinations are conducted authentically across various locations and cultures. Findings from SACMEQ studies can be applied to a broader group of learners in the participating nations. Similarly, GT estimates the extent to which outcomes shown in reports by the SACMEQ were generalised to various educational environments or groups. Equally important, GT enabled the researcher to investigate how the methodology employed impacted on measurement outputs while ensuring the credibility of these reports. Understanding these aspects contributed to ensuring that exams are conducted authentically across diverse contexts and cultures. Findings from SACMEQ exams can be applied to a broader group of learners in the participating nations.

Finally, while examining the reliability and validity of data obtained for use in reports by the SACMEQ, the relationship with Generalizability Theory comes into play. Authenticity relates to the reliability, credibility, and trustworthiness of the facts and results offered in reports. Researchers can improve the accuracy and reliability of the educational quality evaluations reported in these reports by addressing sources of error, sample representativeness, cross-national comparability, and contextual variables.

2.2.7 Justification for GT

Quality in literacy and numeracy in basic education systems needs to be addressed across the world, to develop humans that are productive. The researcher used the generalizability theory due to a concern with the authenticity of reports by the SACMEQ regarding the performance of literacy and numeracy in Lesotho. From the generalizability theory, the dependability of score

interpretations depend on the nature and magnitude of measurement errors through recognition and estimation from multiple sources impacting the performance of learners (Shavelson et al., 2015). That is, during GT application, its scope goes beyond gathering data on standardised scores only hence competencies and measurement errors impacting the performance of learners, are incorporated. GT has been sparingly reporting the results for measures of individual differences (Vispoel, et al., 2018). It, therefore, honours more closely the reality intended to be generalised. This theory procedure allowed the researcher to assess the authenticity of SACMEQ reports by relying on the generalised data from items, occasions, test forms, administration, background etc.

2.3. Conceptual Review

2.3.1 Basic Education Quality

Education is critical for realising individual potential and driving development in a country. Education was once thought useful to prepare soldiers for future obligations, but as society's awareness of their culture grew, it became more democratic (Szliowicz et al., 2023). In that scenario, it is now seen as a key process in human development since it develops human personality, thoughts, attitudes, and values for the improvement of people and society (Al-Shuacbu, 2014). In the twenty-first century, education is a reflection of a person's economic status rather than a process of enabling and empowering (Aheisibwe, 2021). However, Lesotho considered education as the foundation for addressing the welfare of Basotho society (LBECP, 2021). In that regard, its relevance is decided by the clear direction given to personal and social growth during the ongoing elevating of civilisations (CAP, 2009). In this situation, the primary purpose of education in Lesotho is to educate learners with the knowledge, skills, ethics, values, and attitudes required for survival (LBECP, 2021). Agenda 2063 sought to fully develop Africa's human capital by spending its most valuable resources in all levels of education. This discussion prompted the researcher to see education as a method for modelling persons holistically, regardless of level.

It is well-known that the foundational education system in Lesotho was divided into two levels: basic education and secondary education. In accordance with CAP (2009), basic education spans the first ten years and is divided into two parts: Lower Basic Education (grades 1–7) and Upper Basic Education (grades 8-10). It should be emphasised, however, that its service is supplied in chunks, progressing from lower to higher levels. A fundamental set of critical competencies is

provided over the first ten years of schooling. The 21st-century basic education policy states that the Basic Education in Lesotho consists of free and obligatory elementary and secondary education. Education is free and compulsory during the primary level. The classification at this level was based on two phases: the foundation phase (Grades R-3, ages 5-8 years) and the intermediate phase (Grades 4-7), ages 9-12. Though there is another level of free secondary education called lower and upper secondary education, which is divided into academic and technical streams (Grades 8-12: 13-17 years) (LBECP, 2021), the study focused on the primary phase, specifically the Grade 6 level.

Basic education provides a solid basis for all subsequent knowledge development. In line with Raselimo and Mahao (2015) and LBECP (2021), basic education in Lesotho is designed to serve as a basis for secondary, technical, and vocational education, as well as lifelong learning. However, Raselimo and Mahao (2015) further argued that basic education is expected to address the goals of modelling learners for the occupational world and further education. On the CAP (2009) account, the utmost aim of offering basic education in Lesotho was to enable individuals to survive and improve the quality of their lives fully. Since education is a process, its application of knowledge acquired, and the quality of skills and attitudes transferred to the next generation denotes that the society's cultural reproductive system is sustainable (Thereja, 2018). This author emphasised that culture in this essence, is essential as it paves the way to quality in any sphere of life. It is quality control processes that detects whether education development could enable stakeholders to determine the quality state of education. In that manner, it is understood that the quality of the lifelong disciplines learned cognitively, explains why education is considered a prime factor for the survival of both an individual and a society.

Initially, schooling for all and improving access to quality education is the vital pillar that spurs growth within the country (Aheisibwe, 2021). To ensure accessibility, Agenda 2063 stipulated that African youths should be assured full access to education, and any necessary skill essential for lifelong (UNESCO, 2015). This enabled them to realise their full potential hence, the unemployment rate was eradicated. Basic education, according to the SADC Protocol on Education and Training, specifically for goal 'F' stated that, "work towards the reduction and eventual elimination of constraints to better and free access by citizens of the member states to good quality education and training opportunities within the region" (REDCOL, 2012). Accessibility is a major aspect in Lesotho, as Section 21 of the National Constitution addresses all

children's right to receive quality basic education. In this situation, they developed strategic goals for improving quality through instructional design and efficiency through enhanced mathematics and language teaching. In fact, the primary purpose of establishing the SACMEQ was to provide universal access to quality education, regardless of background obstacles. In terms of quality education, the researcher considered that it should be diversified, accessible, and have features that meet the stated or applied needs.

Furthermore, the quality of education is established by assuming that the product of the academic process is a direct result of the input quality. That is why its transmission is associated with a career employable in its respective faculty competencies for lifelong learning (Thereja, 2018). Employability is concerned with how quality is defined and measured, as well as the relationship between quality evaluation and quality improvement. Because SACMEQ uses evaluation methodologies on learning outcomes to track curriculum features that react to societal requirements, they define quality education as the facilitation of effective learning and the assistance of students in acquiring critical skills and competencies.

The quality of education determines whether the productivity and social justice of a country develop, or whether social cohesion and political solidarity improve. In this scenario, overall intellectual output is used to measure the quality of schooling. In summary, if the monitoring and evaluation of procedures are done to address the evaluated needs and meet the targeted features of service quality to stakeholders, the quality of reports by the SACMEQ would improve (Awich, 2017; Karogo et al., 2018). To increase the quality of education, implementers must first be able to measure it, keeping in mind that education quality is a well-known term that defines and measures the educational system's standard within society. Within SACMEQ, these authors stated that excellent education is measured by pupil achievement tests, teacher and school surveys, data analysis, and comparison studies. SACMEQ has performed numerous assessments of member countries' education systems to measure various elements of educational quality. The assessment entails gathering information on learners' accomplishments, learning outcomes, school resources, teaching practices, and other pertinent criteria (Chabaditseli et al., 2018). These procedures help to create the skills, values, attitudes, personal prosperity, and freedom required by the school.

Furthermore, Moloi and Chetty (2010) defined excellent education as a measurable learning outcome for all, particularly in reading, numeracy, and key life skills. Agnihotri (2017)

also stated that in 2012, Sayed and Motala defined excellent education as "meaningful learning" that ensured pupils had gained the core literacy and numeracy skills required to advance to secondary and tertiary levels of education. Their meaningful learning also includes what happens in the classroom and in other learning situations. SACMEQ uses a variety of methodologies to assess educational quality. However, the important strategies in SACMEQ reports were based on assessments concerned with numeracy and literacy abilities of students. This was done to ensure that learners' knowledge and abilities served as major markers of educational excellence. Aside from that, the data analysis and comparative research provided valuable insights and comparisons between countries and regions. SACMEQ reports are critical for evaluating progress over time and adopting targeted interventions to address identified gaps (Karogo et al., 2018). The consistent association between quality assessment and quality improvement assures that SACMEQ reports help to improve educational quality in participating countries. UNESCO has established a new regional data production system to track progress on chosen indicators of educational quality in Sub-Saharan Africa. The data generation measures aspects that influence quality, such as class size, available resources, and access to basic services, all of which can have an impact on learning. Though quality education appears to be a prominent notion globally, Lesotho, through the ESSP 2016-2026, has legislated that education at the basic level ensures that Basotho are functionally literate and productive (Moet, 2016). As a result, literacy education is an important issue to explore in this study.

2.3.2 Literacy Education.

Literacy can be simply defined as the ability to read and write. Reading and writing are key abilities in the educational process. According to Turkeyans Bazon and Anilan (2022), literacy is an essential ability that should be cultivated fully at a young age. In contrast, Zua's (2021) findings indicate that "literacy in Africa has been viewed as the ability to read, write, and use calculation". This author clarified that literacy includes language and culture, therefore it is considered a powerful instrument, a broad talent, and competency that goes beyond reading and writing. This is reinforced by Cambridge Assessment (2013), which views literacy as a crucial educational target that is required for schooling due to its importance in embracing language and culture. On this basis, one can conclude that reading and writing are fundamental abilities in scholastic life in all races.

The capacity to read and write is one of the linguistic abilities that helps determine whether a person is intellectually fully developed. Torres (2014) argues that literacy has transformed from a verbal process to a cognitive act. It also allows a person to regulate the cognitive, linguistic, and socio-cultural aspects of written and spoken language. Consequently, in the context of PIRLS and SACMEQ bodies, literacy is defined as the ability to understand and apply written language forms valued by society and/or individuals (Onsomu et al., 2005; Mullis & Martins, 2016). For Cambridge Assessment (2013), the ability to integrate what they have learned with their life experiences in and across school, as well as the world in general, had to decide how functional and critical literacy abilities are achieved. As a result, all children have the right to functional and critical literacy skills, and schools have the responsibility to provide them. In accordance with the curriculum offered in Lesotho, literacy is one of the skills that serve as a basis for future learning and growth. However, literacy is concerned with the fundamentals of language, which include reading, speaking, and writing. Positive attitudes and values are required for effective communication (CAP, 2009). Even though Jopo et al. (2011a) emphasise that SACMEQ ministers recognised the importance of literacy as a reading comprehension skill imparted through school language and reading instruction programmes, it is clear that in order for an individual to cope with future life, the optimum level of reading and writing skills must be acquired.

Regardless of the instrument employed, communication is the most reliable avenue for bringing the globe together. Literacy refers to the activities and transitions people take when reading and writing for personal or social goals. Literacy is considered a social, cognitive act that provides chances for strategic thinking and reflection that are not present in the teaching of textual rules and correctness. In this sense, literacy serves as the foundation of global socialisation by ensuring that people use a range of modes of communication and expression across multiple media (Montoya, 2018). This author went on to say that literacy is defined in the educational arena in Europe as the capacity to read and write at a level that allows individuals to effectively understand and use written communication in all media (print or electronic), including digital literacy. In the case of Lesotho's CAP (2009), literacy is an effective medium of instruction that encourages all types of communication. The LBECP (2021) clarified this by stating that the primary objective of Basotho learners at the basic level is the development and application of functional and advanced literacy, as well as effective communication skills for lifelong learning. It has been recognised that literacy not only fosters effective communication but also aids in the assessment of goal

achievement and full participation by learners in their neighbourhood and the larger society; hence, it was understood why the SACMEQ assessment focused on literacy.

Finally, lifelong learning promotes SDG 4. This advocacy is intended to prepare a learner to deal with life's issues in the future (Barcena et al., 2018). Literacy appears to be one of the most important skills for achieving that goal. Literacy at this point develops not just the learners' knowledge but also the abilities that encourage employability and productivity in the workplace (Cambridge Assessment 2013). This adds value since it demonstrates its ability to correlate economic position with individual well-being. The results of measuring different literacy proficiency levels reveal the country's socioeconomic condition. Using linguistic, artistic, and other talents to promote literacy benefits socioeconomic development. For effective fostering, the LBECP (2021) literacy aim at the basic level emphasises the development of advanced vocational, technical, scientific, entrepreneurial, and technological knowledge and skills to promote digital literacy, financial literacy, independent and critical thinking required for further learning, self-reliance, and the workplace. In SACMEQ reports, parents' educational backgrounds were among the factors considered to estimate the SOS of literacy (Chetty et al., 2017; Masenche et al., 2017). Literacy and numeracy education work together to promote quality education.

2.2.3 Numeracy Education.

Numeracy is the essential talent that allows individuals to use their knowledge and abilities constructively in society in a variety of settings. However, most individuals use numeracy and mathematics interchangeably, therefore they are not the same (Crosscombe, 2018). Surprisingly, in reports by the SACMEQ, writers highlight that studies by the body are intended to test literacy and numeracy skills in its member nations, hence the presentation of findings for numeracy outlines mathematics scores. For example, Jopo et al. (2011a.) stated that "the SACMEQ II study included a numeracy assessment and an evaluation of teacher literacy and numeracy levels". Figure 2.1 shows the score presentation.

Table 2.1. Numeracy scores as mathematics scores

2014 FREQUENCY Of Mathematics Tests

	Less Often	2/3 Months	1+ per Week
District	%	%	%
Berea	14.2	24.1	61.7
Butha-Buthe	14.5	19.0	66.5
Leribe	15.5	9.8	74.7

Note. Presentation of numeracy scores as mathematics scores *(Lesotho SACMEQ IV report*).

Mathematics is a well-established subject predicated on the extent to which acquired skills, information, and methods are abstractly captured, regardless of their possible application in the real world (Neil, 2014; Barwell, 2023). It is a basic necessity in many facets of daily life, including job. To validate this concept, a precise language and methodologies are used in a clear, consistent development of concepts for modelling, analysing, and interpreting the world. When it comes to modelling the next generation, educators must ensure that the mathematics curriculum supports the individual's current and future private, occupational, and social lives positively so that they become reflective citizens (Neil, 2014). Mathematics can be seen as life-oriented because the capacity to detect, interpret, and use mathematical competencies for sound judgements is well developed in this discipline.

In contrast, numeracy is an interdisciplinary characteristic that is recognised as a critical kind of basic mathematical skills required for usage in all aspects of life. It is focused on people's ability to do tasks rather than activities between their thoughts and writings and hence requires the use of numbers, mathematics, or diagrams in social practices (Barwell, 2023). Kus (2018) highlights that numeracy is more than just the capacity to perform calculations; it is also the ability to apply mathematical abilities when interpreting results, as well as an awareness of the relationship between numbers and the actions of material components in real-world circumstances.

Similarly, SACMEQ defines numeracy as mathematics literacy, which is defined as the ability to understand and apply mathematical procedures and make relevant decisions as an individual and as a part of society. This strengthens the numeracy role in facilitating and sustaining cultural, social, economic, and technical changes in society. In that instance, the information and abilities gained through mathematics education are inextricably linked to the behaviour and personalities of learners, allowing them to successfully apply mathematical principles in a wide range of circumstances around the world. As a result, I understand that numeracy is concerned with the practical application of mathematical skills in various sectors of life. Mathematics is only concerned with understanding mathematical concepts in their abstract form. As a result, numeracy is the primary emphasis of this study.

Numeracy was a valuable skill back then, particularly in areas where English was extensively spoken. They referred to it as mathematical literacy or quantitative literacy because it necessitated numerical proficiency or comprehension (Kus, 2018). They went on to argue that in the mid-1960s, numeracy was viewed differently because it was utilised to evaluate data and draw connections that helped individuals understand the world of business, science, and technology. Numeracy has recently come to include more than just understanding numbers; it also means being able to employ mathematical ideas creatively to make sense of the world (Barwell, 2023). As defined by Nail (2014), numeracy is the application of mathematics to real-world problems, hence it is regarded as applied mathematics. This broadens the perceptions of communities as people effectively apply relevant mathematical competencies for successful involvement in everyday life. As a result, numeracy principles became widely used worldwide beginning in the mid-twentieth century and continuing to the present. While assessing the legitimacy of SACMEQ reports in Lesotho's basic education quality, the researcher conceptualised numeracy in accordance with Nail and Barwell's idea of numeracy.

As previously stated, numeracy is applicable in every sphere of life. Kus (2018) believes that numeracy started in reports by Crowther, which were prepared to address mathematical instruction in Britain teens to reflect on the term literacy in educational discussion. Their emphasis was on the fact that numeracy content in schools included more than just counting. It, instead, enables learners to fully engage their human senses while applying concepts acquired in their personal and professional life for effective outcomes. They noted that numeracy application is

practical in the teaching, learning, and use of mathematics, therefore it is regarded as a comparable CX and assistant partner in assisting learners to conform to the quantitative needs of current society while studying. Learners in Australia were encouraged to use their mathematics knowledge in real-world situations. This was done to ensure the integration of the numerous competencies they encounter in their daily lives, therefore its importance extends to all critical learning areas since learners encounter a variety of scenarios that must be solved through everyday life experiences (ACARA, 2015.). Subsequently, the use of numeracy benefited in solving abstract problems in real-world circumstances. The domains evaluated in reports by the SACMEQ revealed that higher degrees of difficulty in items were addressed, and Lesotho appeared to do badly at that level, in all studies conducted. In the current study, it was important to find out whether there was authenticity in reports by the SACMEQ, particularly on the tools used to gather the data. In addition, in the current study, it was important to determine whether the issue of authenticity in those reports on data gathering instruments for numeracy was detected.

Furthermore, numeracy is concerned with comprehending systems and processes, as well as being able to apply information to specific circumstances. Its development is dependent on the acquisition of knowledge of number ideas, as well as an emphasis on mental and written calculations, which are essential for the foundations of numeracy. The focus of numeracy concepts and skill development should be on assisting children in acquiring and applying the concepts and skills concerning their learning environment so that they can be applied meaningfully in their daily lives (Neill, 2014). This enabled SACMEQ ministries to define numeracy as the numerical and mathematical reasoning skills that formed the foundation of school mathematics curricula (Jopo et al., 2011b). The ministers sought to assess their school systems based on the extent to which learners learned the knowledge and skills expected of them. In this situation, it is clear that the researcher's understanding of numeracy enabled the researcher to judge the veracity of SACMEQ findings, which are written numerically. Stated by Karogo et al. (2018), SACMEQ addresses numeracy concepts at eight levels: pre-numeracy, emergent numeracy, basic numeracy, beginning numeracy, competent numeracy, mathematical skills, problem-solving, and abstract problem-solving.

Numeracy is useful in all aspects of life, not only academics. It entails comprehending the real-world situation, applying suitable mathematical competencies, and mathematically connecting and

critically assessing the results based on the specified statement (Neil, 2014). It is thus revealed through collaboration between humans and the world around them that it would be difficult for an individual to live a regular existence without using some form of mathematics (Homboid, 2019). CAP (2009) emphasises the importance of numeracy in Lesotho, promoting numerical and mathematical skills for everyday life and further learning:

- This includes effective participation in scientific, technological, and socioeconomic development. –
- Apply numerical and mathematical skills to everyday problems and promote socio-economic development. –
- Recognise the importance of numerical and mathematical skills in scientific, technological, and socio-economic development. –
- Foster positive attitudes towards mathematics as a foundation for future learning and career development.

Though numeracy skills are one of the cornerstones of education, it is possible that Lesotho's SACMEQ test allowed it to evaluate its potential in addressing those numeracy skills for the benefit of the Basotho country through learner performance.

2.3.4 The Concept of Learners' Performance

Across the globe, the term 'performance' appears to mean different things to different people. Its meaning is determined by the precise goal and target to be addressed within a given discipline. In their search for performance definitions, Ghalem et al. (2016) discovered that all definitions are based on acts, their outcomes, and success. Among the numerous definitions of performance, the emphasis is on the setting of education in which academic activities occur. Academic performance is concerned with the outcomes of learning. It is all about the ability of students to transform their knowledge, skills, abilities, and comprehension of a given topic into a new state through learning (Lamas, 2015). Literacy and numeracy scores were used to assess performance in SACMEQ studies. However, Chabaditseli et al. (2018) noted that for SACMEQ reports, success in this consortium is measured by factors other than numeracy and literacy achievement. These factors have been grouped into three categories: learners' gender, family lifestyles, and school environment status. These provided the researcher with a platform to contextualise performance as the degree to which an individual may meet the given goals occurs, up to the final step of achieving the set goals completely.

Learners are essential ingredients of the learning process, hence their performance is the primary mirror used. Lamas (2015) defined learner performance as their capacity to gradually apply what they had learnt in real-life settings. Furthermore, he stated that their abilities and experiences were appropriate for their situations, environmental conditions, intellect, personality, and attitude. For, Karogo et al. (2018), the present SACMEQ studies aim to analyse the conditions of schooling and the accomplishment levels of learners and teachers in the domains of reading (literacy and numeracy). However, one of the SACMEQ's objectives was to create a link between school resources and kid achievement. SACMEQ studies have shown that Standard 6 learners' literacy and numeracy performance levels have improved (Karogo et al, 2018). Learners at schools with enough resources tend to have higher scores in literacy and numeracy compared to their counterparts. This argument led the researcher to the conclusion that learner achievement can be measured by their level of commitment and engagement in any prescribed activity.

Lamas (2015) stated that performance is based on the results demonstrated by learners through the assessment of the application of sustainable development strategies that align with the three dimensions of performance, which are economic, social, and environmental elements. Its attainment is tied to learners' mastery of educational objectives or learning outcomes, as well as abilities earned through grading. That is, the level to which learners met the SACMEQ learning objectives, goals, and standards established by the Ministry of Education was determined by progress assessments (Onsomu et al., 2005). This helps to determine areas for improvement and make educated decisions about individual performance. The results of educational processes are then expressed as grades, indicating what a pupil has learned. School grades have been utilised as a performance criterion in relation to intellectual abilities, personality qualities, and behavioural and self-control outcomes (Lamas, 2015). Similarly, performance evaluation allows the teacher to easily gauge pupil comprehension and progress by measuring how well a learner's knowledge and abilities have improved in comparison to their past performance (Ghalem et al., 2016). Understandably, performance serves as a metric for determining learners' overall competence and addressing societal requirements.

To balance the specified margins for the interpretation and procedures of the data obtained, numerous aspects influencing academic achievement must be considered. These aspects encompass intellectual traits, personality traits, behavioural features, and educational approaches

(Lamas, 2015). Aside from the aspects described above, performance is also decided by considering economy, effectiveness, and efficiency (Pintea & Achim, 2010). Measuring outcomes and results on a regular basis produce data that is trustworthy including on the effectiveness and productivity of programmes, allowing for the detection of performance. The performance of learners reported on reports by the SACMEQ is influenced by their background (gender, socioeconomic status, and geography), as well as statistically graded educational parameters (Awich, 2017). In the case of Ghalem et al. (2016), the monitoring and evaluation process of performance is based on the level of achievement of objectives, productivity and efficiency, and the value created. Also, the authors reported that performance is determined by strategic objectives based on comparison results and objectives, which is why the framework for measurement and reporting is based on the specified dimensions. SACMEQ programme evaluation focuses solely on the quality of service delivery and learners' literacy and numeracy outcomes. As a result, it is possible to conclude that performance, as indicated in reports by the SACMEQ, was supported by academic results in comparison to global and national targets.

2.3.5 The Concept of Accurate Reports

The thorough compilation of results and recommendations in a report on an issue of addressing detects the growth of any company, regardless of its discipline. On the basis of Anigbogu (2019), the report is concerned with the facts and information presented formally and systematically to provide an account of events, processes, methods, and/or systems through analysis and evaluation of the results based on the experiences of any event held. To act as an effective means of communication by an organisation, reports should maintain a cross-flow of suggestions and guidelines addressing complex or unsolved issues (Anigbogu, 2017). Similarly, Harappa (2020) believes that a report can help with decision-making and problem-solving based on a collection of analysed facts. Based on the information provided above, it is clear that reports, whether formal or informal, communicate the findings, methodology, and recommendations to a specific audience. To achieve their intended purpose, the reports must be authentic. That is why genuineness, actuality, or truth are the most important factors in assuring authenticity in Lesotho SACMEQ reports.

Continually, data quality assurance is a critical component of authenticity assessments. Pierce (2007) identifies three key indicators of the authenticity of a report: validity, dependability, and accuracy. That is, data validity is assessed by the accuracy of the information, relevance, and

suitability of the objectives of the study. While dependability, trustworthiness, authenticity, and repute are markers of reliability, consistency is the most crucial statistic. The fourth feature is accuracy, which is concerned with sensitivity to change because it is all about details such as dates, numbers, and the presence of people, among others. van Nederpelt (2011) emphasises the importance of correctness in report quality, including credibility, integrity, reliability, objectivity, and validity should be highly valued. Sandstorm (2018) supported these writers' efforts by emphasising transparency and trustworthiness in reports, which serve as tools for readers to evaluate their validity. It indicates that the legitimacy of Lesotho's SACMEQ reports may ensure data quality through completeness, accuracy, timeliness, and conformity with the methods used in those reports.

Maintaining the authenticity in reports by the SACMEQ is critical to their credibility and utility in shaping educational policies and practices aimed at enhancing the quality of education in member states. This is demonstrated by SACMEQ's use of a robust methodological quantitative framework for data collection and analysis, such as standardised testing instruments, random sampling techniques, and strict data handling protocols to ensure data reliability and validity (Onsomu et al., 2005). Similarly, the latter literatures reviewed studies by educational scholars and professionals from member nations and international organisations to ensure that the interpretations were scientifically valid (Murimba, 2005). Furthermore, for verification purposes, SACMEQ is committed to guaranteeing transparency in its research processes by incorporating specific methodology, sample procedures, and analytical techniques that are documented and made public. This transparency is supported by data from these reports, which have been cross-validated with national examinations, other regional assessments, and international studies such as PISA and TIMSS (Hungi et al., 2010). Without blaming anyone, it might be argued that, among other things, accessibility to all stakeholders and adherence to international standards could have made the data presented by SACMEQ usable by all stakeholders.

Summarily, it is crucial to determine how authentic the results shown in reports by the SACMEQ on Lesotho were as well as question the trustworthiness of the outcomes of these reports given that these concepts may influence the quality assurance checks of data. Moving forward, it is critical to assess how perceptions of authenticity have influenced this study.

2.3.6 Assessment

To determine the authenticity of findings by the SACMEQ on literacy and numeracy in Lesotho advocacy, it is necessary to consider what assessment entails. Assessment can be viewed holistically as a set of measures used to identify a complicated attribute of a person or a group of people (Yambi, 2020). Similarly, (Ali et al., 2015) stressed that this process is focused with quantifying knowledge, abilities, attitudes, and beliefs. As a result, expectations and standards are expressed and made public regularly and cyclically. Though the authors examined assessment holistically, it is critical to deconstruct it inside the educational system because SACMEQ operates in the sphere of education. It is an important instrument in education for systematically developing learners and influencing educational activities by planning, implementing, clarifying, designing, collecting, analysing, interpreting, and re-creating (Tontus, 2020). The author also posits that its efficacy at school is defined by both the process of learning and the material, therefore it serves as a guideline for learners to present their abilities, knowledge, and skills. It does, however, include any action in which evidence of learning is gathered in a planned and systematic manner and utilised to form learning judgements (Wood-Wallace, 2016). Viewed in this manner, assessment becomes significant for this study because it is concerned with the systematic cumulative impact of SACMEQ projects on the quality of basic education in Lesotho.

Furthermore, assessment is one of the curriculum's developmental stages that helps learners reflect on government policies. In that situation, Tosuncuoglu (2018) defined assessment as a broad set of methodologies and procedures for gathering information regarding learner aptitude, knowledge understanding, and motivation. Yambi (2020) determined that effective assessment should include four essential components: assessing improvement over time, motivating learners to study, reviewing teaching techniques, and ranking learners' capacities in terms of entire group evaluation. Similarly, SACMEQ, which works to promote educational quality in Southern and Eastern African countries, saw evaluation as central to its purpose. Maema and Mothibeli (2005) demonstrate this by stating that the SACMEQ assessment is based on problems such as educational inputs, general schooling circumstances, equitable assessments for human and material resource allocations among schools, and pupil literacy levels. Its investigations, therefore, critically inform educational reform by giving knowledge that directs planning decisions aimed at improving educational quality (Karogo et al., 2018). Yambi’s (2020) findings led the researcher to conclude

that assessment serves as a reflection point within SACMEQ countries, communicating students' ability to external stakeholders and providing an overall judgement of performance.

So far, the conversation has focused on the value of assessment in Lesotho's education system and around the world, with several authors acknowledging the necessity of assessment in the education profession. Yambi (2020) proposed that the primary goal of assessment is to achieve continuous quality improvement by inspiring and directing learners. This author emphasises for motivational purposes that assessment gives feedback that allows instructors to discover learners' academic problems and strengths and provide support in educational programming or social services. Tontus (2020) claimed that learners' needs are met by applying assessment core principles and concepts in a variety of disciplines to increase their chances of success. In addition to meeting the needs of learners, it gives detailed feedback on how many students have met the learning objectives, how many require remediation, and which strategies are vital in the teaching and learning process for that topic (Tosuncuoglu, 2018). Furthermore, Yambi and Yambi (2020) stated that assessment provides an orientation to learning because it serves as a motivator for learners and measures their progress towards learning objectives. Furthermore, they stated that assessment influences the way learners respond to what they are taught, therefore it is an important part of teacher planning, including examinations. Tosuncuoglu (2018) emphasised that methods and techniques are used to generate data about learners' ability, knowledge, understanding, and motivation, allowing instructors to determine their learners' level of skills or knowledge, thereby shaping their learning styles through their teaching practices. SACMEQ Policy Reports are similar in that they analyse the overall conditions of schooling and the quality of education at the primary school level (Maema & Mohale, 2017). This data from SACMEQ assessments helps instructional designers maintain the long-term enhancement of educational quality. The importance of assessment in this study is to generate data for stakeholders on how authentic and accurate the data presented by SACMEQ reports regarding students' reading and numeracy skills are.

In a nutshell, Wood-Wallace (2016) views assessment as a deeply established component of the present educational system, which is why it is designed to track and predict learners progress. Giving learners critical feedback on their personal effectiveness leads to a deeper knowledge of what they know and can apply as a result of their educational experiences. For Tontus (2020), providing learners with feedback is an essential element of education, regardless of their level of

achievement. Whatever the source, it should be constructive and developing. It provides learners and other educational stakeholders with a glue for their education system standards, therefore their participation is crucial. Aside from that, some learners view their grades or exam scores as feedback. Tosuncuoglu (2018) mentioned that one of the aspects to consider in evaluation is a reflection on how tests affect both teaching and learning. It has a favourable impact on what students may prepare for and how they receive feedback. Constructive feedback can be established by assessing learners' achievement and grades from various tests and exams, among other things. This helps the researcher understand the importance of feedback in assessments, as it is one of the factors to consider when determining whether the Ministry of Education in Lesotho provides constructive feedback to its stakeholders about the performance of Basotho students in SACMEQ literacy and numeracy tests.

The assessment is about more than simply grading and exams; it is also about the awareness of learners, comprehension, views, and attitudes towards learning. The appropriateness of assessment procedures, particularly examination design, should establish authenticity, reliability, validity, and washback (Tosuncouglu, 2018). In clarity, authenticity refers to the test that evaluates a real-life event. It can be portrayed by providing assignments that are similar to real-world assignments with important, relevant, and real-life themes. For the stability and consistency of performance, the reliable text must be constant and dependable, which means that its circumstances must be consistent in order to provide a clear direction of evaluation and straightforward assignments for the test taker.

The use of the phrase honesty ensures that materials and curriculum provided are aligned, as well as the accuracy of assessment outcomes. Brown (2010) regarded validity and reliability as the core principles of assessment. Validity is concerned with the evidence that may be supplied regarding the decision to be made, which must be solid, trustworthy, and lawful due to the appropriateness of the inference, uses, and consequences that result from the assessment. In contrast, reliability refers to the consistency, stability, dependability, and accuracy of assessment outcomes. Its primary procedures are the scoring and grading of learners' work. Chabaditseli et al. (2018) stated that one of the guidelines guiding SACMEQ for assuring acceptable data in large-cross research is not to exclude over 5 per cent of the learners in a desired group. This consistency was maintained when estimating changes in schooling circumstances and educational quality

across countries and throughout time. The assessment, which is the focus of this study, is based on Brown's (2010) idea, which addresses the genuineness and correctness of data provided in various SACMEQ studies. At this stage, it is important to discuss evaluation, since it aids in obtaining meaningful analysis for identifying learners' strengths and deficiencies.

2.3.7 Evaluation

Authors have varying interpretations of the term "evaluation". For Kabonga (2019), assessment is the final process used to assess the effectiveness, efficiency, impact, efficacy, relevance, and sustainability of a development intervention. Ferdaus (2016) defines it as a systematic assessment of the performance of an ongoing project/program at a specific interval or a completed project/program. It is the consideration of something's value, as well as judgement processes about the definition of criteria and evidence on the product (Adom et al., 2020). Because it determines if a programme has met its objectives, its primary goal is to identify the success of a programme, curriculum, or series of experiments. The feedback gained was based on the level of quality as measured by defined standards and whether or not they were satisfied. This aids in determining what is known about performance capabilities and how they are best tested (Adom et al., 2020; Yambi, 2020). The determination of the quality of an object, subject, or phenomenon is an important component of human life. Similarly, Tosuncuoglu (2018) defines evaluation as determining not only which approaches work and which do not, but also whether or not the requirements are reached. Given the aforementioned writers' thoughts about assessment, it is possible to conclude that evaluation is a process or activity of obtaining crucial data to determine whether a programme achieves its aims in terms of holistic human development.

In the education system, it is Moet's obligation to communicate with stakeholders by providing information on what transpired during the continuous teaching and learning process. Evaluation is defined as a periodic process of gathering data and analysing or ordering it in such a way that the resulting information can be used to determine the quality of education and the extent to which each member country is meeting its stated objectives and expected results (Adom et al., 2020). To ensure its effectiveness, it is carried out consistently as an ongoing process. Sindayigaya et al. (2020) viewed evaluation as a vital technique for improving learners' academic performance. As a result, it is the most effective way for monitoring progress and ensuring that what has been accomplished meets the expectations. It is performed at a certain period to assess the level at which objectives have been met. In that circumstance, evaluation is a realistic tool to maintain standards

and improve educational quality. Evaluation is regarded to be based on the natural activities and processes that learners engage in both in the classroom and in their daily lives. Learning and evaluation, for that matter, complement one another, thus they are never complete, rather, they evolve and develop on an on-going basis.

Evaluation is becoming recognised as one of the assessment strategies that support quality education. Adom et al. (2020) stated that worldwide evaluation is based on exams and other assessment techniques. Furthermore, Kabongo (2019) stated that it is concerned with concerns of validity, dependability, accuracy in analysis, and reporting. Developers and implementers must work harder to improve the test's validity and reliability in order to obtain objective information while minimising measurement errors. Furthermore, Chetty and Mokwele, (2020) stated that evaluation is regarded as a measure of the values of educational academic activities, programmes, and curriculum. Its assessment focuses on learning, specifically on tasks that require making decisions or judgements regarding the overall quality of the programme. As a result, its primary focus is on pupils' learning, curriculum revisions, and educational programmes inside the programme or course, as well as at the national level. Yambi (2020) emphasises that it involves comparing a learner's achievement to other students or a set of benchmarks. It is thus regarded as a judging process that yields an overall grade. These grades can be detected internally during the programme (formative evaluation) or externally (summative evaluation) at the conclusion when the summary of the strengths and weaknesses of a programme is done, or on a big scale when they require money and accreditation.

In essence, the idea of evaluation as employed in SACMEQ remains comparable to the prior definitions in that it answers the question "What happens?" It entails making sound educational judgements or learning desirable knowledge, abilities, attitudes, and societal values (Chabaditseli et al., 2018). This is apparent in how it evaluates literacy and numeracy achievement by comparing member countries. In the words of Makuwa (2012), SACMEQ can generate data on large-scale assessments within the member states to improve schooling circumstances and educational quality across Southern and Eastern Africa. The emphasis is on educational inputs to schools, benchmark requirements for educational provision, equity in educational resource allocation, and the reading literacy performance of sixth grade learners. Aside from this, learners' and teachers' and numeracy performance levels are evaluated. The study's idea of assessment is

concerned with the generation of data from the judgmental process about the authenticity and accuracy of SACMEQ reports in Lesotho. Clearly, evaluation does not stand alone; therefore, it is used in conjunction with monitoring to ensure quality education.

2.3.8 Monitoring

Achievement of results may play a significant part in ensuring growth within a society's educational system; nevertheless, constant intervention from beginning to end to ensure constructive progress establishes a strong foundation for growth detection. This is supported by numerous researchers. Kabonga (2019) saw monitoring as a continuous function and more of a day-to-day task. He further underlined that this process begins once the plan has commenced and continues throughout its implementation phase. For Curry (2018), monitoring is an ongoing action that provides early indications of whether or not results are being achieved. Tengan et al. (2021) said that it is formed by stakeholders based on comments received regarding progress towards reaching their objectives. Its primary goal, then, is to track progress. This procedure is carried out internally within the planned project activities to provide continuous feedback on the progress and efficacy with which it is being performed. Kabonga (2019), on the other hand, sees it as a constant evaluation of the project's operation in light of the implementation timeline and the utilisation of project inputs. It does, however, require measurement, which includes looking at quality, quantity, outcomes, and consequences. That is why it only involve the generation of data on key parameters in a methodical manner to support everyday operations. This led to the realisation that transparency in measuring progress, credibility, and consistency are the most important factors to consider while achieving the specified goals.

Furthermore, Kabonga's (2019) monitoring-based research findings may emerge depending on the situation and performance, among other factors. Situation monitoring focuses on situations and developments. It is sometimes referred to as contextual monitoring. Another is performance monitoring, which measures progress towards specified plan implementation targets. DFAT (2018), SACMEQ assessment studies analyse the academic achievement by children in literacy and numeracy, as well as their background. The study, in this context, assessed the sustainability, impact, efficiency, effectiveness, and relevance of studies by the SACMEQ in meeting the need of the Basotho. Furthermore, the job of monitoring is to find the reason and solution to the situation at hand by answering the question of what is going on. Monitoring, in turn, correlates the activities carried out with the outcomes, allowing remedial actions to be taken as

needed. To accomplish this, DFAT (2018) stated that there is a greater emphasis on real-time availability of lifelong learning to improve social and economic conditions as outlined in SDG4 and EFA within education programmes in performance. This author, supported by Kabonga (2019), emphasised that monitoring provides information on the state of a policy, programme, or project at any given time concerning its particular aims and outcomes by comparing progress against plans. It is important to note that the notion of monitoring, in this study, focussed on performance monitoring in order to uncover elements that contribute to the authenticity of literacy and numeracy performance as demonstrated by reports of the SACMEQ.

Finally, monitoring has been viewed as a useful tool for finding flaws in the early stages of achieving the targeted objectives. Monitoring inputs, actions, outputs, and progress towards outcomes is part of the frequent collection and analysis of information to offer indications of success towards objectives (DFAT, 2018). In accordance with the monitoring definitions provided above, SACMEQ's daily operational operations are carried out by the SACMEQ Coordinating Centre (SCC), which is comprised of the SACMEQ Director and the SACMEQ Technical Manager. However, it has been revealed that each SACMEQ Ministry of Education is responsible for hiring a SACMEQ National Research Coordinator and two Deputies, as well as conducting its own SACMEQ research operations inside the country (Makuwa, 2012). As a result, one can conclude from the study that monitoring is not required, but it was vital to focus on it because SACMEQ reports were based on monitored literacy and numeracy performance.

2.4. An Empirical Review

2.4.1. Lesotho's SACMEQ reports on basic education quality, literacy, and numeracy education.

Lesotho, like many other African countries, was colonised and subjected to a segregated education system, as discussed in section 1.2.2 of this report. Its educational system has evolved significantly throughout time as a result of the country's colonial history (Mokotso, 2022). The main goal was to increase access, enhance quality, and promote a curriculum that is culturally and linguistically relevant to the needs of Basotho and the country as a whole. Literacy and numeracy skills are the two most important components in guaranteeing great education. Reading, writing, and completing fundamental mathematical operations are required for all future education and lifelong learning. As a result, developing these talents ensured that societal needs were met. It is my sincere view that the quality of education, as determined within each country, ought to be

concerned with the instructional techniques made possible by the societal need appraised. Arguably, the educational consequences of what a child has learnt are useful in determining the efficacy of quality education (Lekhetho, 2022). Similarly, the assessment of literacy and numeracy skills in SACMEQ identifies the essential areas of attention for excellent education. Reports by the SACMEQ on the other hand, lay a heavy emphasis on educational quality, attempting to understand how well learners are learning and how well education systems are meeting their objectives (Chabaditseli et al., 2018; Karogo et al., 2018). It seemed to me that the education system is ineffective without literacy and numeracy assessments.

In accordance with my point of view, for literacy and numeracy to have an impact on quality education, they must not only focus on school system performance but also serve as the best indicators for senior decision-makers to measure performance by measuring it globally. This is demonstrated by Jopo et al. (2011a) and Karogo et al. (2018), who emphasised that when the SACMEQ Consortium was established in 1995, its member countries should strongly consider literacy and numeracy skills as the best sources of information for strategies aimed at improving educational quality. For the CAP (2009), one of the primary goals of basic education in Lesotho is to build functional and permanent literacy and numeracy abilities, as well as creative and critical thinking for effective living and life-long learning. It strives to monitor the quality, relevance, and efficiency of basic and secondary education. Its goal is to monitor the quality, relevance, and efficiency of basic and secondary education. At this point, the Lesotho government began working to improve access, equity, and quality in primary and secondary education. This reflection is witnessed in Lesotho, where quality, relevance, equity, and access to education are contextualised as the fundamental components of education policy within CAP (2009).

To ensure that a well-established societal needs assessment is handled while ensuring excellent education, the outcomes on essential educational competencies, including literacy and numeracy, appear to be the emphasis points. Eze (2009), asserts that quality education is provided to the immediate community, outcomes such as knowledge, skills, and attitudes must be considered, as well as whether they are linked to national educational goals and positive societal participation. Chabalitseli et al. (2018) noted that knowledge and skills are highly valued in Botswana's educational system, therefore their acquisition is encouraged. Gigaba (2020) reinforced this by stating that the Department of Basic Education (DBE) in South Africa presented

a report on programmes aimed at boosting foundational reading and numeracy skills. While unpacking the speech of Angie Motshekga (the Minister of Basic Education) in the meeting held in July 2019, which stated that the linkage between educational policies and outcomes later in life is essential as RSA prioritised learning to read, write, and study mathematics earlier, had been meaningful for social and economic transformation, Dr. Maboya emphasises that the early acquisition of the foundational skills of literacy and numeracy is essential for the improvement. Based on A4ID (2022), this can only be accomplished by aligning with the global policies outlined in the Education 2030 Framework For Action, which states that foundational skills such as literacy and numeracy, as well as analytical, problem-solving, and other high-level cognitive, interpersonal, and social skills, are required. The nature, as well as the effective and efficient delivery of literacy and numeracy abilities, as indicated by the above writers, lead a researcher to conclude that the country's education system is of high quality.

It appears that SACMEQ member countries, including Lesotho, have implemented a number of initiatives over the years in order to provide high-quality education. In the past, SACMEQ and EFA shared a general goal of improving educational quality. EFA focused on goal implementation, whereas SACMEQ monitored goal achievement. That is, EFA targeted at the ministry providing high-quality education in order to raise all learners' success levels and produce measurable results. However, SACMEQ attempted to measure educational quality by focusing on general schooling circumstances and measuring learning outcomes (Awich, 2017). These bodies allowed Lesotho's Ministry of Education to learn more about sharing resources and experiences (Mothibeli & Maema, 2005). Recently, SDG4 target 6 has been designated as the key objective pillar for SACMEQ, with the goal of ensuring that all youth and a significant number of adults have literacy and numeracy abilities by 2030. Literacy and numeracy play an important role in fulfilling SDG4 as key components of the right to education by integrating everyday life activities with learning and encouraging lifelong learning locally and internationally (A4ID, 2022). Aside from that, Zua (2021) added that literacy should be regarded as one of the most important measures for judging education and educational system success. The quality of education in this study, however, is governed by Sayed and Motala's concept, since it addresses meaningful numeracy and literacy training for the improvement of future societies worldwide. UNICEF views educational quality holistically, providing for five factors within an instruction rather than just the outcomes

provided. These factors include the learner's external experiences, the learning environment, educational content, the learning process, and educational outcomes.

2.4.2. SACMEQ's Literacy and Numeracy Performance

2.4.2.1. The Educational Factor

Reports by the SACMEQ on Lesotho typically focus on the education system and accomplishment outcomes of learners. That is, the performance of its education system is measured in terms of administrative aspects (school heads' personalities and educational levels, school operation and problems, school equipment and general facilities), as well as classroom procedures (the amount and frequency of homework offered, learners' access to classroom materials, lesson preparation and marking, testing, and parents' teacher access to professional support). Furthermore, the growth of any country's education system is dependent on learners' literacy and numeracy skills (Bozan & Anilan, 2022). As a result, SACMEQ uses learners' literacy and numeracy accomplishment outcomes to assess the performance of member countries.

Initially, Lesotho resumed its involvement alongside the RSA and Botswana. Of these countries, Lesotho appears to be the poorest-performing. However, in terms of overall performance, each survey appears to show an improvement. According to Jopo et al. (2011a) and Maema & Mohale (2017), while Lesotho's national mean score remained lower than the SACMEQ average, it trended upward in each survey undertaken. In comparison, SACMEQ III (2007) had considerably higher collective literacy mean scores than SACMEQ II (2000) by 17 points (Jopo et al., 2011a) and SACMEQ IV (2014) by 63 points (Maema & Mohale (2017). Similarly, SACMEQ III's numeracy mean scores were 30 points higher than those of SACMEQ II (Jopo et al., 2011a), while SACMEQ IV was 82 points higher than SACMEQ III (Maema & Mohale, 2017). It has been observed, however, that a higher proportion of pupils have not reached an adequate level of reading competency. Almost all locations reported a considerable improvement in learners' performance on both skills. It occurred to me that, while Lesotho is experiencing a trend of increasing performance, the majority of learners appear to have performed best at basic and elementary skills in literacy and numeracy order skills, which presents a significant challenge when benchmarked internationally.

South Africa resumed participation in SACMEQ in 2000 (Moloi and Strauss, 2005). Since then, this country has seen a significant improvement in the outcomes of SACMEQ studies used

to monitor the state of the education system and guide policy decisions. Learner scores from SACMEQ studies are utilised as indicators of the country's sector's progress goals. This means that participating in global rankings like as the TIMMS, NAEP, PIRLS, and SACMEQ might reveal remarkable RSA pupils' performance, implying a high quality of education (Chetty et al., 2017). This demonstrates that performance continues to improve even when not benchmarked against other countries around the world. Interestingly, these authors said in the RSA Report IV that learners' achievement in literacy and numeracy has improved from SACMEQ II (2000) to SACMEQ IV (2013) research. This is demonstrated by a large decline of 27.2% to 8.9% in learners at lower literacy levels from 2007 to 2013, as well as a considerable increase of 16.8% to 22.4% in higher-level achievements. As a result, the RSA achieved the highest literacy and numeracy improvement rates in SACMEQ IV, increasing by 43 points in literacy and 57 points in numeracy. That example, in reading, 36% advanced reading skills and 15% numeracy skills were acquired, with an 8.9% decline in non-reading and 14.9% in non-numerate learners was encountered (Chetty et al., 2017).

Since its involvement, studies by the SACMEQ reveal that Kenya has shown significant improvements in both literacy and numeracy scores. This is demonstrated by the 51.1 mean score point increase in numeracy between the SACMEQ III and IV reports, compared to 34.5 for literacy (Karogo et al., 2018). They went on to say that Nairobi had the highest regional literacy rate in Kenya, with a mean score of 657.9, followed by Western, with a mean score of 557.5. In numeracy, Nairobi earned a mean score of 689.6, while Western had the lowest score of 573.1. I am certain that Kenya is making unremarkable progress in literacy and numeracy accomplishment, but it still faces hurdles in the area, as well as gender discrepancies, which continue to contribute to unbalanced performance. Based on Barham et al. (2019), other issues encountered include pupils in the first grade having a high level of reading, a medium level of basic numeracy, and a low level of greater difficulty, such as solving word problems. Jukes et al. (2016) adds that a big majority of youngsters do not obtain functional literacy in the first three grades of school.

Finally, Botswana resumed participation in the second SACMEQ study in 2000. Since its participation, performance in literacy and numeracy has steadily improved. For Chabaditseli et al. (2018), mathematics achievements were classified by learners’ gender, school location, and socioeconomic status. Nationally, learners’ performance in literacy and numeracy has steadily

improved. That example, the literacy score for SACMEQ IV increased somewhat by 32.5 points when compared to SACMEQ III, whereas the numeracy score increased by 41.9 points. Some learners' elementary skills in mathematics and reading continue to diminish, while those with acceptable skills have improved. These authors went on to say that, in terms of reading and mathematics, regions in and near cities and towns outperformed those in remote areas, with the majority of learners reaching an adequate reading level. Nyathi-Seleshando (2018) criticises these authors, pointing out that in PSLE scores, pupils received *'C'* grades or lower. One contributing aspect is the poor reading and numeracy performance in rural areas. Researched by Deeba (2022), public schools outperform PEF (Punjab Education Foundation) schools in literacy and numeracy. In agreement with the aforementioned experts, I am inclined to conclude that Botswana appears to value its participation in SACMEQ the most, as it has shown little improvement in literacy and numeracy performance; however, a substantial intervention is required nationwide. To gain a clear understanding of the performance indicated in Lesotho's SACMEQ reports, it is necessary to review the backgrounds of the learners, as this reflects how performance was measured in that area.

2.3.2.2. The Learner's Background

Even though factors (socioeconomic and cultural factors) concerned with the background of learners are not of relevance in the current study, they should be reviewed because they can influence literacy and numeracy performance on the SACMEQ. It is worth noting that learners' literacy and numeracy achievement scores are broken down into subgroups based on gender, school location, and socioeconomic status. Various SACMEQ reports have shown that girls outperformed boys. This is evident in this situation, when Basotho girls appear to do better than boys, despite the fact that boys outperformed girls during the SACMEQ IV (Maema & Mohale 2017). In accordance with Chabaditseli et al. (2018)'s investigation, Botswana witnessed a similar phenomenon, with girls outperforming boys. In the case of RSA, Chetty et al. (2017) confirm this by stating that both boys' and girls' success scores improved in SACMEQ III and IV, while females outperformed boys by 20 points in literacy and 4 points in numeracy. That idea differs between Malawi and Kenya, where boys outperformed girls in all SACMEQ studies. Although Basotho males did poorly in these skills, boys' attendance at rural schools is low due to traditional chores. It is consequently critical to pay attention to the school location while analysing performance. Lesotho's accomplishment data show that the mean score for urban Grade 6 learners in both

literacy and numeracy in SACMEQ III and SACMEQ IV was higher than the corresponding mean score for rural learners (Jopo et al., 2011a; Maema & Mohale, 2017). Kenya, Malawi, RSA, and Botswana had a similar experience in their SACMEQ IV results, which collectively demonstrated that urban schools outperformed rural schools (Chabeditseli et al., 2018; Karago et al., 2018). Impressively, Malawi has seen a 10% drop in closing this gap (Masenche et al., 2017). However, while these countries had similar findings in terms of school location, survey IV of the SACMEQ revealed that rural areas in Lesotho outperformed urban areas in numeracy (Maema & Mohale 2017). In light of this discussion, the researcher concluded that in urban schools, most learners have a high socioeconomic status, so they have access to a variety of instructional resources, and their performance appears to be impressive, whereas rural schools appear to have improved in numeracy. This calls into doubt the devotion of learners of high socioeconomic position.

Aside from school location, socioeconomic status (SOS) is an essential factor in affecting pupil performance in all countries. In the context of SACMEQ, reports showed learners with high SOS fared better than those with low SOS. Results showed that in Kenya, Malawi, the Republic of South Africa, and Botswana, learners from areas or families considered to be of high socioeconomic status performed better than those from low socioeconomic status (Chetty et al., 2017; Masenche et al., 2017). Lesotho is not an exception in this regard since learners from high socioeconomic class appear to have scored well in literacy and numeracy in all studies, whilst learners from low socioeconomic status strive for improvement on a regular basis (Maema & Mohale, 2017). Aside from the educational and learner's background factors illustrated in SACMEQ reports, Lesotho's national progress reports and other educational reports presented the performance on literacy and numeracy skills assessed, which reported a declining trend on these skills monitored, giving a researcher the task of delving deeper into how authentic Lesotho's SACMEQ reports on those monitored skills are.

2.4.4. Authenticity-Influential Factors in SACMEQ Reports

There is agreement in the research on the factors impacting the legitimacy of SACMEQ reports on literacy and numeracy in Lesotho's basic education quality. The data generation, data analysis techniques, sampling procedures, and reporting openness are some of the most important variables determining the credibility of reports by the SACMEQ.

2.3.4.1 Data Generation

To begin, Awich, (2017) and Maema and Mohale, (2017) stressed that during the preparation phase, the review of the instrument to ensure that it meets the curriculum implemented is clear and effective in strengthening and monitoring communication to schools, which is to be done four weeks before data gathering. The focal points are the printing and distribution of instruments that are free of errors and omissions, as well as training data collectors in the correctness and genuineness of the data generated. These pioneers also stated that the data collectors underwent three days of training on the study's aims, procedures, and ethical considerations. In Lesotho, according to Maema and Mothibeli (2005), the data was generated by experienced persons in similar surveys to those used for population censuses. As a result, their training workshop took place one week before the major data generation began. This idea may lead one to question whether the Lesotho SACMEQ reports issued data that allows participants, schools, and other stakeholders to obtain data with no discrepancies, as training is designed for expertise. As stated by Maema and Mothibeli (2005), the Secretary-General of the National Commission for UNESCO presided over and opened the SACMEQ II training session, which was concluded by the Registrar of the Examinations Council of Lesotho.

To ensure accuracy, Chabaditseli et al., (2018) cite the IV report by the SACMEQ on Botswana that the SCC held at least three working sessions in Nairobi (Kenya), Lusaka (Zambia), and Pretoria (RSA) to review existing items and ensure that, where there had been curriculum changes, the items were still relevant. To support this, accuracy in SACMEQ reports is critical since it guarantees that the data accurately reflects the educational situation, laying the groundwork for policy decisions (Verger et al, 2018). The SACMEQ reading and mathematics test items were standardised during SACMEQ II and tested for fairness across countries and genders (Saito,2011). In contrast, comprehensive validation procedures and data cleaning protocols are critical for discovering and correcting flaws in the data and ensuring accuracy (Bryman, 2015). When data generating procedures are exact, confidence in the consistency of data-driven findings grows. For that matter, the researcher believes that in order to determine the accuracy of SACMEQ reports, it is necessary to ensure that the assessments administered by SACMEQ accurately measure the intended educational outcomes, such as student achievement in various subjects and cognitive domains.

Furthermore, the most data is generated while in the field. This is the stage at which data quality control techniques such as double-checking data entry and conducting spot checks are implemented solely to ensure the authenticity of the data obtained. NRTs and specialists at SCC completed the instrument's final statistical and content validity and reliability evaluations before declaring it ready to print and administer (Awich, 2017; Karogo et al. 2018; Maema & Mohale, 2017). At this point, assessor training and standards contribute to data consistency, lowering the possibility of bias and assuring data coherence (Cohen et al., 2017). To ensure uniformity in SACMEQ investigations, three data generators were assigned to three sampled schools for two days of data generation exercises (Awich, 2017). This technique was implemented to ensure that data collectors in all sample schools in all countries received the identical verbal instructions for each phase of data production.

To begin, member countries were given instructions on how to collect data for the study, in accordance with the SACMEQ IV technical report. Lesotho followed a similar procedure, with data collectors resuming by reviewing the instructions in the box located throughout to ensure that they understood what to accomplish. Then, while the test on-going, no assistance is provided to pupils requesting hints. The data collectors were also given a 40-point checklist to ensure that they had performed all of the necessary activities before to, during, and after their school visits. They verify that they have finished everything (Awich, 2017; Karogo et al, 2018; Maema & Mohale, 2017). This helps to ensure that reports by the SACMEQ are cohesive, which is critical for guaranteeing the validity and integrity of the assessment findings. Coherence is defined in this context as an endeavour to make the entire text accessible by creating communicative written language, which ensures that a means of sense-making is required to establish the schema for assessing text coherence (Fitriata & Yonata, 2017). Coherence in SACMEQ reports is critical for preserving the validity and reliability of assessment results. Coherent reports improve the usability and impact of SACMEQ assessments on educational policy and practice in member countries by ensuring clarity, logical flow, findings integration, and contextual relevance.

At the end, before collecting the booklets, the data collector must ensure that all questions have been completed. Though these authors focused on medical record data, they emphasised that when evaluating data quality, completeness is assessed by ensuring the presence of all needed data items in a target dataset. In this study, completeness in reports by the SACMEQ were defined as

all significant components of the research study, including methodology, data analysis, results, and interpretations that are properly recorded. This complete method accurately represents the study process and conclusions.

Moreover, guaranteeing data security and participant privacy is crucial to sustaining data credibility (Creswell & Creswell, 2017). Based on Awich (2017), once the data is complete, the tools are stored safely, hand-edited, and sent to the NRC. Lesotho is not an exception; once completed, the materials are handed over to the provincial coordinator for safekeeping, hand-editing, and delivery to the NRC in Maseru (Maema and Mohale, 2017). Kenya, on the other hand, varies from other SACMEQ members in that the National Examination Council is in charge of tool safety (Karago et al., 2018). To preserve the confidentiality and integrity of the information generated, I believe that appropriate methods for storage, transfer, and data processing must be in place. Data collectors need to demonstrate appreciation to the heads of schools participating in improving education in the country (Masenche et al., 2017). To understand this, the discussion that follows describe procedures on how samples of school and pupils were selected.

2.4.2.2. Aspects to Take into Account in SACMEQ Reports Sample Selection and Sampling Procedures

Global assessment studies rely heavily on sampling selection processes to ensure the consistency and accuracy of the data provided. Sample designs in the realm of education are typically created within a network of challenging constraints. These designs must be followed because they create survey sampling theory while also taking into account the financial, administrative, and socio-political contexts in which they were applied. The sample designs utilised in the SACMEQ Projects were selected to meet the IEA standards. These criteria required sample estimates of grade 6 pupil population parameters to have sampling accuracy that was at least equivalent to a simple random sample of 400 pupils (; Awich, 2017; Onsomu et al., 2005). Though the selection in SACMEQ studies was performed on schools and learners (Onsomu et al., 2005), a similar sampling selection strategy and methodologies were employed in the SACMEQ reports for all studies in nation members respectively (Awich, 2017). However, they may differ among evaluation cycles and countries. This author went on to say that sampling is directed by a sampling frame, which is often based on national education databases, school listings, or census data. Before commencing sampling, each country member must submit its sample frame to SCC

for approval (Awich, 2017; Maema & Mohale, 2017). To understand how Lesotho sampling selection was conducted, the question of how well the sampling frames were established is critical since it may influence the success and improper selection of schools within Lesotho's parameters.

School Selection

Following the criteria used to choose schools in Lesotho, investigations have found that, as with all SACMEQ members in all studies done, a similar pattern of school sampling selection was followed. Kenya, Malawi, RSA, Botswana, and Lesotho, among others, used a similar methodology and procedure to sample the defined target population from sampling frames on a PPS basis (; Awich, 2017; Onsomu et al., 2005). In this example, prior to sampling, schools are chosen based on regions, following the guidelines of the sampling framework, which helps to ensure that different portions of the selected population are sufficiently represented. This framework is classified into strata, depending on key factors such as geographical location, school type (public or private), urban/rural classification, and other important variables (Moloi & Strauss, 2005). The information used to generate the sampling frames was derived from data obtained by the SACMEQ Ministries of Education for the most recent School Census. Though they are guided by identical processes and procedures, members are not required to adopt them exactly as they are. In Kenya, sampling frames were based on national school lists that included information such as school identification numbers, enrollment for the target population of Grade 6 learners, and school regional location (Onsomu et al., 2005). Looking at Lesotho's geographical layout, one might challenge the sampling framework used in region selection, given that the majority of the mountainous district's schools are disadvantaged.

Selection of Regions

Two primary variables were addressed while selecting regions: providing an increase in sampling precision based on regional differences in learners' educational attainment and providing a large geographical coverage for the sample (Creswell et al., 2015). RSA has nine regions based on provinces, Kenya has nine districts, Malawi has seven, Botswana has eleven, and Lesotho has ten districts. It has been highlighted that the selection of these regions allowed the MOE to have distinct education administration regions as domains for the study, as well as a measurable number of learners in a selected school (Moloi and Strauss, 2005). In the opinion of Onsomu et al. (2005), rural schools have smaller enrollments than urban schools. That is why urban schools have high

learner achievement and resource levels. As a result, the most recent high-quality EMIS data offered for countries such as Kenya and South Africa, among others, assisted them in quickly selecting schools based on the provided yearly accomplishment scores (Moloi & Strauss, 2005; Chetty et al., 2017). As stated by Jopo et al. (2011a), EMIS monitoring and evaluation of performance in Lesotho does not account for regional differences, therefore mountainous districts continue to be disadvantaged, resulting in a longer selection process. Given this emphasis, it is reasonable to assume that if Lesotho's geographical layout were even, mountainous districts would benefit from equivalent monitoring as lowlands districts.

For Onsomu et al. (2005) and Moloi & Strauss (2005), schools are the most common main sampling units used in educational survey research, and they are rarely equal in size. This size variance makes it impossible to manage the entire sample size when schools are chosen within SACMEQ ministries of education. As a result, a seemingly non-reliable method in the scientific community known as probability proportional to size (PPS) was employed with SAMDEM software to sample schools that did not match research sampling parameters used by the SACMEQ (Onsomu et al., 2005). The PPS sample technique was designed for relatively large schools, which had a larger chance of getting selected than smaller schools. PSS helps to outline how many pupils need to be selected in that school (Moloi & Strauss, 2005; Chetty et al., 2017). SAMDEM permitted the rapid creation of a variety of sampling choices that met statistical accuracy restrictions while also accounting for each country's logistical and financial realities (Onsomu et al., 2005). This brings us to another crucial factor that can affect the authenticity of Lesotho's SACMEQ reports, pupil sampling choices.

Pupil Sampling Selection Procedure

Based on SACMEQ reports, grade 6 pupils were selected using random sampling and a computer-generated random number, which was intended to assist the sample of pupils using the software (Ross and Saito) (Awich, 2017; Moloi & Strauss, 2005). These authors underlined that this selection was carried out by skilled data collectors to ensure that simple random sampling of learners occurred as intended in each selected school. Before resuming data generation at schools, administrators were given an explanation of how they should operate during the learners' selection process. Thereafter, they ought to viewed the grade 6 attendance registers and organise the current learners in consecutive order. They then find a suitable set of selection numbers (Onsomu et al.,

2005; Moloi and Strauss, 2005). To produce a sufficient sample for the SACMEQ II, these authors specify that the first selection number was utilised to discover the Grade 6 learner with the same sequential number on the Register(s). The second selection number was used to find the Grade 6 learners with the same sequential number on the Register(s). The process was repeated to choose 20 learners. A similar tendency was observed in subsequent investigations, which used basic random sampling and computer-generated random numbers to facilitate pupil sampling. However, in the third study, the sampling size was set at twenty-five learners, and for schools with enrollments ranging from 15 to 25, every learner was sampled (Awich, 2017). This sample process employed in SACMEQ studies is critical for assuring the consistency and accuracy of the assessment outcomes of the sampling size.

Accuracy and Unbiasness of Sampling Selection

The techniques used to identify schools and participants in Lesotho's SACMEQ research should be transparent and unbiased in order to obtain a fair and representative sample. In fact, the sampling size used in these reports is selected statistically to ensure that the results are consistent and generalisable to the target population. As a result, it was expected that at least 5% of the population would be excluded from mainstream education, as well as special needs schools with severe educational needs and schools with fewer than 15 learners (; Maema & Mothibeli, 2005; Masanche et al., 2017). For that matter, Maema and Mohale (2017) stated that, in order to achieve the SACMEQ IV standards for accuracy in large-scale assessment data of each school, 25 learners were picked from large schools and schools with fewer than 15 learners in grade 6 sampled. In summary, the majority of SACMEC members appear to have met the IEA standards for large-scale educational assessment. This is demonstrated by SACMEQ IV reports, in which Lesotho appeared to have surpassed the aim with a 5.02% exclusion from the study (Maema & Mohale, 2017).

In Kenya, however, sampling of 25 pupils became an issue because most schools enrolled grade 6 learners aged 15 to 25, resulting in a 4.10% exclusion during the SACMEQ IV (Karogo et al., 2018). Malawi's 4.13% was likewise was below the projected threshold (Masanche et al., 2017). Botswana’s 4.7% (Chabalitsedi et al., 2018) and RSA’s 4.7% (Chetty et al., 2018) met the IEA standards for large-scale educational assessment. It becomes apparent that in this sum of thought, the data in reports was presented statistically, which presents qualitative researchers with

a significant obstacle in connecting with other stakeholders of comparable calibre. In light of the preceding discussion, history appears to have procedurally reproduced itself, the only variation is the magnitude. During the second study, Kenya and Malawi withdrew 15 schools, Botswana and the Republic of South Africa excluded 20, and Lesotho excluded 10. All of these countries also omitted schools with special needs (Onsomu et al., 2005). These authors went on to say that sampling weights were utilised to remove any bias in sample estimates caused by variances from "epsem sampling" (equal probability of selection method). SACMEQ may use sampling weights to account for differences between the sample and the population, ensuring that the results are representative at the national or regional level.

In addition to establishing accuracy and unbiasedness in sampling size, SACMEQ reports provide information on any changes made to account for response and other factors (Moloi & Strauss, 2005 Onsomu et al., 2005;). The project monitors several variables, including response rate, design effect, and effective sample size. According to the SACMEQ guideline, the overall response rate for both schools and learners must be at least 90% (Awich, 2017). In this example, Lesotho appears to be above expectations in SACMEQ IV, with responses ranging from 98.4% for schools to 98.9% for learners. Kenya has 97.4% of schools and 92.5% of learners (Karogo et al., 2018), while Botswana has 100% of schools and 97% of learners (Chabaditseli et al., 2018). Malawi, for that matter, failed to fulfil the stated criterion for learners because the response rate for learners in Malawi was 68%, but the response rate for schools was 100% (Masenche et al., 2017). Aside from the response rate, the effective sampling size is at least 400 learners. Botswana and Lesotho had an effective sample size of more than 400 for SACMEQ IV (Chabaditseli, 2018; Maema & Mohale, 2017), however, Kenya and Malawi fell short of that standard in all three tests (Karogo et al., 2018; Masenche et al., 2017). Given this rationale, it is possible that inaccuracies in the computations occurred as a result of the sampled learners' reluctance to participate in all three assessments. As a result, it is critical to understand how data was recorded and cleaned in order to ensure accuracy and trustworthiness in terms of stakeholder knowledge acquisition.

2.4.2.4. Data Cleaning and Entry

It is common knowledge that once data has been generated, it must be analysed using certain analytic processes or softwares. However, it has been collaboratively noted in reports by the SACMEQ that being responsible for the large-scale assessment data, cleaning, merging, and weighing should be in gear before the analysis process begins (Chetty et al., 2017; Onsomu et al.,

2005). These authors went on to say that when cleaning and processing data, the trained crew manually checked for errors, missing values, inconsistencies, and outliers to ensure trustworthy and inaccuratcy of the data. The Kenya National Examination Council (Karogo et al., 2018) carried out this process in Kenya. In Botswana, the Ministry of Basic Education was responsible (Chabeditseli et al., 2018), and in Lesotho, this was done by the Ministry of Education and Training which submitted the well cleaned up data files to the Monitoring Educational Quality at the IIEP in Paris at the beginning of 2001 (Maema & Mothibeli 2005). MOET is responsible for monitoring and evaluating projects in Lesotho, as mandated by SACMEQ. However, the accuracy of the data may be questioned as ECOL is trusted to conduct assessments at any level within the country.

Subsequently, the data cleaned manually is computerised for further cleaning using the Data Management Expert (DMA) software (Chetty et al., 2017; Hungi et al., 2010; Moloi & Strauss, 2005). Countries such as Kenya and Botswana appear to have continued to clean data using DMA across all investigations because it authenticates, validates, and verifies data to ensure correctness and quality (Chabeditseli et al., 2018; Karogo et al., 2018). However, according to Maema and Mohale (2017), the data generated in Lesotho for the SACMEQ IV was cleaned using WINDEM software. This software was designed to identify numbers and cross-check them across files to ensure that data collected at schools was linked to the recorded data, that the sampled schools listed on the original sampling frame had valid data generation tools, and that variables used as linkage devices in later file merges were available and accurate. Being informed by multiple reports that followed similar trends of data entering, checking, and cleaning, as well as the importance of enduring such processes, I understand that the methods conducted were precisely followed and valuable for assuring the worthiness and accuracy of the reports. As a result, merging and weighing require special consideration.

2.4.2.5. Merging and Sampling Weights

Merging was structured based on learners' accomplishment, locality, and gender of instructors (Onsomu et al., 2005; Moloi & Strauss, 2005). This merging procedure necessitated the creation of a single school system in which pupils were the units of analysis and the other data from other respondents (pupils, teachers, and school heads) were linked to learner data (Maema & Mothibeli, 2005). When the operations involving cleaning and merging are done, sampling weights are employed to account for missing data and verification probability of selections resulting from the use of stratified multi-stage sample design. However, the sampling weights

should take into account the country-specific aspects of the sampling technique (Chabeditseli et al., 2018). The processes of merging and sample weighting are not the areas of concern for this study, however, I viewed them because of their contribution to improving accuracy and consistency in reports and smoothen the analysis methods.

2.4.2.6. Data Analysis

Data Visualisation and Descriptive Statistical Analysis Procedure

Data visualisation and descriptive statistical analysis are intertwined. Lesotho's SACMEQ reports frequently show data findings in the form of graphs, charts, tables, and maps in order to make them more appealing and useful. In contrast, descriptive statistics such as mean, median, mode, standard deviation, and percentiles have been used to summarise the characteristics of data obtained during assessments (Maema & Mohale 2017). Creswell et al.'s (2015) review of collaborative SACMEQ reports stressed that the scores are provided in two ways: mean scaled scores computed and contrasted across countries, genders, school location (rural/urban), and socioeconomic status (low/high) derived from a scaled SES indicator. He went on to say that the second option involves the eight skill levels. This might be regarded as computations in mean scaled scores over several implementations recorded in SACMEQ studies being identified by academic success per the learner's background characteristics.

As previously stated, since the resumption of SACMEQ investigations, data visualisation and descriptive analysis have always operated in cycle. Botswana, Malawi, RSA, and Lesotho followed similar trends throughout the surveys. This is demonstrated by analogous data studies for the SACMEQ Projects, which were deliberately designed to produce results that could be used to "fill in the blank entries" in the Dummy Tables. The IIEP's specialist data analysis program, IIEPJACK, was used to "fill" the Dummy Tables with acceptable statistics as well as the right measurements of sampling error (Chetty et al., 2017; Masenche et al., 2017). Hungi et al. (2010) tabulated the scores in Kenya based on mean scores and percentages of pupils at each of eight competency levels for the educational regions in each SACMEQ country, as well as achievement in the eight competency levels, which were broken down by pupil gender, school location, and socioeconomic status. Tables throughout Lesotho's SACMEQ II report provide interpretations of the mean and percentages represented in terms of pupils, as these were the key elements of analysis (Maema & Mothibeli, 2005). However, progress was noted in the third and fourth investigations,

as charts, maps, and graphs were used to visualise data. Creswell et al, (2015) data leads one to conclude that, data visualisation techniques are intended to portray complicated patterns and trends to a diverse audience, whereas descriptive statistics analysis summarises the key elements of the data obtained in SACMEQ evaluations.

Multilevel Modelling Approach and Comparative Analysis

Creswell et al. (2015) compares SACMEQ reports on achievement levels, trends over time, disparities between demographic groups, or variations in educational outcomes by researching within-school and between-school variations in achievement, as well as examining how social and gender differences in achievement compare after controlling for other factors that influence achievement. Assessing success variances within and between schools, as well as comparing socioeconomic and gender inequalities in accomplishment after adjusting for other achievement-influencing factors. Creswell et al. (2015) agrees with Lee et al. (2005) in stating that the multilevel modelling approach was suited for such a study since schools varied in terms of social makeup, setting, and resources (human and physical). Lee et al. (2005) examined Malawi SACMEQ records and explained how this approach was utilised with geographical information systems to discover factors influencing pupils' performance in primary school. This implies that pupils, schools, and districts are the key components in multi-level modelling and comparison analysis since the score representation in these reports is examined by comparing student performance inside and between nations that participate in the examinations. In Lesotho, the disparities in pupils' distribution among schools within districts, as well as the structure of the sample design within each district, were contextual variables that influenced performance (Maema & Mothibeli, 2005). In this study, it is important to determine whether reports by the SACMEQ on Lesotho are transparent on the issue of meeting international standards by addressing the pupils' academic level and the learner's background factors that influence learners' achievement or educational outcomes; thus, the analysis accounts for variation at different levels (e.g., learners, school, district).

2.3.2.7. Transparency in Reporting

Transparency in reporting is an important aspect of SACMEQ studies because it ensures the credibility and consistency of the findings in reporting methodologies, data collection processes, analysis techniques, and interpretation of results that are intended to be communicated

to stakeholders such as policymakers, educators, and the general public. SACMEQ reports collaboratively outlined that the data generation was based on a preparation phase in which instruments were reviewed, communicated to schools through DEM and EDM under mandatory DEP, data collection tools were printed and distributed from SCC to ministries to their respective schools, and data collectors were trained by NCR, DNCR, and a member of SACMEQ Scientific Research Committee (Milner et al., 2011). In Lesotho, the office of the Director of Education Planning (DEP) informs the sampled schools through the office of the District Education Officer (DEO). DEP additionally draws attention to coordination for the gathering of data and district authorities' teams (Jopo et al., 2011a). This is taken further through the implementation procedure of collecting data from the sampled schools by the manual's recommendations, which is then verified and stored safely. However, piloting was conducted to ensure that the data collectors and team leaders had a clear grasp (Chabaditseli et al., 2018). This transparency helped researcher to understand how data was gathered and analysed, which increased the credibility of the study results.

To continue, it has been noted that in reports of the SACMEQ, data analysis appears to be synonymous with result interpretation; thus, analytic methods, data visualisation and descriptive analysis procedures, multilevel modelling techniques, and comparative analysis have been used to interpret the data generated (Creswell at al., 2015). This is demonstrated by Maema and Mothibeli (2005) and ACARA (2015), who state that the performance is reported as a mean score scaled through Rasch Model 4 of Item Response Theory and as percentages, however, for the sake of analysis, these scores and percentages are disaggregated by region, gender, school location (rural/urban), and socioeconomic status (low/high). ACARA (2015) went on to say that, for the sake of transparency, explanations of how results were derived in any statistical techniques were applied, with a focus on discussing strengths, weaknesses, and areas for improvement within the education systems of participating countries in data. This allows stakeholders to examine the veracity of the data-based findings. This is pertinent to the study since reports by the SACMEQ on Lesotho first evaluated and interpreted data results using tables, maps, charts, graphs, and narratives to summarise key findings clearly and understandably.

One of the primary goals of SACMEQ is to guarantee that these reports are made public and accessible, whether through the consortium's website or other means. This is demonstrated by

various sorts of reports and data files from SACMEQ projects that are available to the public on the organisation's website (http://www.sacmeq.org/) (ACARA, 2015). To ensure transparency, each country affiliated to the SACMEQ convenes a meeting for the dissemination of results that includes various groups of stakeholders. This allows the results to reach a broader range of stakeholders while also providing education planners and researchers with an opportunity to conduct additional analysis to aid in policy formulation for specific concerns in the education sector. For the Ministry of Education in Lesotho, a separate publication providing descriptive data for all variables in the research provided to interested readers (Maema and Mothibeli, 2005). Though it could be argued that Lesotho's commitment to open access promotes transparency by allowing stakeholders to scrutinise the findings and methodology and make informed decisions, there is a big question mark over whether Lesotho has disseminated the results to all stakeholders in the education system panel.

2.4 Appraisal of the Literature Review and Gap

2.4.1 Appraisal of the Literature Review

By a way of providing the context for the study, this chapter has presented an overview of the authenticity of performance depicted on SACMEQ reports about literacy and numeracy in Lesotho's basic education. The literature studied found that SACMEQ and national assessment progress reports (NAEP) use identical wording to describe Lesotho's unimpressive literacy and numeracy performance. In standalone research, these entities have demonstrated a wide range of results for literacy and numeracy proficiency. NAEP reports indicated a trending decline in performance, while SACMEQ shows a slight acceleration in performance. In accordance with SACMEQ programme reports, the majority of learners performed best at basic and elementary skill levels, with an emphasis on high-order skill levels. These findings also revealed that educational characteristics in literacy and numeracy, as well as the learner's background (gender, school location, and SOS), influenced the learners' performance. Continually, the research indicated that the elements contributing to the performance stated in SACMEQ members' reports are used by policymakers to make informed decisions about curriculum development, teacher training, and allocation of educational resources.

Furthermore, a number of studies and publications said that monitoring and evaluation processes were carried out to fulfil societal needs and meet the targeted components of service

quality for stakeholders in order to promote quality education. Similarly, research stated that in order to meet these demands, educational stakeholders should be able to compare the gaps in their curricula to those of other nations. Additionally, it was discovered that increasing access, improving quality, and promoting cultural and linguistic curricula meet the demands of Basotho and the country holistically.

Subsequently, it was shown that, in order to achieve high quality in education, outcomes on core abilities such as literacy and numeracy should be carefully assessed to guarantee that societal needs are met. Once more, learners with disabilities were excluded because the design and completion of the evaluation required for quality education, independent of background problems, was the primary goal. In addition, the job of monitoring is to find the reason and solution to the situation at hand by answering the question of what is going on. Monitoring, in turn, correlates activities with outcomes, allowing remedial actions to be taken as needed. Literature has also revealed that delegates who represent Lesotho in meetings of the SACMEQ, from the Ministry of Education are assigned to high-ranking officials within the Ministry of Education, with one or two members who would not participate in implementation, so hindering skill transfer. Aside from that, the literature focused on the aspects that influence the authenticity of the reports, with a particular emphasis on the correctness, consistency, and transparency of the generated data. It also revealed that the methodology used, sampling sizes, data collection instruments, data analysis and interpretation techniques, internal and external validity, and alignment with other available educational data sources in Lesotho, all contribute to the accuracy and genuineness of the findings presented in these reports.

The literature pointed to the selection was based on schools, regions, and learners. Schools were chosen based on geographical proximity, educational type, and other characteristics. Regions were driven by regional accomplishment in educational learners' achievement and geographical coverage for the sample. Rural schools had smaller enrollments than metropolitan schools. Again, Lesotho does not monitor regional disparity, therefore mountainous districts are disadvantaged. Data collectors and software used random sampling to choose pupils. The sampling size was chosen based on statistical considerations to assure the target population's consistency and generalisability. Again, response rate, design effect, and effective sampling size are among the factors assessed in the research.

The literature revealed that data cleaning and entry, merging, and sample weights were utilised to correct missing data and verify selection probabilities. Data was analysed both visually (graphs, charts, tables, and maps) and descriptively (mean, mode, median, and standard deviation). Learners from urban and high SOS outperformed those from rural and low SOS. Comparative and multilevel modelling methodologies based on social composition, context, and resources influence learners' performance inside and across nations participating in a test. Finally, studies and publications recognised transparency in reporting as a factor that contributed to the consistency and credibility of findings in reporting procedures, data gathering processes, analysis techniques, and the interpretation of outcomes intended for stakeholders. However, these factors fueled the desire for faster and more accurate searches. Several studies have been conducted regarding ways of improving performance and factors impacting poor performance in literacy and numeracy in Lesotho. It has been observed that few studies have related performance to SACMEQ studies conducted in Lesotho. The researcher, however, sought to provide a deeper insight into performance by assessing whether the performance portrayed in Lesotho's SACMEQ reports addressed Basotho's needs.

2.4.2. Research Gaps

Depicting from the above-mentioned literature reviewed, the researcher outlined several gaps regarding theoretical and knowledge in the study. The reports were quantitatively presented while the researcher assessed them qualitatively. From the reviewed literature, no studies were undertaken that revealed the assessment of authenticity in SACMEQ reports on literacy and numeracy in Lesotho's basic education. Again, it was discovered that most scholars had the deepened consideration of whether Basotho's needs were met catered for an individual and national needs holistically. However, it seemed that the assessment had some limitations when relating them to authenticity of Lesotho's SACMEQ reports on literacy and numeracy performance. The study, therefore, attempted to fill these observed gaps in the literature and advance the boundaries of knowledge in the area by unpacking the data quality assurance aspects utilised in methodology of those reports.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter outlines research method employed in the study, including the research paradigm, research design, data generation procedures, and data analysis method. It begins with a description of the research paradigm and research design, then describes tactics used in sampling, data generation procedures, research instruments, and data analysis techniques. Finally, ethical considerations is discussed, followed by a description of the procedures done to maintain research ethics.

3.2 Research Paradigm

Paradigms define the philosophical orientation of researchers. They are centred on abstract beliefs and concepts that represent how a researcher views, understands, and acts in the world around them. The chosen research paradigm has a substantial impact on the researcher's worldview and is an important stage in any study research design (Miskon et al., 2015). Kivunja and Kuyini (2017) defined a research paradigm in educational research as a way to describe the researcher's perspective. They added that the paradigm consists of four components: epistemology, ontology, methodology, and axiology. These components encapsulate the fundamental assumptions, beliefs, values, and conventions that each paradigm maintains. Amongst the three major paradigms, the interpretivism paradigm guides the study, and is gaining popularity. It is sometimes known as the constructivism paradigm.

The interpretivism paradigm adopted for this study, as well as the nature of the research questions, were deemed the most appropriate way for thoroughly understanding a shared services phenomenon (Miskon et al., 2015). Similarly, the interpretivism paradigm helped the researcher understand the participants' experiences while assessing the accuracy and authenticity of the SACMEQ reports, which served as the study's baseline. For that matter, numerous key informants from the Ministry of Education and Training and other educational private sectors shared their experiences, opinions, and beliefs about the value of SACMEQ reports, allowing me to gain a better understanding. The extensive examination of reality was based on Basotho's need for cultural diversity, social background and contextual elements, being addressed, and the methodology employed to compile the report data.

Based on the inclusive nature of the interpretivism paradigm, the researcher accommodated many perspectives from individuals from various groups (Thanh & Thanh, 2015), and each participant's response contributed to the discovery of the truth. It is, however, originally anchored in methodologies used to understand knowledge about humans as they perceive the world and act on that understanding (Pham, 2018). To ensure trustworthiness and authenticity, credibility, dependability, conformability, and transferability were utilised as criteria to validate the learners' performance in this study (Kivunja and Kuvinja, 2017). It has been observed that interpretivism advocated for qualitative approaches since they typically provide extensive reports necessary for contextualising data in documents and scenarios depending on the provided conditions linked with the persons involved (Alharahsheh & Pius, 2020). This has resulted in a strong link between the interpretivism paradigm and the qualitative approach to the inquiry. Both strategies allowed me to focus on an individual participant's experiences, understanding, and views in order to reveal the truth rather than a collection of numbers (Thanh & Thanh, 2015). The characteristics of interpretivism as employed in the study are divided into two categories: the nature of reality (ontology), which is the nature of knowledge, the link between the inquiry and the epistemology, and methodology.

3.2.1 Ontology

It is concerned with how people conceptualise the items that make up their social environment. The assumption of a relativist ontology implies that one believes that the situation under study has multiple realities, which can be explored and meaning made of or reconstructed through human interactions between the researcher and the research subjects, as well as among the research participants (Kivunja & Kuyunja, 2017). The study aligned with the relativist ontology, which holds that reality is seen through experiences and meanings formed from different sources about the existence of things. Subsequently, the study discovered how the SACMEQ reports depicted Basotho's performance in literacy and numeracy assessments in grade 6, as well as the standard of education quality in Lesotho in comparison to other SACMEQ members.

3.2.2 Epistemology

To effectively address epistemology in this study, a comprehensive account of the techniques for knowing something and how it is judged as true, was provided. The researcher began by conducting semi-structured interviews with participants, allowing her to engage in an interrogative dialogue with them before recording the study data. The data generated from

interviewees' personal experiences on how reports of the SACMEQ on Lesotho affect the quality of the education system in the country, as well as the elements that contribute to the authenticity of these reports, allowed the researcher to understand why the performance by learners in Lesotho was displayed in that manner. The knowledge obtained, presented, and formed was dictated by the researcher's contact with the methods used to confirm the legitimacy and worthiness of SACMEQ reports. The researcher analysed data from Lesotho's SACMEQ reports and interviewees' responses using inductive content analysis together with Atlas.ti software (Miskon et al., 2015).

3.3. Qualitative Approach

Numerous explanations supported my adoption of a qualitative research approach. Aligning with the qualitative technique, I generated and analysed non-numerical data. Its primary goal is to investigate in-depth people's experiences, viewpoints, and social situations (Creswell & Poth, 2018). The emphasis is mostly on the meanings, themes, and patterns that emerge from the data (Denzin & Lincoln, 2017). It uses interviews, focus groups, texts, and observations to generate extensive and comprehensive information (Creswell & Poth, 2018; Denzin & Lincoln, 2017). To meet the study's objectives, data was generated using a qualitative approach. During data generation, document review and in-depth interviews with key informants were employed to thoroughly examine accuracy and credibility. In this way, the qualitative approach directed the study as it explored Lesotho's education stakeholders' experiences and interpreted the data analysed in those reports in accordance with its accuracy and authenticity in the natural environment (Boru, 2018). This was done to determine the worthiness of SACMEQ reports on Lesotho's basic education quality, specifically how Lesotho SACMEQ reports address Basotho's needs and what factors have influenced the authenticity of those reports. As a result, an in-depth interview and review of documents were conducted.

3.4. Research Design

The research design is a framework or plan for a study that guides data generation and analysis. It describes strategies for doing systematic research to assure the validity and dependability of outcomes. The study design outlines the techniques for data gathering, analysis, and interpretation, ensuring that these processes are consistent with the research questions (Creswell & Creswell, 2020). The research design is intended to give an adequate structure for a study. A study design specifies the procedures for gathering and analysing the necessary data, as well as how all of this will be used to answer the research questions (Boru, 2018). This function

led this author to see research design as a comprehensive strategy for integrating conceptual research concerns with relevant and feasible empirical research. The study was, nevertheless, influenced by historical design.

3.4.1 Historical Design

Many authors see historical design as a scientific approach to discovering the truth and knowledge of past events in order to provide an accurate and comprehensive understanding of the history and context of a specific topic (Cohen et al., 2017; Majeed et al., 2023; Wiersma & Jurs, 2009). Using the historic design, I provided a comprehensive and contextual understanding of factors influencing the authenticity of SACMEQ reports, assisting educators in identifying and evaluating fads and bandwagon of these reports (Cohen et al., 2017). The study focused on evaluating the Lesotho SACMEQ II, III, and IV reports, content, and context to determine their genuineness and accuracy using source critique, content analysis and discrepancy detection. Another reason I chose a qualitative historical design was that it allowed me to ensure accuracy and consistency, methodological transparency, and data completeness in the reports. The significance of a qualitative historical design in this study was to analyse the factors that contribute to the authenticity of SACMEQ reports and their impact on Basotho education quality. This implied that by identifying key informants in the Ministry of Education and Training and other educational stakeholders' perceptions of the authenticity of Lesotho SACMEQ reports, I was able to better understand the methodology used in those reports as well as the data quality assurance procedures. Furthermore, the use of digital tools and software for text analysis improved the use of digital humanities approaches by critically assessing the credibility and relevance of sources (Tosh, 2015).

This design helps in the determination of authenticity and accuracy when analysing SACMEQ II, III, and IV reports. The evaluation was based on an extensive examination of objective data obtained by evaluating, authenticating, and synthesising evidence from previous events in order to develop facts and defensible conclusions (eGyankosh, 2017). To improve the authenticity and accuracy of information sources in historical research, the coalition employed verification, sourcing, and contextualisation strategies. This was done to promote textual criticisms, both internal and external, in order to lay a solid foundation for assessing the authenticity and accuracy of this study. However, the study depended heavily on external

criticisms because it is concerned with examining historical documents from Lesotho's SACMEQ reports in order to determine the authenticity of them.

3.5 Samples and Sampling Technique

To determine the accuracy of the study, sampling was used. Samples are drawn from the population. A sampling is defined as a subset of the population that fully represents the population (Shukle, 2020). Bhardwaj (2019) contends that it is the process of selecting a large sample of individuals from a large group for a specific study aim. Therefore, the selection in this study was based on reports II, III, and IV issued by the SACMEQ on Lesotho. The study selection team also meant to interview four key informants at Lesotho MoET, however they ended up interviewing other educational stakeholders. For that matter, the selection was based on the information providers' judgment of rich data relevant to the researcher's study (Palinkas et al., 2015), hence this sampling method is referred to as a judgment or purposeful sample.

Since the study attempted to analyse the accuracy of the reports of the SACMEQ on Lesotho's performance in literacy and numeracy, purposive sampling was deemed most suitable for the study. This sampling method helps the researcher consciously select participants based on their pertinent experiences with education programmes such as SACMEQ (Palinkas et al., 2015). Hence, participants were selected from the Ministry of Education and Training and other educational stakeholders. The key objective was to acquire an in-depth understanding of the individuals providing information while meeting research objectives, so the researcher adapted sampling to additional educational stakeholders (Patton, 2015). Furthermore, an impressive and sufficient demonstration of the authenticity of the reports by the SACMEQ were obtained. This type of sampling is important to the overall study as it allowed the researcher to gain extensive knowledge of the authenticity of the SACMEQ reports and why they indicated that performance had improved on literacy and numeracy at the basic level, despite those similar bodies assessing similar skills finding the opposite results.

3.6 Research Trustworthiness and Rigors

A qualitative study report should include the same detailed procedural description as any other study (Hammarberg et al., 2016). The research findings were completely trustworthy, and each research study examined the processes utilised in generating the results. A reviewer could follow the sequence of events and decisions and understand their logic since the technique and procedures were adequately described, explained, and justified. The following

measures were used to ensure trustworthiness in this study: credibility, dependability, transferability, and conformity.

3.6.1 Credibility

In qualitative research, credibility is defined as the plausibility and accuracy of facts and interpretations (Nguyen et al., 2021). A credible study is, therefore, labelled by faithful descriptions to which readers with similar experiences can relate. In this case, the researcher presents the findings that reflect exactly the opinions and experiences of the participants or the context in a believable way. Besides, credibility deals with confidence in how well data and process analysis address the intended focus. It is, therefore, determined by the results presented with adequate descriptions of context, and recognition of people who shared their experience and care for or treat them (Hammarberg et al., 2016). Shenton (2004) concurred that the viewpoints and experiences of the participants together with their attitudes and, needs and behaviour during the interview, give a rich picture of data for those under scrutiny. Hence, the participants of a research study should recognize the reported research findings as their own experience.

Credibility, like internal validity, refers to how well study findings reflect reality. In contrast, credibility is the criterion used to assess the truth value or internal validity of qualitative research (Hammarberg et al., 2016). Judgment was based on the criteria and terminology devised to assess the validity of qualitative paradigm-based results. In this study, the researcher's priority in assuring credibility was to choose the study's focus, context, participants, and approach to data generation. In support, credibility requires choosing the best method for data generation, as well as the volume of data. As a result, the individuals were selected using purposive sampling. The researcher's observations were persistent, and varied perceptions were detected among the participants.

Finally, the researcher aligned with Hammarberg et al.'s (2016) perspective indicating that credibility as an instrument in qualitative research can be increased in alignment with four aspects: *reflexivity* denoted that the researcher performs self-reflection by reflecting on his influence on the study based on preconceptions, prejudices, and the relationship with the study, which may affect the inquiry, *triangulation for the suitable*, answering the research topic in many methods, such as through interviews and documentary analysis, which allowed for a wider range of applicability of the findings, e*ngagement*; the researcher was given enough time to generate data by himself, so

that it became saturated, and *a detailed description of the interpretation process*, including verbatim quotations from the data, was provided to explain and justify their interpretations. Inconsistent data snippets and interpretations call the study's trustworthiness into question.

3.6.2 Transferability

Hammarberg et al. (2016) define transferability as the applicability of research findings. It relates to the criteria for determining external validity. Shenton (2004) emphasised that external validity is concerned with how well the findings of one study may be transferred to other similar scenarios in a larger population. At this time, the researcher considered the data important and applicable to his own experiences and other investigations. I precisely outlined the method I used in this investigation. This can allow other researchers to make judgments and apply the study's findings to other research investigations. Furthermore, the findings of this qualitative study were mostly relevant to Ministry of Education personnel who participated in the study. Their perceptions of the authenticity of the SACMEQ reports were enhanced. The sample size of a qualitative study is often small since it is determined by the nature of the data, the availability of participants, and where those data lead the investigator (Hammarberg et al., 2016). Finally, the qualitative researcher improved transferability by describing the research techniques, contexts, and assumptions that underpin the study. The readers can evaluate the transferability of this study based on the full report supplied by the researcher. Transferability is determined by the reader of the research study thus the researcher must ensure that the findings connect with them.

3.6.3 Dependability

The dependability of the outcomes is occasionally used to describe the consistency of the results. It is the criterion for determining the level of reliability (Hammarberg et al., 2016). Being open about the algorithm's method is crucial to achieving dependability (Nguyen et al., 2021). To address the issue of dependability, I employed the same data generation tools and interviewed all Ministry of Education personnel who took part in SACMEQ studies, as well as other educational stakeholders. However, I meticulously examined the data to identify similarities and differences in the respondents' responses. Also, I looked for continuities and discrepancies between what they said during the interviews and what the results of the reports outlined under comparable conditions, to see if they could be duplicated in a similar setting. Based on the support of Hammarberg et al. (2016), the researcher frequently evaluated the major disparities in the experience of an event, not only to explain it but also to discourage the fulfilment of narrow researcher expectations. To

improve dependability, the processes used in this study were detailed (description of data generation and analysis methodologies, as well as how judgments were reached throughout the study), allowing other researchers to replicate the work. Then, a detailed audited trial was presented. To provide readers with a comprehensive picture of the methodologies and their success, the study ensured that the research design and implementation stated what was intended and executed on a strategic level, the operational specifics of data gathered, the details of what was done in the field, and the successful appraisal of the project evaluated the effectiveness of the inquiry process (Shenton, 2004).

3.6.4 Confirmability

Confirmability refers to the extent to which a researcher believes and pursues objectives is dependent on accuracy and precision (Stahl & King, 2020). Kasirye (2021) contends that confirmability is concerned with the impartiality of the research. The results are interpreted based on the data generated through audit trails. In this sense, the conclusions of the study were formed by the respondents rather than by researcher bias, motivation, or interest. Shenton (2004) backs this up by underlining that the extent to which the researcher recognizes their bias is an important criterion for confirmability. To sustain it, triangulation was adopted since it mitigated the consequences of the researcher's unfairness. Finally, to ensure consistency, the researcher retained audiotapes and transcripts of interviews as an audit trail.

3.7 Data Generation Procedure

This section describes strategies used in this investigation to generate the data. Data for this study was primarily generated through a qualitative approach. This strategy enabled the researcher to thoroughly, accurately, and systematically investigate the authenticity of Lesotho SACMEQ reports through the document review procedure. Document reviews and interviews were the primary data generation procedures employed in this study to meet the research objectives.

3.7.1 Document Review

The initial data generation strategy used in this study was document review. This method revealed literacy and numeracy proficiency in Lesotho, as well as the accuracy of the Lesotho SACMEQ reporting on those skills at the Basic level. Three reports from Lesotho were reviewed: SACMEQ II, III, and IV. These reports were utilised to provide additional insight into what the interviews indicated. This assisted the researcher in ensuring the credibility, accuracy, and value

of the data to the study by critically evaluating academic publications, research papers, or theses, which competent peers in the subject frequently completed. As a result, the review of SACMEQ reports provided the researcher with the opportunity to scrutinise data externally by reviewing literacy and numeracy performance, data generation and analysis methods used, sampling procedures, and data entry transparency, among other factors. Using this technique, I generated data from the selected aspects to complete the assessment of the authenticity of SACMEQ reports and augment the data gathered during the interview.

3.7.2 In-depth interviews

Interviews allow both the interviewer and the interviewee to get insight into how people interpret different situations depending on their understanding. As a result, this study conducted interviews to learn more about how authentic the SACMEQ's reports on the basic education of Lesotho. Again, interviews help to understand how Basotho interpret the impact of SACMEQ reports on their education system. Semi-structured interviews were the best fit for the study out of the three different formats. Thus, the researcher specifically conducted in-depth semi-structured interviews to study the opinions and emotions providing a wide range of data generation experiences while keeping a structure to guarantee all essential areas are addressed (Longhurst, 2009; Ricks & Warren, 2018). In-depth interviews allowed me to understand whether reports issued by the SACMEQ on Lesotho's performance delved deeply into difficult subjects and combining a set of planned questions with the ability to diverge as needed. As a result, the researcher was able to analyse authenticity concerning the selected features that were aligned with the research topics, which were approached from various perspectives and lenses. Furthermore, the researchers mostly chose this technique since it allowed informants to express themselves on their terms, resulting in comparable and accurate data (Kabir, 2016). This technique provided a clear set of instructions, so the researcher appeared prepared and competent throughout the interview.

Thereafter, the researcher designed an interview guide (see Appendix 1) to obtain information from key informants about Lesotho's performance and criteria suggesting the legitimacy of Lesotho's SACMEQ findings. This method of interview shares qualities with both organised and unstructured interviews. It consequently accommodated both closed and open questions. The tool consisted of nine questions. To ensure uniformity with all participants, the interviewer sent the pre-planned key questions for guidance to the interviewees two weeks before

the interview data. The interviews were performed in person with three individuals and online with one. As the interview progressed, the interviewees were allowed to elaborate or provide more relevant information if they desired, even though they were reassured that the information disclosed during the interview sessions was confidential and intended to be destroyed once the study was completed. This study interviewed each participant using a semi-structured interview style for a maximum of 30 minutes.

To ensure the success of the data generation process, an audio recorder was employed to capture every sentence stated by informants. This allowed the researcher to use a reference during the transcription process. Aside from that, it was impossible to take notes to capture the respondent's responses during the process, therefore the building of rapport between them was hampered (Kabir, 2016). Furthermore, using these recordings, the researcher double-checked the phrasing of interest statements used in the analysis. As a result, the data creation approach used aided in the generation of data on how Lesotho performs in SACMEQ studies, and the elements impacting authenticity in those reports aided in their smooth analysis.

3.8 Data Analysis

After completing the data generation process, my role as a researcher was to make sense of the raw data acquired through analysis and interpretation for the readers to understand it. Qualitative data analysis approaches were utilised. The next subsection discusses inductive content analysis, highlighting iterative inductive coding with verbatim quotations, as the data analysis methodologies used in this study.

3.8.1 Inductive Content Analysis

The researcher serves as the primary instrument for qualitative data analysis. However, the project seeks to analyse the generated data using inductive content analysis (ICA) and Atlas. ti software. Inductive content analysis is a qualitative research method for analysing textual material that begins with specific observations and progresses to broader generalisations, allowing patterns and themes to emerge naturally from the data without prior categorisation (Elo & Kyngäs, 2008). Similarly, throughout the coding process, some content categories developed naturally from the data without being predefined. The ICA was based on the transcribed interview dataset and the Lesotho SACMEQ II, III, and IV reports. However, the content categories were relatively closely related to the researcher's inquiries to participants (Vears & Gillam, 2022). In line with the

generalizability theory, the researcher went on to analyse the provided data of the elements contributing to the authenticity of SACMEQ reports in Lesotho using ICA.

These strategies were consistently used to assist the researcher in thoroughly evaluating data while ensuring the ICA using Atlas. ti guiding steps. According to Ngalande and Mkwinda (2014), the Atlas.it program benefited the researcher by enhancing the researcher's previous research skills and allowing the investigation of several research resources at the same time. The usage of Atlas.ti software in this manner helps to reduce the time and number of errors, resulting in uniformity and transparency throughout the analysis process. Again, the data ought to be broken down and reorganised depending on content categories, classes, and areas of interest, such as original documents, codes, and quotations, ensuring consistency in data processing. Aside from allowing the researcher to write, save, and comment, this program help with categorizing, super-coding, and ordinary coding of direct trends in the results (Ngalande & Mkwinda, 2014). The interview audio recordings were then transcribed to textual form and entered into the Atlast programme for qualitative data analysis using the SACMEQ reports.

3.8.2 Iterative Coding

This study's data processing methods included inductive coding, specifically, iterative coding. According to Elo and Kyngäs (2008), this strategy includes open coding, converting categories into related codes, and abstraction to build general themes from the categories. The researcher used Atlas. ti to construct codes and groups and then classified the generated data for conversations so that meaning could be drawn from the responses in the categories. Inductive coding comprises open coding methods in which codes and categories emerge from the qualitative data. Inductive coding facilitated the continual discovery of new aspects from the data as more documents/transcripts were analysed. Iterative re-coding was used as a critical step to ensure that freshly found codes were not "missed" in previous coding rounds (Vears & Gillam, 2022). Each document/transcript was coded multiple times in increasingly precise iterations. The ICA coding procedure was followed by comparing, grouping, and subdividing groups of codes to create content categories and subcategories. In my pursuit of complete analysis, I grasped a large number of interviewee responses for each code (attached codebook in Appendix 2), ensuring a thorough understanding and depiction of data.

3.8.3 Verbatim Quotations

Direct quotations from the interviewees (Key Informants) were used in the data processing and interpretation to improve the results. It entailed taking the participants' precise words from the qualitative data gathered through interviews (Pattons, 2015). This technique helped me to explore how the authenticity of SACMEQ reports influences how Basotho responds to their needs, as well as the factors that contribute to that authenticity. Similarly, this approach revealed the depth of the data representing the participants' experiences via direct speech. For the sake of authenticity, the original wording of the participants' responses should be preserved, as this will help to illustrate themes and findings directly from the data, as well as improve the accuracy of the data presentation, transparency, and credibility of the research outcomes through the provision of clear evidence (Corden & Sainsbury, 2006). This, in my opinion, improved the overall validity and credibility of the research findings. In that situation, this study followed the qualitative way to presenting the results, which explains how the qualitative results showed the expected outcomes. Similarly, the qualitative findings are provided in Chapter 4. The next paragraphs describe how the data generated by each device was analysed.

3.8.4 Analysing the SACMEQ report methods

The data from the SACMEQ reports were transcribed and coded in accordance with the study question. To clarify, the data was organised using the guide's prepared questions, which correspond to the research topics that underpin this study. The questions were then coded and saved as PDFs. These files were inserted into the Atlas.ti software, to ensue analysis of the data. Additional classification and categorisation were performed to assess the meaning of the established categories. After completing the analytical process, the researcher disposed of the significant results based on the treated data. The suggested conclusions and interpretations were based on the study objectives' advanced purpose.

3.8.5 Analysis of the key informants' interviews procedures

At this point, I listened to the recordings to summarise the participants' responses, which helped simplify the next stage. The interview data was analysed using the methods described above. The audio tapes were manually transcribed to promote insights and a deeper understanding of the database, which aligned with the guide's posed questions. Each interviewee's response was transcribed and stored as a pdf. I am confident that as compared to automatic transcription, manual transcription maintains higher levels of accuracy. That explained why I elected to transcribe the

data manually. During the analysis of each interview transcript, inductive coding and classifying of the data, as well as verbatim quotations, were performed using the Atlas. ti program. This study employed qualitative language to describe and analyse the concerns of authenticity in Lesotho's SACMEQ reports. The coding and recoding led the researcher in identifying various themes that emerged, assisting in demonstrating the relationships or contrasts between the four respondents' responses, under which the qualitative data was presented and debated. Following that, data from interviews were analysed to generate ideas for answers to the research sub-question, which sought to determine interviewees' opinions and experiences on the impacts of SACMEQ reports on Lesotho's basic education, as well as factors influencing the authenticity of SACMEQ reports.

The following table summarises the alignment between the methodologies and the questions used to ensure that the data obtained could answer the research questions. The table shows the methods used to answer each research question.

Table 3.1: *Methods and research questions*

Research Questions	**Data Used to Answer The Questions**	**The analysis tool of the Generated Data**
Does monitoring and evaluation of literacy and numeracy in basic education quality implemented by SACMEQ address Basotho's needs	Analyses of interview responses and SACMEQ reports	Atlas. ti software
How is Lesotho performing in the assessment of literacy and numeracy in the SACMEQ reports?	Analyses of SACMEQ report transcripts and interview responses	Atlas. ti software

What are the factors influencing the authenticity of SACMEQ reports regarding Lesotho's basic education quality?	Analyses of interview responses and SACMEQ reports transcripts	Atlas.ti software
How trustworthy are the results of SACMEQ reports?	Analysis of interview responses and SACMEQ reports transcripts	Atlas.ti software

Note. Alignment between methods and research questions

3.9 Ethical Considerations

While conducting the qualitative study, the researcher considered the importance of participants using ethical principles. Firstly, a brief overview of the study was provided. The researcher ensured that the participants understood what the researcher was asking of them by describing the goals of the study, the procedures to be utilised, the potential outcomes of the research, and the associated demands, discomfort, inconveniences, and hazards. Participants who volunteered for the study were subsequently given a letter of consent. The information was utilised based on the consent provided

The researcher maintained that the participants were adequately protected and had the freedom to choose what and how much information to share to balance the risk of harm. Furthermore, participants were informed that they were free to withdraw at any point during the study and were not pressured to continue or coerced to stop withdrawing, as they have the right to do so at any moment. Furthermore, the researcher assured participants that their participation was voluntary, and that any sensitive or private information they provided would be kept confidential, or that they would stay anonymous until otherwise agreed upon.

3.10. Chapter Summary

This chapter dealt with the research methodology and research design. It described the research paradigm, approaches and design. It further explained the document and in-depth interview used to generate data, the trustworthiness, how the instrument was developed, inductive content analysis method with atlas. ti that was used, sampling techniques as well as explaining the ethical

considerations guiding the researcher. The following chapter focus on the analysis and interpretation of the research findings.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.1 Introduction

The SACMEQ (Southern and Eastern Africa Consortium for Monitoring Educational Quality) Programme provides a comprehensive analysis of education quality in Lesotho, with a focus on meeting societal needs, adhering to SACMEQ expectations, and actual performance metrics. This qualitative data analysis is generated from an in-depth interview conducted for key actors of the programme and document; critically examines the extent to which Lesotho's education system aligns with SACMEQ standards and identifies significant gaps and challenges. Some of the key findings include the neglect of disabled children's needs, the country's persistent underperformance in SACMEQ assessments, and the various expectations Lesotho had upon joining SACMEQ. The report also discussed the authenticity of SACMEQ findings and the systemic issues preventing Lesotho from meeting educational standards. Practical steps for improvement are suggested; emphasising the need for enhanced teacher training, better curriculum development, and more effective use of assessment data. This analysis highlights the critical areas for intervention to improve the quality of education in Lesotho.

Participating in the SACMEQ helps Lesotho gain important understanding of its educational goals and objectives. Lesotho has struggled to reach the required educational standards despite committed efforts and strategic plans. Mathematical and reading in English scores for Lesotho revealed below the SACMEQ average of 500, suggesting notable challenges in reaching competency in these fundamental disciplines. According to the SACMEQ III research, more than half of Standard Six pupils showed poor levels of the fundamental competencies; many of them finished primary education with only basic literacy and numeracy skills.

There were four participants in total comprised of the Ministry of Education and Training officials and educational stakeholders aged between 48 to 60. For the issue of anonymity from ethical consideration, they were represented by interviewee1- 4.

4.2 Status of Country’s Expectations Regarding Quality Education Standards by SACMEQ

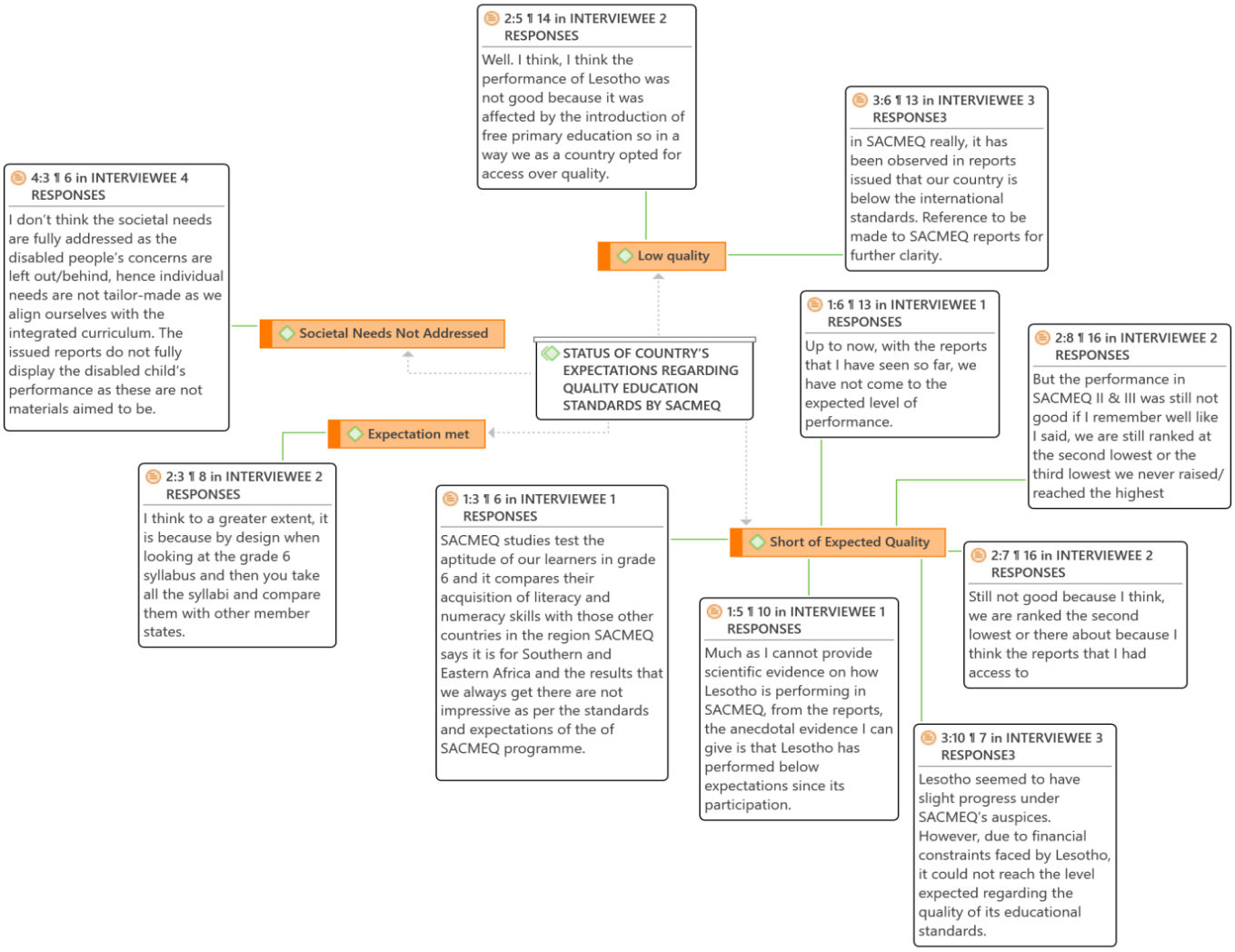

Figure 4.1: Status of Country's Expectations Regarding Quality Education Standards by SACMEQ

Figure 4.1 presents findings on the quality of education in Lesotho, focusing on societal needs, SACMEQ expectations, and actual performance. Each response box captures a participant's viewpoint.

- **Quality Education by SACMEQ**: One participant explained the curriculum alignment, "*I think to a greater extent, it is because by design when looking at the grade 6 syllabus and then you take all the syllabi and compare them with other member states*" (Interviewee 2). However, the general consensus highlights poor performance. "*SACMEQ studies test the aptitude of our*

learners in grade 6...the results that we always get there are not impressive as per the standards and expectations of the SACMEQ programme" (Interviewee 1).

- **Short of Expected Quality**: A participant expressed dissatisfaction with Lesotho's SACMEQ performance. He noted,

  But the performance in SACMEQ II & III was still not good if I remember well...we are still ranked at the second lowest or the third lowest we never raised/reached the highest…Still not good because I think, we are ranked the second lowest or there about because I think the reports that I had access to" (Interviewee 2).

- **Societal Needs Not Addressed**: Corollary to the above, one participant asserted that societal needs, especially those of disabled children are overlooked. "*I don't think the societal needs are fully addressed as the disabled people's concerns are left out/behind, hence individual needs are not tailor-made as we align ourselves with the integrated curriculum*" (Interviewee 4).

In summary, the responses generated revealed concerns about Lesotho's education system, highlighting the neglect of disabled children's needs and persistent underperformance in SACMEQ assessments, indicating a gap between expected and actual educational quality.

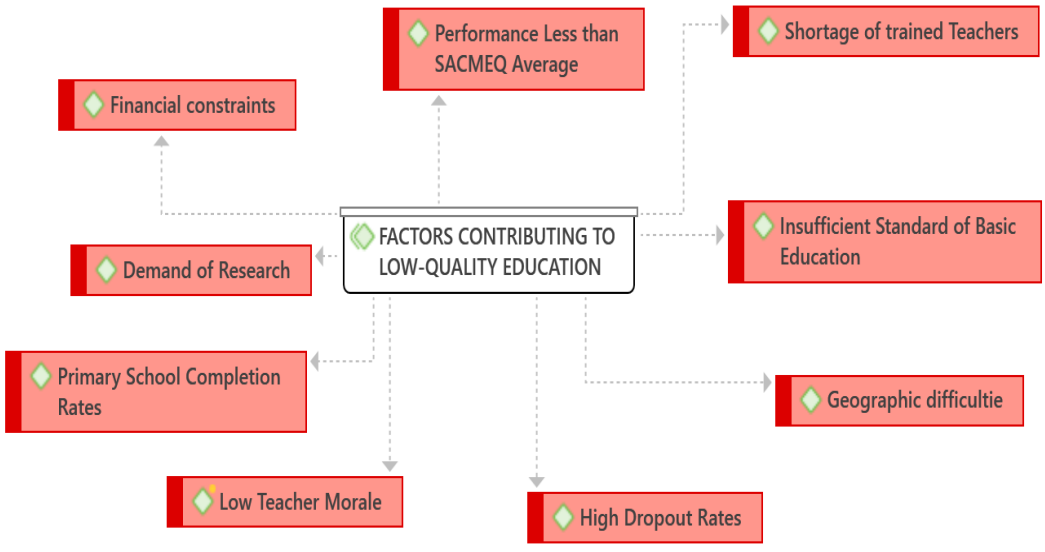

Figure 4.2: Factors contributing to low-quality education standards by SACMEQ

Status of Country's Expectations Regarding the Quality Education Standards by SACMEQ Lesotho's involvement with the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) offers some important details about the country's educational standards and aspirations. Despite concerted efforts and strategies, Lesotho has struggled to attain the necessary educational standards. Its performance in SACMEQ II, III and SACMEQ IV was lower than the SACMEQ average score of 500 in Mathematics and Reading in English. This suggests ongoing difficulties in obtaining competency in critical subjects. According to the SACMEQ III research, many Standard Six students completed their primary education with very basic literacy and numeracy skills. More than half of the students exhibited low levels of these core competencies.

Factors contributing to low-quality education

Shortage of trained Teachers: A substantial shortage of trained teaching personnel, particularly in distant locations, has hampered efforts to improve educational quality. Insufficient learning and teaching resources have limited the capacity to give a high-quality educational experience.

Low Teacher Morale: Low morale in the teaching profession, along with inadequate inspection, supervision, and support, has had a negative impact on educational outcomes. Low morale in the teaching field influences the performance of students and efficacy of teachers. Further contributing to the poor quality of education are inadequate inspection and support for teachers. Restricted financial resources make it difficult to fully handle these issues. Elevated Early Grade Repetition Rates.

Financial constraints: Many of these issues are related to low financial resources, which affects many facets of the educational system.

Insufficient Standard of Basic Education: Maintaining good standards of basic education presents great difficulty for Lesotho's educational system.

Performance Less than SACMEQ Average: In both Mathematics and Reading in English at SACMEQ II and SACMEQ III, Lesotho routinely performed below the SACMEQ average (500). With more than half of the kids showing low levels of numeracy and reading, many standard six students finish primary education with only basic skills.

Primary School Completion Rates: The rate of primary school completion is low, and educational waste is considerable since many children fail to gain fundamental competences.

Geographic difficulties: At times, the topography of Lesotho make it impossible for schools to be built near villages, as a result, they are situated far from villages, hence pupils walk long distances. Extreme weather like rain and heavy snowfall often causes pupils to drop out momentarily and retake classes.

Influence on Students: Particularly common among adolescents between the ages of 9 and 15, high repetition rates help to explain educational inefficiencies and higher dropout rates.

High Dropout Rates: High dropout rates in the educational system undermine its efficiency and effectiveness by nature.

Demand of Research: Supported by Irish Aid and the World Bank, the Ministry of Education plans to look at the fundamental reasons of high dropout and repeat rates in order to create focused treatments.

Summarily, the Ministry of Education in Lesotho struggles to satisfy the criteria for high quality education set out by the SACMEQ. Dealing with these problems calls for a multifarious strategy includes bettering teacher qualifications, increasing the availability of learning resources, improving the morale of teachers, and thus offering better inspection and support systems. Furthermore, devising suitable plans to improve the general quality and efficiency of the educational system depends on focused investigation on the reasons of high repetition and dropout rates.

4.3 Expectations Regarding Literacy and Numeracy When Joining SACMEQ

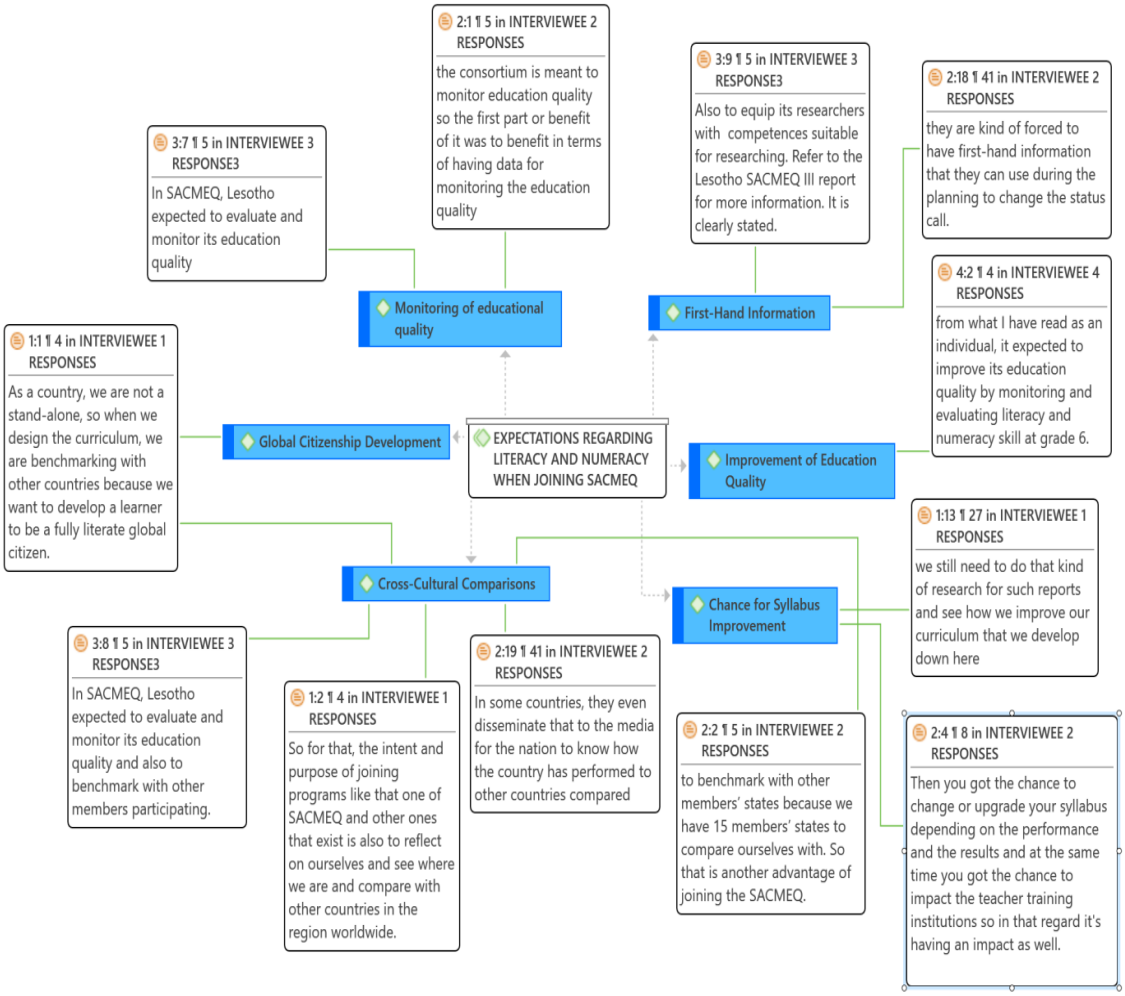

Figure 4.3: Lesotho's Expectations Regarding Literacy and Numeracy When Joining SACMEQ

Findings displayed in Figure 4.3 show the expectations regarding literacy and numeracy when Lesotho joined SACMEQ, with responses from various interviewees. The discussion is categorised into sub-categories: Monitoring of educational quality, Global Citizenship Development, Cross-Cultural Comparisons, First-Hand Information, Improvement of Education Quality, and Chance for Syllabus Improvement.

Monitoring of Educational Quality

Several interviewees emphasised the role of SACMEQ in monitoring educational quality. Interviewee 2 explained that "*the consortium is meant to monitor education quality so the first part*

or benefit of it was to benefit in terms of having data for monitoring the education quality" (Interviewee 2). Interviewee 3 added that Lesotho expected to "*evaluate and monitor its education quality*" (Interviewee 3).

Global Citizenship Development

Interviewees highlighted the importance of developing global citizens. Interviewee 1 stated, "*as a country, we are not a stand-alone entity, so when we design the curriculum, we are benchmarking with other countries because we want to develop a learner to be a fully literate global citizen*" (Interviewee 1).

Cross-Cultural Comparisons

Cross-cultural comparisons were deemed crucial for educational progress. Interviewee 1 mentioned that SACMEQ's purpose includes "*reflecting on ourselves and seeing where we are and comparing with other countries in the region worldwide*" (Interviewee 1). Interviewee 2 also noted the advantage of benchmarking with 15 member states (Interviewee 2).

First-Hand Information

The provision of first-hand information was another significant benefit. Interviewee 2 pointed out this benefit about SACMEQ. According to him, through SACMEQ, they were able "*to have first-hand information that they can use during the planning to change the status quo* " (Interviewee 2). Interviewee 4 reinforced this by stating that SACMEQ provided information "*to improve its education quality by monitoring and evaluating literacy and numeracy skill at Grade 6*" (Interviewee 4).

Improvement of Education Quality

Improving the quality of education was a core expectation. Interviewee 1 remarked that through SACMEQ, continuous research is necessary "*to see how we improve our curriculum that we develop down here*" (Interviewee 1). Interviewee 3 added that "*while Lesotho made slight progress, financial constraints hindered reaching the expected level"* (Interviewee 3).

Chance for Syllabus Improvement

Additionally, SACMEQ offers opportunities for syllabus improvement. Interviewee 2 highlighted that it allowed changes based on performance, impacting teacher training institutions positively (Interviewee 2).

Taken together, the participants highlighted the multifaceted benefits and expectations of Lesotho's involvement with SACMEQ, focusing on monitoring educational quality, developing global citizens, cross-cultural comparisons, obtaining first-hand information, improving education quality, and enhancing the syllabus. Each sub-category is supported by direct quotes from interviewees, illustrating the comprehensive impact of SACMEQ on Lesotho's educational landscape.

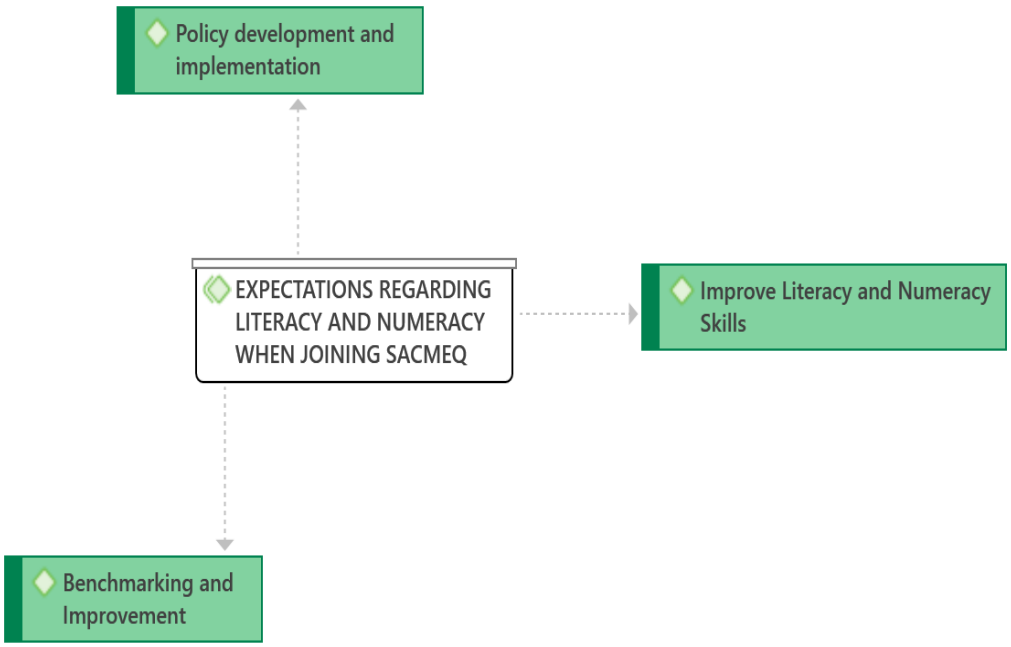

Figure 4.4: Lesotho's expectations Regarding Literacy and Numeracy When Joining SACMEQ outlined from SACMEQ reports.

The Ministry of Education and Training (MoET) has launched several strategic efforts to address these concerns. The Education Sector Strategic Plan (ESSP 2005-2015) and its successor, the Medium-Term Sector Plan (2009-2012), aimed to increase access to education while enhancing quality. The African Development Bank financed projects such as the Education Quality

Enhancement Project (Education III), which sought to expand access to quality education through capacity building, curriculum development, and improved teaching, and learning environments. Lesotho had various aspirations about literacy and numeracy when they joined SACMEQ.

Improve Literacy and Numeracy Skills: The ESSP's 2005-2015 mission statement emphasised functional literacy for all Basotho. This goal complements SACMEQ's emphasis on monitoring and improving literacy and numeracy skills. The purpose was to ensure that students not only had access to education, but also learned the skills required to be functionally literate and numerate by the end of elementary school.

Benchmarking and Improvement: Participation in SACMEQ tests provides a means to compare the country's educational standards to the regional averages. This helps in the identification of gaps and opportunities for improvement. The assumption was that SACMEQ data would be used to support policy decisions and strategic planning targeted at improving literacy and numeracy standards.

Policy development and implementation: Lesotho joined SACMEQ with the hope of gaining data-driven insights that could help it plan and implement successful educational policy. The idea was that such policies would result in greater teacher training, better resource allocation, and stronger support systems for reading and numeracy outcomes. Addressing educational inequities, Lesotho planned to reduce educational disparities, particularly in distant areas, by tailoring interventions based on the SACMEQ findings. This included prioritising support for schools in the greatest need and ensuring equal resource allocation.

Taken together, Lesotho's involvement with SACMEQ has revealed considerable obstacles in meeting targeted educational quality requirements, particularly in literacy and numeracy. The MoET's strategic objectives and activities, while well-intentioned and comprehensive, have encountered roadblocks such as insufficient money, resource shortages, and teacher difficulties. Nonetheless, membership in SACMEQ provides a significant framework for monitoring progress, identifying gaps, and developing focused interventions to improve educational quality in Lesotho.

4.4 Authenticity of SACMEQ Reports

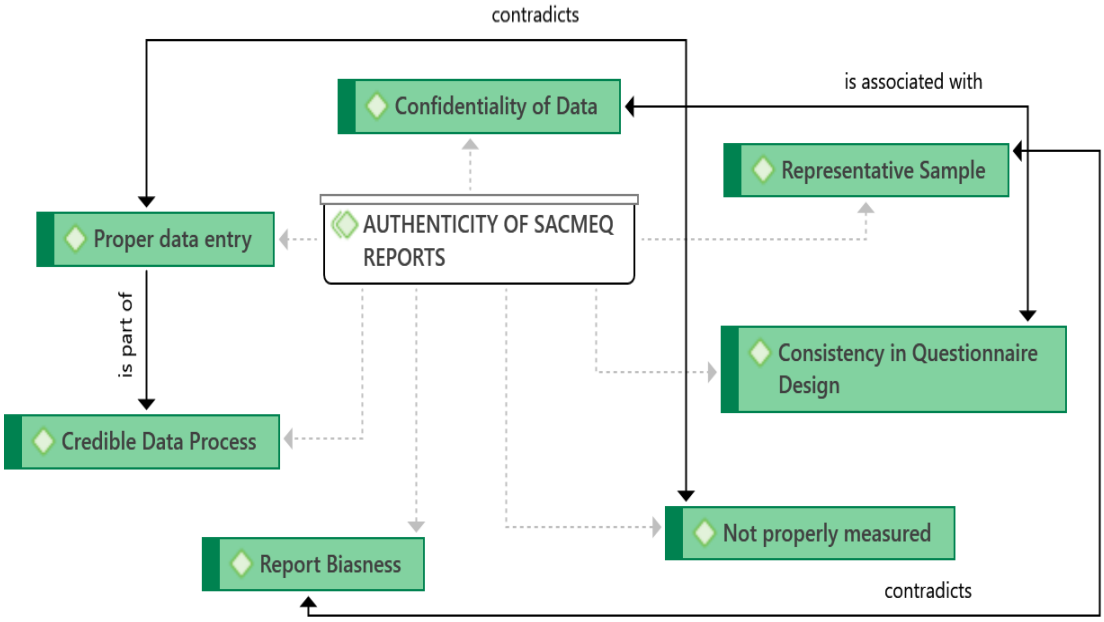

Figure 4.5: Factors impacting the authenticity of SACMEQ reports

The key elements include the confidentiality of data, proper data entry, and maintaining a credible data process. Ensuring a representative sample and consistency in questionnaire design are critical, while report bias and improper measurement are significant challenges. Addressing these issues is essential to produce reliable and trustworthy educational assessments. Each of the sub-category is further explained as presented in Figures 4.6 to 4.7.

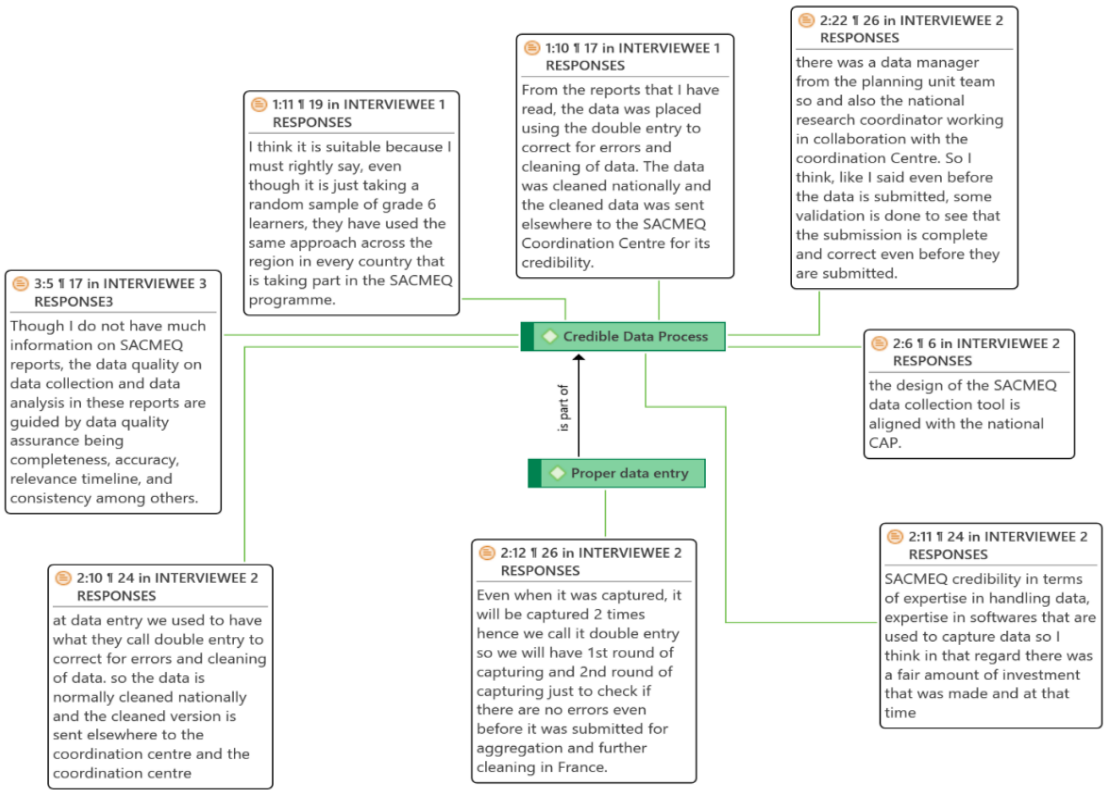

Figure 4.6: The above figure outlines various factors impacting the authenticity of reports by the SACMEQ.

Credible Data Process

A credible data process encompasses proper data entry, confidentiality of data, and consistency in questionnaire design. This holistic approach ensures that the data collected is accurate, reliable, and trustworthy. It is fundamental that the SACMEQ produce reports that are authentic that can be confidently used for educational assessments and policymaking. This was fully expressed by the participants as presented in the quotations below:

> *From the reports that I have read, the data was placed using the double entry to correct for errors and cleaning of data. The data was cleaned nationally, and the cleaned data was sent elsewhere to the SACMEQ Coordination Centre for its credibility…. I think it is suitable because I must rightly say, even though it is just taking a random sample of Grade 6 learners, they have used the same approach across the region in every country that is taking part in the SACMEQ programme* (Interviewee 1)

> *The design of the SACMEQ data collection tool is aligned with the national CAP…At data entry, we used to have what they call double entry to correct for errors and cleaning of data. So, the data is normally cleaned nationally and the cleaned version is sent elsewhere to ,the coordination centre and the coordination centre…SACMEQ credibility in terms of expertise in handling data, expertise in software that are used to capture data, so, I think in that regard, there was a fair amount of investment that was made, and at that time, there was a data manager from the planning unit team so and also the national research coordinator working in collaboration with the coordination Centre. So I think, like I said even before the data is submitted, some validation is done to see that the submission is complete and correct even before they are submitted* (Interviewee 2).

> *Though I do not have much information on SACMEQ reports, the data quality on data collection and data analysis in these reports are guided by data quality assurance being completeness, accuracy, relevance timeline, and consistency, among others* (Interviewee 3)

Proper Data Entry

Proper data entry is an integral part of a credible data process. Ensuring accuracy and precision during data entry prevents errors that could lead to biased or incorrect findings. Proper data entry supports the authenticity of SACMEQ reports by contributing to the reliability of the overall data collection and analysis process. This was highlighted by a participant who mentioned, "*Even when it was captured, it will be captured two times, hence we call it double entry so we will have the 1st round of capturing and 2nd round of capturing just to check if there are no errors even before it was submitted for aggregation and further cleaning in France.*" (Interviewee 3). Proper data entry forms the basis of a credible data process, essential for producing valid reports.

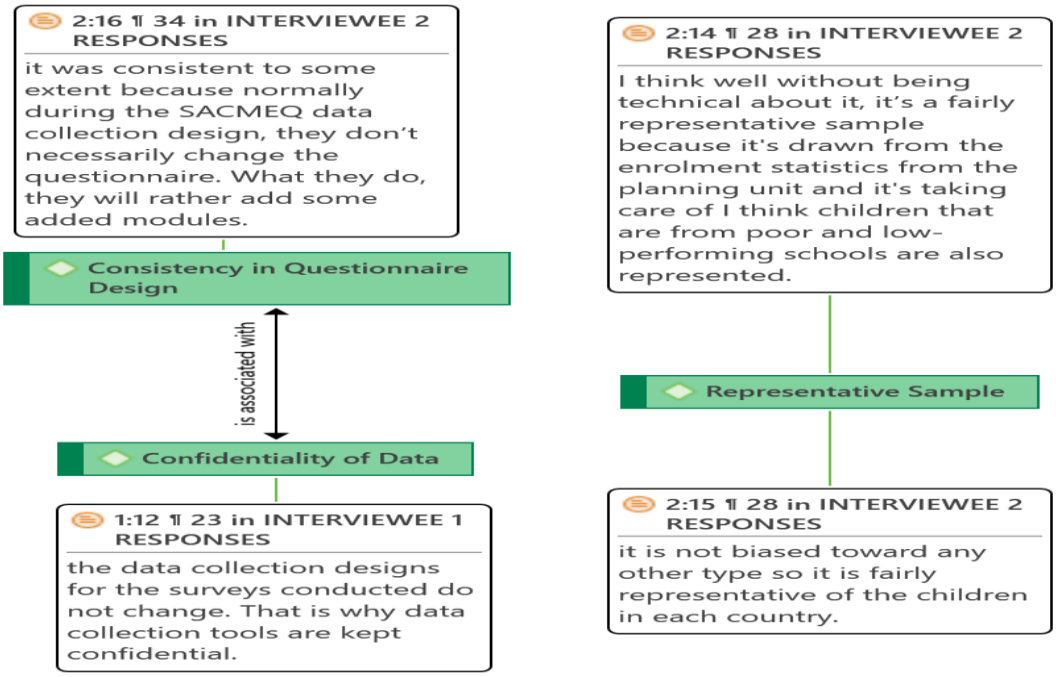

Figure 4.7: This figure sketches various factors impacting the authenticity of reports by the SACMEQ

Consistency in Questionnaire Design

Consistency in the design of questionnaires is essential for producing authentic SACMEQ reports. Standardised questionnaires ensure that data is collected uniformly across different contexts and times, allowing for accurate comparisons and reliable conclusions. Inconsistencies in design can lead to data that is not properly measured, affecting the report's validity. A participant emphasized the importance of this, saying, "*it was consistent to some extent because normally during the SACMEQ data collection design, they don't necessarily change the questionnaire. What they do, they will rather add some modules*" (Interviewee 2).

Confidentiality of Data

Confidentiality of data is crucial in ensuring the authenticity of SACMEQ reports. Protecting the privacy of participants' information is essential to maintain trust in the data collection process and its results. This aspect is emphasized as a key component of credible data processing and contradicts any tendencies toward report bias. One participant emphasized the need for confidentiality to prevent misuse of sensitive information, stating, "*Normally, it only stays with the*

government officials, the few academics who participated, and researchers who are interested but by nature, in some countries, they make a national agenda whenever the results are published" (Interviewee 2).

Representative Sample

Using a representative sample is associated with the authenticity of SACMEQ reports. It ensures that the findings are generalisable to the larger population. A representative sample provides a comprehensive view of the educational landscape, thereby enhancing the credibility and relevance of the reports.

Representative Sample

Using a representative sample is crucial for generalizing the findings to the larger population. A participant remarked, "*I think, well, without being technical about it, it's a fairly representative sample because it's drawn from the enrolment statistics from the Planning Unit and it's taking care of I think children that are from poor and low-performing schools to ensure that they are also represented…It is not biased toward any other type, so it is fairly representative of the children in each country*" (Interviewee 2). A representative sample provides a comprehensive view, enhancing the report's credibility.

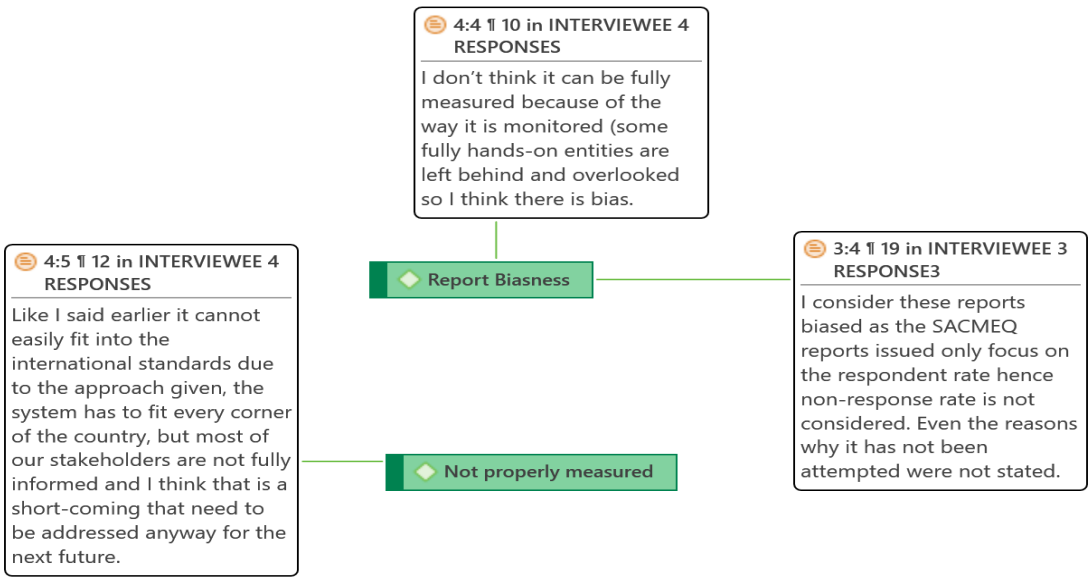

Figure 4.8: This figure shows a number of factors impacting the authenticity of reports by the SACMEQ

Not Properly Measured

When data is not measured properly, it contradicts the authenticity of reports, including that by the SACMEQ. Accurate and precise measurement is necessary to produce data that is valid and reliable. Any lapses in measurement can lead to incorrect conclusions, undermining the credibility of the reports and their utility in informing educational improvements. One participant expressed concern about measurement issues, stating, "*Like I said earlier, it cannot easily fit into the international standards due to the approach given, the system has to fit every corner of the country, but most of our stakeholders are not fully informed, and I think that is a shortcoming that needs to be addressed in future*" (Interviewee 4). Accurate measurement is essential for producing data that is valid and reliable.

Report Bias

Report bias can undermine the authenticity of SACMEQ reports. Biases can stem from improper data entry, non-representative samples, or inconsistencies in questionnaire design. Identifying and mitigating these biases is crucial to ensure that the findings are reflective of the actual educational outcomes and not skewed by systematic errors. A participant shared, "*I consider these reports biased as the SACMEQ reports issued only focus on the respondent rate, hence non-response rate is not considered. Even the reasons why it has not been attempted were not stated"* (Interviewee 3). While another added, "*I don't think it can be fully measured because of the way it is monitored; some fully hands-on entities are left behind and overlooked so I think there is bias"* (Interviewee 4). Addressing bias is essential to ensure the reports are fair and accurate.

Figure 4.8 outlines various factors affecting the authenticity of the SACMEQ reports, including the confidentiality of data, proper data entry, and a credible data process. Ensuring a representative sample and consistency in questionnaire design are critical, while addressing report bias and proper measurement are significant challenges. These elements collectively ensure the reliability and trustworthiness of educational assessments.

4.5 Challenges Militating Against Meeting the Expected Standard

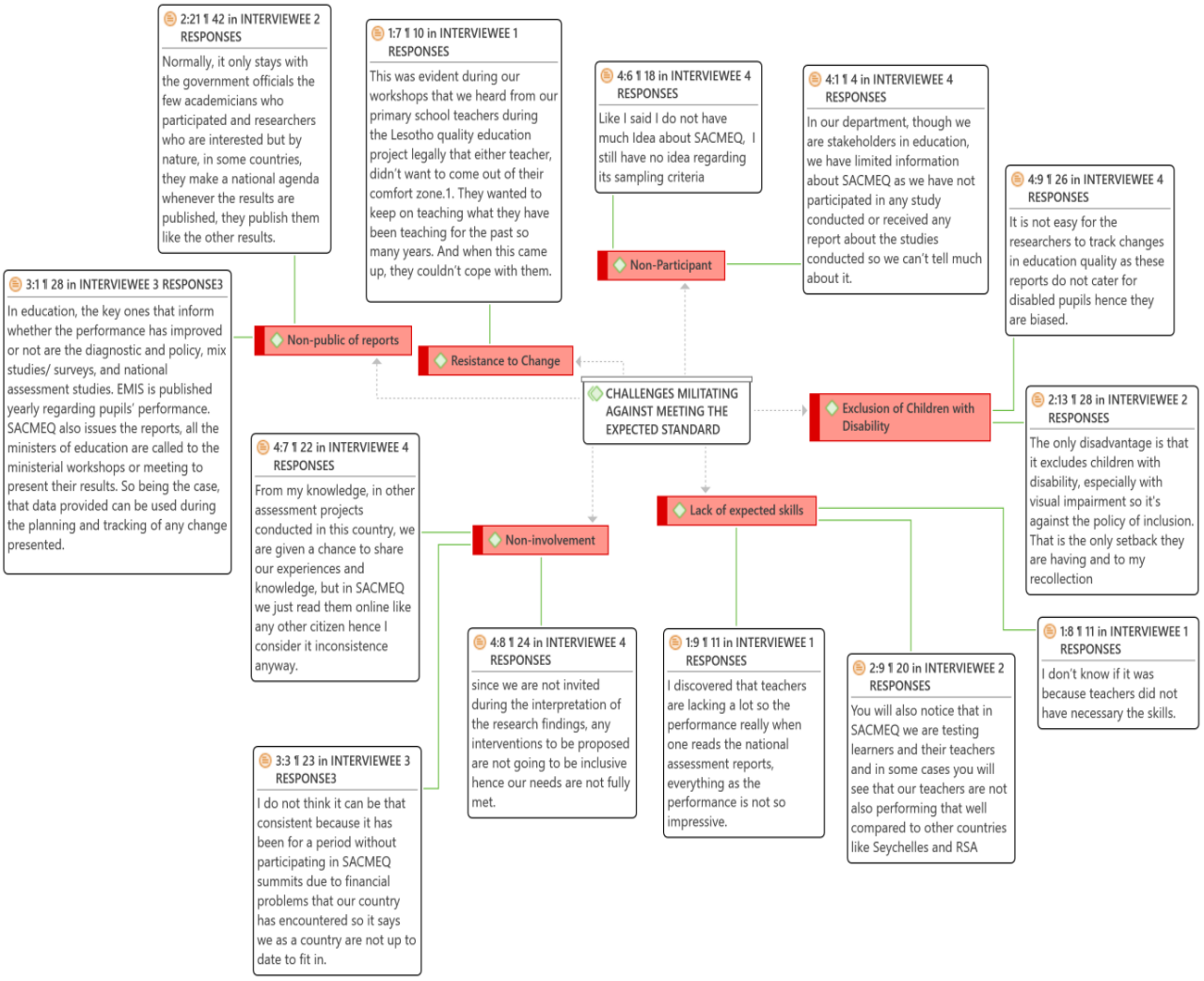

Figure 4.9: Challenges hindering Lesotho from meeting educational standards

Various challenges that hamper Lesotho from meeting educational standards are presented in Figure 4.9, based on different responses of participants.

Non-public Reports

Interviewee 2 complained that "*Normally, it (report) only stays with the government officials... in some countries, they make a national agenda whenever the results are published*" (Interviewee 2). Interviewee 3 also shared that,

> *In education, the key ones that inform whether the performance has improved are diagnostic reports and policy, mixed studies/ surveys, and national assessment studies.*

> *EMIS is published yearly regarding pupils' performance. SACMEQ also issues the reports, and all the ministers of education are called to the ministerial workshops or meetings to present their results. So, being the case, the data provided can be used during the planning and tracking of any change presented* (Interviewee 3)

Resistance to Change

Another challenge also mentioned by Interviewee 1 was that "*This was evident during the workshops that we heard from our primary school teachers during the Lesotho quality education project legally that either teacher, didn't want to come out of their comfort zone. They wanted to keep on teaching what they have been teaching for the past so many years. And when this came up, they couldn't cope with them.*" (Interviewee 1).

Non-Participation

Interviewee 4 said, "*Like I said, I do not have much idea about SACMEQ, I still have no idea regarding its sampling criteria*". *We have not participated in any study conducted or received any report about the studies conducted*" (Interviewee 4).

Exclusion of Children with Disabilities

Interviewee 2 explained, "*The only disadvantage is that it excludes children with disability... against the policy of inclusion*" (Interviewee 2). Interviewee 4 also supported the assertion by stating, "*Reports do not cater for disabled pupils, hence they are biased*" (Interviewee 4). This statement revealed non-inclusiveness of the programme, which is one of the major challenges.

Lack of Expected Skills

As noted by Interviewee 1, "*Teachers are lacking a lot so the performance really when one reads the national assessment reports, everything as the performance is not so impressive*" (Interviewee 1). Interviewee 2 added, "*You will also notice that in SACMEQ we are testing learners and their teachers and in some cases, you will see that our teachers are not also performing that well compared to other countries like Seychelles and RSA*" (Interviewee 2).

Summarily, the participants' responses on challenges that face the SACMEQ programme encapsulated multiple issues that affect the quality of education in Lesotho. Resistance to change, lack of public dissemination of reports, non-participation in assessments, exclusion of children with disabilities, and inadequate teacher skills are highlighted as key barriers. The detailed responses from interviewees underscore the multifaceted challenges and the need for systemic improvements to meet expected educational standards.

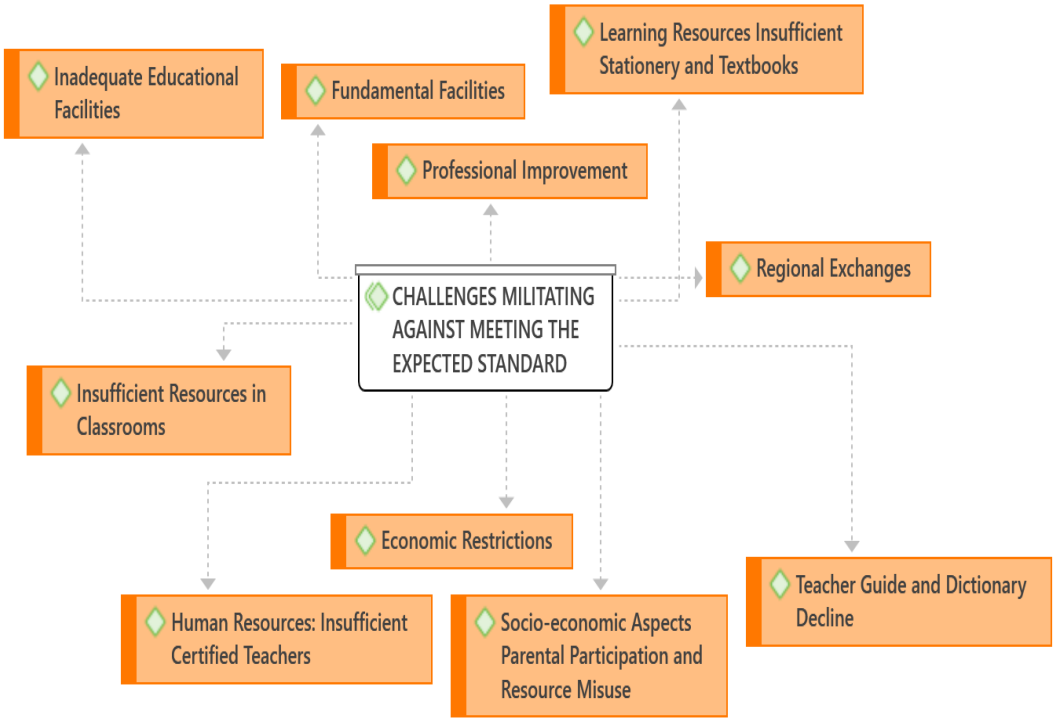

Figure 4.10: Challenges hindering Lesotho from meeting educational standards

To operate effectively, an efficient education system has to satisfy certain basic pre-conditions. These comprise qualified teachers, necessary learning resources, and enough infrastructure. Still, a number of obstacles stand in the way of reaching these benchmarks, especially in developing nations with limited means.

Inadequate Educational Facilities: Many schools lack libraries, offices, bathrooms, and classrooms - all of which are very necessary for a good learning environment. Poorly maintained buildings hinder good instruction and learning.

Insufficient Resources in Classrooms: Often lacking are basic school supplies such dictionaries, teacher tables and seats, writing boards, storage space and reading and Maths teacher guides. Desirable physical resources such school head offices, staff rooms, conference halls, classroom cabinets, bookshelves, sports fields, school fences, power, TVs, photocopiers, computers, and so on are scarce.

Fundamental Facilities: Students' health and well-being depend on safe drinking water, so access to it has dropped in schools. There is limited supply of basic conveniences such sufficient lighting and enough of storage space.

Learning Resources Insufficient Stationery and Textbooks: Though the Free Primary Education (FPE) programme has increased the availability of exercise books, pens, pencils, and rulers, inequalities still exist particularly in regions including Qacha's Nek, Thaba-Tseka, and Quthing. Not all institutions have followed the FPE policy exactly, which causes disparities in the availability of resources.

Teacher Guide and Dictionary Decline: Not only dictionaries, which are essential for good instruction, but also teacher aids for reading and arithmetic have clearly become less available. Less than ideal student seating and writing areas not every student in many districts has somewhere to sit and write, which reduces their capacity for learning.

Human Resources: Insufficient Certified Teachers: Especially in rural areas, many schools lack teachers with sufficient credentials and training. Unappealing working conditions and inadequate incentives still make it difficult to attract and keep qualified teachers.

Professional Improvement: More female school heads and instructors who have taken management and HIV/AIDS courses are needed. The count of reading teachers with at least two years of pre-service training and appropriate subject area competence has to rise. Programmes for continuous in-service development ought to be efficient and easily available for every instructor. Variations in resource input affect equity and distribution of resources. Different districts and inside each district have notable differences in resource inputs, which results in inequalities in the

quality of education. To properly distribute resources, educational planners must have thorough knowledge on these variances.

Regional Exchanges: Schools in some localities, especially isolated communities, experience the most shortages of infrastructure and learning resources compared to that of schools in areas that are more easily reachable. Appropriate distribution of resources depends on focused initiatives.

Socio-economic Aspects Parental Participation and Resource Misuse: Since FPE-provided stationery is only used once a year, several parents either misplace the stationery or give it to children in post-secondary or higher education. Schools say that the given stationery is sometimes inadequate to last the whole year.

Economic Restrictions: Economic downturns cause education budgets to be cut, therefore depriving basic buildings, furniture, and classroom equipment. Restricted financial means worsen the difficulties of delivering high-quality education.

4.6 Practical Steps to Meet Expected Standard

4.6.1 Analysis from The Participants

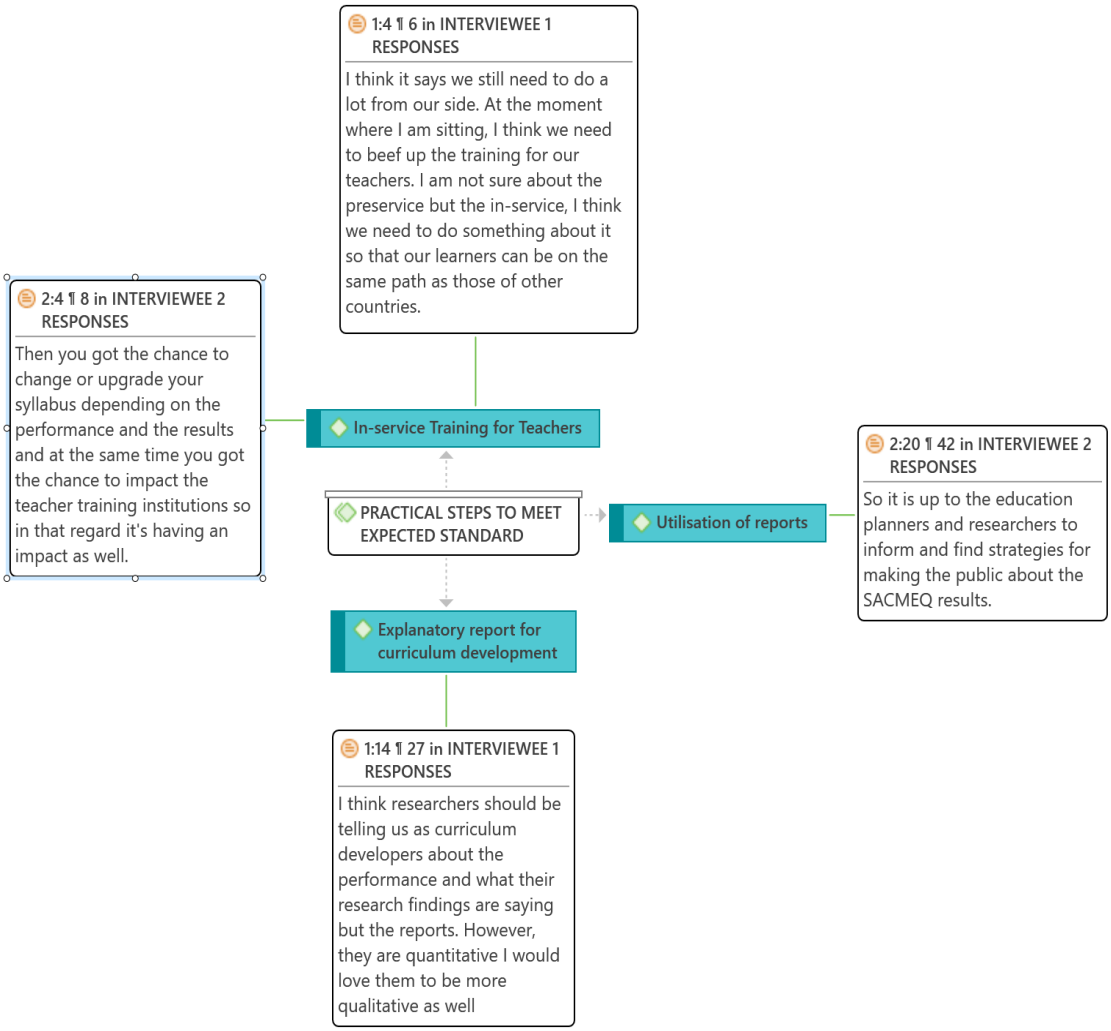

Figure 4.11: Practical steps to be taken to meet expected standard

In order to enhance the programme by the SACMEQ, the participants suggested that various practical steps ought to be taken, as presented in Figure 4, regarding the expectations of literacy and numeracy when joining SACMEQ. It highlights several key sub-categories, each supported by verbatim responses from interview participants.

In-Service Training for Teachers

Participants emphasised the need for improved training for teachers to meet the expected standards. Interviewee 1 stated, "*I think we need to beef up the training for our teachers. I am not sure about the pre-service but the in-service, I think we need to do something about it so that our learners can be on the same path as those of other countries*" (Interviewee 1). Interviewee 2 also

mentioned, "*Then you got the chance to change or upgrade your syllabus depending on the performance and the results and at the same time you got the chance to impact the teacher training institutions so in that regard it's having an impact as well*" (Interviewee 2).

Explanatory Report for Curriculum Development

Interviewee 1 highlighted the need for qualitative data in reports, stating, "*I think researchers should be telling us as curriculum developers about the performance and what their research findings are saying but the reports. However, they are quantitative I would love them to be more qualitative as well*" (Interviewee 1).

Utilisation of Reports

The importance of making results by the SACMEQ public and using them for planning and strategy was emphasised by Interviewee 2: "*So it is up to the education planners and researchers to inform and find strategies for making the public about the SACMEQ results*" (Interviewee 2).

Taken together, the participants suggested practical steps that can be adopted in order to meet expected standards in education, focusing on in-service teacher training, the need for explanatory reports for curriculum development, and the utilisation of SACMEQ reports. Key responses highlight the necessity of improving teacher training, incorporating qualitative data into reports, and effectively using assessment results to inform public and policy strategies.

4.6.2. Analysis from the report on Practical Steps to Meet Expected Standard

Overcoming these obstacles depends on making sure the basic pre-conditions for good education are satisfied. This covers bettering infrastructure, guaranteeing constant availability of learning resources, raising teacher credentials and assistance, and correcting regional differences in resource allocation. Achieving a high-quality education system in Lesotho would depend on fair and effective use of resources guided by thorough knowledge of current disparities.

Overcoming these obstacles depends on making sure the basic pre-conditions for good education are satisfied. This covers bettering infrastructure, guaranteeing constant availability of learning resources, raising teacher credentials and assistance, and correcting regional differences in

resource allocation. A high-quality education system in Lesotho depends on fair and effective use of resources guided by thorough knowledge of current disparities.

Consultations with Staff, Community, and Experts

Social Mobilisation: Implement social mobilization campaigns highlighting the benefits of schooling to local communities.

Parent-Teacher Meetings: Establish regular meeting dates between teachers and parents in all schools.

Parental Involvement in Homework*:* Develop and monitor a program where parents sign off on their children's completed homework.

Awareness of District Resources: Inform teachers about the services available at District Resource Centres via the Field Inspectorate.

Roles of Inspectors and Advisors: Educate schools on the specific roles and responsibilities of inspectors and advisors.

Distribution of Supervision Reports: Ensure that reports from school visits are distributed to all relevant stakeholders.

Clarifying Inspection Visits: Communicate to schools that courtesy calls are not inspections to alleviate misunderstandings.

Review of Existing Planning and Policy Procedures

Strengthen Non-Formal Education (NFE)*:* Enhance NFE programs to support the Free Primary Education (FPE) initiative towards achieving ‘Education for All’.

Feeding Programs for Herd-Boys: Implement feeding programs in learning posts specifically for herd-boys.

Free and Compulsory Basic Education: Enforce policies to make basic education free and compulsory.

Library Facilities: Ensure that schools have facilities for students to borrow books for home reading.

Regular Homework and Feedback: Require teachers to give regular homework, mark it, and include detailed comments in school reports.

Make-Up for Lost School Days: Implement policies to ensure school days lost due to non-school events are compensated for.

Regulation of Extra Tuition: Develop policies regulating extra tuition and review in-service training programs to benefit all teachers.

Raise Qualifications for School Heads: Increase the minimum entry qualification for school heads from a primary school certificate to a junior secondary certificate.

School Committees and Boards: Broaden the mandates of school committees and boards to address behavioural problems in schools.

Data Collection for Planning Purposes

Inclusion of NFE Activities in EMIS: Expand the Education Management Information System (EMIS) to include data on NFE activities.

Identify Resource Needs: Conduct surveys to identify schools lacking teaching and learning resources, including physical facilities like toilets.

Target Resource Allocation: Focus on schools without adequate resources to reduce regional disparities.

Educational Policy Research Projects

Curriculum Relevance and Responsiveness: Conduct surveys to evaluate the relevance and responsiveness of the curriculum.

Teacher Supply and Training Programs: Investigate ways to enhance teacher supply and improve training programs.

Extent of Extra Tuition: Survey the nature and extent of extra tuition practices.

In-Service Training Effectiveness: Gather teachers' perceptions on the effectiveness of in-service training programs.

Integrated Curriculum and Assessment Policy: Develop a comprehensive policy integrating curriculum and assessment.

Investment in Infrastructure and Human Resources

Professional Teaching Qualifications: Invest in the development of existing professional teaching qualifications.

Attract More Males into Teaching: Create programs to attract more males into the teaching profession.

Teacher Accommodation: Provide adequate and decent accommodation for teachers, especially in remote areas.

School/ Classroom Libraries: Establish libraries within schools and classrooms to support student learning.

Incentive Packages for Teachers in Hardship Areas: Implement enhanced incentive packages for qualified teachers working in hardship areas and mountain districts.

School Magazines or Journals*:* Produce school magazines or journals to motivate pupils and contribute to their learning.

As generated from the report documents, meeting the criteria set by the SACMEQ on quality education presents ongoing difficulties for the Ministry of Education in Lesotho. Important problems include low teacher morale, inadequate inspection and support, a dearth of trained teachers especially in rural areas and insufficient learning and teaching tools. Financial restrictions aggravate these issues by reducing the ability to provide excellent education. Geographic difficulties cause high rates of repeat in early grades; many schools are located far from villages, which forces pupils to travel great distances and often results in temporary dropout due to bad weather conditions. Particularly for students between the ages of 9 and 15, this fuels educational inefficiencies and increased dropout rates.

Supported by Irish Aid and the World Bank, the Ministry intends to look at the fundamental reasons of these high dropout and recurrence rates in order to create focused treatments. Notwithstanding these difficulties, Lesotho's participation with SACMEQ has given a structure for tracking development, pointing up areas needing work, and guiding policy decisions meant to raise the standard of education. Strategic plans such the Education Sector Strategic Plan (ESSP 2005-2015) and the Medium Term Sector Plan (2009-2012) aim to increase access to and quality of education, therefore efforts to improve literacy and numeracy abilities are continuous. Still, problems include poor infrastructure, limited school supplies, and unequal resource distribution keep advancement hampered.

Practical actions must be done to guarantee the fundamental prerequisites for quality education are satisfied in order to solve these difficulties. This covers bettering infrastructure, guaranteeing a

consistent flow of instructional materials, raising teacher credentials and support, and correcting regional differences in resource allocation. Creating an equitable and efficient education system in Lesotho depends on involving communities, improving policy processes, gathering pertinent information, and funding infrastructure as well as human resources.

Summary of analysis

Generally, the SACMEQ (Southern and Eastern Africa Consortium for Monitoring Educational Quality) Programme report in Lesotho revealed the country's alignment with quality education standards, revealing significant gaps between societal needs and actual educational performance. Societal needs, especially those of disabled children, are not fully addressed, as highlighted by participants who expressed that the curriculum does not cater for all individual needs. Lesotho's performance in SACMEQ assessments has consistently fallen short of expectations, with participants noting that the country's ranking remains among the lowest in the consortium. Despite curriculum alignment efforts, the results from grade 6 assessments indicate poor performance, demonstrating a need for substantial improvements. Furthermore, the report outlines the expectations Lesotho had upon joining SACMEQ, such as monitoring educational quality, developing global citizens, and enhancing curriculum through cross-cultural comparisons and first-hand data. However, challenges like data confidentiality, proper data entry, and report bias affect the authenticity of SACMEQ reports. Additionally, resistance to change, non-public dissemination of reports, exclusion of disabled children, and inadequate teacher skills impede meeting educational standards. Overall, the analysis underscores the need for systemic improvements to bridge the gap between expected and actual educational quality in Lesotho.

4.3 Chapter Summary

The findings of the four research questions were presented and interviewees' responses to the questions and Lesotho SACMEQ II, III and IV reports were analyzed. The last chapter being Chapter 5 deals with the summary, conclusion and recommendations of the study.

CHAPTER 5

DISCUSSION OF FINDINGS, CONCLUSION, AND RECOMMENDATION

5.1 Discussion

Chapter 5 presents a comprehensive discussion of findings, which focuses on the assessment of the authenticity of SACMEQ reports on literacy and numeracy in Lesotho's Basic education. This chapter encompasses the data from both interviews of the participants being education stakeholders and the Lesotho SACMEQ II, III & IV reports presented in Chapter 4. The discussion of the findings emerged from the four research questions that underlined this study; as a result, the research questions guided this discussion.

The discussion is started by addressing research questions 1 and 2 connectively since they are interwoven.

1. Does monitoring and evaluation of literacy and numeracy in basic education quality implemented by SACMEQ address Basotho's needs?

2. How is Lesotho performing in the assessment of literacy and numeracy in the SACMEQ reports?

5.1.1 Expectations Regarding Literacy and Numeracy When Joining SACMEQ

The findings from the reports, as well as the responses of the participants, outlined the expectations for reading and numeracy performance when Lesotho joined SACMEQ. The findings indicated several areas, including educational quality monitoring, global citizenship development, cross-cultural comparisons, and educational quality improvement.

Monitoring the educational quality

While tracking progress, stakeholders monitored performance based on remarks about progress towards their goals (Tengan et al., 2021). Monitoring and assessment of educational systems appear to be fundamental to SACMEQ's overall objectives. It required completely involved monitoring to influence the quality of education in SACMEQ members. Some participants reported that, "*Lesotho joined SACMEQ intending to benefit from its programmes through the data for evaluation and monitoring of the education quality within this consortium".*

The study's findings on monitoring and evaluation are consistent with Lesotho's CAP (2009), whose purpose is to evaluate the quality, relevance, and efficiency of basic and secondary education. Importantly, Matei et al. (2022) state that Lesotho has always profited from its

participation in the SACMEQ scheme. Monitoring and evaluating the quality of basic education in this study is critical for decision-makers seeking to plan and improve educational quality.

Improvement of Education Quality

Lesotho appeared to place a high value on improving education quality at all levels. One participant preferred to improve the programme by conducting constant research. This is not a new scenario for SACMEQ members (Awich (2017) stated that policymakers use information from SACMEQ members' reports to make informed decisions about curriculum development, teacher training, and educational resource allocation. Other participants appear to value syllabus improvement the most, as it has a beneficial impact on the guidance of learners' performance and teacher training at institutions. In a nutshell, Lesotho SACMEQ II, III, and IV reports, along with the ESSP 2005-2015 mission statement, focused on monitoring and developing functional literacy and numeracy abilities. These skills appear to be the finest sources of information for programmes targeted at increasing educational access and quality in Basotho. This assertion is consistent with SACMEQ reports of other participating countries, as discussed in the literature studied (Chabaditseli et al., 2018; Karogo et al., 2018).

Several participants stated that the supply of firsthand knowledge regarding SACMEQ was another key benefit in improving education quality by monitoring and evaluating literacy and numeracy skills in Grade 6. In contrast, it has been highlighted that while a participant voiced their motivation for the minor progress made, they failed to point out areas for development within the school system to ensure quality. They did, however, highlight that Lesotho's financial constraints prevented it from reaching the planned level.

Global Citizenship Development

Besides monitoring education quality, global citizenship development is another aspect. The study's findings demonstrated that participants viewed citizenship growth solely in terms of benchmarking. An example is Interviewee 1 who had concerns about the importance of developing global citizens. The emphasis was on the benefits to be acquired during curriculum design, particularly for benchmarking against other countries. Interviewee 2 corroborated this argument by highlighting the benefits of benchmarking with SACMEQ member states. Raselimo and Mahao

(2015) appear to differ slightly from the participants in that they saw global citizenship development as modelling learners at the basic level for work orientation and future learning. Though global citizenship development was perceived in this study as benchmarking, job orientation, and further education, the participants and literature did not align with the primary goal of the SACMEQ programmes, which is to provide universal access to quality education regardless of the background obstacles. To achieve accessibility, Agenda 2063 advocates for African youths to have complete access to education and any other necessary skills for a lifetime.

Cross-cultural Comparison

Cross-cultural comparisons are critical to achieving growth in education. In this study, both the participants and the reports defined cross-cultural comparison in terms of benchmarking. For instance, the Lesotho SACMEQ reports indicated that benchmarking is based on literacy and numeracy performance compared to other SACMEQ members. Their statistical evidence centred on the mean scores, allowing each country to compare its educational standards to those of other member states and highlight gaps and chances for growth on a holistic level. Aside from that, the participants saw this concept as a vital tool for reflection with others in the region and among SACMEQ members. Though the findings on reports and participants generally conceptualised cross-cultural comparison exclusively from a benchmarking perspective, they differ from the literature discussion on Creswell et al's study (2015). For this author, comparisons in SACMEQ reports are made on achievement levels, trends over time, disparities between demographic groups, or variations in educational outcomes by investigating within-school and between-school variations in achievement, as well as examining how social and gender differences in achievement compare after controlling for other achievement-influencing factors.

Each sub-category demonstrated the comprehensive impact of SACMEQ on Lesotho's educational landscape, as anticipated by joining this consortium. It is, therefore, crucial to understand Lesotho's education standards status when joining SACMEQ.

5.1.2 The Status of the Country's Expectations Regarding Standards by SACMEQ

Lesotho seems to have performed below the average of the SACMEQ, 500, in both skills tested in all surveys. (Maema & Mohale, 2017). The findings in this study regarding the quality of education in Lesotho focused on societal needs, SACMEQ expectations, and the actual performance.

Quality education in SACMEQ

This study found that participants had differing perspectives on quality education in SACMEQ. They conceptualised quality education in terms of student accomplishment and curriculum alignment. For instance, Interviewee 1 focused on curriculum alignment with other member countries, where Lesotho appeared to work in accordance with SACMEQ objectives. On the contrary, some participants considered education as a measure of the country's performance in terms of SACMEQ. The participant's responses generally reflected that Lesotho's performance remains unacceptably high in terms of established standards and expectations. Substantively, the findings from the reports demonstrated that Lesotho's basic education system had a low quality according to SACMEQ studies. This has been reinforced by the Lesotho SACMEQ IV reports, which revealed that Lesotho hovers at a lower rank than expected throughout the studies done. This consistency carries over to the generalisability theory, which implies that the modal rate of circumstances indicated for low-quality basic education aids to maximising reliability (Huerbner and Lucht, 2019). In that situation, low literacy and numeracy proficiency rates compared to global norms promoted many African countries, including Lesotho, to ensure universal access to education (Lekhetho, 2022). Furthermore, the research identified the variables that contribute to low-quality education.

Factors causing low-quality education

The study's findings revealed additional factors that contribute to Lesotho's underperformance in SACMEQ in both literacy and numeracy. The reports have indicated that most learners have underperformed in other domains than basic skills. Since the reports uncovered academic, personal, geographic, and home factors as influential agents of low-quality education in Lesotho, financial constraints seem to be the major one hitting the country's performance in SACMEQ programmes. These reports seem to address factors catering for both learners and teachers, however, the study focused only on learners. The findings further revealed that low motivation rate towards learners' education led to a rapid decline in performance on the fundamental competencies and the increased dropout rate at schools. Though research was made on high

dropout and class repetition rate, much effort was not done to ensure that the challenge was fully addressed.

The Expectation

The findings of this study revealed that the expectation of high quality appears to be the driving force that has had a significant impact in Lesotho since joining SACMEQ. When we reviewed this point, it appeared that respondents were blind to it, as the majority of them failed to respond. However, a participant voiced dissatisfaction with Lesotho's performance, which placed second-lowest in the SACMEQ II & III. The interviewee focused solely on literacy and numeracy achievement, ignoring other variables needed to improve Lesotho's educational quality. This generated a gap because it was discovered that the interviewees believed that GT is concerned with determining the performance aspect during the assessment of multiple sources of variation on the accuracy of multiple sources of variation, the accuracy of behavioural measurement, and various sources of measurement errors (Shavelson et al., 2015). Matei et al. (2022) stated that Lesotho expects to improve educational quality in areas such as literacy and numeracy performance, researcher capacity, and government educators and policymakers. Policymakers use the information from SACMEQ members' reports to make informed decisions concerning curriculum creation, teacher training, and educational resource allocation.

Societal Needs Not Addressed

The findings showed that societal needs appear to be disregarded. A participant's assertion centred on people with disabilities whose needs had gone unfulfilled completely. The research also revealed that reports by the SACMEQ on Lesotho overlooked the performance of impaired pupils. This claim had a negative impact on meeting individual needs in Basotho society. Lesotho considers education to be the cornerstone for addressing Basotho society's welfare, and there is an education policy that promotes for quality, inclusive, and equitable education (LBECP, 2021). With respect to the study findings, Eze (2009) appears to address a similar challenge in the context of the immediate community, specifically focusing on outcomes such as knowledge, skills, and attitudes and whether they are linked to national goals for education and positive participation in society. It has been observed, however, that SACMEQ members, including Lesotho, work in accordance with global standards, notably the Sustainable Development Goals, objective 4, which is concerned with the availability of quality education, which is a problem in every country.

5.1.3 Challenges Militating Against Meeting the Expected Standard

Lesotho has experienced various challenges in meeting educational standards. The participants and reports diversely outline some challenges facing the SACMEQ programme that encapsulated multiple issues affecting Lesotho's education quality.

Non-participation in SACMEQ programme

The study discovered that participants had diverse perspectives on non-participation in SACMEQ programmes in terms of individual and social needs. An example is Interviewees 2 and 4 who were concerned with the welfare of disabled children and global educational inclusion policies. The participants disclosed the weakness of SACMEQ programmes for excluding disabled children. In line with SACMEQ programmes, all countries' members excluded schools with special needs and learners with disabilities (Onsomu et al., 2005). This prompted the consortium to take action against the inclusion policy that is being applied in schools globally. The Lesotho SACMEQ reports findings, however, do not expressly show that the inclusion policy is being revised; so, the CAP (2009) and LBECP (2021) advocated for quality education assurance based on accessibility, inclusion, and quality. A participant went on to say that the SACMEQ reports had settled into a biased state. This assertion highlighted the significant challenge of the published reports' bias in not including impaired pupils.

In addition, the study's findings demonstrated that some participants prioritised stakeholder participation in education. Their emphasis addressed the issue of excluding other stakeholders in the SACMEQ programme, which contributed to having limited data about this consortium because the information was obtained just through reading SACMEQ reports online, just like any other citizen. This contrasts with the other assessment entities in the country, where all stakeholder representatives are allowed to convey their experiences and knowledge on the problem at hand. Other participants complained about Lesotho's participation in SACMEQ projects, which was hampered by the country's financial constraints. However, based on the findings of the reports and participants, Lesotho is experiencing a tremendous issue in holistically addressing Basotho's demands, with the most significant challenge being the SACMEQ programmes' misunderstanding of global inclusion policies.

Non-public Reports

The study discovered that participants had conflicting emotions concerning the dissemination of educational reports in Lesotho. Interviewee 3 is one example, as she stated her delight with how

the government obtained data to improve education. This participant did not explain whether SACMEQ reports are disseminated to the Basotho people. They concentrated on the SACMEQ reports distributed to all education ministers during ministerial workshops or meetings to present their findings. They, however, contradicted Interviewee 2, who explicitly stated that Lesotho's SACMEQ reports remain with government officials. The nation does not have access to them, whereas other countries set national agendas for the publishing of the results. This allegation revealed a conflict between Lesotho's practices with SACMEQ's primary goal of ensuring that all types of its reports and data files are publicly available to the public, whether through the consortium's website (http://www.sacmeq.org/) or other means (ACARA, 2015). In my perspective, it is rightful to disseminate the information on SACMEQ reports for the benefit of the nation holistically to address the quality education that will meet the international standards as specified in fundamental human rights (right to information) internationally in SDG12 target 8.

Lack of expected skills and resistance to change

The anticipation of positive results is almost always met; nevertheless, some circumstances may have an adverse effect and impede this. In this study, the data revealed that both teachers and students fared poorly in reading and numeracy. For example, interviewee 1 shared their findings from the national assessment analysis, but interviewee 2 anticipated the SACMEQ stand. From the standpoint of the teacher, both participants' findings demonstrated that the observed performance was the result of a lack of expected skills. This has a negative impact on meeting the educational standards. Furthermore, the study findings revealed that a participant appears to be angry at teachers for their resistance to change, which has contributed to the country's poor performance in literacy and numeracy. Their emphasis was on the improvements that were implemented and disseminated to instructors, but due to their comfort zone, they appear to be reluctant to improve in addressing this issue. Given the assertions made, it is clear that the reasons listed above led to Lesotho's poor literacy and numeracy performance. However, the study focused on learners rather than teachers.

Infrastructures, resources and welfare of stakeholders

The report's findings disclosed that Lesotho has faced a variety of obstacles that have contributed to poor literacy and numeracy performance, in addition to academic challenges. The study’s findings centred on infrastructure conditions and the scarcity and unavailability of human

resources in mountainous areas, notably Qacha's Nek, Quthing, and Thaba-Tseka. The findings further showed that learners' and teachers' health and social well-being appear to be inadequately supplied with fundamental necessities. An example is the instability of qualified teachers who leave or are hesitant to stay due to the hostile working conditions and inadequacy of incentives and emoluments supplied, as well as the need for professional development in either the administrative or implementation stages. This sentiment is consistent with SACMEQ's guidelines, which sought to measure educational quality by focusing on general schooling conditions and monitoring learning outcomes (Awich, 2017). In fact, this body helped Lesotho's Ministry of Education learn more about sharing resources and experiences (Mothibeli & Maema, 2005).

5.1.4 Practical Steps to Meet Expected Standard

To enhance the SACMEQ programme, the participants suggested that various practical steps should be taken regarding the expectations of literacy and numeracy when joining SACMEQ.

Utilisation and Explanation of Reports

The study's findings revealed that several participants attempted to emphasise the necessity of publicising SACMEQ results since it allows stakeholders to have a role in the country's performance. A participant told the researcher that the publication of these reports offered education planners and researchers the freedom to distribute their findings to stakeholders. The above sentiment was reinforced by the Lesotho SACMEQ results, which confirmed that the sharing of supervision reports to all stakeholders during school visits appeared to improve educational quality. These reports failed to address SACMEQ's effective and efficient ways of disseminating the results to stakeholders. Both reports and participants acknowledged that reports are an important tool for notifying stakeholders about the country's progress, however, the report focused on supervision reports, whereas the participants particularly addressed the SACMEQ reports issue.

Aside from that, the findings indicated that certain participants' impressions of getting reports should be written qualitatively. For example, some participants had a fear of either mathematics or statistics, therefore obtaining quantitative reports obscured information for those individuals. Interviewee 1 is an example, whose reasoning was based on explanatory reports on performance and research findings that were understandable to all participants, with the goal of easing their work in a variety of ways while contributing to curriculum development. Regarding the study findings, Maema and Mothibeli (2005) and ACARA (2015) confirmed that SACMEQ reports are

quantitative because the data analysed was presented as percentages and mean score scaled. These writers addressed how statistical results helped participants to engage in meaningful discussions about accomplishments, flaws, and opportunities for change in their educational system.

In-service training for teachers

As discussed in Chapter 4, both Lesotho SACMEQ reports and participants underlined the importance of improved teacher training in meeting the required criteria. For example, an interviewee 2 claimed that teacher training raised the standard of Basotho's education system to an international level. The shown comprehension was based on comparisons with other countries, which may drive Basotho pupils' academic achievement to levels comparable to other countries. Another interviewee conveyed feelings about the role of teacher training institutions in syllabus upgrading. This method is carried out in accordance with the learners' performance and the outcomes at hand, which affect a change. Even though the participants appeared to hold opposing perspectives on teacher preparation, it could be claimed that their voices were the only difference. For example, an interviewee 1 concentrated on syllabus improvement, whilst another saw it as a benchmarking opportunity. Furthermore, the above ideas were supported by Lesotho SACMEQ II, III, and IV reports, which saw teacher training as an important investment instrument for gathering data on teachers' impressions of in-service training, which aids in the supply and improvement of training programmes. This sentiment was echoed by Awich (2017), who emphasised the importance of policymakers adopting information from SACMEQ member reports to make educated decisions on teacher training and other issues. Overall, reports and participant findings emphasised the importance of providing teacher training courses and workshops to ensure quality education that meets international standards.

Educational policies and their reviews

Within the education system, policies are the driving forces throughout curriculum development; the outcomes of this study revealed the importance of assessing and implementing educational policy initiatives appropriately. The previous research interpreted the importance of policy creation differently based on these findings. It became clear that the reports raised awareness by asking policymakers to design a comprehensive policy incorporating curriculum assessment to ensure relevance and responsiveness to the current curriculum. Similarly, the most recent reports are skewed by focusing on resource availability, administrative knowledge, and free and accessible basic education. This policy perspective was similar to that of A4ID (2022), which stated that

to achieve the global policies outlined in the Education 2030 Framework for Action, foundational skills such as literacy and numeracy, as well as analytical, problem-solving, and other high-level cognitive, interpersonal, and social skills, are required. Gigaba (2020) also addressed the linkage between educational policies and outcomes of literacy and numeracy skills, which had been meaningful for social and economic transformation, hence it is essential for the improvement.

Support to Teachers and Learners

Teachers, as curriculum implementers, require recognition and encouragement. The study's findings emphasise the importance of providing different forms of assistance to teachers to generate conducive environment in the school system. Teachers also found that administrative tasks should be communicated to teachers to avoid misunderstandings during their visits. The findings were similar to those of Chetty et al. (2017), who focused on teachers' support for launching a comprehensive professional training programme and district officials' training on how to assist multi-school learning improvement efforts.

In this study, learners, in addition to teachers, were considered key ingredients of the education system who require a variety of supports. Furthermore, the reports' findings contextualised learners' support in terms of accessibility of instructional resources, the frequency with which constructive feedback was provided, and the monitoring of their learning. Furthermore, all of this was founded on newly formulated policies regarding compensation for missing classes and remedies, as well as diverse parental involvement in their children's education. Furthermore, the report findings revealed that acquiring all these increases learners' drive to learn. Given the findings, support plays an important part in ensuring quality education; hence, teachers and pupils perform best when provided with holistic support. In the present scenario, these findings are consistent with those of Al-Shuacbu (2014), who emphasised that the key process in human development is the development of human personality, thoughts, attitudes, and values for the benefit of people and society. Similarly, Agenda 2063 aimed to fully develop Africa's human capital by allocating its most precious resources to all levels of education.

5.1.5 Authenticity of SACMEQ Reports

This sub-section discusses the participants' views on the authenticity of Lesotho's SACMEQ reports regarding the methodology utilised and the data quality assurance alignment. The sub-section provides answers to the third and fourth research questions of the study:

1. What are the factors influencing the authenticity of SACMEQ reports regarding Lesotho's basic education quality?

2. How trustworthy are the results of SACMEQ reports?

Credible Data Process in Data Entry

The findings of this study highlighted the need for establishing credibility during data entry as a key factor in addressing authenticity in Lesotho SACMEQ reports. Most participants emphasised that credibility of research data is largely assured through assurance obtained throughout the data generation procedure. The double data capture undertaken prior to the national cleaning and for further cleaning in France by the SCC team confirmed the consortium's work while maintaining data credibility. Furthermore, the credibility of data assurance is critical for producing useable and authentic SACMEQ reports for Lesotho. Some interviewees also established the need to measure accuracy and precision when entering data. This process is intended to eliminate errors during data generation and analysis processes while boosting the authenticity of SACMEQ reports. Regarding the study, the issue of adding credibility to SACMEQ reports is consistent with the generalisability theory (GT), which guides the study in assessing the consistency and accuracy of the results (Huerbner & Lucht, 2019).

In contrast, reports of the SACMEQ on Lesotho as well as the participants assessed credibility differently, using the same random selection of Grade 6 learners' technique across all regions of the country. This was not a new scenario for other SACMEQ members. A similar pattern of schooling sampling selection on methodology and procedures to sample the defined targeted population from the sampling frame employed on a PPS basis was seen (Awich, 2017; Masanche et al., 2017; Onsomu et al., 2005;). Generally, credible data is considered a fundamental tool in producing authentic SACMEQ reports that can be confidently utilised for educational assessments and policy making.

Consistency in Questionnaire Design

The study found that the determination of the consistency in data generation tools is a vital aspect. An example is the participant who viewed the essentiality of consistency in the questionnaire design utilised in the SACMEQ programme. However, it should be noted that several modules were modified to ensure compatibility. As per the findings, the interpretation was based on the

SACMEQ data generation tool design, which was consistent among members from various nations and studies. This assertion calls to question the criteria used to measure the accuracy in comparisons, and reliability of conclusions. In alignment, the literature has sustained that the instruments and methods employed were similar throughout the studies since the SACMEQ II project in 2000 and the SACMEQ IV project in 2013 (Karogo et al., 2018).

Confidentiality of Data

The assessment also focused on data confidentiality, which is critical in assuring the credibility of SACMEQ results. The findings of this study highlighted several participants' concerns about this issue. For example, interviewee 2 emphasised the need to prevent vandalism of sensitive material by keeping the data confidential with government authorities, a few academics, and interested researchers. Karogo et al. (2018) affirmed that the tools and procedures used were comparable across all studies completed since SACMEQ II, therefore they are inaccessible and kept private for validity concerns and to maintain participant trust. Depending on the value of the confidentiality issue, one may argue that this approach caused Lesotho to fail to publicise the results to the nation, unlike nations like Kenya where a national agenda is held whenever the results are published (Karogo et al., 2018)

Representative Sampling

An assessment of the authenticity of Lesotho SACMEQ reports focused heavily on methodology, which included a representative sample. The participants expressed authenticity in terms of the fairness of the selected participants, which are diversely recognised based on the planning unit's enrollment statistics. The reports differ slightly in that they focus on the response rate, design effect, and effective sample size within the project, which helps to ensure that a full view of the educational landscape is monitored in SACMEQ reports. This aligns the study's findings with the literature, as Onsomu et al. (2005) state, and SACMEQ reports include information on any modifications to account for response and other factors. A similar assertion was made, since SACMEQ may apply sampling weights to correct for discrepancies between the sample and the population, guaranteeing that the results are representative at the national or regional level (Chabeditseli et al., 2018; Karogo et al., 2018; Maema & Mothibeli, 2005).

Not properly measured

Measurement errors diminish the credibility and usefulness of reporting during educational progress. Some participants were concerned about the inaccurate measurement of the data utilised in the reports. This viewpoint was reinforced by the finding that the majority of stakeholders received insufficient information, resulting in gaps in their future needs. Similarly, this perspective is compatible with the notion that the findings identified incorrect measurement in Lesotho SACMEQ reports using generalizability theory. The theory represents the discovery of numerous measurement errors while ensuring reliable measurements of instructors' actual teaching competence (Cankoy & Ozder, 2016). The findings of this study contradict the notion that measuring data precisely and truthfully determines the authenticity of SACMEQ reports.

Report bias

Report bias can call into question the credibility of Lesotho SACMEQ reports. The findings revealed the biases of these reports as viewed from various perspectives. Some participants expressed concerns about report bias caused by the non-respondent rate, which was ignored without justification. In contrast, some participants felt that the programme monitoring system was unfair because some fully engaged entities within the education system were left behind. Though these participants detailed the reports' biases, another participant disagreed, claiming that the selection of pupils' representation was fair. The confirmation was that children were chosen regardless of their background to eliminate bias. In these SACMEQ reports, the sampling size was chosen to ensure accuracy and unbiasedness (Onsomu et al., 2005). As mentioned by (Onsomu et al., 2005) in the literature, sampling weights were employed to remove any bias in sample estimates induced by variances from "epsem sampling" (equal probability of selection).

5.2 Conclusion

This study aimed to assess the authenticity of reports by the SACMEQ on literacy and numeracy in the basic education of Lesotho. Through document analysis and interviews of the ministry of education and educational private sectors participants, the objectives of the study were to find out;

1. Does monitoring and evaluation of literacy and numeracy in basic education quality implemented by SACMEQ address Basotho’s needs?

2. How is Lesotho performing in the assessment of literacy and numeracy in the SACMEQ reports?

3. What are the factors influencing the authenticity of SACMEQ reports regarding Lesotho's basic education quality?

4. How trustworthy are the results of SACMEQ reports?

The results of the study showed that Lesotho has struggled to meet the necessary educational standards, despite the dedicated efforts and strategic plans put in place. As a result, a significant discrepancy between social demands and actual educational performance was noted. Additionally, the findings disclosed that several factors had an impact on the methodology (data entry, representative sampling) and data quality assurance (data confidentiality and credibility, questionnaire consistency, and report biasness) alignment that determined the authenticity of SACMEQ reports. All these factors worked together to guarantee the reliability and trustworthiness of educational assessment. Despite efforts to verify the authenticity of these reports, the results ran counter to the notion that measurement accuracy and precision are key factors in determining authenticity. As a result, the participants recommended that in order for the reports to be considered legit, they should take into account issues like confidentiality in the data, uniformity in questionnaire design, and impartiality in reporting. Ultimately, the reports and participants concluded that Lesotho had fallen short of expectations when it came to participating in the SACMEQ programmes, even if the authenticity of the reports was partially guaranteed.

5.3 Limitations

Data was generated qualitatively, yet the SACMEQ studies were conducted quantitatively. Like all qualitative studies, this study has limitations that the study cannot be generalised. This study seems to be challenging to participants as the analysis of those reports' methodology seemed to be unfamiliar to qualitative researchers. Therefore, this study's outcomes might not apply to other related studies.

The sampling of participants focused on Ministry of Education who participated to have an idea about SACMEQ neglecting the data collectors as the key implementers of SACMEQ instruments. This might encourage other researchers to generate data for data generators and obtain much richer data as compared to the study.

I struggled to have access to the participants of SACMEQ within the ministry and educational private sectors Some kept on postponing the appointments while others seemed to be preoccupied with the fieldwork and others kept on offering incorrect emails. This forced the study data collection process to be longer than planned.

5.4 Recommendation

Based on the study findings, it is recommended that:

- SACMEQ outcomes should be disclosed to all stakeholders, whether they contributed to the program or not. This technique is observed in Kenya, where the findings have been made public.
- To address these issues, practical steps such as enhanced in-service teacher training, qualitative curriculum development reports, and effective utilization of assessment results are recommended.
- To get qualitative feedback on SACMEQ programs in Lesotho, the study should include researchers from around the country.

5.5 Suggestions for Further Studies

- Similar studies can be undertaken that focus on the performance of teachers or teachers and learners.
- Additional studies can be conducted to collect data on data collectors during SACMEQ programs.

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APPENDIX 1: INTERVIEW GUIDE INTERVIEW
A BREIF NOTE ABOUT MY STUDY

My research is all about the **Assessment of the authenticity of SACMEQ reports on literacy and numeracy in Lesotho's basic Education;** This research is fully under the supervision of Dr. KUNLE AYANWALE MUSA (my supervisor at the moment).

This study aims to assess;

1. how authentic are the SACMEQ reports regarding Lesotho's basic Education quality. This is driven by Lesotho's performance on literacy and numeracy since it joined the SACMEQ studies in 2000, and how SACMEQ impacted on addressing the individual needs of Basotho and of the country as a whole.
2. the factors influencing the authenticity of those reports by specifically focusing on the accuracy, consistency and transparency of the data generated. For a better understanding while determining the accuracy and genuineness of the findings presented in these reports, the researcher will carefully dwell more on the methodology employed, sampling sizes, data collection instruments, data analysis and interpretation techniques, internal and external validity, and their alignment with other available educational data sources in Lesotho.

Based on the empirical evidence intended to be provided, I believe that every stakeholder within the education system will have a better understanding of how Lesotho is performing in literacy and numeracy at the basic level internationally as presented in SACMEQ reports.

For clarity, please contact

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R Q.1

Does monitoring and evaluation of literacy and numeracy in basic education quality implemented by SACMEQ address Basotho's needs?

1. What were Lesotho's expectations regarding literacy and numeracy when joining SACMEQ?
2. To what extent are the country's expectations regarding their quality education standards met by SACMEQ?

R.Q 2

How is Lesotho performing in the assessment of literacy and numeracy in the SACMEQ reports?

3. How is the performance of Lesotho in those skills monitored?
4. How has the performance portrayed in SACMEQ reports ensured that Lesotho's education system can fit into international standards?

R Q 3

What are the factors influencing the authenticity of SACMEQ reports regarding Lesotho's basic education quality?

5. What are the elements of the data quality that are fully determined based on the data collection and analysis methods?
6. What is the degree to which the criteria used to select a sampling size suitable enough to detect the general nation's performance?

R Q 4

How trustwrthy are the results of SACMEQ reports?

7. How consistent are the SACMEQ report with other educational assessment and research findings in Lesotho?
8. What are the social, economic and cultural contexts of Lesotho considered during the interpretation of the findings?
9. What is the extent to which the reports enable the researchers to track changes in education quality and outcomes over time to make productive interventions in Lesotho?

APPENDIX 2: PROJECT SACMEQ

Report created by Maipato Khoase

Code Report – Grouped by: Code Groups

All (27) codes

Groupless

1 Codes:

- **social econimic issues**

2 Quotations:

2:17 ¶ 36 – 39 in INTERVIEWEE 2 RESPONSES

You know for SACMEQ III, one interesting thing about it was knowledge about HIV/AIDS. So you know for Lesotho sex education is not easy for parents to talk about so those are some of the issues that emerged as the results were being analysed. Other than that, you will have this issue of people being given homework so issues such as a high orphan rate will emerge there because you find a learner not having someone helping with the homework then you get to answer why. Then you find that the child is in a child-headed household or staying alone. So those are the issues that were unique in our case as we interpreted.

Another issue is SESOTHO as our mother tongue versus ENGLISH as the medium of instruction and these issues like in MOZAMBIQUE were tested in PORTUGUESE as their mother tongue and you will think that they will be having their advantage but only to find that it is not as they are still below the margin.

It was analysed by the economic status of the households like the assets they have, and the poverty indicators. So you will see that the fact that we are poor, you can even see the number of schools with electricity for example, the number of schools with computers for example. They will be surprised that there are no schools with a computer while in some countries having a computer is a normal or part of their lifestyle so those issues will emerge for us to see okay, it is probably normal because these schools do not have a library, they are using a book corner. It's probably because this school do not

have electricity therefore they don't have much time to read. So you will see those arising in the data that was collected because it was collected as part of the background information.

There is also an issue with facilities as there was an analysis on performance versus those who have toilets, electricity, water and what. So it was a lot of data that was being analysed from all angles to see what impacts what.

3:2 ¶ 26 in INTERVIEWEE 3 RESPONSE3

Ecology and culture are the factors considered.

AUTHENTICITY OF SACMEQ REPORTS

7 Codes:

- **Confidentiality of Data**

1 Quotations:

1:12 ¶ 23 in INTERVIEWEE 1 RESPONSES

the data collection designs for the surveys conducted do not change. That is why data collection tools are kept confidential.

- **Consistency in Questionnaire Design**

1 Quotations:

2:16 ¶ 34 in INTERVIEWEE 2 RESPONSES

it was consistent to some extent because normally during the SACMEQ data collection design, they don't necessarily change the questionnaire. What they do, they will rather add some added modules.

- **Credible Data Process**

7 Quotations:

1:10 ¶ 17 in INTERVIEWEE 1 RESPONSES

From the reports that I have read, the data was placed using the double entry to correct for errors and cleaning of data. The data was cleaned nationally and the cleaned data was sent elsewhere to the SACMEQ Coordination Centre for its credibility.

1:11 ¶ 19 in INTERVIEWEE 1 RESPONSES

I think it is suitable because I must rightly say, even though it is just taking a random sample of grade 6 learners, they have used the same approach across the region in every country that is taking part in the SACMEQ programme.

2:6 ¶ 6 in INTERVIEWEE 2 RESPONSES

the design of the SACMEQ data collection tool is aligned with the national CAP.

2:10 ¶ 24 in INTERVIEWEE 2 RESPONSES

at data entry we used to have what they call double entry to correct for errors and cleaning of data. so the data is normally cleaned nationally and the cleaned version is sent elsewhere to the coordination centre and the coordination centre

2:11 ¶ 24 in INTERVIEWEE 2 RESPONSES

SACMEQ credibility in terms of expertise in handling data, expertise in softwares that are used to capture data so I think in that regard there was a fair amount of investment that was made and at that time

2:22 ¶ 26 in INTERVIEWEE 2 RESPONSES

there was a data manager from the planning unit team so and also the national research coordinator working in collaboration with the coordination Centre. So I think, like I said even before the data is submitted, some validation is done to see that the submission is complete and correct even before they are submitted.

3:5 ¶ 17 in INTERVIEWEE 3 RESPONSE3

Though I do not have much information on SACMEQ reports, the data quality on data collection and data analysis in these reports are guided by data quality assurance being completeness, accuracy, relevance timeline, and consistency among others.

- **Not properly measured**

1 Quotations:

4:5 ¶ 12 in INTERVIEWEE 4 RESPONSES

Like I said earlier it cannot easily fit into the international standards due to the approach given, the system has to fit every corner of the country, but most of our stakeholders are not fully informed and I think that is a short-coming that need to be addressed anyway for the next future.

- **Proper data entry**

1 Quotations:

2:12 ¶ 26 in INTERVIEWEE 2 RESPONSES

Even when it was captured, it will be captured 2 times hence we call it double entry so we will have 1st round of capturing and 2nd round of capturing just to check if there are no errors even before it was submitted for aggregation and further cleaning in France.

- **Report Biasness**

2 Quotations:

3:4 ¶ 19 in INTERVIEWEE 3 RESPONSE3

I consider these reports biased as the SACMEQ reports issued only focus on the respondent rate hence non-response rate is not considered. Even the reasons why it has not been attempted were not stated.

4:4 ¶ 10 in INTERVIEWEE 4 RESPONSES

I don’t think it can be fully measured because of the way it is monitored (some fully hands-on entities are left behind and overlooked so I think there is bias.

- **Representative Sample**

2 Quotations:

2:14 ¶ 28 in INTERVIEWEE 2 RESPONSES

I think well without being technical about it, it’s a fairly representative sample because it's drawn from the enrolment statistics from the planning unit and it's taking care of I think children that are from poor and low-performing schools are also represented.

2:15 ¶ 28 in INTERVIEWEE 2 RESPONSES

it is not biased toward any other type so it is fairly representative of the children in each country.

CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

6 Codes:

- **Exclusion of Children with Disability**

2 Quotations:

2:13 ¶ 28 in INTERVIEWEE 2 RESPONSES

The only disadvantage is that it excludes children with disability, especially with visual impairment so it's against the policy of inclusion. That is the only setback they are having and to my recollection

4:9 ¶ 26 in INTERVIEWEE 4 RESPONSES

It is not easy for the researchers to track changes in education quality as these reports do not cater for disabled pupils hence they are biased.

- **Lack of expected skills**

3 Quotations:

1:8 ¶ 11 in INTERVIEWEE 1 RESPONSES

I don't know if it was because teachers did not have necessary the skills.

1:9 ¶ 11 in INTERVIEWEE 1 RESPONSES

I discovered that teachers are lacking a lot so the performance really when one reads the national assessment reports, everything as the performance is not so impressive.

2:9 ¶ 20 in INTERVIEWEE 2 RESPONSES

You will also notice that in SACMEQ we are testing learners and their teachers and in some cases you will see that our teachers are not also performing that well compared to other countries like Seychelles and RSA

- **Non-involvement**

3 Quotations:

3:3 ¶ 23 in INTERVIEWEE 3 RESPONSE3

I do not think it can be that consistent because it has been for a period without participating in SACMEQ summits due to financial problems that our country has encountered so it says we as a country are not up to date to fit in.

4:7 ¶ 22 in INTERVIEWEE 4 RESPONSES

From my knowledge, in other assessment projects conducted in this country, we are given a chance to share our experiences and knowledge, but in SACMEQ we just read them online like any other citizen hence I consider it inconsistence anyway.

4:8 ¶ 24 in INTERVIEWEE 4 RESPONSES

since we are not invited during the interpretation of the research findings, any interventions to be proposed are not going to be inclusive hence our needs are not fully met.

- **Non-Participant**

2 Quotations:

4:1 ¶ 4 in INTERVIEWEE 4 RESPONSES

In our department, though we are stakeholders in education, we have limited information about SACMEQ as we have not participated in any study conducted or received any report about the studies conducted so we can't tell much about it.

4:6 ¶ 18 in INTERVIEWEE 4 RESPONSES

Like I said I do not have much Idea about SACMEQ, I still have no idea regarding its sampling criteria

- **Non-public of reports**

2 Quotations:

2:21 ¶ 42 in INTERVIEWEE 2 RESPONSES

Normally, it only stays with the government officials the few academicians who participated and researchers who are interested but by nature, in some countries, they make a national agenda whenever the results are published, they publish them like the other results.

3:1 ¶ 28 in INTERVIEWEE 3 RESPONSE3

In education, the key ones that inform whether the performance has improved or not are the diagnostic and policy, mix studies/ surveys, and national assessment studies. EMIS is published yearly regarding pupils' performance. SACMEQ also issues the reports, all the ministers of education are called to the ministerial workshops or meeting to present

their results. So being the case, that data provided can be used during the planning and tracking of any change presented.

- **Resistance to Change**

1 Quotations:

1:7 ¶ 10 in INTERVIEWEE 1 RESPONSES

This was evident during our workshops that we heard from our primary school teachers during the Lesotho quality education project legally that either teacher, didn't want to come out of their comfort zone.1. They wanted to keep on teaching what they have been teaching for the past so many years. And when this came up, they couldn't cope with them.

EXPECTATIONS REGARDING LITERACY AND NUMERACY WHEN JOINING SACMEQ

6 Codes:

- **Chance for Syllabus Improvement**

2 Quotations:

1:13 ¶ 27 in INTERVIEWEE 1 RESPONSES

we still need to do that kind of research for such reports and see how we improve our curriculum that we develop down here

2:4 ¶ 8 in INTERVIEWEE 2 RESPONSES

Then you got the chance to change or upgrade your syllabus depending on the performance and the results and at the same time you got the chance to impact the teacher training institutions so in that regard it's having an impact as well.

- **Cross-Cultural Comparisons**

5 Quotations:

1:1 ¶ 4 in INTERVIEWEE 1 RESPONSES

As a country, we are not a stand-alone, so when we design the curriculum, we are benchmarking with other countries because we want to develop a learner to be a fully literate global citizen.

1:2 ¶ 4 in INTERVIEWEE 1 RESPONSES

So for that, the intent and purpose of joining programs like that one of SACMEQ and other ones that exist is also to reflect on ourselves and see where we are and compare with other countries in the region worldwide.

2:2 ¶ 5 in INTERVIEWEE 2 RESPONSES

to benchmark with other members' states because we have 15 members' states to compare ourselves with. So that is another advantage of joining the SACMEQ.

2:19 ¶ 41 in INTERVIEWEE 2 RESPONSES

In some countries, they even disseminate that to the media for the nation to know how the country has performed to other countries compared

3:8 ¶ 5 in INTERVIEWEE 3 RESPONSE3

In SACMEQ, Lesotho expected to evaluate and monitor its education quality and also to benchmark with other members participating.

- **First-Hand Information**

2 Quotations:

2:18 ¶ 41 in INTERVIEWEE 2 RESPONSES

they are kind of forced to have first-hand information that they can use during the planning to change the status call.

3:9 ¶ 5 in INTERVIEWEE 3 RESPONSE3

Also to equip its researchers with competences suitable for researching. Refer to the Lesotho SACMEQ III report for more information. It is clearly stated.

- **Global Citizenship Development**

1 Quotations:

1:1 ¶ 4 in INTERVIEWEE 1 RESPONSES

As a country, we are not a stand-alone, so when we design the curriculum, we are benchmarking with other countries because we want to develop a learner to be a fully literate global citizen.

- **Improvement of Education Quality**

1 Quotations:

4:2 ¶ 4 in INTERVIEWEE 4 RESPONSES

from what I have read as an individual, it expected to improve its education quality by monitoring and evaluating literacy and numeracy skill at grade 6.

- **Monitoring of educational quality**

2 Quotations:

2:1 ¶ 5 in INTERVIEWEE 2 RESPONSES

the consortium is meant to monitor education quality so the first part or benefit of it was to benefit in terms of having data for monitoring the education quality

3:7 ¶ 5 in INTERVIEWEE 3 RESPONSE3

In SACMEQ, Lesotho expected to evaluate and monitor its education quality

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PRACTICAL STEPS TO MEET EXPECTED STANDARD

3 Codes:

- **Explanatory report for curriculum development**

1 Quotations:

1:14 ¶ 27 in INTERVIEWEE 1 RESPONSES

I think researchers should be telling us as curriculum developers about the performance and what their research findings are saying but the reports. However, they are quantitative I would love them to be more qualitative as well

- **In-service Training for Teachers**

2 Quotations:

1:4 ¶ 6 in INTERVIEWEE 1 RESPONSES

I think it says we still need to do a lot from our side. At the moment where I am sitting, I think we need to beef up the training for our teachers. I am not sure about the preservice but the in-service, I think we need to do something about it so that our learners can be on the same path as those of other countries.

2:4 ¶ 8 in INTERVIEWEE 2 RESPONSES

Then you got the chance to change or upgrade your syllabus depending on the performance and the results and at the same time you got the chance to impact the teacher training institutions so in that regard it's having an impact as well.

- **Utilisation of reports**

1 Quotations:

2:20 ¶ 42 in INTERVIEWEE 2 RESPONSES

So it is up to the education planners and researchers to inform and find strategies for making the public about the SACMEQ results.

STATUS OF COUNTRY'S EXPECTATIONS REGARDING QUALITY EDUCATION STANDARDS BY SACMEQ

4 Codes:

- **Expectation met**

1 Quotations:

2:3 ¶ 8 in INTERVIEWEE 2 RESPONSES

I think to a greater extent, it is because by design when looking at the grade 6 syllabus and then you take all the syllabi and compare them with other member states.

- **Low quality**

2 Quotations:

2:5 ¶ 14 in INTERVIEWEE 2 RESPONSES

Well. I think, I think the performance of Lesotho was not good because it was affected by the introduction of free primary education so in a way we as a country opted for access over quality.

3:6 ¶ 13 in INTERVIEWEE 3 RESPONSE3

in SACMEQ really, it has been observed in reports issued that our country is below the international standards. Reference to be made to SACMEQ reports for further clarity.

- **Short of Expected Quality**

6 Quotations:

1:3 ¶ 6 in INTERVIEWEE 1 RESPONSES

SACMEQ studies test the aptitude of our learners in grade 6 and it compares their acquisition of literacy and numeracy skills with those other countries in the region SACMEQ says it is for Southern and Eastern Africa and the results that we always get

there are not impressive as per the standards and expectations of the of SACMEQ programme.

1:5 ¶ 10 in INTERVIEWEE 1 RESPONSES

Much as I cannot provide scientific evidence on how Lesotho is performing in SACMEQ, from the reports, the anecdotal evidence I can give is that Lesotho has performed below expectations since its participation.

1:6 ¶ 13 in INTERVIEWEE 1 RESPONSES

Up to now, with the reports that I have seen so far, we have not come to the expected level of performance.

2:7 ¶ 16 in INTERVIEWEE 2 RESPONSES

Still not good because I think, we are ranked the second lowest or there about because I think the reports that I had access to

2:8 ¶ 16 in INTERVIEWEE 2 RESPONSES

But the performance in SACMEQ II & III was still not good if I remember well like I said, we are still ranked at the second lowest or the third lowest we never raised/ reached the highest

3:10 ¶ 7 in INTERVIEWEE 3 RESPONSE3

Lesotho seemed to have slight progress under SACMEQ's auspices. However, due to financial constraints faced by Lesotho, it could not reach the level expected regarding the quality of its educational standards.

- **Societal Needs Not Addressed**

1 Quotations:

4:3 ¶ 6 in INTERVIEWEE 4 RESPONSES

I don't think the societal needs are fully addressed as the disabled people's concerns are left out/behind, hence individual needs are not tailor-made as we align ourselves with

the integrated curriculum. The issued reports do not fully display the disabled child's performance as these are not materials aimed to be.

APPENDIX 3: PROJECT: DOCUMENT ANALYSIS_SACMEQ

Code Report – Grouped by: Code Groups

All (22) codes

CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

10 Codes:

- **Economic Restrictions**

  1 Groups:

  CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

  1 Quotations:

  1:23 ¶ 61 in SACMEQ

  Economic Restrictions

  0 Codes

- **Fundamental Facilities**

  1 Groups:

  CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

  1 Quotations:

  1:16 ¶ 49 in SACMEQ

  Fundamental Facilities

  0 Codes

- **Human Resources: Insufficient Certified Teachers**

  1 Groups:

  CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

  1 Quotations:

  1:19 ¶ 55 in SACMEQ

  Human Resources: Insufficient Certified Teachers

  0 Codes

- **Inadequate Educational Facilities**

  1 Groups:

  CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

  1 Quotations:

  1:14 ¶ 45 in SACMEQ

  Inadequate Educational Facilities

  0 Codes

- **Insufficient Resources in Classrooms**

  1 Groups:

  CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

  1 Quotations:

  1:15 ¶ 47 in SACMEQ

  Insufficient Resources in Classrooms

  0 Codes

- **Learning Resources Insufficient Stationery and Textbooks**

  1 Groups:

  CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

  1 Quotations:

  1:17 ¶ 51 in SACMEQ

  Learning Resources Insufficient Stationery and Textbooks

  0 Codes

- **Professional Improvement**

  1 Groups:

  CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

  1 Quotations:

  1:20 ¶ 57 in SACMEQ

  Professional Improvement

0 Codes

- **Regional Exchanges**

1 Groups:

CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

1 Quotations:

1:21 ¶ 59 in SACMEQ

Regional Exchanges

0 Codes

- **Socio-economic Aspects Parental Participation and Resource Misuse**

1 Groups:

CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

1 Quotations:

1:22 ¶ 60 in SACMEQ

Socio-economic Aspects Parental Participation and Resource Misuse

0 Codes

- **Teacher Guide and Dictionary Decline**

1 Groups:

CHALLENGES MILITATING AGAINST MEETING THE EXPECTED STANDARD

1 Quotations:

1:18 ¶ 53 in SACMEQ

Teacher Guide and Dictionary Decline

0 Codes

EXPECTATIONS REGARDING LITERACY AND NUMERACY WHEN JOINING SACMEQ

3 Codes:

- **Benchmarking and Improvement**

1 Groups:

EXPECTATIONS REGARDING LITERACY AND NUMERACY WHEN JOINING SACMEQ

1 Quotations:

1:12 ¶ 38 in SACMEQ

Benchmarking and Improvement

0 Codes

- **Improve Literacy and Numeracy Skills**

1 Groups:

EXPECTATIONS REGARDING LITERACY AND NUMERACY WHEN JOINING SACMEQ

1 Quotations:

1:11 ¶ 36 in SACMEQ

Improve Literacy and Numeracy Skills

0 Codes

- **Policy development and implementation**

1 Groups:

EXPECTATIONS REGARDING LITERACY AND NUMERACY WHEN JOINING SACMEQ

1 Quotations:

1:13 ¶ 40 in SACMEQ

Policy development and implementation

0 Codes

FACTORS CONTRIBUTING TO LOW-QUALITY EDUCATION

9 Codes:

- **Demand of Research**

1 Groups:

FACTORS CONTRIBUTING TO LOW-QUALITY EDUCATION

1 Quotations:

1:10 ¶ 29 in SACMEQ

Demand of Research

0 Codes

- **Financial constraints**

1 Groups:

FACTORS CONTRIBUTING TO LOW-QUALITY EDUCATION

1 Quotations:

1:3 ¶ 14 in SACMEQ

Financial constraints

0 Codes

- **Geographic difficulties**

1 Groups:

FACTORS CONTRIBUTING TO LOW-QUALITY EDUCATION

1 Quotations:

1:8 ¶ 23 in SACMEQ

Geographic difficultiess

0 Codes

- **High Dropout Rates**

1 Groups:

FACTORS CONTRIBUTING TO LOW-QUALITY EDUCATION

1 Quotations:

1:9 ¶ 27 in SACMEQ

High Dropout Rates

0 Codes

- **Insufficient Standard of Basic Education**

1 Groups:

FACTORS CONTRIBUTING TO LOW-QUALITY EDUCATION

1 Quotations:

1:4 ¶ 15 in SACMEQ

Insufficient Standard of Basic Education

0 Codes

- **Low Teacher Morale**

1 Groups:

FACTORS CONTRIBUTING TO LOW-QUALITY EDUCATION

2 Quotations:

1:2 ¶ 13 in SACMEQ

Teacher Morale and Support

1:7 ¶ 21 in SACMEG

Low Teacher Morale

0 Codes

- **Performance Less than SACMEQ Average**

1 Groups:

FACTORS CONTRIBUTING TO LOW-QUALITY EDUCATION

1 Quotations:

1:5 ¶ 17 in SACMEQ

Performance Less than SACMEQ Average

0 Codes

- **Primary School Completion Rates**

1 Groups:

FACTORS CONTRIBUTING TO LOW-QUALITY EDUCATION

1 Quotations:

1:6 ¶ 19 in SACMEQ

Primary School Completion Rates

0 Codes

- **Shortage of trained Teachers**

1 Groups:

FACTORS CONTRIBUTING TO LOW-QUALITY EDUCATION

1 Quotations:

1:1 ¶ 11 in SACMEQ

Shortage of trained Teachers

0 Codes

APPENDIX 4: INTRODUCTORY LETTER FROM THE UNIVERSITY (FACULTY OF EDUCATION)

The National University of Lesotho

Telephone: +266 22340601

P.O. Roma 180
Lesotho

Faculty of Education

30th January 2024.

Permanent Secretary,

Ministry of Education and Training,
Maseru 0100,
Lesotho.

RE: Letter of introduction

I am writing to introduce Maipato Khoase (Student ID: 200705185), currently enrolled in the Faculty of Education for a master's degree program in Educational Testing and Measurement. Her research, titled **"Evaluation of SACMEQ Reports on Literacy and Numeracy in Lesotho's Basic Education,"** requires information gathering from Ministry of Education and Training stakeholders to enhance theoretical understanding.

Maipato will articulate the research rationale within the Education department, adhering to ethical protocols to ensure the institution's integrity and protect human participants. Your support in facilitating her access to necessary resources and assistance is greatly appreciated to ensure the successful completion of her study program.

Thank you for your consideration.

Yours Sincerely,

Paseka A. Mosia (D.Ed.)
Associate Professor of Inclusive Education
Dean, Faculty of Education.
Cell: +26658969867
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APPENDIX 5: PROOF OF EDITING

STMbondvo editing services (Pty) Ltd
148 Aramburg (Mpumalanga) Cell: 060 346 7091 email:mhlekazist@gmail.com

Proof of editing

STMbondvo editing services
148 Aramburg
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Cell.: 0603467091

Date: July 2024

This is to certify that I have edited the MeD dissertation of the following candidate:

Names and Surname: M. Khoase

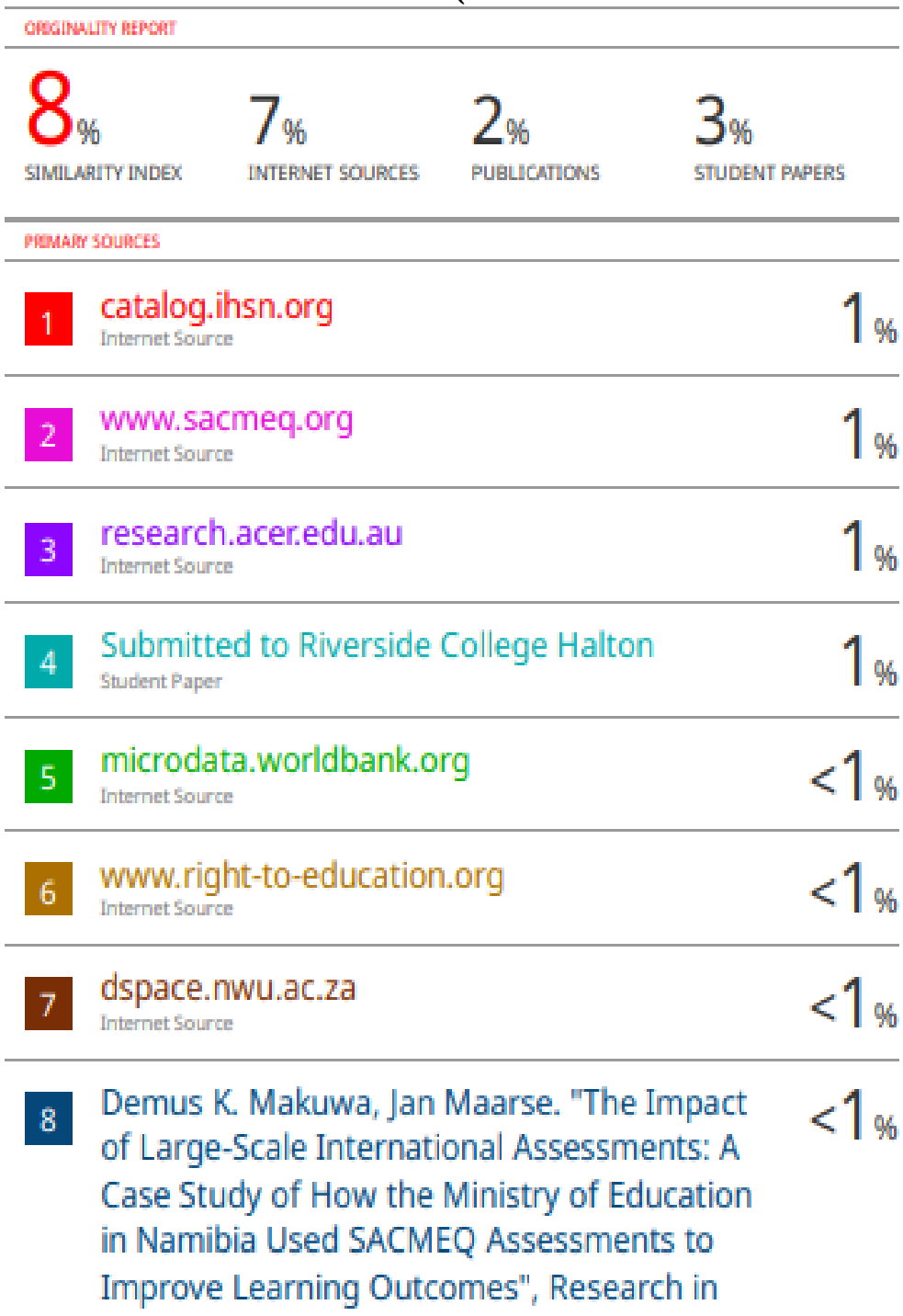
Student number: 200705185

Title: Assessment the authenticity of SACMEQ reports on literacy and numeracy in the Basic Education in Lesotho.

Dr. S.T Maseko
Director
STMbondvo editing services

Confidentiality: *In editing academic documents, I understand that I have access to confidential data, that information contained in documents is confidential and for that, I agree not to divulge, publish, make known to unauthorized persons or to the public the data in documents.*

APPENDIXX 6: SIMILARITY INDEX (FROM TURNITIN PLAGIARISM CHECKER)



ORIGINALITY REPORT

8%	7%	2%	3%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	catalog.ihsn.org Internet Source	1%
2	www.sacmeq.org Internet Source	1%
3	research.acer.edu.au Internet Source	1%
4	Submitted to Riverside College Halton Student Paper	1%
5	microdata.worldbank.org Internet Source	<1%
6	www.right-to-education.org Internet Source	<1%
7	dspace.nwu.ac.za Internet Source	<1%
8	Demus K. Makuwa, Jan Maarse. "The Impact of Large-Scale International Assessments: A Case Study of How the Ministry of Education in Namibia Used SACMEQ Assessments to Improve Learning Outcomes", Research in	<1%