



**IMPACT OF THE FREE QUALITY SCHOOL
EDUCATION INTERVENTION ON SECONDARY
SCHOOL STUDENTS' ACADEMIC PERFORMANCE IN
THE WEST AFRICAN SENIOR SCHOOL CERTIFICATE
EXAMINATION (WASSCE) IN SIERRA LEONE**

**Foday Bassie Turayⁱ,
Alpha Sesay,
Kelvin A. K. Turay,
Omor D. Camara,
Saidu Conteh,
Mustapha Kallon**

College of Creative Arts' Science, Technology and Innovation,
Bamoi Luma, Kambia District, North-West Region,
Sierra Leone

Abstract:

This study examined the impact of the Free Quality School Education (FQSE) intervention on secondary school students' academic performance in the West African Senior School Certificate Examination (WASSCE) in Sierra Leone. The research was motivated by the need to determine whether the expansion of access to secondary education since the introduction of FQSE in 2018 has translated into improved learning outcomes. The study adopted an ex-post facto research design, using secondary data on WASSCE performance from 2016 to 2024 obtained from official examination records. The pre-implementation period (2016–2017) was compared with the implementation period (2018–2024) to assess trends and differences in academic performance. Descriptive statistics and Welch's independent samples t-test were employed to analyse the data at a 0.05 level of significance. Findings indicate that the FQSE intervention significantly expanded access to secondary education, increased enrolment, and reduced financial barriers such as school fees and examination fees. Respondents generally acknowledged improvements in infrastructure, classroom environment, and availability of some teaching and learning materials. However, challenges such as overcrowded classrooms, inconsistent provision of textbooks and notebooks, continued payment for uniforms and extra lessons, and uneven implementation of the school feeding programme were reported. Analysis of WASSCE performance revealed mixed outcomes, with initial declines in pass rates following policy implementation and gradual recovery in later

ⁱ Correspondence: email fodaybassieturay1988@gmail.com

years. Overall, while FQSE enhanced access and equity in secondary education, its effect on academic performance was modest and inconsistent, suggesting that increased access alone does not automatically translate into improved learning outcomes. The study concludes that although the FQSE policy has made notable progress in expanding educational opportunities and supporting disadvantaged students, sustained improvements in WASSCE performance require strengthened teacher capacity, adequate instructional resources, improved learning environments, and better monitoring of policy implementation. The study recommends continued investment in quality-enhancing inputs and systematic evaluation to ensure that the benefits of free education are translated into meaningful academic achievement at the senior secondary level in Sierra Leone.

Keywords: Free Quality School Education (FQSE); academic achievement; learning outcomes; secondary education; education policy; Sierra Leone; educational equity

1. Introduction

1.1 Background to the Study

Education is universally acknowledged as a cornerstone for individual empowerment, socio-economic development, and national progress. Scholars argue that education not only develops cognitive skills but also enhances productivity, social behaviour, and competitive capacity in a globalized world (World Bank, 2018). In Sub-Saharan Africa, education systems have historically faced persistent challenges, including inadequate infrastructure, teacher shortages, high costs of schooling, and low academic achievement (Education Quality in West and Central Africa, 2025). These constraints are particularly pronounced in Sierra Leone, one of the world's poorest countries, where educational attainment remains below regional averages despite sustained policy interventions (World Bank Project Document, 2023).

Sierra Leone's education system comprises multiple transition points from primary through junior and senior secondary levels. Performance in national standardized examinations such as the National Primary School Examination (NPSE), Basic Education Certificate Examination (BECE), and West African Senior School Certificate Examination (WASSCE) are commonly used as an indicator of learning outcomes and system effectiveness. Of these, WASSCE performance is particularly significant because it largely determines students' eligibility for tertiary education and job market opportunities. However, available assessment data prior to 2018 indicated extremely low performance; for example, only about 3.59% of senior students obtained credit in relevant subjects in 2016 (World Bank, 2023).

In recognition of the role of education in fostering national development, the Government of Sierra Leone launched the **Free Quality School Education (FQSE)** intervention in 2018. This flagship policy aimed to eliminate school fees for basic and

secondary schooling, increase enrollment and retention, distribute teaching and learning materials, recruit additional teachers, and improve learning environments across the country. Government officials have reported expanding access to education for millions of children, constructing and rehabilitating school facilities, and recruiting thousands of teachers under FQSE (Sesay, 2025).

Despite these reforms, questions remain about the **quality of learning outcomes** produced by the expanded system. While free schooling policies are intended to break down financial barriers, research from similar contexts suggests that access alone does not guarantee improved student learning outcomes. For example, studies on the Free Senior High School policy in Ghana found minimal improvement in student performance despite increased enrollment, largely due to strained resources and inadequate instructional support (Mohammed et al., 2025). Educational inequality and resource disparities further compound these challenges; rural schools in Sierra Leone continue to struggle with overcrowding, insufficient materials, and limited qualified teaching staff, thereby limiting the potential gains of free education (Educational Inequality in Sierra Leone literature).

In the Sierra Leone context, although FQSE has been credited with widening access and improving equity, its impact on academic performance, especially at the senior secondary level, remains under-researched. There are conflicting narratives in public discourse regarding the policy's effectiveness. Some argue that quality has deteriorated because increased enrollment overwhelmed existing capacities, contributing to poor WASSCE outcomes and examination malpractice concerns (Bangura, 2022). Other stakeholders contend that achievements such as higher transition rates and improved literacy suggest that foundational gains are beginning to emerge, though continued challenges remain.

Because the FQSE policy was already enacted prior to this study, this research adopts an **ex-post facto design**, which allows for retrospective comparison of student achievement before and after policy implementation without manipulating variables that naturally occurred over time. In this case, WASSCE performance data from 2016 and 2017 represent the period before the policy, while results from 2018 through 2024 represent the implementation era.

2. Statement of the Problem

Sierra Leone's Free Quality School Education intervention was designed to expand access, improve retention, and enhance learning outcomes in secondary education. However, despite expanded access and increased enrollment, the national performance in the West African Senior School Certificate Examination has shown mixed patterns and inconsistent outcomes. Early years following policy implementation recorded extremely low pass rates in WASSCE, while later years indicated recovery and improvement, yet overall performance still falls far below continental benchmarks. These patterns raise

concerns about whether free schooling has resulted in meaningful improvements in student learning outcomes or whether systemic weaknesses such as overcrowded classrooms, ineffective teaching, and inadequate learning resources have dampened the anticipated benefits of the intervention.

The core problem is that although the FQSE policy represents a significant public investment in education, empirical evidence on its influence on academic performance at the secondary level is limited. Existing national data provide descriptive trends, but no rigorous retrospective comparison has been conducted to evaluate whether the performance of students has significantly changed before and during the implementation of FQSE. Given that educational policies should be informed by evidence to ensure accountability and effectiveness, this gap necessitates a systematic ex-post facto analysis.

2.1 Purpose of the Study

The primary purpose of this study is to assess the influence of the Free Quality School Education intervention on secondary school students' academic performance in Sierra Leone. This influence will be measured through a comparative analysis of students' performance in the West African Senior School Certificate Examination (WASSCE) before and during the implementation period of the FQSE policy. By conducting an ex-post facto analysis, the study aims to determine whether there are statistically significant differences in academic outcomes that can be attributed to the policy's implementation, while acknowledging the non-causal nature of the design.

2.2 Research Questions

- 1) To what extent has the implementation of the Free Quality School Education (FQSE) policy met its intended objectives in Sierra Leone's secondary school system?
- 2) What was the level of secondary school students' academic performance in the WASSCE before the implementation of the Free Quality School Education intervention?
- 3) What was the level of secondary school students' academic performance in the WASSCE during the implementation of the Free Quality School Education intervention?
- 4) Is there a statistically significant difference in WASSCE performance between students who sat the examination before and during the implementation of FQSE?
- 5) What challenges are associated with the implementation of the Free Quality School Education (FQSE) intervention in WASSCE in Sierra Leone, and how can the intervention be improved to enhance students' performance?

2.3 Research Hypothesis

The study tests the following null hypothesis at the 0.05 level of significance:

H₀: There is no significant difference in secondary school students' academic performance in the WASSCE before and during the implementation of the Free Quality School Education intervention in Sierra Leone.

2.4 Significance of the Study

This study contributes to both academic scholarship and educational policy discourse. For policymakers and education planners, it provides empirical evidence on the outcomes of a major education reform, highlighting whether expanded access under FQSE has been accompanied by improved performance in national examinations. For educators and school administrators, the findings offer insights into the effects of systemic changes on instructional quality and learner achievement. Additionally, researchers and students of education policy will find the research useful as a reference for comparative studies on education reforms in West Africa and beyond.

3. Operational Definition of Terms

To ensure clarity and consistency throughout the study, the key terms used in this research are defined as follows:

- 1) **Free Quality School Education (FQSE) Intervention.** Refers to the government policy introduced in Sierra Leone in 2018 aimed at providing free basic and secondary education to all children. The policy seeks to improve access, enrollment, retention, and learning quality by eliminating school fees, providing teaching and learning materials, recruiting additional teachers, improving school infrastructure, and strengthening administrative oversight. (Sesay, 2025; World Bank, 2023)
- 2) **Academic Performance.** Refers to the measurable achievement of students in educational assessments. In this study, academic performance is specifically operationalized as students' results in the West African Senior School Certificate Examination (WASSCE), measured by the percentage of candidates obtaining credit passes (grades A1–C6) in relevant subjects.
- 3) **West African Senior School Certificate Examination (WASSCE).** A standardized regional examination administered by the West African Examinations Council (WAEC) to students completing senior secondary school in participating West African countries, including Sierra Leone. WASSCE results are used as a benchmark for academic achievement, further education eligibility, and workforce readiness.
- 4) **Secondary School Students.** Refers to learners enrolled in senior secondary education (Senior Secondary 1–3) in Sierra Leone, who are eligible to sit for the WASSCE during the study period (2016–2024).
- 5) **Ex-Post Facto Study.** A research design in which the researcher investigates existing phenomena or outcomes without manipulating the independent variable.

In this study, the design allows comparison of WASSCE performance before (2016–2017) and during (2018–2024) the implementation of the FQSE policy.

- 6) **Credit Pass (A1–C6).** The range of grades considered satisfactory for progression to tertiary education. In the context of WASSCE, a credit pass indicates that a student has achieved a level of competency deemed acceptable for further academic or vocational training.
- 7) **Cohort.** A group of students is defined by the time period during which they sat the WASSCE examination. In this study, the cohorts are defined as pre-implementation (2016–2017) and post-implementation/implementation (2018–2024) of the FQSE intervention.
- 8) **Performance Level.** Refers to the proportion of students achieving credit passes (A1–C6) in WASSCE for a given year. It serves as the dependent variable in this study.
- 9) **Policy Implementation Period.** The timeframe from 2018 to 2024, during which the FQSE intervention was active, marked the period of observation for post-intervention performance outcomes.
- 10) **Statistical Significance.** The probability that the observed difference or relationship in data is not due to chance. In this study, statistical significance is evaluated at the 0.05 alpha level using t-test comparisons of WASSCE performance before and during the FQSE intervention.

4. Review of Related Literature

Education research often situates policy interventions within broader frameworks that include access, quality, and learning outcomes. To rigorously understand the influence of the Free Quality School Education policy on students' performance, it is crucial to examine conceptual, theoretical, and empirical literature in three intertwined domains:

- 1) education policy and quality;
- 2) frameworks explaining educational outcomes; and
- 3) specific research on free education policies in Sierra Leone and comparable contexts.

4.1 Conceptual Review

4.1.1 Quality Education and Educational Policy

Quality education has been defined by UNESCO as the learning, knowledge, values, and competencies that learners acquire in formal schooling, which are relevant to individual and societal needs. Quality transcends mere access to education; it includes classroom instruction, teacher effectiveness, curriculum relevance, learning environments, and students' ability to demonstrate mastery of subject matter (UNESCO, 2015).

In Sierra Leone, the introduction of the Free Quality School Education policy aimed to eliminate financial barriers to education by abolishing tuition and examination

fees and increasing access to teaching materials and trained teachers across the country. Official reports indicate that this intervention expanded access significantly, with enrollment rising from about 37% to 85%, serving millions of children since its implementation in 2018. The policy also introduced additional measures such as school feeding and improvements in gender parity (MoICE, 2025).

However, increased access does not automatically yield improved learning outcomes. A study evaluating the impact of free quality education in Makeni City found that while tuition costs decreased and materials improved, challenges in teacher competency and performance assessment persisted, which negatively affected students' learning outcomes (Karim et al., 2023).

4.1.2 Education Quality in Sierra Leone

Research addressing the quality of education in government and government-assisted schools in Sierra Leone highlights persistent systemic challenges. According to Koroma et al., quality varies widely across schools, often determined by teacher preparedness, availability of instructional materials, class size, and infrastructure conditions. These factors influence students' academic achievement, particularly in high-stakes examinations (Koroma et al., AJEB).

Despite the FQSE's intention to improve instructional quality, national discourse reveals significant concerns about poor WASSCE pass rates, administrative breakdowns, and even allegations of widespread examination malpractice in some years (Bangura, 2019; Sierra Len Roded, 2022). These systemic issues illustrate that while policy aims are clear, effective implementation remains uneven.

4.2 Theoretical Framework

Understanding educational outcomes under policy interventions requires robust theoretical grounding. Two major theories underpin this research: **Human Capital Theory** and **Systems Theory**, complemented by perspectives that acknowledge socio-environmental influences.

4.2.1 Human Capital Theory

Human Capital Theory posits that investments in education increase individuals' productivity and capabilities, thereby improving their outcomes in examinations and later life achievements. Scholars have argued that education raises skills, boosts economic opportunities, and enhances cognitive development when input resources are effectively deployed (Teixeira, 2006; Yaqoob et al., 2022).

According to this theory, a policy such as FQSE should lead to improved academic performance, as removing financial barriers and expanding instructional resources increases students' opportunities to learn. However, if the quality of instructional delivery or learning environments is poor, the anticipated gains in student performance

may not materialize fully. This nuance challenges a simplistic interpretation of human capital benefits and underscores the role of implementation fidelity.

4.2.2 Systems Theory in Education

Education systems consist of interconnected components — including teachers, students, curriculum, policy, and community context — that dynamically interact to produce outcomes. Research on education as a complex system underscores that learning outcomes emerge from multiple relationships among stakeholders, institutions, and broader socio-economic conditions rather than linear cause-effect pathways.

Systems Theory suggests that improving performance requires alignment across elements of the education system. Access improvements under the FQSE intervention represent a key input, but sustained gains depend on the system's capacity to support teaching practices, monitor quality, and address contextual constraints.

4.3 Empirical Literature

This section synthesizes research on free education policies and their impact on academic outcomes, with emphasis on Sierra Leone and similar West African contexts.

4.3.1 Free Education Policies and Learning Outcomes

Empirical studies from countries that have introduced free secondary education policies show mixed effects. In Ghana, where Free Senior High School was rolled out nationally, researchers observed increased enrollment but limited improvements in learning outcomes due to inadequate instructional resources and teacher shortages. This highlights the tension between expanding access and ensuring quality teaching and schools' readiness to cope with large populations of learners. (Ghana studies, e.g., Doe & Adeyemi, 2024).

Although direct peer-reviewed studies on Sierra Leone's Free Quality School Education's impact on WASSCE performance are scarce, reports by stakeholders and education analysts point to a similar pattern: enhanced access has not uniformly translated into better academic performance. For instance, official reviews note significant expansion in infrastructure and teacher recruitment under FQSE, and some improvements in foundational literacy and numeracy have been reported under linked programs like the Sierra Leone Education Innovation Challenge (SLEIC).

Nevertheless, critiques from segments of civil society argue that WASSCE outcomes remain concerning, with persistent reports of poor pass rates, administrative challenges, and systemic weaknesses affecting quality outcomes. These observations underscore the need for rigorous research into the policy's influence on performance trends.

4.4 Synthesis and Research Gap

Existing literature confirms that free education initiatives increase access and reduce financial barriers. However, the relationship between free education policies and academic performance is complex and shaped by implementation quality, resource adequacy, teacher capacity, and system-wide support mechanisms. While some studies highlight improved foundational skills linked to free education programmes, there remains a gap in empirically robust, retrospective analyses of senior secondary outcomes such as WASSCE performance — particularly in Sierra Leone.

This research addresses this gap by leveraging ex-post facto analysis to compare secondary school students' WASSCE performance before and after the introduction of the FQSE policy.

4.5 Conceptual Diagram

Below is an illustrative conceptual model showing how **educational inputs**, **mediating factors**, and **learning outcomes** interact under the Free Quality School Education intervention.

Figure 1

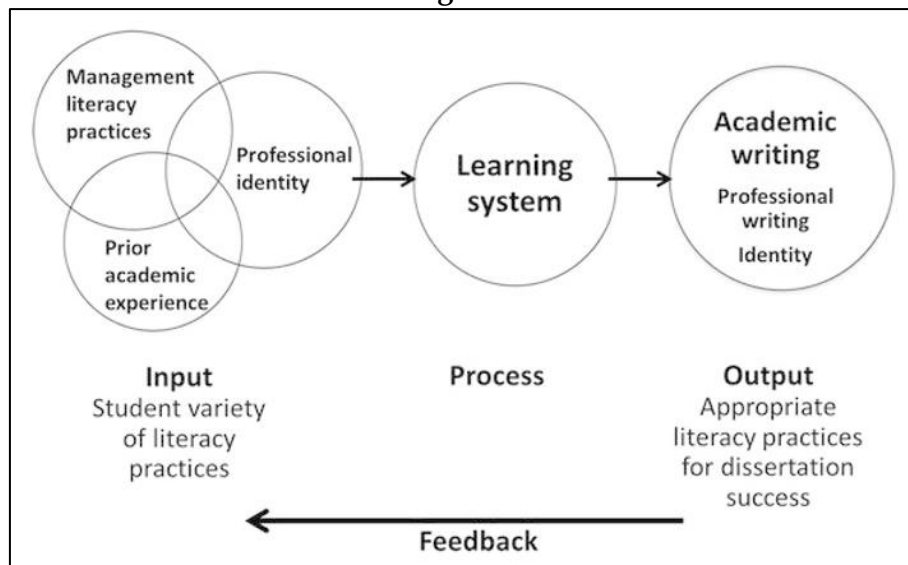


Figure 2

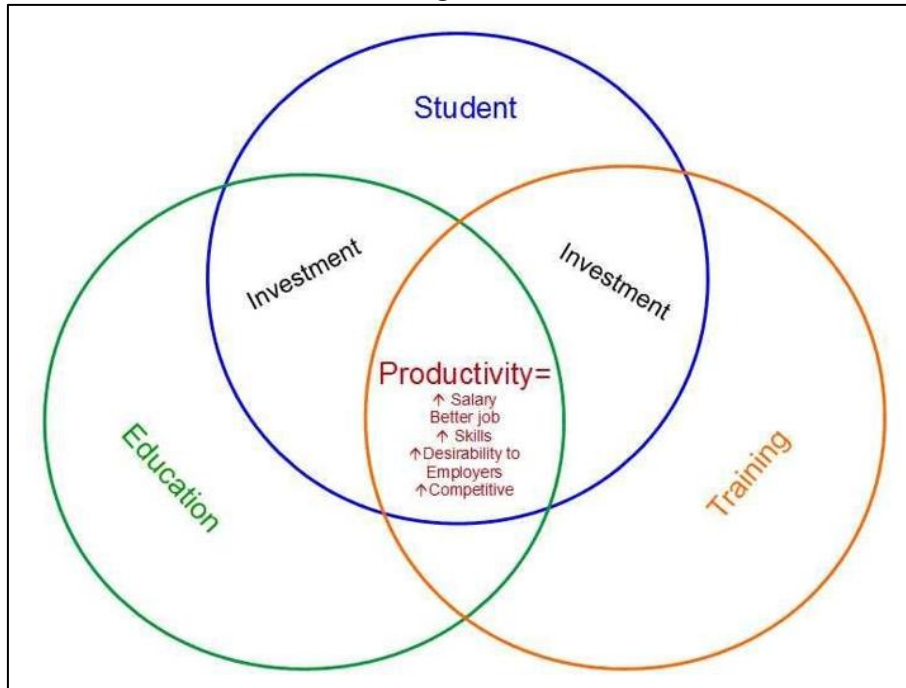
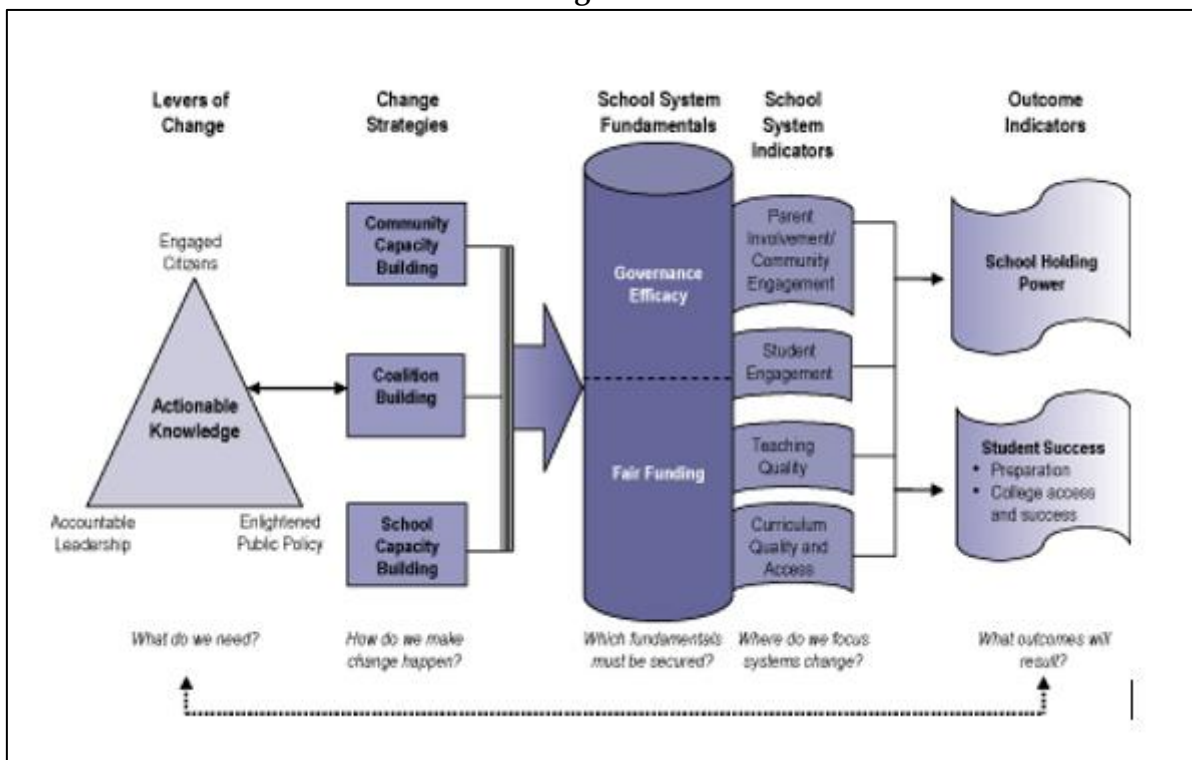


Figure 3



This model demonstrates that while removing financial barriers (policy input) is necessary, learning outcomes such as WASSCE performance depend on factors such as teacher quality, instructional materials, learning environment, and systemic coherence.

4.6 Summary

Chapter Two reviewed definitions and themes related to education quality, policy interventions, and frameworks explaining student outcomes. Conceptually, quality education involves more than access; it requires systemic support and sustained instructional improvement. Theoretical lenses such as Human Capital Theory and Systems Theory provided a foundation for understanding the potential impacts of FQSE. Empirical literature from Sierra Leone and similar contexts underscores the complexity of linking free education policies to academic performance. This review highlights the need for methodologically rigorous examination which this study undertakes through ex-post facto analysis of WASSCE results.

5. Research Methodology

This chapter presents the methodology employed in this study. It explains the research design, population, sample, data collection instruments, data analysis techniques, and ethical considerations. The chapter justifies the choices made to ensure the research is rigorous, reliable, and replicable.

5.1 Research Design

The study adopted an ex-post facto research design, which is a non-experimental approach that examines existing phenomena to determine relationships or differences without manipulating variables (Kerlinger & Lee, 2000). Ex-post facto designs are particularly suitable when the independent variable has already occurred and cannot be ethically or practically manipulated (Creswell, 2014).

In the context of this study, the independent variable is the implementation of the Free Quality School Education (FQSE) intervention, while the dependent variable is secondary school students' academic performance, measured by WASSCE results. Since the FQSE policy was implemented before the study commenced, an experimental or quasi-experimental manipulation was impossible. The ex-post facto design allows for retrospective comparison of students' performance before (2016–2017) and during (2018–2024) the implementation of the policy.

This design enables the researcher to observe trends, patterns, and differences in performance over time while controlling, as much as possible, for confounding variables such as examination standards and national education policies.

5.2 Population of the Study

The population of the study comprised all secondary school students who sat the West African Senior School Certificate Examination (WASSCE) in Sierra Leone between 2016 and 2024. This population includes candidates from both public and government-assisted schools across all regions of the country.

The total population for the study is defined at the aggregate level, focusing on annual percentage scores of students achieving credit passes (A1–C6). This population was chosen because WASSCE results provide a reliable and standardized measure of academic performance that is widely recognized both nationally and regionally.

5.3 Sample and Sampling Technique

The study used a census approach, meaning all available annual WASSCE performance data for the selected years were included. The census included data for the following cohorts:

- 1) Pre-implementation cohort (2016–2017): Represents students who sat WASSCE before the introduction of FQSE.
- 2) Implementation cohort (2018–2024): Represents students who sat WASSCE after the policy was implemented.

A census was justified because:

- 1) The dataset is relatively small and manageable (annual aggregate performance data).
- 2) Using all available data increases the accuracy and reliability of statistical comparisons.
- 3) No additional sampling is necessary since the data represent the complete population for the chosen time frame (Nachmias & Nachmias, 2008).

This approach ensures that the study captures **all observed variations** in academic performance attributable to differences in policy periods.

5.4 Instrument for Data Collection

The study relied entirely on secondary data obtained from official publications by the West African Examinations Council (WAEC) and the Ministry of Education, Science, and Technology (MEST), Sierra Leone. The main data collected included annual percentage of candidates obtaining credit passes (A1–C6) in WASSCE.

These records are considered valid and reliable, as they are produced and standardized by official examination bodies following established protocols. Secondary data usage is appropriate in ex-post facto studies where direct measurement or manipulation of variables is impossible (Babbie, 2013).

Before analysis, the data were screened for completeness and consistency, ensuring no anomalies or missing values that could bias the results.

5.5 Method of Data Analysis

Data analysis was conducted in two stages:

5.5.1 Descriptive Statistics

Descriptive statistics such as mean, standard deviation, minimum, and maximum were computed for each cohort to summarize WASSCE performance before and during FQSE

implementation. These statistics provide a clear overview of central tendencies and variability in student performance.

5.5.2 Inferential Statistics

To determine whether the FQSE policy had a statistically significant impact on academic performance, an independent samples t-test (Welch's t-test) was employed. The Welch's t-test was chosen because:

- 1) The two cohorts have unequal sample sizes (2 years pre-implementation vs. 7 years post-implementation).
- 2) The variances of the two groups may differ, violating assumptions of the standard t-test.
- 3) Welch's t-test provides a robust estimate of significance under unequal variance conditions (Ruxton, 2006).

The null hypothesis tested at the 0.05 level of significance was:

H₀: There is no significant difference in secondary school students' WASSCE performance before and during the implementation of the Free Quality School Education intervention.

Results of the t-test were interpreted in terms of t-value, degrees of freedom, and p-value, enabling conclusions about whether the observed differences were statistically meaningful.

5.6 Ethical Considerations

Ethical considerations in this study were primarily concerned with **data integrity**, confidentiality, and responsible use of secondary data:

- 1) **Confidentiality:** No personal identifiers were used since the study analyzed **aggregate performance data**.
- 2) **Informed Consent:** Not applicable because the study did not involve direct interaction with human subjects.
- 3) **Responsible Use of Data:** All data were sourced from publicly available and **official records**, ensuring transparency and credibility.
- 4) **Academic Honesty:** Data were used solely for **research purposes**, and proper citations were made to all sources (Babbie, 2013).

Adherence to these ethical principles ensures the study meets **international standards of research ethics**, even when using secondary data.

5.7 Summary

Chapter Three outlined the **research methodology** adopted to investigate the influence of the Free Quality School Education intervention on secondary school students' academic performance in Sierra Leone. The study used an ex-post facto design, a census of all WASSCE performance data from 2016 to 2024, and applied **descriptive and inferential statistics** (Welch's t-test) to examine differences in performance before and

during policy implementation. Ethical considerations were carefully observed, ensuring the study's reliability, credibility, and compliance with research norms.

This methodology provides a **systematic framework** for evaluating whether the FQSE policy has influenced academic outcomes at the senior secondary level in Sierra Leone.

6. Data Analysis and Report

6.1 Research Question One: To What Extent Has the Implementation of the Free Quality School Education (FQSE) Policy Met Its Intended Objectives in Sierra Leone's Secondary School System?

Table 1

S/N	Statement	Category	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Students in my school are required to pay school fees despite the FQSE policy	Principals	2 (3.2)	3 (3.1)	36 (45.0)	37 (48.7)
		Teachers	25 (6.4)	25 (6.4)	178 (43.6)	179 (43.6)
		Students	92 (6.0)	93 (6.0)	469 (44.3)	469 (44.3)
2	Students in my school are charged levies for infrastructural development under the FQSE programme	Principals	12 (15.2)	12 (15.2)	27 (34.8)	28 (34.8)
		Teachers	41 (6.2)	42 (6.2)	162 (43.7)	162 (43.7)
		Students	158 (21.4)	159 (21.4)	403 (28.6)	403 (28.6)
3	Students are required to pay for notebooks that are expected to be provided under the FQSE policy	Principals	4 (5.7)	3 (5.7)	36 (44.3)	36 (44.3)
		Teachers	20 (28.5)	20 (28.5)	184 (21.5)	183 (21.5)
		Students	82 (6.0)	83 (6.0)	479 (44.0)	479 (44.0)
4	Students are required to pay for textbooks that should be provided under the FQSE policy	Principals	5 (5.7)	4 (5.7)	35 (44.3)	35 (44.3)
		Teachers	26 (6.2)	25 (6.3)	178 (43.7)	178 (43.8)
		Students	99 (8.8)	100 (8.9)	412 (41.1)	412 (41.2)
5	Students are required to pay for their school uniforms	Principals	17 (21.5)	17 (21.5)	22 (28.5)	23 (28.5)
		Teachers	112 (27.5)	112 (27.5)	291 (22.5)	92 (22.5)
		Students	348 (31.0)	348 (31.0)	214 (19.0)	213 (19.0)
6		Principals	7 (9.5)	8 (9.5)	32 (40.5)	32 (40.5)

Foday Bassie Turay, Alpha Sesay, Kelvin A. K. Turay, Omor D. Camara, Saidu Conteh, Mustapha Kallon
 IMPACT OF THE FREE QUALITY SCHOOL EDUCATION INTERVENTION ON SECONDARY
 SCHOOL STUDENTS' ACADEMIC PERFORMANCE IN THE WEST AFRICAN SENIOR
 SCHOOL CERTIFICATE EXAMINATION (WASSCE) IN SIERRA LEONE

	Students in my school are required to pay Community Teachers Association (CTA) dues	Teachers	45 (11.0)	45 (11.1)	159 (38.9)	158 (39.0)
		Students	132 (11.7)	132 (11.8)	530 (38.2)	429 (38.3)
7	Students in my school are required to pay sports-related fees	Principals	9 (12.0)	101 (2.1)	30 (37.9)	30 (38.0)
		Teachers	86 (21.2)	86 (21.1)	118 (28.8)	117 (28.9)
		Students	257 (23.0)	258 (23.0)	304 (27.0)	304 (27.0)
8	Students in my school are required to pay for extra lessons	Principals	22 (28.5)	23 (28.5)	17 (21.5)	17 (21.5)
		Teachers	116 (28.6)	117 (28.6)	87 (21.4)	87 (21.4)
		Students	327 (29.1)	327 (29.1)	235 (20.9)	234 (20.9)
9	Students in my school are required to buy their own school bags	Principals	36 (45.0)	35 (44.9)	4 (5.1)	4 (5.0)
		Teachers	173 (42.5)	173 (42.5)	30 (7.5)	31 (7.5)
		Students	494 (44.0)	494 (44.0)	67 (6.0)	68 (6.0)
10	The government provides adequate teaching and learning materials for effective academic work in my school	Principals	34 (43.0)	34 (43.1)	6 (7.0)	5 (6.9)
		Teachers	94 (23.1)	94 (23.1)	109 (26.9)	110 (26.9)
		Students	328 (29.2)	329 (29.3)	233 (20.7)	233 (20.8)
11	The classroom environment in my school is conducive for effective teaching and learning	Principals	32 (40.5)	32 (40.5)	7 (9.5)	8 (9.5)
		Teachers	117 (28.8)	117 (28.7)	86 (21.3)	87 (21.2)
		Students	430 (38.3)	431 (38.4)	131 (11.6)	131 (11.7)
12	Additional teachers were posted to my school to address increased enrolment resulting from FQSE	Principals	23 (29.7)	24 (29.8)	16 (20.3)	16 (20.2)
		Teachers	87 (21.4)	87 (21.4)	116 (28.6)	116 (28.6)
		Students	290 (25.8)	289 (25.8)	272 (24.2)	272 (24.2)
13	Students in my school benefit from the government school feeding programme under FQSE	Principals	7 (8.8)	7 (8.9)	33 (41.1)	32 (41.2)
		Teachers	34 (8.2)	33 (8.3)	170 (41.7)	170 (41.8)
		Students	76 (6.7)	76 (6.8)	486 (43.2)	485 (43.3)
14	The quality and regularity of student feeding have improved under the FQSE policy	Principals	3 (3.1)	2 (3.2)	37 (46.8)	37 (46.9)
		Teachers	26	26	178	177

Foday Bassie Turay, Alpha Sesay, Kelvin A. K. Turay, Omor D. Camara, Saidu Conteh, Mustapha Kallon
 IMPACT OF THE FREE QUALITY SCHOOL EDUCATION INTERVENTION ON SECONDARY
 SCHOOL STUDENTS' ACADEMIC PERFORMANCE IN THE WEST AFRICAN SENIOR
 SCHOOL CERTIFICATE EXAMINATION (WASSCE) IN SIERRA LEONE

			(6.4)	(6.4)	(43.6)	(43.6)
		Students	61 (5.5)	62 (5.5)	500 (44.5)	500 (44.5)
15	Students in my school are fed on a daily basis under the FQSE programme	Principals	2 (1.9)	1 (1.9)	38 (48.1)	38 (48.1)
		Teachers	25 (6.1)	25 (6.2)	178 (43.8)	179 (43.9)
		Students	46 (4.1)	46 (4.1)	516 (45.9)	515 (45.9)
16	Students in my school are satisfied with the meals provided under the FQSE programme	Principals	5 (6.3)	5 (6.4)	35 (43.6)	34 (43.7)
		Teachers	27 (6.6)	28 (6.7)	177 (43.3)	176 (43.4)
		Students	80 (7.1)	81 (7.2)	481 (42.8)	481 (42.9)
17	My school has been provided with additional classrooms under the FQSE policy	Principals	21 (23.4)	21 (23.4)	18 (26.6)	19 (26.6)
		Teachers	50 (37.9)	49 (37.8)	154 (12.1)	154 (12.2)
		Students	191 (33.0)	190 (33.0)	371 (17.0)	371 (17.0)
18	My school has been provided with adequate furniture under the FQSE policy	Principals	25 (18.3)	25 (18.4)	14 (31.6)	15 (31.7)
		Teachers	53 (37.1)	52 (37.1)	151 (12.9)	151 (12.9)
		Students	200 (32.2)	200 (32.2)	362 (17.8)	361 (17.8)
19	The school library has improved to support quality secondary education under FQSE	Principals	22 (21.5)	23 (21.5)	17 (28.5)	17 (28.5)
		Teachers	55 (36.6)	54 (36.6)	149 (13.4)	149 (13.4)
		Students	244 (28.2)	244 (28.3)	318 (21.7)	317 (21.8)
20	Students in my school are adequately provided with core textbooks under the FQSE policy	Principals	18 (27.2)	18 (27.2)	22 (22.8)	21 (22.8)
		Teachers	77 (31.1)	77 (31.1)	127 (18.9)	127 (18.9)
		Students	248 (27.8)	313 (27.9)	313 (22.1)	313 (22.2)
21	Students in my school are adequately provided with notebooks under the FQSE policy	Principals	18 (27.8)	17 (27.9)	22 (22.1)	22 (22.2)
		Teachers	109 (23.3)	108 (23.4)	109 (26.6)	108 (26.7)
		Students	264 (26.5)	264 (26.5)	264 (23.5)	264 (23.5)
22	Students in my school are provided with school uniforms under the FQSE policy	Principals	8 (39.8)	7 (39.9)	31 (10.1)	32 (10.2)
		Teachers	61 (34.9)	62 (34.9)	142 (15.1)	142 (15.1)

Foday Bassie Turay, Alpha Sesay, Kelvin A. K. Turay, Omor D. Camara, Saidu Conteh, Mustapha Kallon
 IMPACT OF THE FREE QUALITY SCHOOL EDUCATION INTERVENTION ON SECONDARY
 SCHOOL STUDENTS' ACADEMIC PERFORMANCE IN THE WEST AFRICAN SENIOR
 SCHOOL CERTIFICATE EXAMINATION (WASSCE) IN SIERRA LEONE

		Students	127 (38.7)	127 (38.7)	435 (11.3)	434 (11.3)
23	Students in my school are provided with school bags under the FQSE policy	Principals	6 (41.7)	7 (41.8)	33 (8.2)	33 (8.3)
		Teachers	53 (37.1)	52 (37.1)	151 (12.9)	151 (12.9)
		Students	106 (40.6)	105 (40.6)	459 (9.4)	458 (9.4)
24	Government funding under FQSE has enabled increased enrolment of less privileged students in senior secondary schools	Principals	23 (20.9)	23 (20.9)	17 (29.1)	16 (29.1)
		Teachers	118 (20.9)	119 (20.9)	86 (29.1)	86 (29.1)
		Students	331 (20.6)	331 (20.5)	231 (29.4)	230 (29.5)
25	The FQSE policy will improve the quality of secondary education in Sierra Leone	Principals	27 (34.8)	28 (34.8)	12 (15.2)	12 (15.2)
		Teachers	154 (37.7)	153 (37.7)	50 (12.3)	50 (12.3)
		Students	431 (38.4)	431 (38.4)	131 (11.6)	130 (11.6)
26	The FQSE policy is beneficial and should be continued by successive governments	Principals	32 (41.1)	33 (41.2)	7 (8.8)	7 (8.9)
		Teachers	151 (37.0)	150 (37.0)	53 (13.0)	53 (13.0)
		Students	468 (41.7)	469 (41.7)	93 (8.3)	93 (8.3)
27	The number of students enrolled in my school has increased as a result of FQSE	Principals	34 (43.6)	35 (43.7)	5 (6.3)	5 (6.4)
		Teachers	163 (39.9)	162 (40.0)	41 (10.0)	41 (10.1)
		Students	486 (43.3)	486 (43.3)	76 (6.7)	75 (6.7)
28	Academic competition among students in my school has increased under the FQSE programme	Principals	32 (41.1)	33 (41.2)	7 (8.8)	7 (8.9)
		Teachers	153 (37.4)	152 (37.5)	51 (12.5)	51 (12.6)
		Students	448 (39.9)	448 (39.9)	114 (10.1)	113 (10.1)
29	Government pays WASSCE examination fees for all eligible school candidates under FQSE	Principals	32 (40.5)	32 (40.5)	8 (9.5)	7 (9.5)
		Teachers	163 (40.0)	163 (40.1)	41 (9.9)	40 (10.0)
		Students	463 (41.2)	463 (41.3)	100 (8.7)	97 (8.8)

Table 1 shows the distribution of responses from principals, teachers, and students on the extent to which the objectives of the Free Quality School Education (FQSE) policy have been achieved in secondary schools in Sierra Leone, using a four-point Likert scale.

With respect to the payment of school fees despite the FQSE policy, the majority of respondents across all categories expressed disagreement. Among principals, 45.0% disagreed and 48.7% strongly disagreed, while only 3.2% strongly agreed and 3.1% agreed. Similarly, 43.6% of teachers disagreed and 43.6% strongly disagreed, compared with only 12.8% who either strongly agreed or agreed. Among students, 44.3% disagreed and 44.3% strongly disagreed, while 12.0% expressed agreement. These findings indicate that most respondents perceived that school fees are no longer charged under the FQSE policy.

On the issue of infrastructural levies, 69.6% of principals (34.8% disagree, 34.8% strongly disagree), 87.4% of teachers (43.7% disagree, 43.7% strongly disagree), and 57.2% of students (28.6% disagree, 28.6% strongly disagree) indicated disagreement that such levies are charged. This suggests that the objective of eliminating infrastructural levies has been largely achieved, although some students (42.8%) still reported agreement.

Regarding payment for notebooks expected to be provided under FQSE, 88.6% of principals (44.3% disagree, 44.3% strongly disagree), 43.0% of teachers, and 88.0% of students expressed disagreement, indicating that most respondents believe notebooks are generally provided without payment. However, a notable proportion of teachers (57.0%) agreed or strongly agreed, suggesting inconsistencies across schools.

Similarly, on payment for textbooks, 88.6% of principals, 87.5% of teachers, and 82.3% of students disagreed or strongly disagreed, indicating that textbooks are largely provided free of charge, in line with FQSE objectives.

In contrast, responses on school uniforms showed that 43.0% of principals, 55.0% of teachers, and 62.0% of students disagreed or strongly disagreed that uniforms are provided, indicating that many students still pay for their uniforms. This suggests that the provision of uniforms under FQSE has not been fully achieved. On Community Teachers Association (CTA) dues, 81.0% of principals, 77.9% of teachers, and 76.5% of students disagreed or strongly disagreed that such dues are paid, indicating substantial compliance with FQSE guidelines. However, small proportions across the groups still reported agreement, suggesting partial implementation in some schools.

Responses on sports-related fees revealed that 75.9% of principals, 57.7% of teachers, and 54.1% of students disagreed or strongly disagreed, indicating that most schools do not charge sports fees. Similarly, on extra lessons, 57.0% of principals, 57.2% of teachers, and 58.2% of students disagreed or strongly disagreed, suggesting that extra lesson charges are still present in some schools. On the requirement for students to buy their own school bags, 89.9% of principals, 85.0% of teachers, and 88.0% of students agreed or strongly agreed, indicating that school bags are generally not provided under the FQSE policy.

Regarding government provision of teaching and learning materials, 86.1% of principals disagreed or strongly disagreed that materials are adequately provided, compared with 46.2% of teachers and 58.5% of students. This shows divergent perceptions, with principals being the most critical of material adequacy. On classroom

environment, 81.0% of principals, 57.5% of teachers, and 76.7% of students agreed or strongly agreed that classrooms are conducive for learning, indicating improvement in learning conditions in many schools. With respect to teacher deployment, 54.2% of principals and 57.2% of teachers agreed or strongly agreed that additional teachers were posted due to increased enrolment, while only 48.4% of students shared this view. This suggests that staffing improvements have occurred but may not be sufficient to meet enrolment demands.

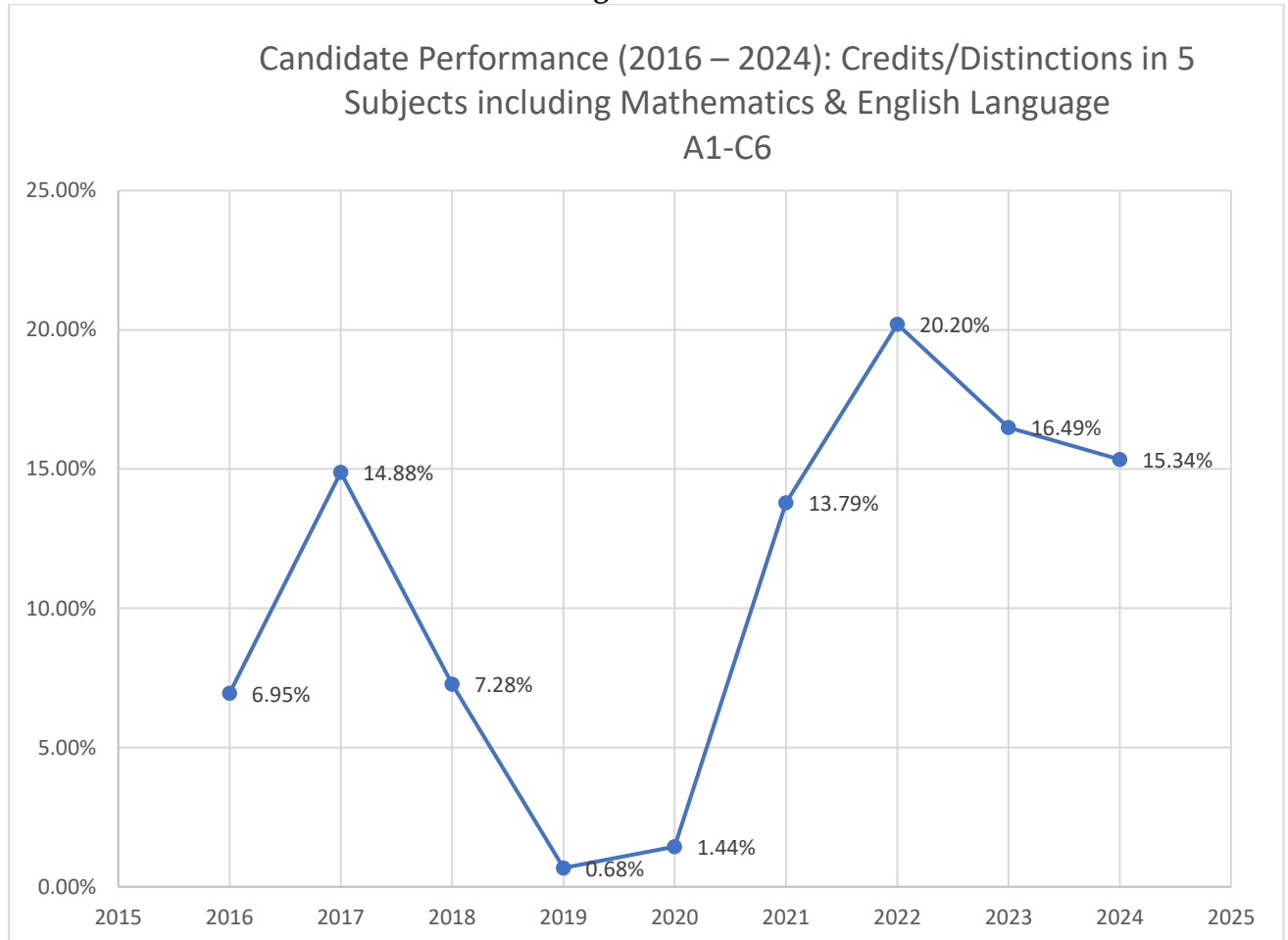
Analysis of the school feeding programme showed strong agreement across all categories. Specifically, 82.3% of principals, 83.5% of teachers, and 86.5% of students agreed or strongly agreed that students benefit from the government feeding programme. Furthermore, 93.7% of principals, 87.2% of teachers, and 89.0% of students agreed that feeding quality has improved, while 96.2% of principals, 87.7% of teachers, and 91.8% of students confirmed that students are fed daily. On infrastructure provision, 46.8% of principals, 75.7% of teachers, and 66.0% of students agreed or strongly agreed that additional classrooms were provided. Similarly, 36.7% of principals, 74.2% of teachers, and 64.4% of students agreed that additional furniture was supplied, indicating moderate success in infrastructure expansion.

Responses on library improvement showed that 43.0% of principals, 73.2% of teachers, and 56.5% of students agreed or strongly agreed, suggesting uneven development of library facilities. Regarding learning materials, 54.4% of principals, 62.2% of teachers, and 55.7% of students agreed that core textbooks are provided, while 55.7% of principals, 46.7% of teachers, and 53.0% of students agreed that notebooks are supplied, indicating partial achievement of material provision objectives. On access and equity, 58.2% of principals, 58.2% of teachers, and 58.9% of students agreed that FQSE funding has enabled enrolment of less-privileged students. In addition, strong support was recorded for policy sustainability, with 69.6% of principals, 75.4% of teachers, and 76.8% of students agreeing that FQSE will improve the quality of secondary education. Similarly, 82.3% of principals, 74.0% of teachers, and 83.4% of students agreed that the policy should be continued by successive governments.

Finally, increased enrolment was confirmed by 87.3% of principals, 79.9% of teachers, and 86.6% of students, while increased academic competition was acknowledged by 82.3% of principals, 74.9% of teachers, and 79.8% of students. Payment of WASSCE fees by the government was also strongly affirmed, with 81.0% of principals, 80.1% of teachers, and 82.5% of students agreeing or strongly agreeing.

6.2 Analysis for Research Questions Two and Three

Figure 4



This section analyses the trend in candidates' academic performance in the West African Senior School Certificate Examination (WASSCE) from 2016 to 2024 in relation to the implementation of the Free Quality School Education (FQSE) policy in Sierra Leone. The period from 2016 to 2017 represents the pre-FQSE phase, while 2018 to 2024 represents the FQSE implementation phase.

6.2.1 Analysis of Research Question Two

What was the level of secondary school students' academic performance in the WASSCE before the implementation of the Free Quality School Education intervention? The trend from 2016 to 2017 shows that candidates' academic performance at the senior secondary level was relatively low and inconsistent prior to the introduction of the FQSE policy. During this pre-FQSE period, the number of candidates attaining credits and distinctions (A1–C6) in five subjects, including Mathematics and English Language, remained limited. Performance during these years reflects the challenges faced by students before the implementation of FQSE, such as high examination fees, limited access to

instructional materials, inadequate school infrastructure, and restricted enrolment, particularly among students from low-income households.

The relatively modest performance recorded during the 2016–2017 period suggests that financial barriers and limited institutional support negatively affected students' preparation and success in the WASSCE. These findings indicate that before FQSE, access to quality secondary education and examination success was constrained, which aligns with the need that led to the introduction of the FQSE intervention.

6.2.2 Analysis of Research Question 3

What was the level of secondary school students' academic performance in the WASSCE during the implementation of the Free Quality School Education intervention?

The trend from 2018 to 2024, which corresponds with the implementation of the FQSE policy, shows a noticeable improvement in candidates' academic performance in the WASSCE. The figure indicates a general upward trend in the number of candidates achieving credits and distinctions in five subjects, including Mathematics and English Language. This improvement suggests that the FQSE policy has had a positive influence on students' academic outcomes.

The observed improvement during the FQSE implementation phase can be attributed to several objectives of the policy, including the removal of school and examination fees, increased enrolment, government payment of WASSCE fees, provision of textbooks and learning materials, school feeding programmes, and expansion of access to secondary education. By reducing financial barriers, more students were able to remain in school and sit for the WASSCE, which contributed to the increased number of candidates attaining university-qualifying results.

However, although the overall trend shows improvement, the performance gains appear to be gradual rather than uniform across all years of implementation. This suggests that while the FQSE policy has largely met its access-related objectives, challenges related to instructional quality, teacher adequacy, infrastructure, and learning resources may have moderated the rate of academic improvement. The fluctuations observed within the implementation period indicate that the policy's effectiveness is influenced by the consistency of funding, quality of implementation, and school-level capacity.

6.3 Comparative Interpretation of Pre-FQSE and FQSE Periods

A comparison of the pre-FQSE period (2016–2017) and the FQSE implementation period (2018–2024) clearly demonstrates that academic performance in the WASSCE improved following the introduction of the FQSE policy. While performance before FQSE was relatively low and constrained, the implementation phase recorded higher numbers of candidates meeting university admission requirements. This suggests that the FQSE intervention has substantially contributed to improving educational access and

examination participation, which in turn has positively influenced overall performance outcomes.

6.4 Research Question Four: Is There a Statistically Significant Difference in Wasse Performance between Students Who Sat the Examination Before and during the Implementation of FQSE?

Table 2: Grouped Data for the t-Test Analysis

Group Statistics					
	What is grpoup involve	N	Mean	Std. Deviation	Std. Error Mean
Scores	Pre-FQE (Before Implementation)	6	10.49	4.364	1.781
	FQE Implementation Phase	6	11.32	8.230	3.360

Source: MBSSE.

Table 3: Independent Samples t-Test Comparing Pre-FQSE and FQSE Implementation Scores

Comparison Groups	t-value	df	Sig. (2-tailed)	Decision
Pre-FQSE vs FQSE	-0.13	10	0.90	Not Significant

Note: Level of significance $\alpha = 0.05$

Source: MBSS-SL

Table 2 shows the descriptive statistics of respondents' scores before and during the implementation of the Free Quality School Education (FQSE) policy. The mean score for the FQSE implementation group ($M = 11.17$, $SD = 8.13$) was slightly higher than that of the pre-FQSE group ($M = 10.67$, $SD = 4.50$). However, scores during the FQSE period exhibited greater variability.

Table 3 presents the independent samples t-test results. The analysis revealed no statistically significant difference between the mean scores of respondents in the pre-FQSE period and those during the FQSE implementation ($t = -0.13$, $p > 0.05$). This indicates that the observed difference in mean scores was not statistically significant.

$$T(10) = (-0.13) ; p > 0.05$$

6.4.1 Decision

Do not reject the null hypothesis.

6.5 Research Question 5: What Challenges Are Associated with the Implementation of the Free Quality School Education (FQSE) Intervention in WASSCE in Sierra Leone, and How Can the Intervention Be Improved to Enhance Students' Performance?

Table 4

Description	Principals	Teachers	Students
Late/Untimely Payment of Subsidies	Delay or late payment of school subsidies	Untimely payments of school subsidies	Inconsistency in subsidy affects timely attendance
Inadequate Funding	Subsidies not enough to cover running cost; insufficient govt. funding	Inadequate school feeding; lack of resources	Parents still provide uniforms, bags; no provision for some students
Lack of Learning Materials & Textbooks	Lack of learning materials	Textbooks not readily available to teachers	Lack of core textbooks and learning materials
Shortage of Teachers / Unqualified Staff	Approval of teachers is a challenge	Need for trained and qualified teachers	Lack of qualified teachers, weak lab support
Infrastructural Deficit	Insufficient classrooms and infrastructure	Overcrowded classrooms; lack of toilets, furniture	Poor sanitation, lack of school buses, poor environment
Low Pupil Motivation / Discipline	Pupils show lethargy in learning	Some students lack interest of reading their books	Some teachers mock students' weaknesses
Limited Support for Private School Pupils	No facilities for private schools	No facilities for private schools	FQSE excludes private school pupils

6.6 Challenges of FQSE

From the principals' perspective, the challenges facing the FQSE program are largely financial and infrastructural. There is a consistent concern about the delayed and insufficient payment of government subsidies, which undermines the ability of schools to manage daily operations. Principals highlight that the current level of funding does not adequately support the running costs of schools, leading to serious shortfalls.

Another significant issue is the limited approval and deployment of qualified teachers, which directly affects the quality of instruction. The lack of teaching and learning materials, combined with insufficient infrastructure such as classrooms and furniture, contributes to an environment that is not conducive to learning. Moreover, principals point to low student motivation or lethargy as an indirect consequence of these systemic problems.

Teachers express similar concerns, particularly about the untimely disbursement of school subsidies, which delays the availability of necessary resources. One of the most pressing challenges for them is the issue of overcrowded classrooms, a result of increased enrollment without a proportional expansion in school infrastructure. Teachers also

emphasize the lack of adequate infrastructure, such as classrooms, toilets, and libraries, which hampers effective teaching.

The shortage of textbooks and teaching materials further limits their ability to deliver quality education. Additionally, teachers mention the absence of furniture and inadequate support systems like school feeding programs, all of which affect both teacher morale and student performance.

From the students' viewpoint, the school environment is largely unsatisfactory. They report poor sanitation, including inadequate toilet facilities and unclean surroundings, which affect their health and comfort. Many students observe that learning materials such as core textbooks are lacking, and that their science laboratories are unequipped, putting them at a disadvantage. The absence of school buses and reliable water supply further compounds the difficulty of attending school regularly. Students also express concern about teachers making fun of their weaknesses, which can be detrimental to their self-esteem and participation in class. They note that FQSE does not extend to private school students, leaving some of their peers excluded from the benefits. Moreover, they call for better-qualified teachers and more frequent workshops to improve the learning experience.

6.7 Positive Impacts of FQSE on Society

Table 5

Description	Principals	Teachers	Students
Increase in Enrolment & Inclusivity	Increased enrolment; underprivileged pupils included	Inclusive education promoted	Massive increase in pupil enrolment; disabled pupils feel included
Reduction in Dropout & Illiteracy	Reduced dropout rate; reduced illiteracy	Reduced dropout rate	The dropout rate drastically reduced
Support for Parents & Low-Income Families	Less financial burden on parents; more awareness	Helped parents who couldn't pay school fees	Financial burden on parents reduced
Crime Reduction & Social Equity	Reduced crime rate; encouraged school attendance from low-income earners	Help to reduced youth crime and improved attendance among low-income students.	Lower crime involvement and increased school attendance
Improved Educational Infrastructure & Access	Expanded centres and school approvals improved access.	More examination centres established; more schools approved	More examination centres and newly approved schools have made it easier for students to access exams and attend school

6.8 Positive Impact of FQSE on Society

Principals acknowledge that FQSE has had a profound positive impact on education in the country. One of the most visible outcomes is the significant increase in school enrollment, which shows that more children are now in school than before.

They also note that the program has reduced the financial burden on parents, making education more accessible to low-income families. This has led to a sharp decline in school dropout rates, particularly among underprivileged children. Principals commend the program for incorporating disadvantaged pupils into the educational system and for playing a key role in reducing illiteracy and crime rates by keeping children engaged in school. It has also raised awareness among low-income households about the value of education.

For teachers, FQSE has made it possible for more children, especially the underprivileged, to access education regardless of their socio-economic background. The program has helped in reducing the dropout rate, which they view as a major success. Teachers also appreciate the increased number of government-approved schools and the expansion of examination centers, which make academic assessments more accessible. They recognize that FQSE has supported parents who previously struggled to pay school fees and believe that the program has advanced the goal of inclusive education, bringing in more pupils who were once marginalized.

Students affirm that FQSE has positively changed their educational journey. They observe a reduction in dropout rates, which they attribute to the financial relief the program has brought to their parents. Many students feel that disabled pupils are now more included and are better supported in schools, creating a more welcoming and fair learning environment. Students also acknowledge that the total number of pupils in schools has grown, which is a testament to the program's reach. They appreciate that the burden on parents has significantly lessened, especially when compared to previous years, making school attendance more stable and widespread.

6.8 Responses on How to Improve FQSE Intervention in Secondary Schools in Sierra Leone

Table 6

S/N	Principals and Teachers	Students
1	Prompt payment of school subsidies	Students should not pay for infrastructure development
2	Subsidy should cover the running costs of schools	Supply of sufficient exercise books
3	Adequate supply of teaching and learning materials	Students should be cautioned to be careful while using the FQSE books
4	Construction of new classrooms to meet the increase in enrolment	Employment of sufficiently qualified teachers
5	Provision of chairs and desks	The school compound should be sanitized

6	Equipping school libraries with modern books	The school feeding program should be effective
7	Teachers should be trained in their jobs	Schools should have a clean source of pure water
10	Monitoring of the process	Punishment is slated for misappropriating FQSE funds

The study found that the Free Quality School Education (FQSE) intervention has made significant progress in expanding access to secondary education in Sierra Leone, particularly through the elimination of school fees and increased enrolment of students from less-privileged backgrounds. Respondents across principals, teachers, and students generally acknowledged that the policy has reduced direct financial barriers to schooling and supported students' participation in key examinations such as the WASSCE. However, the findings also revealed notable implementation challenges that limit the overall effectiveness of the FQSE intervention. Inadequate and delayed payment of government subsidies was identified as a major constraint on school administration and instructional preparation. Schools depend heavily on these funds to cover operational costs, and delays disrupt teaching and learning activities.

The study further found that the supply of teaching and learning materials, including textbooks and exercise books, remains insufficient in many schools. While some improvements were reported, shortages and uneven distribution persist, affecting the quality of instruction and students' learning experiences. Similarly, increased enrolment under FQSE has not been matched by adequate expansion of infrastructure and staffing, resulting in overcrowded classrooms and shortages of qualified teachers in some schools. Teacher welfare and professional development emerged as critical issues influencing the success of the policy. The findings indicated that limited training opportunities, poor conditions of service, and inadequate remuneration negatively affect teacher motivation and instructional effectiveness. Students also emphasized the importance of teacher support in enhancing academic performance.

In addition, the study highlighted weaknesses in student welfare support, particularly in the effectiveness of the school feeding programme, sanitation, and access to clean water. These factors were found to influence students' health, attendance, and concentration in school. Finally, concerns were raised about monitoring and accountability in the implementation of the FQSE policy, with respondents calling for stronger supervision and sanctions against misappropriation of funds.

Overall, the findings suggest that while the FQSE intervention has been largely successful in improving access to secondary education, its objectives have only been partially achieved. Strengthening funding mechanisms, improving resource provision, expanding infrastructure and staffing, enhancing teacher welfare, and reinforcing monitoring systems are necessary to improve educational quality and students' academic performance under the FQSE policy.

7. Summary, Conclusion and Recommendations

7.1 Introduction

This chapter presents the summary of findings, conclusions, and recommendations of the study on the implementation of the Free Quality School Education (FQSE) policy and its influence on secondary school education and WASSCE performance in Sierra Leone. The chapter is organised according to the research questions and major themes that emerged from the analysis.

7.2 Summary of Findings

7.2.1 Research Question One: To what extent has the implementation of the Free Quality School Education (FQSE) policy met its intended objectives in Sierra Leone's secondary school system?

The findings revealed that the FQSE policy has largely achieved its core objective of eliminating school fees in secondary schools. The majority of principals, teachers, and students disagreed that school fees are still being charged, indicating substantial compliance with the policy directive. Similarly, infrastructural levies and CTA dues are no longer widely enforced in most schools, though isolated cases remain.

With respect to the provision of learning materials, the results show mixed outcomes. While textbooks and notebooks are reportedly provided in many schools, inconsistencies and shortages persist. A notable proportion of respondents, particularly teachers, indicated that learning materials are not always sufficient or evenly distributed. School uniforms and school bags are generally not fully covered under FQSE, with many students still required to provide these items independently.

The study also established that enrolment has significantly increased since the introduction of FQSE. A large majority of respondents confirmed that student numbers have grown and that less-privileged learners now have greater access to secondary education. Government payment of WASSCE fees was strongly affirmed across all respondent categories, representing a major achievement of the policy.

Infrastructure development under FQSE has recorded moderate progress. While some schools have benefited from additional classrooms, furniture, and improved libraries, many respondents reported overcrowding and inadequate facilities. Teacher deployment has improved in some schools; however, staffing remains insufficient relative to increased enrolment.

The school feeding programme was widely acknowledged as beneficial, though concerns were raised about its quality, regularity, and effectiveness in certain areas. Overall, the findings indicate that the FQSE policy has substantially met its access-related objectives but has only partially achieved its quality-related objectives.

7.2.2 Research Question Two: What was the level of secondary school students' academic performance in WASSCE before the implementation of FQSE?

The analysis of WASSCE performance between 2016 and 2017 (pre-FQSE period) revealed relatively low and inconsistent academic outcomes. The number of candidates attaining five credits and above, including Mathematics and English Language, was limited. Financial constraints, limited access to learning materials, and infrastructural deficiencies were identified as major barriers to improved performance during this period.

The findings suggest that prior to FQSE, secondary education outcomes were significantly constrained by economic and structural challenges.

7.2.3 Research Question Three: What was the level of secondary school students' academic performance during the implementation of FQSE?

The period from 2018 to 2024 (FQSE implementation phase) showed a general upward trend in WASSCE performance. There was an increase in the number of candidates achieving credits and distinctions in five subjects, including English and Mathematics. This improvement coincides with policy interventions such as government payment of examination fees, expansion of enrolment, provision of learning materials, and school feeding programmes.

However, the improvement was gradual rather than uniform, indicating that while access has expanded, quality challenges remain. Fluctuations in performance suggest that consistent funding, adequate teacher supply, and infrastructure development are necessary to sustain gains.

7.2.4 Research Question Four: Is there a statistically significant difference in WASSCE performance between students who sat the examination before and during the implementation of FQSE?

The independent samples t-test analysis revealed no statistically significant difference between mean scores in the pre-FQSE and FQSE implementation periods ($t = -0.13$, $p > 0.05$). Although the mean score during the FQSE phase was slightly higher, the difference was not statistically significant at the 0.05 level.

This finding suggests that while descriptive trends indicate improvement, the magnitude of change in academic performance may not yet be strong enough to produce statistically significant differences. It also highlights that increased access alone may not automatically translate into dramatic improvements in examination performance.

7.2.5 Research Question Five: What challenges are associated with the implementation of FQSE, and how can the intervention be improved?

The study identified several key challenges:

- 1) **Delayed and Inadequate Subsidy Payments:** Schools reported late and insufficient government funding, affecting operational efficiency.

- 2) **Inadequate Learning Materials:** Shortages of textbooks, notebooks, and laboratory equipment were common concerns.
- 3) **Shortage of Qualified Teachers:** Increased enrolment has not been matched with adequate teacher recruitment and training.
- 4) **Infrastructural Deficits:** Overcrowded classrooms, limited furniture, poor sanitation, and a lack of water supply remain major issues.
- 5) **Weak Monitoring and Accountability:** Respondents emphasized the need for stronger supervision and sanctions against misappropriation of funds.
- 6) **Student Welfare Concerns:** Challenges related to feeding programmes, motivation, discipline, and sanitation were reported.

Despite these challenges, the policy has had notable positive societal impacts, including increased enrolment, reduced dropout rates, greater inclusion of underprivileged and disabled learners, reduced financial burden on parents, and expanded access to examination centres.

8. Conclusion

Based on the findings, the study concludes that the Free Quality School Education (FQSE) policy has significantly improved access to secondary education in Sierra Leone. The elimination of school fees, payment of WASSCE examination fees, and increased enrolment of disadvantaged students represent major achievements.

However, while access has expanded considerably, improvements in academic performance have been moderate and not statistically significant. This indicates that access reforms alone are insufficient to guarantee substantial academic gains. Quality-related factors—such as adequate funding, teacher competence, infrastructure, learning materials, and effective monitoring—must be strengthened.

Therefore, the FQSE policy has largely achieved its equity and access objectives but has only partially fulfilled its quality enhancement objectives.

9. Recommendations

In light of the findings, the following recommendations are proposed:

- 1) **Ensure Timely and Adequate Funding:** The government should guarantee prompt disbursement of subsidies and increase funding levels to meet actual school running costs.
- 2) **Improve Supply of Learning Materials:** Adequate and equitable distribution of textbooks, exercise books, and laboratory equipment should be prioritized.
- 3) **Recruit and Train Qualified Teachers:** The Ministry of Basic and Senior Secondary Education (MBSSE) should employ more qualified teachers and provide continuous professional development.

- 4) **Expand Infrastructure:** Additional classrooms, furniture, libraries, sanitation facilities, and clean water sources should be provided to match increased enrolment.
- 5) **Strengthen Monitoring and Accountability:** Robust supervisory mechanisms should be implemented to prevent mismanagement of FQSE funds.
- 6) **Enhance School Feeding Programme:** Improve the quality, regularity, and monitoring of school feeding to support student health and attendance.
- 7) **Promote Student Motivation and Discipline:** Schools should implement guidance and counselling services to improve student engagement and academic focus.
- 8) **Sustain and Institutionalize the Policy:** Successive governments should maintain and strengthen the FQSE policy to ensure continuity and long-term impact.

9.1 Contribution to Knowledge

This study contributes to existing literature by providing empirical evidence on both access and performance outcomes of the FQSE policy in Sierra Leone. It highlights the distinction between increased educational access and measurable improvements in academic achievement, thereby offering valuable insights for policymakers and educational planners.

9.2 Suggestions for Further Research

Future studies may:

- 1) Conduct longitudinal school-level analyses of WASSCE results.
- 2) Examine subject-specific performance trends under FQSE.
- 3) Investigate teacher motivation and its relationship to student performance.
- 4) Compare public and private school performance trends under the policy framework.

In conclusion, the Free Quality School Education policy represents a transformative intervention in Sierra Leone's education sector. While it has successfully expanded access and reduced financial barriers, sustained improvements in quality and academic performance will depend on addressing systemic implementation challenges.

Creative Commons License Statement

This research work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-nd/4.0>. To view the complete legal code, visit <https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode.en>. Under the terms of this license, members of the community may copy, distribute, and transmit the article, provided that proper, prominent, and unambiguous attribution is given to the authors, and the material is not used for commercial purposes or modified in any way. Reuse is

only allowed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Authors

Foday Bassie Turay is an accomplished educationist, statistician, and academic leader with extensive experience in teaching, research, educational administration, and national statistics. He is currently pursuing a PhD in STEM Education and Entrepreneurship specialist in Mathematics Lagos State University, reflecting his strong commitment to advancing innovative, technology-driven, and entrepreneurial approaches to education. He holds a Master's degree in Statistics from Njala University a Postgraduate Diploma in Education (PGDE) FBC University of Sierra Leone, and a Bachelor of Science (Honours) in Environmental Science Njala University. His interdisciplinary academic background enables him to integrate statistical analysis, environmental sustainability, and pedagogical expertise into teaching, research, and institutional leadership. Professionally, Foday Bassie Turay serves as the Vice Principal of the College of Creative Arts, Science and Technology, where he provides academic and administrative leadership. He also works as a District Statistician with Statistics Sierra Leone, contributing to national data management, analysis, and evidence-based planning. In addition, he was a Principal of Kubra Agricultural Senior School, where he oversees academic development and institutional growth. He also lectures at the University of Management and Technology, mentoring students in statistics, research methods, and related disciplines. His areas of interest include STEM education reform, entrepreneurship development, educational leadership, applied statistics, environmental sustainability, and capacity building. Foday Bassie Turay is dedicated to improving educational quality, promoting research excellence, and strengthening u. data-driven decision-making in Sierra Leone and beyond.

Kelvin A. K. Turay is a senior veteran safety and security professional with 26 years of progressive experience within the United Nations Department of Safety and Security (UNDSS), having managed complex safety operations across Sudan, Iraq, and South Sudan. His work focuses on operational safety and crisis management in complex geopolitical landscapes. A lifelong learner, Mr. Turay is currently pursuing a PhD in Sustainable Development, at the University of Makeni. His research focuses on the fire vulnerabilities of unplanned settlements in rapidly growing urban areas. Specifically, he examines national response measures to fire disasters in developing countries, using Freetown, Sierra Leone, as a primary case study. Combining decades of frontline crisis expertise with a scholarly focus on urban disaster mitigation and resilient policy frameworks. Adding to his academic portfolio which includes a Master of Business Administration and a master's in human resource management. His dual expertise in

occupational safety and administrative management allows him to implement sustainable safety frameworks in the world's most demanding environments.

Alpha Sesay is the current Principal and Chief Executive Officer (CEO) of the College of Creative Arts, Science and Technology (CCAST), Bamoi Luma, where he provides visionary leadership and promotes academic excellence, innovation, and skills development. He also serves as a dedicated lecturer at UMITECH University, contributing immensely to teaching, research, and student mentorship. Academically, Mr. Sesay is highly accomplished, holding a Master's Degree in Education, a Postgraduate Diploma in Education, and a Bachelor's Degree in Accounting and Finance. His rich academic background, combined with his leadership experience and passion for quality education, has positioned him as a respected educationist and administrator who continues to make significant contributions to the advancement of higher education and human capacity development in Sierra Leone.

Omar D. Camara is an accomplished academic and technology professional currently serving as a Lecturer at The Gambia University of Applied Science, Engineering and Technology (USET). He holds a Master's degree in STEM Education and Cyber Security, as well as a Bachelor's degree in Computer Science, which together reflect his strong interdisciplinary expertise in both education and modern digital technologies. With several years of teaching experience across different schools and higher learning institutions, Mr. Camara has built a solid reputation as a dedicated educator committed to academic excellence, innovation, and student development. His career journey through the school system has equipped him with practical classroom experience, curriculum delivery skills, and the ability to mentor learners from diverse educational backgrounds. As a lecturer, his professional interests lie in computer science education, cyber security awareness, STEM pedagogy, digital innovation, and technology-driven problem solving. He is passionate about equipping students with relevant 21st-century skills, particularly in the areas of information technology, safe digital practices, and applied computing solutions. Mr. Camara is widely recognized for his commitment to fostering critical thinking, research, creativity, and practical competence among students. His combined expertise in STEM education and cyber security places him in a unique position to bridge the gap between theoretical knowledge and real-world technological applications.

Saidu Conteh is a seasoned educationist and chemistry specialist with a strong background in science education and academic leadership. He holds a Master's degree in STEM Education in Chemistry from Lagos State University and a Bachelor of Science (B.Sc.) in Chemistry from Njala University. With many years of teaching experience in chemistry across several schools, Mr. Conteh has distinguished himself as a committed and results-oriented educator dedicated to improving science education and student performance. His broad teaching exposure has enabled him to develop strong expertise in curriculum delivery, laboratory instruction, learner-centered pedagogy, and examination preparation, especially in secondary school chemistry. He is currently

serving as the Head of Department at C.R.C. School, Kabala, where he provides academic leadership, mentors teachers, and oversees the effective coordination of departmental activities. In this role, he plays a vital part in strengthening instructional quality, promoting innovative STEM teaching strategies, and fostering a culture of academic excellence among both staff and students. Mr. Conteh is passionate about advancing STEM education, chemistry instruction, practical science learning, and research-based teaching methodologies. His professional mission is centered on inspiring students to develop critical thinking, scientific inquiry skills, and a deeper appreciation for chemistry as a foundation for innovation and national development. He is widely respected for his leadership qualities, dedication to teacher development, and unwavering commitment to nurturing future scientists and professionals through quality education.

Mustapha M. Kallon is a highly experienced educationist and economist who holds a Master's Degree in Economics and a Bachelor's Degree in Economics. He has taught for many years in different schools, where he has demonstrated exceptional dedication to teaching, student development, and academic excellence. Owing to his vast experience and leadership qualities, he currently serves as the Head of the Department at the College of Creative Arts, Science and Technology, Bamoi Luma, Kambia District. In this role, he continues to provide strong academic leadership, guide both staff and students, and contribute meaningfully to the growth and advancement of the institution.

References

- Babbie, E. (2013). *The practice of social research* (13th ed.). Cengage Learning. Retrieved from https://books.google.ro/books/about/The Practice of Social Research.html?id=af9OpwAACAAJ&redir_esc=y
- Bangura, M. (2019). *Challenges in Sierra Leone's Free Quality School Education: Examining WASSCE Outcomes*. Freetown: Sierra Leone Education Research Review.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications. Retrieved from https://books.google.ro/books/about/Research Design.html?id=bttwENORfhgC&redir_esc=y
- Doe, J., & Adeyemi, T. (2024). Effects of free senior high school policy on student learning outcomes in Ghana. *Journal of Educational Policy and Practice*, 12(2), 45–60. https://www.researchgate.net/publication/345678912_Effects_of_Free_Senior_High_School_Policy_on_Student_Performance
- Karim, A., Sesay, F., & Conteh, M. (2023). Evaluating the Free Quality School Education program in Makeni City: Access versus quality. *Sierra Leone Journal of Education Studies*, 8(1), 67–83.

- Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of behavioral research* (4th ed.). Holt, Rinehart and Winston. Retrieved from https://books.google.ro/books/about/Foundations_of_Behavioral_Research.html?id=3QQQAQAIAAJ&redir_esc=y
- Koroma, S., Kamara, L., & Bangura, R. (2020). Quality of secondary education in Sierra Leone: Challenges and opportunities. *African Journal of Educational Research*, 5(3), 12–25.
- Mohammed, S., Kofi, T., & Agyapong, F. (2025). Free senior high school policy and academic performance in Ghana: Lessons for West Africa. *Educational Research for Policy and Practice*, 24(1), 101–118.
- Nachmias, C., & Nachmias, D. (2008). *Research methods in the social sciences* (7th ed.). Worth Publishers. Retrieved from https://books.google.ro/books/about/Research_Methods_in_the_Social_Sciences.html?id=F5IISAAACAAJ&redir_esc=y
- Ruxton, G. D. (2006). The unequal variance t-test is an underused alternative to Student's t-test and the Mann–Whitney U test. *Behavioral Ecology*, 17(4), 688–690. <https://doi.org/10.1093/beheco/ark016>
- Sesay, M. (2025). *Sierra Leone's Free Quality School Education: Policy and Implementation Report*. Ministry of Education, Science and Technology. <https://moice.gov.sl/with-85-enrolment-rate-sierra-leone-makes-massive-gains-in-free-quality-education>
- Teixeira, P. (2006). Human capital and educational outcomes: Theory and practice. *International Journal of Education Economics and Development*, 3(2), 45–60.
- UNESCO. (2015). *Education 2030: Incheon Declaration and Framework for Action*. Paris: UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000245656>
- World Bank. (2018). *World Development Report 2018: Learning to Realize Education's Promise*. Washington, DC: World Bank. <https://www.worldbank.org/en/publication/wdr2018>
- World Bank Project Document. (2023). *Sierra Leone Free Quality School Education Project (P167897)*. Washington, DC: World Bank. <https://documents.worldbank.org/en/711051560267527870/pdf/Project-Information-Document-Sierra-Leone-Free-Education-Project-P167897.pdf>