

UNIVERSITY OF CAPE COAST

EXAMINING THE EFFECT OF THE FREE SHS PROGRAMME ON THE
ACADEMIC OUTCOMES OF MUSIC STUDENTS IN THE SENIOR HIGH
SCHOOLS OF GHANA

BY

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ABSTRACT

With the implementation of successive government reforms, including the Free Senior High School Programme (FSHS): The 1992 constitution ensures that all Ghanaians have equal access to free education at the pre-tertiary level, and with mixed evidence on the extent to which the FSHS policy is influencing the academic achievement of students in the senior high schools, this study aimed to examine the overall effect of the FSHS programme on the academic achievements of students in music, through the exploration of the key tenets of the policy and their correlation to outcomes in music in Ghana. Employing a quantitative mode of enquiry and a multistage sampling technique, this project randomly stratified 30 senior high schools across the Volta and Oti regions of Ghana, which also produced data on 4,612 participants for the study. Both primary and secondary data were collected for analysis, with descriptive and inferential statistical tools used to test the hypotheses of relationships among the variables.

The findings revealed that Pearson's correlation with an asymptotic significance (2-sided) of 0.001, the FSHS programme has significantly affected students' results, with the key pillars of the programme also playing significant roles in students' academic outcomes under the FSHS programme. There is therefore ample evidence to believe that the policy is positively influencing music education.

KEY TERMS: Educational Reform, Policy, Free SHS Policy, Cost-Sharing, Cost Absorption, Academic Outcomes, Music Education.

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DEDICATION

To my lovely wife and children and to my ever-loving siblings, as well as everyone who values the pursuit of knowledge.



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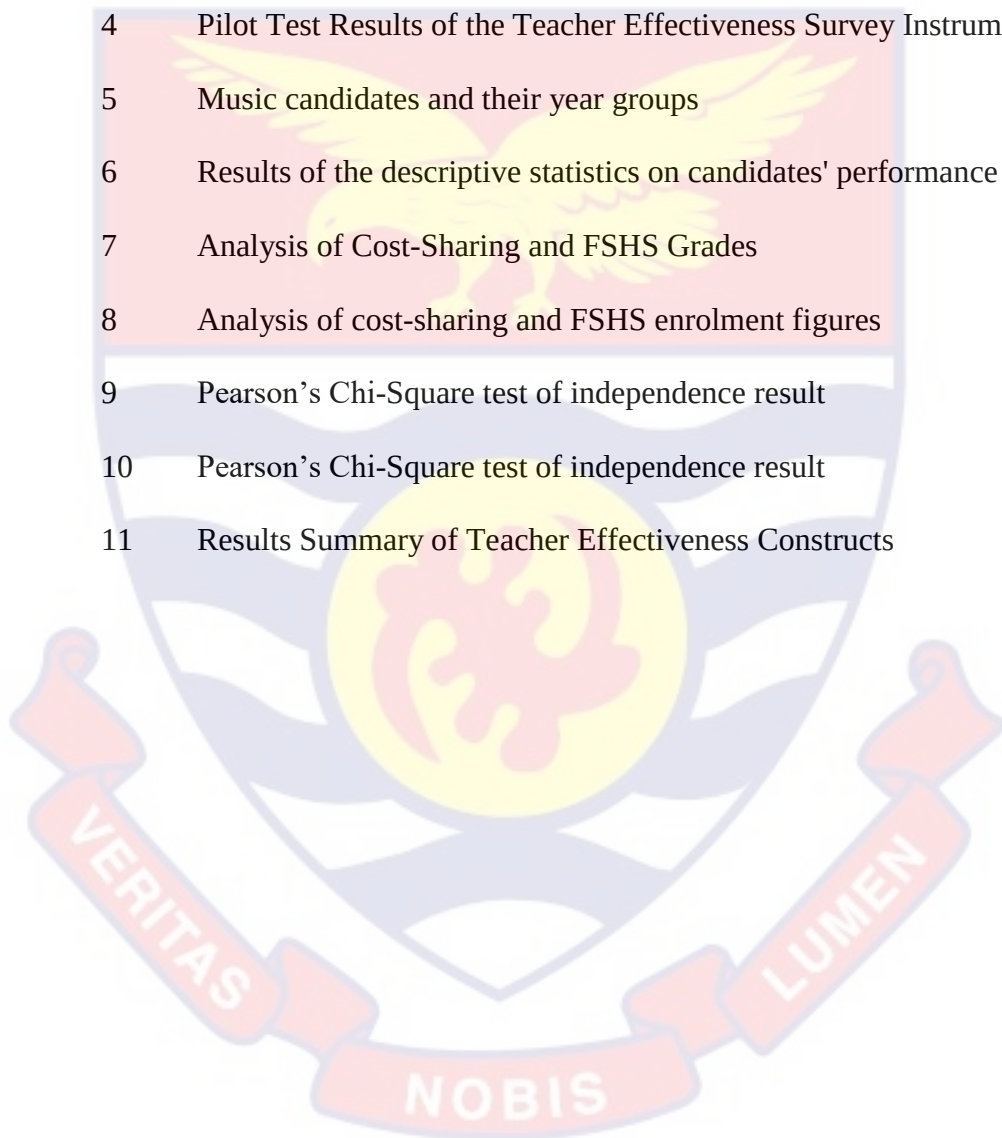
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LIST OF ACRONYMS AND ABBREVIATIONS



AU	African Union
CEU	Cultural Education Unit
CR	Cost Removal
ESP	Education Strategic Plan
FCUBE	Free Compulsory Universal Basic Education
FSHE	Free Senior High Education
FSHS	Free Senior High School
FSHP	Free Senior High School Policy
GES	Ghana Education Service
GTEC	Ghana Tertiary Education Commission
IE	Infrastructural Expansion
ICTP	ICT Proficiency
IP	Instrumental Proficiency
MoE	Ministry of Education
MGCSP	Ministry of Gender, Children and Social Protection
NaCCA	National Council for Curriculum and Assessment
NDC	National Democratic Congress
NPP	New Patriotic Party
PC	Pedagogical Competence
PD	Professional Development
SHS	Senior High School
TRD	Teacher Rationalization and Deployment
TC	Technical Competence
UN	United Nations

UNESCO United Nations Educational, Scientific and Cultural
Organization

WAEC West African Examination Council

WASSCE West African Senior School Certificate Examination

WFP World Food Programme



DEFINITION OF TERMS

There are several definitions by different scholars on *Educational Reform* (discussion of additional definitions is covered in Chapter 2's section on the literature review). For this research, however, the definition of Adu-Gyamfi, Donkoh, & Addo (2016) was adopted. They primarily define Educational Reform as the changes and policies initiated for better educational structure or systems (p. 158).

Free Senior High School Policy: The Free S.H.S. Policy, as used in this study, borrowed from Asumadu (2019) refers to legislation that allows every qualified Ghanaian child to be placed in a public Senior High School and to have his/her fees absorbed by the government of Ghana (p. 19). A term like the policy has also been used in this study to interchangeably denote the same concept (Free High School Policy) appropriated from what Considine (1994) considers as governmental action that exercises authority to commit resources in support of a valued programme (p. 3).

Partial-cost-sharing – according to the Australian Government Cost Recovery Guidelines (Resource Management Guide - RMG 304) refers to charging the non-government sector some of the efficient costs of specific government activity. This term will also be used correspondingly with cost-sharing in the study to refer to boarding fees and other facility user fees that were paid by Ghanaian students in the Senior High Schools in the past educational systems. Diarra, M. C. (1997, p. 89) believes all strategies that consist of making individuals partly contribute to the cost of their education are referred to as cost-sharing or cost recovery.

Full-cost absorption – This is a managerial accounting method for capturing all costs associated with manufacturing a particular product (Drury, 2020).

Free Compulsory Universal Basic Education (FCUBE) – A constitutional provision that granted free compulsory universal and Basic Education for all Ghanaian children of school-going age.



CHAPTER ONE

INTRODUCTION

Background to the Study

Educational reforms in Ghana

Education in Ghana from the pre-colonial period has experienced a series of reforms, intending to find lasting solutions to the challenges confronting the nation's education. Adu-Gyamfi, Donkoh, and Addo (2016) define educational reforms as initiatives for bettering a nation's educational framework or systems (p. 158). Adu-Gyamfi et al. also believed the inconsistencies in Ghana's educational system are a consequence of excessive politicisation, where political parties seek to enact reforms which they believe will offer high-quality education to the Ghanaian citizenry after acquiring power (p. 160). The Accelerated Development Plan of 1951, the Education Act of 1961, the Reforms of the National Liberation Council of 1966, The New Structure and Content of Education of 1974, The Education Reforms of 1987, Educational Reforms of 2007, and the Educational Reforms of 2017 are few of the reforms in Ghana.

Also, in its effort to end poverty, as well as to ensure peace and tranquillity for all persons across the globe by 2030, the United Nations Sustainable Development Goals (UN - SDG), notably SDG 4 among its primary concerns focuses on promoting lifelong learning through all-inclusive quality education. The relevant objectives of SDG 4 guarantee that all children irrespective of gender, race, or disability have access to quality early childhood development. Additionally, they should all have access to fully free

and equal elementary and secondary education, which will ensure that they have the information and skills necessary to support sustainable development.

The Ghanaian government has affirmed its dedication to achieving universal access to education for all Ghanaian children for free. In addition to providing basic education free, mandatory, and accessible to all residents of school age, Ghana's 1992 constitution guarantees all children of school age the right and equal educational opportunity (Republic of Ghana, 1993). The constitution further obligates the state in Article twenty-five (25), clause one (1) section (a) and (b) to ensure all Ghanaian children have legal claims to equal access to education as well as its chances. The constitution mandates that for these rights to be fully realized: (a) basic education needs to be made available to all residents, free of charge, and without exception; (b) by all means necessary, and in particular by gradually implementing free education, senior high education including vocational and technical education should be made available and accessible to every individual. The 2019 reform in education has therefore redefined education at the basic level to include secondary education. This is an implication of the government absorbing the full cost of fees for senior high school students which is an aspect of the Free and Compulsory Universal Basic Education (FCUBE) for every child in Ghana.

Secondary education in Ghana until 2017 was a cost-sharing between the government of Ghana and other principal players in education. An explanation of the cost-sharing phenomenon is provided by leading researchers in the Economics of Education such as Johnstone (1986, 1991, 1992, 2002, and 2003), Diarra (1997), Buchert & King (1995), and many

others. Johnstone (2006, p. 3) for instance regards cost-sharing as a change in the distribution of the cost of education by the government to the key stakeholders. Further support to this argument is provided by Diarra (1997, p. 89) who believes all strategies that consist of making individuals subsidize the expenditure on their education are referred to as cost-sharing or cost recovery.

In the foregoing quotations, there seems to be a unanimous approval of the fact that, this situation engenders when there are increasing pressures on governments to downsize their costs on goods and services so that the scarce public resources can be distributed to other needs.

The UNESCO report (2000) on the results of Ghana's 2000 census reveals that only 53.3% of Ghanaians aged 15 and over can read and write. Although other contributing factors may also account for the mass illiteracy rate of Ghana's population, it follows logically that the high cost of education remains the predominant factor that deprived many underprivileged Ghanaian children of the opportunity to pursue further education contributing to the mass illiteracy rate. It is against this background that in 2017, the free secondary education policy which is one of the embedded predictor/independent variables in this study, was implemented to salvage the less privileged Ghanaian children to enjoy equal access to basic education as enshrined in the 1992 constitution of Ghana. The introduction of the free SHS programme aligns with the worldwide commitment to education for all which many Sub-Saharan African nations such as Kenya, Uganda, Tanzania, and South Africa have subscribed to.

Under the FSHS programme, the cost component of senior high education is paid for by the state to all children who have qualified to be

enrolled in public senior high schools in Ghana (Asumadu, 2019, p. 19). The main objectives of this policy include 1. removal of cost barriers in education at the SHS level; 2. infrastructure expansion to handle the anticipated rise in enrollment, 3. enhancement of quality through the distribution of core textbooks and supplemental readers, as well as through the rationalization and deployment of teachers, 4. enhance equity by allocating 30% of seats at elite schools to pupils from public junior high schools. 5. set priorities, plan, support, and reform Technical and vocational training and education (freeshs.gov.gh, 2017).

Relevance of music education

The relevance of emotional intelligence (EQ) in educating the individual is globally gaining momentum. Studies by scholars such as Goleman, (1995), Davies, Stankov, and Roberts, (1998), and Otchere (2014), have underscored the increasing significance of the EQ domain in the development as well as in the general accomplishment of individuals. A thriving education is that which makes provision for the equitable development of the cognitive, affective, and psychomotor domains, thus for a holistic development of the human being to be attained, education must encompass all areas of equal importance. According to Otchere et al. (2016, p. 107), the acceptance of a wide range of subjects, each with its unique values, supports the idea that various facets of human nature require improvement. This similar view is expressed by Aristotle quoted by Otchere et al. (p. 107) that it is futility in education to train only the mind and not the heart. It is quite evident from the above argument that it is ineffectual for the cognitive to be given all the attention, or for a particular domain to be

considered more esteemed for preferential attention to the neglect of the other domains.

A plethora of studies by scholars including Otchere, 2014; Otchere, 2013a; Flolu, 2000; Abeles, Hoffer, Klotman, 1995; Horley and Brian, 1985, have adequately proven the fact that certain subjects are more suited for developing particular domains. Otchere et al. pointed out that physical and vocational education courses are among the best at developing the psychomotor domain, while the hard sciences are more focused on the cognitive domain. The arts and social sciences, which include humanities courses, are said to be more appropriate for the growth of the affective domain (Akrofi, 1982; Reimer, 2003; Otchere, 2013b). For the affective domain to be developed, scholars (Meyer, 1956; Reimer, 2003) have found that the instruction of human feeling, subjectivity, or affect is censored by arts education. The performing arts, which include drama, dance, and music, have been designated as subjects within the arts and humanities that are extremely helpful in fostering the emotive domain (Otchere, 2014).

Speaking on the emotional development of the individual, Otchere (2014) believes one of the most compelling stimulants that arouses and frames emotion is music (p, 28). Bachorowski and Owren (2002) in support of this assertion, opined that what constitutes an important part of emotional intelligence (EI) is the exact ways in which the listener uses sounds; thus, how s/he perceives, appraises, and responds to sounds. They claim that noise can cause overall organismal activation by stimulating low-level neuronal circuitry like the brainstem's pontine nuclei. (p. 13). Plato cited in Trimble and Hesdorffer (2017) feels that various musical modes will cause various

emotions to be evoked. For instance, Trimble and Hesdorffer assert that musical pieces in major chords are perceived to be cheerful while pieces performed in the minor chords are considered to be sad (p. 29). This points to the fact that sound has a direct impact on our emotions, hence music acts as that strong stimulus in arousing and constructing our emotions. The main objective of music education is therefore to assess and internalize musical feeling evolving within the sounds and from the outside world of the music in educating the feelings.

It is an undeniable fact human subjectivity controls every aspect of the human being, and a person with an educated affect (human subjectivity) establishes control over his / her emotions. Otchere (2014. p. 25) opines that nearly every facet of the human: behaviour; perception, memory, learning, action, and decision-making is influenced by emotion, making it one of the most ubiquitous components of human existence. Emotions dominate our daily lives, affecting all our decisions; thus, expressions of happiness, anger, boredom, or frustration, are all brewed based on a chosen emotion. Moreover, the nurturing of an individual's emotions has been considered central to the development of intra-personal intelligence. Emotional education is equated to the development of intra and inter-personal intelligence, a strong force that ensures unity and stabilization as well as the efficient performance of individuals in a social system, hence the need for adequate educational provision to cater for the development of the affective domain of every child.

As educators and adults, though we must emphasize the total educational development of learners (all-inclusive domain education), we also need to be acquainted with the fact that, emotions control every aspect of the

individual (Otchere 2014, p. 25). By implication, we need to be aware that, our learners are growing up in a very complex world that is inundated with information and requires prudent decision-making that emanates from emotional maturity; for an affected emotion is a recipe for the mislaid behavioural construct of the individual. This consequently becomes increasingly necessary therefore to pay explicit attention to the potential issues that have the propensity to regulate our emotions, especially in our schools.

Presumably, all societies are musical, and everyone has a brain that is well suited to process music. This assertion according to Hodges and Sebald (2011) underpins the assumption that a brain induced for music is the primogeniture of all humans and that everyone inherits a brain predisposed to be musical (p. 162).

The left and right hemispheres of the brain are divided into lobes based on their general physiological roles. In light of this, vision is processed by the frontal lobe (long-term planning, movement control, and speech production), occipital lobe (for vision), parietal lobe (for sensory processing), temporal lobe (auditory, perception, language, and visual processing), and frontal cortex (for language) Hodges and Sebald (2011, pp. 157-158).



that convenient and successful training in music affects the brain's organization of music, and for Gojmerac (2018), there is an exceptional development of the human cognitive attributes which is believed to correspond with the evolutionary developments of our brain regarding both size and structure (p. 28).

The arcuate fasciculus (which transmits and distributes neurological information) and the superior longitudinal fasciculus (which connects the frontal cortex to the occipital and parietal cortex) are two white matter pathways in the auditory domain that, according to Zuk and Gaab (2018), are connected by musical instruction (p. 2). This implies that musical training leads to dynamic collaboration of the various regions of the brain. For instance, Gojmerac claims that studies on the impact of music on the brain conducted by experts in the field of neuromusicology show that the frontal, temporal, parietal, and occipital lobes of the brain respond bilaterally to musical stimulation. This shows that different areas of the cerebral cortex are stimulated by music, explaining why people can retain information more easily when they are listening to music (p. 180).

Reiteratively, Gojmerac citing Hodges discovers that some parts of the brain, such as planum temporale (part of the brain that performs language and sound operations) and corpus callosum, (band of fibres that connects the two cerebral hemispheres of the human brain that ensures communication stays in sync with each side of the brain) are larger in musicians than in nonmusicians (p. 181). In their research, Zuk and Gaab find that there are differences, including structural asymmetry, in many brain regions used during musical training, especially in the auditory, sensorimotor, premotor/motor, and visual-

spatial areas (p. 2). These points are put together to explain the indispensability nature of music education which is significant in the development of the human brain and hence requires significant attention in every educational endeavour.

Exploring a possible link between the FSHS programme and music educational outcomes of students stems from the conflicting accounts on the contribution of the Free SHS programme to the academic achievement of music students in the senior high schools of Ghana. There appears to be a political debate between different categories of people who from one perspective opine that, the FSHS programme is lowering the academic standards of the country, and at the end of the spectrum, others believe it is qualifying more students to pursue tertiary education. This is a profound public discourse where there is a need to understand the extent to which the human capital metaphor (FSHS programme) is giving Ghana new prestige by predicting its economic fortunes as far as students' performances are concerned. This study has thus charted a balanced ground between these opposing views on the FSHS programme and how events are conjoining to affect students' academic outcomes. It examines the effect of the free secondary education programme on the pedagogical practices and educational attainment of students in music and consequently explains the interactions between the various factors that result in these outcomes.

Statement of the Problem

The literature review has revealed conflicting findings about the degree to which the policy is influencing senior high school students' academic performances. From one standpoint, the programme has decreased the

academic standards of students, and from the other extreme, it has qualified more students to pursue tertiary education in Ghana. Consequently, the government believed that the programme achieved its usefulness because it is allowing more students to enter the colleges, and universities in pursuance of their tertiary education than it had during the cost-sharing era of education, despite the claims of academics like Addae-Mensah, Stephen Adei, Ato Essuman, and numerous others, as well as organizations like the IMF, that the programme is poorly targeted because of the detrimental effects it is having on students' learning outcomes (MyJoyOnline Report, 2022; 2023; Agyei, 2023). The understanding of the extent to which the FSHS is contributing significantly to the performances of students in senior high schools in Ghana is a profound public conversation that requires major investigation. This would attempt to eliminate all uncertainties surrounding its operationalisation in the schools.

In furtherance, given the expensive cost of music education with regards to the cost of its instruments for students' practical lessons, investing in well-resourced music libraries and studios and many others, many school administrators lack the enthusiasm to support its evolution as well as being apathetic to the pedagogical practices regarding its status in their schools with the justification of being resource intensive. The status of music education is therefore to a large extent dependent on the financial standing of the schools as well as preferences of school administrators in Ghana.

In other contexts, textbooks and other relevant materials expected to support instruction are completely absent in the schools, and most importantly, the deficit of professional teachers in most schools accounts for the

impassivity in the discipline in the last decade. It is therefore imperative to divulge the prevailing locus of the subject under the current policy in senior high schools through empirical research which this study seeks to accomplish.

Considerably, there is a gap in information flow on how government policies have affected the academic outcomes of students in the field of music which to an extent, explains the lacuna in the area. Policymakers and music educationists must have comprehensive reports on the effect of policies such as the FSHS on the study of music, and by extension on the academic outcomes of music students in senior high schools.

To sum up, the exploration of a possible link between music education and the policy of FSHS stems from the assumption that, there are laws or hypotheses that control the world which require to be tested, validated, and improved to build an understanding (Creswell and Creswell, 2018, p. 48). In the case of this project, the policy of Free SHS is construed as the predictor variable that seeks to influence an outcome variable which is the academic outcomes of students in music education over the last two years of the policy implementation. This study is hence designed to subject the tenets of the policy to statistical tests to ascertain their consequences on the outcomes of students taking music as an elective subject in the senior high schools of Ghana, an insight that might help professionals in the area of music instruction.

Purpose of the Study

The main goal of this study is to examine the extent to which the free SHS programme has affected the results of SHS students in music. Specifically, the study has focused on the primary objectives of (1) Analyzing

the differences in students' WASSCE results between the cost-sharing and the FSHS educational eras; (2) Examining the influence of the FSHS programme on the music educational outcomes of students in the senior high schools and exploring the correlation between the cost-sharing and the free SHS results, (3) Ascertaining whether the key pillars of the FSHS policy such as; cost removal, infrastructural expansion, and improvement in quality and equity through teacher rationalization and deployment have significantly contributed to students' academic performances in music, (4) Establishing the extent to which activities of music teachers have significantly contributed to students' academic outcomes under the FSHS programme.

Hypothesis

To establish a correlation between the independent variables and the dependent variable, the following null and non-directional alternative hypotheses have been formulated and have been statistically tested: the key tenets of the Free SHS policy and teacher effectiveness, against students' results in music education.

1. H_0 : There is no statistically significant difference between the academic outcomes of music students within the cost-sharing and the FSHS eras of education in Ghana.
 H_1 : There is a statistically significant difference between the academic outcomes of music students within the cost-sharing and the FSHS eras of education in Ghana
2. H_0 : The FSHS key pillars have no statistically significant effect on students' academic outcomes

H₁: The FSHS key pillars have a statistically significant effect on students' academic outcomes

3. H₀: Teacher effectiveness has no statistically significant effect on the academic outcomes of SHS students pursuing music in Ghana

H₁: Teacher effectiveness has a statistically significant effect on the academic outcomes of SHS students pursuing music in Ghana

Significance of the Study

This study has considerably explained the lacuna in information flow on how government policies have affected students' academic performances in schools, especially in music education. The results have provided policymakers and scholars in music education with a quantifiable understanding of the calibre of students' academic achievements under the FSHS programme. The findings have also provided information on the extent to which these performances differ from the previous regimes and qualify students to pursue tertiary education should they perform well in the remaining disciplines. Once more, details were given regarding the amount of professional staff resources allotted to the schools to accommodate the growing student body, as well as the obstacles to the discipline's pedagogical methods and how they ought to be removed or enhanced.

Furthermore, the findings have laid to rest the controversies regarding the degree to which the policy is affecting senior high school students' academic achievements as discovered after a review of the literature. This was accomplished by providing statistical evidence of students' performances under the programme from the prism of music education. The study has thus delineated a moderate position amidst divergent perspectives regarding the

FSSHS programme and its effect on senior high school academic outcomes in Ghana.

Additionally, the work emphasized what is effective, ineffective, and requires improvement, as well as what should be done to address any shortcomings. As a result, it has given researchers insight into how to analyse the success or failure of the FSSHS programme from the perspective of their respective fields. The findings also lent empirical substantiation to views in existing literature while also refuting and modifying other statements made in light of the most recent research findings. All of this made a substantial contribution to the field of music education within the larger context of Ghana's educational system and governmental policies.

Also, the Frame of the Mind, based on Howard Gardner's idea of multiple intelligences, as published in the late 1970s and early 1980s postulates that human beings possess eight or more separate intelligences, from which people draw individually or cooperatively to create products and solve relevant problems that pertain to themselves as well as their societies (Gardner, 1993, 1999, 2006b, 2006c) cited in Davis, Christodoulou, Seider and Gardner, (2011, p. 2).

Gardner identifies these intelligences as linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, intrapersonal, interpersonal, and naturalistic. This theory seeks to challenge the conventional perception that there exists one single type of intelligence, known as general intelligence (G intelligence) which focuses on cognitive abilities only. Resonating very well with Gardner's analysis, only two of the above-mentioned intelligences thus linguistic and logical-mathematical are being valued and emphasized in

the Ghanaian Educational context, where subjects like English, mathematics, and science are being represented as scholarly intelligences to the detriment of the others including music education.

With credence given to music education, this study conceivably is a departure from the conservative notion of viewing intelligence as unitary rather than multiple. Significantly, the theory of multiple intelligence (MI) that presents musical knowledge (ability to produce, remember, and make meaning of different patterns of sound) as one of the indispensable brain powers is very relevant to all teachers because of its focus on individual uniqueness. It thus enables educators to review their methods of instruction and evaluations in light of the unique learning styles of each student.

Davis et al. (2011, p. 3) believe proponents such as Eysenck, 1994; Herrnstein and Murray, 1994; Jensen, 1980, 1998) conceive general intelligence as an inborn attribute with which individuals are born and for which one can do little to change. Other scholars like Diamond and Hopson, 1998; Lucas, Morley and Cole, 1998; Neisser et al. 1996; Nisbet, 2008, also contended that intelligence is influenced by the circumstances around the individual. Synergistically, Gardner (1983) conjoined these contrasting schools of thought with the indication that views intelligence as an amalgam of genetically passed-on potentials as well as abilities that can be acquired through a variety of relevant situations. For instance, a person may possess a high level of musical intelligence at birth, which allows them to jam on an instrument for extended periods with ease. For another person, attaining similar expertise may require extra hours of rehearsal and studies. But whether

the performance emanates from genetically passed-on potential or an acquired skill both individuals are capable of achieving success in their performances.

Significantly, this study believes that with equal resources allocated for, and corresponding attention given to subjects such as music in education in Ghana, many students could have located their bearings in life early, which may reduce graduate unemployment.

Delimitation

The purpose of this study resonates very well with Creswell and Creswell's (2018) description of the Postpositivism worldview that holds that to build an understanding, laws or hypotheses governing the world must be examined, confirmed, and improved. (p. 48). In the case of this project, the free SHS is presented as a legislative act whose outcome on senior high school education requires to be juxtaposed with the outcomes of the existing reforms for contrasting effects. In this case, I set out to investigate the impact of the Free SHS educational policy (independent variables) that affected music educational outcomes (dependent variable). This established the study's parameters. It is only logical to speculate, but not a core component of my concerns in this study, how other subjects studied in Ghana's senior high schools are faring under the free SHS programme.

Also, there were several educational reforms (both pre-colonial and post-colonial) that influenced academic activities in Ghana. There are substantial disparities in the theoretical conceptualizations and operationalization of these educational programmes, even though they are identical in many ways. This study, however, limits itself to variables within the Free SHS Policy, but would nonetheless compare its two years' results

with the last two years' cost-sharing outcomes to give credence to either the null or the alternative hypotheses of the study.

It is also obvious music education encompasses all stages of education in Ghana, including primary, secondary, and higher education. The target population in this study however comprised of administrators, staff, and students involved in music education in the senior high schools in Ghana. This limitation prevented all other deductions and conclusions from being expanded.

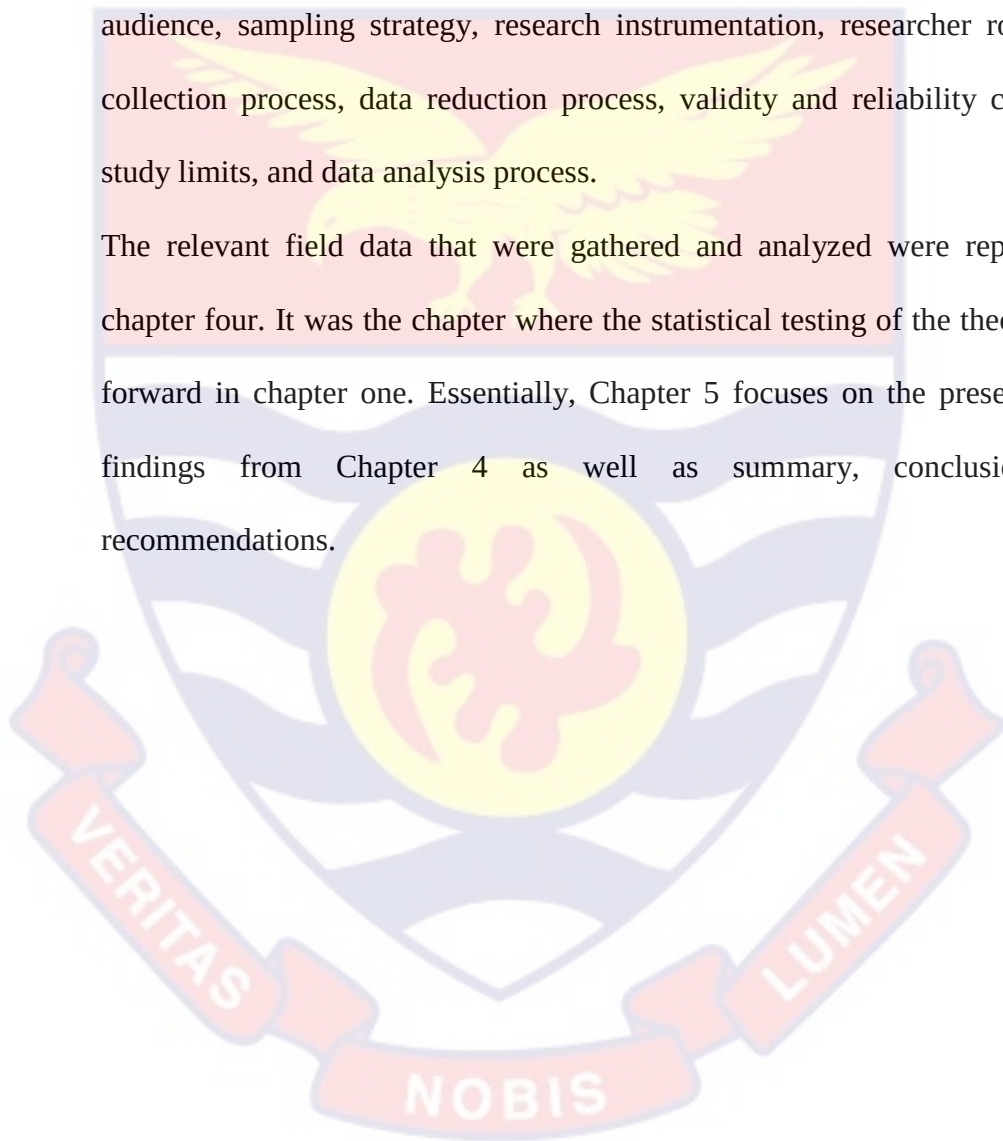
this study to determine the levels of effectiveness of e-learning, and English achievement at the University of Perpetual Help System Pueblo de Panay Campus for the school year 2019-202

Organization of the Study

In general, the research was divided into five chapters. By concentrating on the study's background, problem statement, purpose, research hypothesis, importance, delimitation, definition of terms, and organizational structure, Chapter One places the research in context. Chapter Two reviews the literature that is pertinent to the topic. These comprise statements made by various authorities regarding various facets of the research problem. This served to clarify and focus the research, help define its boundaries, and lay a solid platform for the verification of its findings about communicative cogency. The gap in the literature that was highlighted in the problem statement and the importance of the study were also established in this chapter. The two main study variables (FSHS policy and music educational outcomes) were covered in the review under the appropriate sub-headings.

The third chapter is devoted to describing the methodology, which includes a thorough explanation of the development and testing of the measurement tool, a discussion of the selection criteria, and an explanation of the characteristics of the populations from which the samples were taken. In this chapter, particular focus was placed on the research design, target audience, sampling strategy, research instrumentation, researcher role, data collection process, data reduction process, validity and reliability concerns, study limits, and data analysis process.

The relevant field data that were gathered and analyzed were reported in chapter four. It was the chapter where the statistical testing of the theories put forward in chapter one. Essentially, Chapter 5 focuses on the presenting of findings from Chapter 4 as well as summary, conclusion and recommendations.



CHAPTER TWO

REVIEW OF LITERATURE

Literature review in any scholarly work presents a series of advantages to the study. Apart from sharpening the author's research focus through the provision of factuality and very significant resources, it also offers the opportunity to get acquainted with the contemporary trends of knowledge in a chosen discipline, as well as the frontiers and constraints of that field. It also helps in avoiding inadvertent plagiarism, as well as justifying the suitability of one's project into an existing body of knowledge (Gratton, 2009; University of Illinois, 2022; Machi, and Brenda, 2022; Jones and Gratton, 2009). Examining the literature exposes the connections between the various facets of a topic and those of other topics. This is in tandem with the anthropological view expressed by Allan P. Merriam (1969) that: In human civilization and culture, nothing happens or is created in a vacuum; rather, everything is connected and forms a complex totality whose components are intricately and inexorably intertwined together (p. 74).

This assertion by Merriam indicates that there are elements of relativity and connectivity in diverse ideas. The endeavour for educational systems to adjust toward improvement to navigate the future appears warranted considering the expeditious economic, social and demographic environments that revolve around education. Educational policies and their impact on quality globally are no exception to this general axiom of Merriam; which is an indication that complications and accomplishments may not be unique to specific countries, but may have wider import of consideration. This study

also aimed at to find how the operational variables within an educational reform intertwine with music education in Ghana.

A review of pertinent and related literature is done for each of the study variables, namely: Free Secondary Education Policy (cost removal, infrastructural expansion, teacher rationalization and deployment); teacher effectiveness (commitment to teaching, technical/pedagogical knowledge, professional development, musical instrument/ICT proficiency) serving as the independent variables, and music educational outcomes (dependent variable) respectively.

The following subtopics are covered by the review using both thematic and conceptual approaches: The nexus between global policies and education policies in Ghana, educational reforms in Ghana thus the FCUBE and other analogous educational policies of Ghana in the 2000s; the effects of cost-sharing on pre-tertiary education in Ghana, the Free Senior High School Policy of Ghana, and teacher effectiveness and students' achievements. This is organized into a conceptual map as shown below.

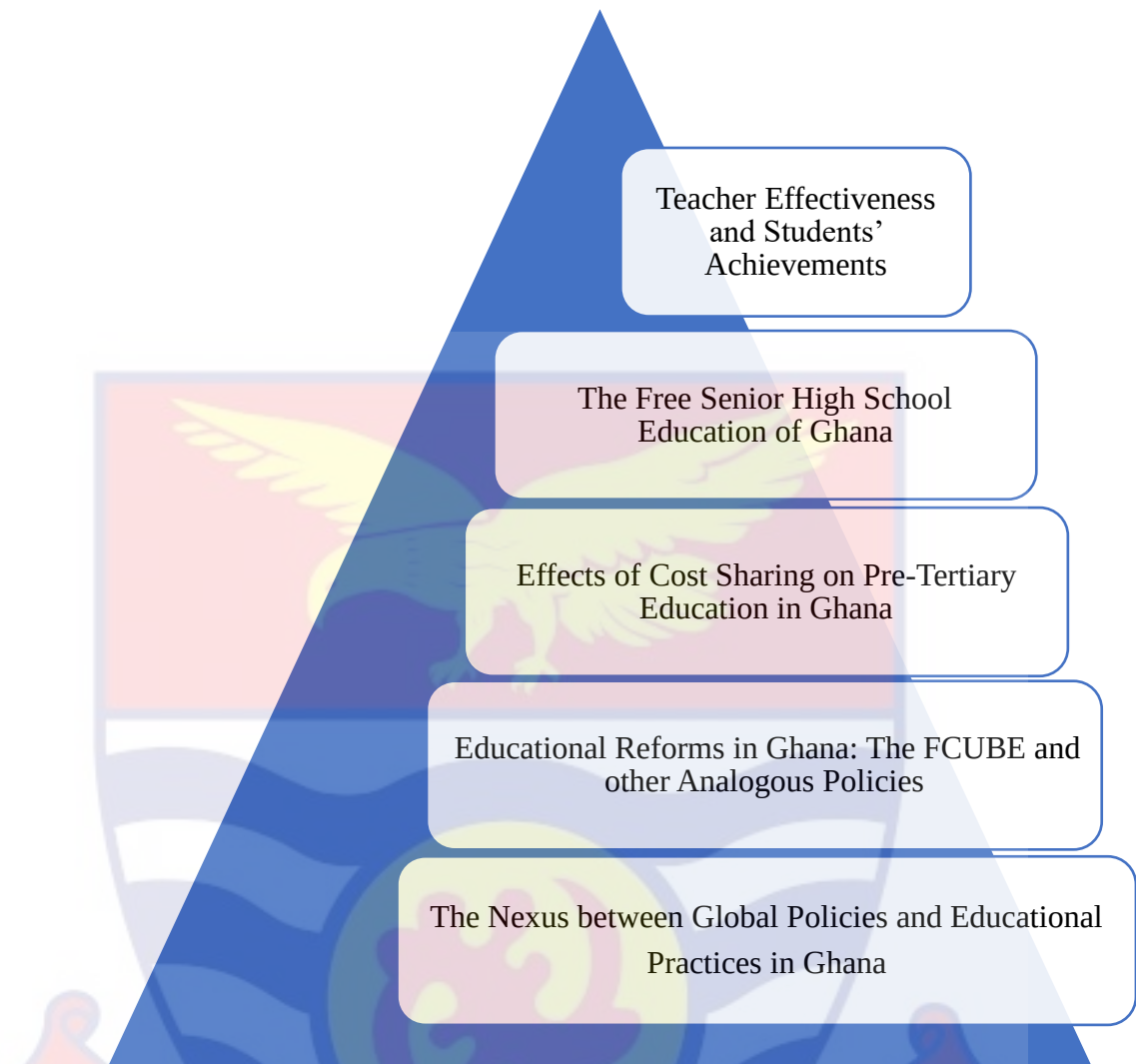


Figure 3: Literature Review Conceptual Map (source: author)

Theoretical Framework: Free Senior High School Policy

The twenty-first century has witnessed a paradigm shift towards knowledge optimization, where education is prioritized as the engine of economic growth and development. This presupposes that high-quality as well as accessible education is indispensable for nation-building, that is if citizens are to contribute considerably to the expansion and development of their respective national economies. In parallel, Almendarez, 2013; Burgess, 2016; Holden and Biddle, 2016, reckon that an investment in education; promotes a country's stock of skills which is predominant for national development in a

highly competitive global milieu. It is a key determinant of income inequality in society, the bedrock of good citizenship, and the ultimate tool for introducing civic and cultural values to children as well as supporting them to adjust rationally to the global terrain.

This issue is explained in the Human Capital Theory (Heller, 1957; Schultz, 1961; Becker, 1962; Weisbrod, 1964). In this theory, Schultz (1961) for instance affirms that the productive capability of human beings far out-measures all other forms of wealth put together. Schultz considers human efforts very cardinal in the wealth-creation processes of nations (p. 2). The proponents of the theory assume that a productive population is well-educated, therefore for the efficiency of workers as well as productivity to improve, the cognitive stock must be given prominence, where the provision of formal education is conceptualized as synonymous with investing in human resources (Almendarez, 2013, p. 21).

In resonating with this theory, Sweetman (2002, p. 158) and reechoed in Babalola (2009, p. 6) asserted that even though our great-grandparents laboured at least as hard as we do, on average, they were less wealthy in worldly possessions while putting in significantly more time and effort. This dichotomy between the productivity of the conservative and the contemporary labour force can be construed as the consequence of advancement in the academic upbringing of workers where education significantly plays a predominant role in impacting the labour market with highly skilled and technologically oriented individuals in recent times.

In keeping with this theory, Almendarez citing Babalola (2003) postulated that the philosophy behind this theory is based on the assumptions

that; (1) The current generation ought to be provided with the essential aspects of the knowledge of the previous generations. (2) The new generation should be introduced to how existing knowledge should be used to develop new products and to introduce new processes, production methods and social services. (3) The current generation ought to be motivated to develop entirely new ideas, products, processes, and methods through creative approaches (p. 22). Our world is made by history which demystifies most problems we face today, and because knowledge of the past offers pristine dispositions about the present, the essence of schooling undoubtedly is to link the past to the present.

Another major function of the school is to promote the development of critical thinking, problem-solving skills as well as creativity and innovation which are invaluable tools that liberate the minds of individuals in contributing to national development. Almendarez for instance believed that one significant explanatory variable that predicted the East Asian countries' economic upswing is the investment in their education (p. 23). It is therefore not astonishing that policies and programmes that seek to maximise the human resource stock of nations are a major concern to governments across the globe.

The Free SHS Policy is one such public policy of Ghana that is affecting the human capital and skills development of senior high school students in Ghana. It is a major measuring rod that is capable of comparing Ghana's economic performance to that of other nations, hence its effectiveness is a profound public discourse that is worth charting to unravel whether the human capital metaphor is providing Ghana's education with a new prestige that is capable of predicting the country's fortunes as well as justifying the allocation of state resources to its funding. The human capital theory has thus

been adapted as an operational framework for the current study to assess the academic performances of students in music under the current regime of education in Ghana. The theoretical model for this study is presented below;

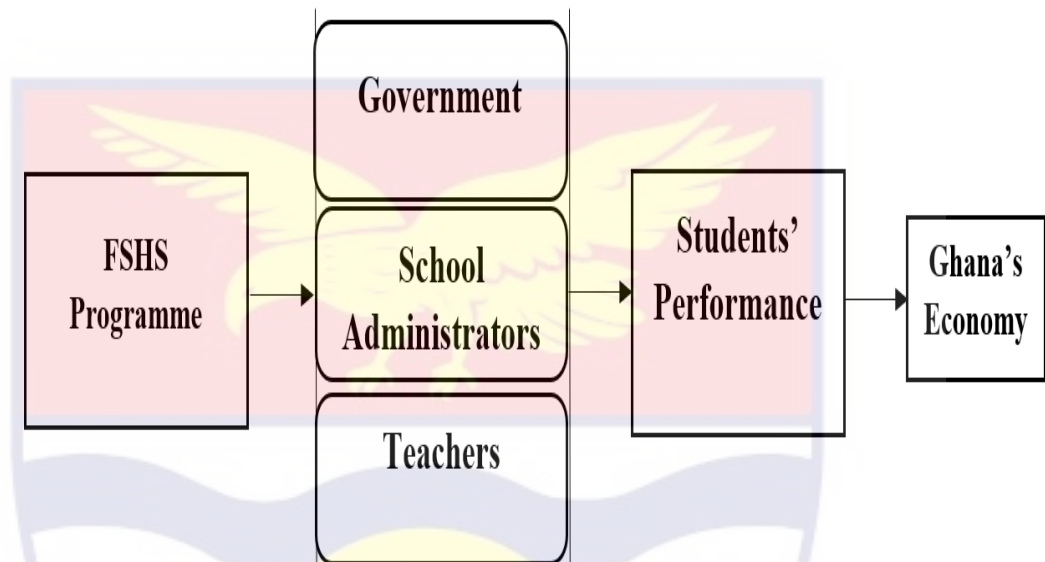


Figure 4: FSHS theoretical model (source: author)

In this model, the FSHS is construed as a state intervention that seeks to predict the ultimate economic fortunes of Ghana. The nation's economic destiny notwithstanding is dependent on the performances of students, which by extension is significantly fixated upon predictors such as activities of; government, school administrators, and teachers. That is, for academic consequences to be attained in our schools, it is imperative to connect the actions of teachers and other stakeholders to the learning and achievements of students which explains the link between cause and effect (Argyris & Schon, 1974; City, Elmore, Fiarman & Teitel, 2009; Andres & Nordengren, 2022).

The human capital theory therefore finds support in the action theory (Talcott Parsons; 1937; Argyris and Schon, 1974; and the theory of performance (Bacon, 2001; Elger, 2007). These theories subscribe to the view

that human beings are capable of accomplishing incredible results when specific actions are taken by all players within the performance landscape.

Ultimately, to enhance the performance levels of students there is the need for the government to; promptly release funds to the school heads, engage in infrastructure expansion, secure a decent student-teacher ratio, and many others in the schools. In addition, the school administrators are obliged to implement the FSHS programme at their levels through prudent management of resources allocated to them, as well as supervise the activities of staff personnel and students under their control. The teachers on the other hand are also expected to engage in effective pedagogical practices. Presumably, when all these parties can fulfil their aforementioned duties, the performances of students are likely to improve significantly.

The Nexus between Global Policies and Educational Practices in Ghana

Educational reforms have contemporarily become a global phenomenon, where countries worldwide are seen implementing analogous policies in education. This is corroborated by Schriewer (2000) who opines that education reforms are presently enmeshed in a global network of concepts related to social issues and development. Verger, Novelli, and Altinyelken, (2012) in confirming this assertion pointed out that a generic set of educational policy jargon has become a charted discourse globally, including countries with incredibly diverse cultural records.

This unambiguously suggests that there exists a constituted global educational policy landscape that is attracting international players; both governmental (World Bank, OECD, UNESCO) and nongovernmental organizations, including transnational advocacy coalitions, transnational

corporations and foundations, international consultants, and many more into education policy-making.

Several studies including Altbach and Knight, 2007; Verger, Novelli, and Altinyelken 2012; Geo-JaJa, 2013; Arnove, Franz, and Torres, 2013; Anlimachie 2014; Geo-JaJa and Majhanovich, 2016, consider globalization as a worldwide ideological hybridization by local and international public policy players to augment trade, security, health and many more. Arnove et al. (2013) for instance conceive the phenomenon as a worldwide social relationship that seeks to link international agencies to the shaping of local occurrences (p. 2). This assertion can be visualized as a borderless phenomenon that has its tentacles spreading through different economies, a correlation that is capable of generating either positive or negative effects.

Globalisation transcends trade and commerce to engulf education (which is the main focus of this review), health, security and many other social interventions, Yeates (2001). The fundamental premise for globalizing education according to Meyer, Boli, Thomas and Ramirez, 1997; Silova, 2012, cited in Anlimachie (2014, p. 11) is to expand knowledge, paradigms and theories, policies, personnel and funding across political boundaries through policy borrowing, replacement, reinforcement, hybridization, convergence, diffusion and adoption to promote quality education globally.

To exemplify the connection between global and national policies on education, scholars like Anderson-Levitt 2003; Vavrus; and Bartlett 2012; and Brown, 2015, have examined the intricate interaction of universal practices in national and local contexts. Anderson-Levitt 2003; and Vavrus and Bartlett 2012; for instance, assume that policy ideas appear to have Western or global

connotations, but they are embraced locally by countries for disparate reasons. Brown in furtherance reports that global policies are mostly implemented particularly by local actors from poor countries, often with constrained resources.

Education is globally considered the overriding factor to economic success. Conspicuously demonstrated from the literature is the complex nexus established between global policies and national educational ideologies where emphasis on schooling has become the predominant landscape of contemporary discussions. Demboh and Susanti (2021) for instance highlighted the transnational synergy among educational systems worldwide in the development and implementation of reforms for effective transformation of their economies (p. 31). Also, scholarly works by O'Donovan, 2020; Huckle, 1993; and Orr, 1992, consider the educational community as a significant wheel in the global sustainable revolution and thus has been pivotal in the environmentalism drive. Gopinathan, 2007; Hannum, 2005, in furtherance, believe that global and national economies have changed and require contemporary categories of labour, hence there is a need for educational reforms that can ostensibly drive the present knowledge-based economy. To Hannum, the human capital stock is central to national and transnational economic development, because productivity is enhanced when citizens are well educated.

The above transformational views as expressed by the aforementioned scholars are expected to emanate from robust educational systems in all countries; which can consequently be networked into building transnational and transcontinental economies, because it is assumed that vibrant educational

system in every country across the world is a recipe that will turn the global economic fortunes around. This suggests fundamentally also that, legislations in various countries ought to be explicitly based on quality and accessible educational delivery, hence constitutions must be promulgated in making education a social right for all citizens.

Legitimately, one could interrogate inter alia the relevance of globalizing education in independent political and cultural domains. Verger et al. (2012) in responding to this question, affirms that global policies are considered feasible by their local actors, and hence incorporate them into their education systems, (p. 18). In the most basic sense, it can be inferred from the above assertion that the local policymakers are thoroughly knowledgeable in international educational policies, and thus can determine the best policy-type to improve their education systems. It is also relevant to construe that, those international educational policies are adopted by countries due to the aid conditionalities given by the external actors. Gopinathan (2007) in concordance with this postulation indicated that Agencies like the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Bank, the Organization for Economic Co-operation and Development (OECD) etc., on the grounds of their funding powers, recommendations, and cross-national comparisons, contribute immensely to countries that endorse their policies, (p. 56).

Williams (2015) also offered another logical explanation for the globalization phenomenon. Williams accordingly, explained that expansion in communications and economic linkages have increased international interaction and interdependence in a world with unequal power relations.

Williams assumes that Western and Northern conceptions of education have higher policy weight than views from the South, because the Western educational paradigm is deemed dominant, and because the West and North have more coercive, projective, and cultural powers than the South, most nations tend to borrow as well as implement their educational policies (p. 16).

In parallel, Campbell 2004; Verger, Novelli, and Altinyelken, 2012, reckon the global status of the policy ideas. To these authors, the global reputation of the actors formulating these policies predominates, that is to say when policy ideas emanate from multilateral agencies, notably the UNESCO, UNICEF, UNDP, and the World Bank, they are considered influential and superior by local actors because of the global prestige and the vital roles they play in designing and supporting the global architecture agenda through education, King (2007).

Paradoxically, however, globalization of education and its impact on local educational policies of countries has been described as hegemonic since these international agencies ostensibly have the capacity and amplitude to set and define the educational priorities of countries via funding mechanisms and aid conditionalities, Verger et al. (2012, p. 4). Scholars like Habermas, 1996: Dale, 1999; and Dale and Robertson, 2007, for instance, opined that though countries have retained their formal territorial sovereignty, they have to an extent lost some of their capacity to make national policies independently, (p. 2).

It is essential to concede to the above assertion that, globalization tends to transpose the directions and parameters of state policies, though in essence, maintaining their territorial jurisdiction. For further elaboration, Dale cited in

Verger et al. (2012) acknowledges that external agencies impose some specific educational policies on countries which is tantamount to erosion of their national sovereignty. The terms and conditions attached to loans made to borrowing nations by the World Bank, the IMF, and other aid organizations, to Dale (1999), are classical examples of imposition, (p. 15). In furtherance, countries are coerced to freeze out tariffs and taxes if they desire to attract subventions from these external agencies, Yeates (2001, p. 631).

Commenting on the sovereignty of states, one of the principles in international law as enshrined in the United Nations Charter and elaborated by Yeates, 2001; Osiander, 2001; Verger, Novelli, and Altinyelken, 2012, conclude that, (1) each country's government is unquestionably sovereign within its territorial jurisdiction, and (2) Countries shall not meddle in internal affairs of other countries.

This by implication prohibits any individual or group from meandering in internal matters of domestic jurisdiction. Every country should be reckoned to be autonomous in formulating its policies within its defined geographical territory without any form of interference. These supranational organizations, as Esty (2006) refers to them because the sovereignty of countries is partly ceded to them in terms of policymaking, dispute settlement, organizing informal workshops within which policymakers, business leaders, NGOs, and academics exchange ideas (p. 1497), nonetheless accomplish their policy targets through powers of persuasion, conditionalities attached to loans, as well as imposition of fines on governments to pay compensations should they renege on implementation agreements, Yeates (p. 645).

From a consociation perspective, Biersteker and Weber (1996) contextualized state sovereignty as both internal governance and international relationships (p. 2). Their synergistic posture seeks to establish a balance between the proponents and the opponents of educational globalization. Biersteker and Weber prefer confluence as an alternative rather than fixating on the discord of whether educational globalization should be considered hegemonic or correlative. Their position indicates the possibility of cooperation of countries and international agencies in developing education across the world rather than opposition.

In reviewing all of these, it is clear that educational globalization is a complex and multifaceted phenomenon, and from whichever perspective we view it, it is significant to note that, no government can exclusively address all critical issues. In all ramifications, nation-building is all about bringing development to the citizens, and the roles played by these non-state actors in expanding education are colossal, and as a matter of consequence ought to be construed as significant political agents in the educational delivery process. They collectively play significant roles directly and indirectly in promoting education in various countries.

Globalization should not be considered as a one-size-fits-all but as a set of rules that can be interpreted differently by state actors who must create programmes and policies that work with their educational environment (Dale, 1999, p. 2). Countries are unable to ascribe to whichever policy fits or resonates well with their local needs.

Education policies and programmes in Ghana have predominantly been modelled by trends in global education. From Anlimachie's (2014) historical

accounts of Ghana's educational transformation, it is evident that the educational landscape in Ghana has to a large extent been influenced by a copious number of policy players both governmental and non-governmental (p. 16). This review will however take critical reflection of the nexus between these global policies and Ghana's educational practices, explicitly from the 1990s.

In pursuit of Article 26 of the Universal Declaration of Human Rights espoused by the United Nations General Assembly, which inter alia considers education as; 1. a right for every individual, 2. elementary education free and compulsory for all, UN (1948); the Ghana government has significantly promulgated the 1992 Constitution which granted Free Compulsory Basic Education (FCUBE) for all citizens Anlimachie (2014, p. 12).

This action by the government of Ghana axiomatically suggests a dichotomy in the availability of educational opportunities between the affluent and the less privileged, which is required to be bridged to ensure prosperity for all, as well as development for the country. This intimates also that, the dignity of every citizen is an overriding priority to the government of Ghana, and thus, must be attained through education for all strategies as stipulated in the constitution.

The government by this constitutional commitment is expected to marshal the requisite resources to provide quality education for every child despite every limitation, UNICEF (2003). Akyeampong (2009) in furtherance opines that the global policy on Education for All launched in 1990; which seeks to universalize primary education, has committed many countries to

implementing the fee-free educational system which presumably is an extension of the Universal Declaration of Human Rights.

The Capitation Grant and the school feeding programmes are other initiatives introduced by the Ghanaian government in the 2000s as part of the Education for All (EFA) strategy. The Capitation grant for example was introduced in 2005 after the government abolished school fees in the basic schools. The grant is an annual fund allocation per pupil per school meant to cater for all expenses while they are in school. The motive is to raise the nation's educational standards (UNESCO 2017). These policies are discussed in detail under the sub-heading Post-Colonial Educational Reforms in Ghana – The FCUBE and other Analogous Policies.

In another instance, studies by Osei-Fosu, 2011; Osei-Owusu, Ampofo, and Ampomah, 2020, revealed that the preeminent reason for the implementation of the school nutrition programme and the capitation grant is to address the backlashes of the FCUBE implementation manifesting through fees charged on; examination, sports and games etc., as well as to attain the United Nations Goal of Universal Primary Education by 2015. This position is corroborated by the studies of Anlimachie, 2014; and Kumi & Seidu, 2017, who affirm that Ghana's participation in, and support of international conventions including EFA, the Declaration on the Rights of the Child, the Beijing Declaration on Women's Rights, the Lome Convention, the African Charter on Human and Peoples' Rights, and the Millennium Development Goals (MDGs) and many others, has greatly shaped its educational system. They assert that, though these interventions sought, in many instances, to

improve the educational context, their introduction are consequence of international agreements the nation ascribed to.

In consonance with the already discussed policies, several studies (World Bank, 2007; Lincove 2009; UNESCO 2010; Evans and Ngatia) have acknowledged the fact that school uniforms and other non-tuition fees significantly impair Universal Basic Education, especially in developing countries. This resonates with Nasiba's (2016) claim that though many countries have abolished school fees from their education, there are other significant costs such as fees connected with the provision of school uniforms and textbooks that still hinder free educational provision.

In Sierra Leone, for instance, the World Bank reports that the cost of school uniforms can be equated to the cost of fees charged for school attendance. The situation in Nigeria is no exception because the cost of uniforms and stationaries as disclosed by Lincove (2009) is pegged at 2.5 times more than school fees before their removal. This ostensibly connotes a significant negative effect on school enrollment. It is on this tangent of solidifying the FCUBE programme that led to the introduction of the policy of Free School Uniform and Free Sandals for Basic school children in Ghana in 2010 and 2015 respectively.

In alignment with accomplishing the global agenda for equitable quality education, the Ghana government with its growing commitment towards achieving Sustainable Development Goal 4 (SDG 4) has introduced the FSHS policy in 2017 to provide education for deserving Ghanaians (Ministry of Education, 2018; Opoku, 2018; Addo, 2019). The objective of the Free SHS Programme is to remove every cost barrier in senior high school

education that is capable of denying qualified students access to senior secondary education in Ghana, MoE (2018, p. 25).

The Sustainable Development Agenda for 2030 espoused by 193 member states of the United Nations Organization (UNO) in 2015, provided a roadmap that seeks to provide peace and prosperity for every individual living on earth (UN 2018). They are global goals instituted to build on the achievements of the Millennium Developmental Goals which expired in 2015. SDG 4 among the 17 Goals focuses on promoting life-long learning through all-inclusive quality education. Its objectives include; ensuring that all children regardless of gender, race, or disability have access to a high-quality early childhood education, as well as completely free and equitable elementary and secondary education, and ensuring that learners are equipped with the requisite expertise and abilities to advance sustainable development (p. 5). Juxtaposing the SDG 4 with Ghana's Free SHS Policy, it is logical to reckon the fact that, the SDG 4 constitutes the global framework from which the Free Senior High School Policy is conveniently shaped. It is a planning and follow-up tool that is expected to be embraced by member countries for the creation of all-inclusive and an egalitarian society.

Correspondingly, Ghana's educational reform agenda has committed the government to design key educational reforms under the Education Strategic Plan (ESP 2018-2030) to transform pedagogical practices in the country to meet Sustainable Development Goal 4. The ESP advanced three broad policy objectives that incorporate the continental Education Strategy for Africa which is a continental agenda (Agenda 2063), and the Sustainable Development Goals by 2030 which is of global significance into its National

Short-term, Medium-Term, and Long-term educational development objectives (Mohammed, 2017; MoE, 2018). This is summarized in a conceptual model in Figure 4.

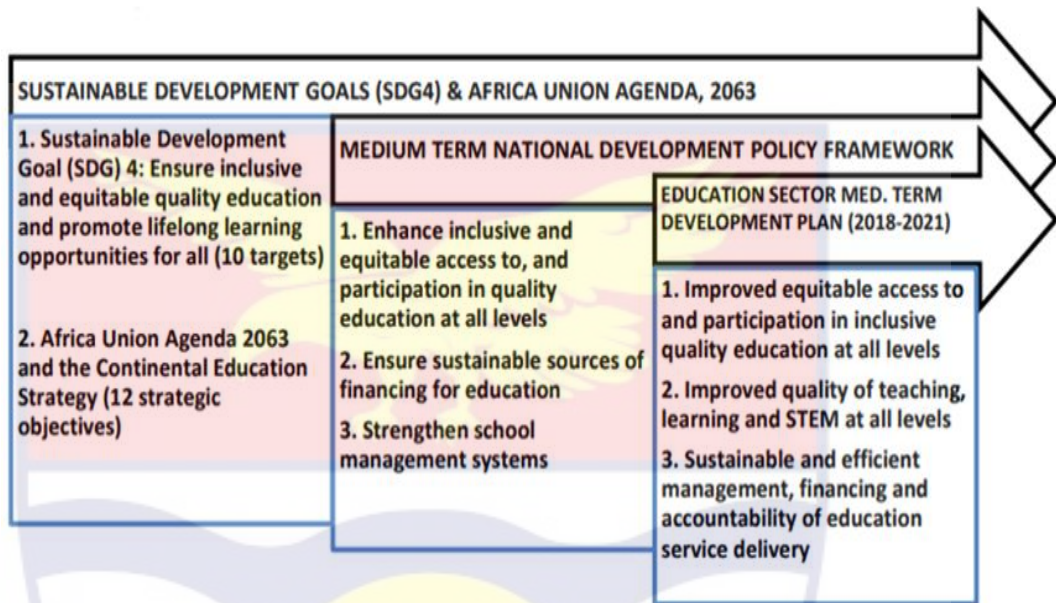


Figure 5: Conceptual Model of Key Educational Reforms of ESP 2018-2030 (adapted from MoE, 2018 Education Sector Performance Report)

Consequently, this burgeoning template of the 2018-2030 Education Strategic Plan by the nation epitomizes Ghana's dedication to education on a global and continental scale (MoE, 2018, p. 9). The model also explains the extent of engagement in Ghana's policy formulation process where a high level of consultation and consensus building is significantly prioritized. For instance, the 2006 educational reform process according to Anlimachie followed frenzied engagements; with the district, and regional consultations forming the bases. This extends to the nation where all stakeholders in education including international players met to make inputs. The draft was accordingly approved by the cabinet, and laid in the legislative assembly for parliamentary input. The final document was returned to the cabinet for

ultimate approval and presidential assent (issue of white paper) to become the final policy document (MoE, 2018, p. 19).

Similarly, Ghana's educational reforms have been described as donor-driven because of the overwhelming involvement of international organizations in policy formulation and sponsorship of programmes. Kumi and Seidu presume that the symbiotic connectivity of these international organizations such as the World Bank and the International Monetary Fund (IMF), African Union (AU) etc. have shaped the discourse of education in Ghana (p. 419).

In exemplifying the nexus between global policies and educational practices in Ghana, and with specific reference to Ghana's School Feeding Programme (GSFP), the Ministry of Education (2012) affirms that the genealogy of the GSFP could be traced to the New Partnership for Africa Development/Hunger Task Force Initiative (NEPAD/HTFI) with the support from the Dutch government. This corroborates Anlimachie's (2014, p. 19) study which concludes with UNESCO's (2014) position on the evidential influence of global policies on Ghana's reform implementation that: the UN, its specialized agencies, and donor nations have helped Ghanaian policymakers create sound and pertinent education policies and initiatives (including the GPRS, ESP, the School Feeding Programme, and others) and manage their efficient implementation. These aids take the shape of technical assistance with education policy analysis, the creation of strategies for the development of the education sector, and donor mobilization for funding educational goals. The assistance also takes the form of improving institutional capacity in areas such as policy formulation, sector analysis,

educational planning, policy simulation and conversation, resource projections, sector management, program monitoring and evaluation, and development cooperation (Anlimachie, 2014, p. 19).

It is obvious from the review so far that, policy implementation in Ghana's education system is heavily dependent on international support, hence, it is essential to recognize the continuing significance of these agencies which include; all the United Nations agencies, the World Bank, the United Kingdom Department for International Development (DFID), the United States Agency for International Development (USAID) and many other multilateral policy actors who have at various points in Ghana's educational development, and in diverse ways intersected to shape the educational landscape of the country.

In sum, the literature on the nexus between global policies and educational practices in Ghana points to the noticeable fact that every nation's most valued investment is in the education of its citizens. Policy recommendations and designs are therefore directed ultimately toward improvement in quality and expansion to cater for equity. The emerging explanations from the studies reviewed also indicate that globalization has profoundly impacted educational systems worldwide; where education is considered to be a right of the individual, and this right stems from a myriad of international treaties appended to by different governments. Ghana is no exception because, over the past decades, there have been different reforms in education that are meant to realize a quality and equitable educational system.

Apparently from the literature, most of these reforms engaged in by the country emanated from the international conventions the country has ratified. Literature also reveals that from 1992 till now, the country has engaged in a

series of reforms that are presumed to be extracted from global policies. Local policies including; FCUBE, School Feeding Programme, Capitation Grant, Free Sandals, Free School Uniforms, and many others including the recent policy on Free SHS are believed to have global connotations. This suggests that these local policies are instruments through which the country seeks to reach the global goals including; EFA, MGDs and SDGs on education.

Concerning the current study, the findings on the interrelationship between global policies and educational practices in Ghana are very beneficial. This is because, the present study seeks to determine whether there is a difference between the new policy on Free SHS and the existing cost-sharing system, as well as to determine the extent to which the policy of Free SHS aligns with the objectives of the SDG 4. The review already highlighted the relationship between the international educational policies including the current global policy (SDG 4), and the newest national reform (FSHS). How this relationship conspires to promote music education in senior high schools in Ghana is a major interest area for the present study.

Below is a conceptual model showing a proportional, interconnected, and hierarchical relationship between the current global goal on education (SDG 4), and Ghana's newest national policy on education (FSHS) that seeks to influence music education.

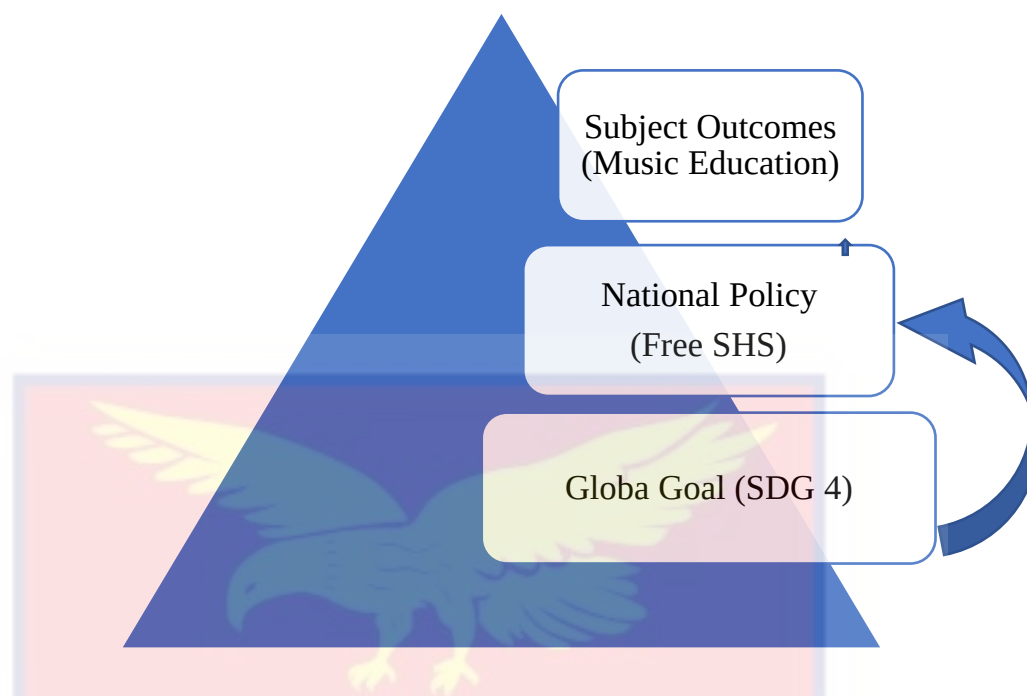


Figure 6: Pictorial Summary of Hierarchical Relationship Between SDG 4 and FSHS Policy (source: author)

The larger triangle forms the fundamental premise of education being the principal key to individual success and national development. It is the substratum for both global and national policy decisions that seek to influence Music Educational practices in Ghana. The arrows establish the protocol of interdependence. They indicate hierarchical progression from a broader sphere of policy formulation, thus the SDG 4 serving as the underpinning philosophy of the national reform on secondary education which is impacting the discipline, where the national objectives are perceived to be embedded in the global goal of education. It is worth concluding also that; music education has a direct and indirect link with the FSHS policy, and SDG 4.

By implication, it suggests that music educational outcomes stand to be directly or indirectly influenced by the intimacy of global and national policy decisions, which is cardinal for this study. Though literature analysis reveals a quantum of scholarly works on global policies and their impact on local

educational reforms holistically, there seems to be a gap in the effects and the significance of such effects on individual disciplines like music education, which is a lacuna this study aims at filling. This review by consequence, offers indispensable analytical parameters for interpreting results in the study.

Educational Reforms in Ghana – The FCUBE and Other Analogous

Policies

The evolvement of economies globally from industrial to knowledge-based establishes quality and accessible education as a major driver that equips the young generation with the required competencies to meet the demands of the knowledge society as well as contribute effectively to its development. This is empirically supported by the works of Lessard and Carpentier 2015; and Viennet and Pont 2017, who opined that, perceiving education as the main channel of developing highly-skilled youth to meet the standards of the knowledge society delineates the 21st-century paradigm shift, which to them, obligates educational systems to adjust, improve, to navigate the future expansions as far as the fast-paced economic transformations are concerned. Viennet and Pont (p. 10) for instance believe the revolution engenders the circumspection of policymakers and stakeholders to focus on educational outputs thereby raising expectations relating to the quality services being delivered in the schools, as well as achieving equity in access to narrow the gap between the societal affluent and the impoverished.

To exemplify the relationship between education and development, World Bank, 2009c; Kuyini, 2013, indicate that the most effective method for eliminating inequality and poverty is education. Kuyini (2013) believes education for the Knowledge Economy aims at assisting third-world countries

to equip themselves with the proficient labour force and flexible human capital required to compete effectively in today's global markets (p. 169). Significantly, enhancing the potential of graduates *inter alia* will certainly have profound consequences on the domestic economies of these countries because of the maximum impact they will make.

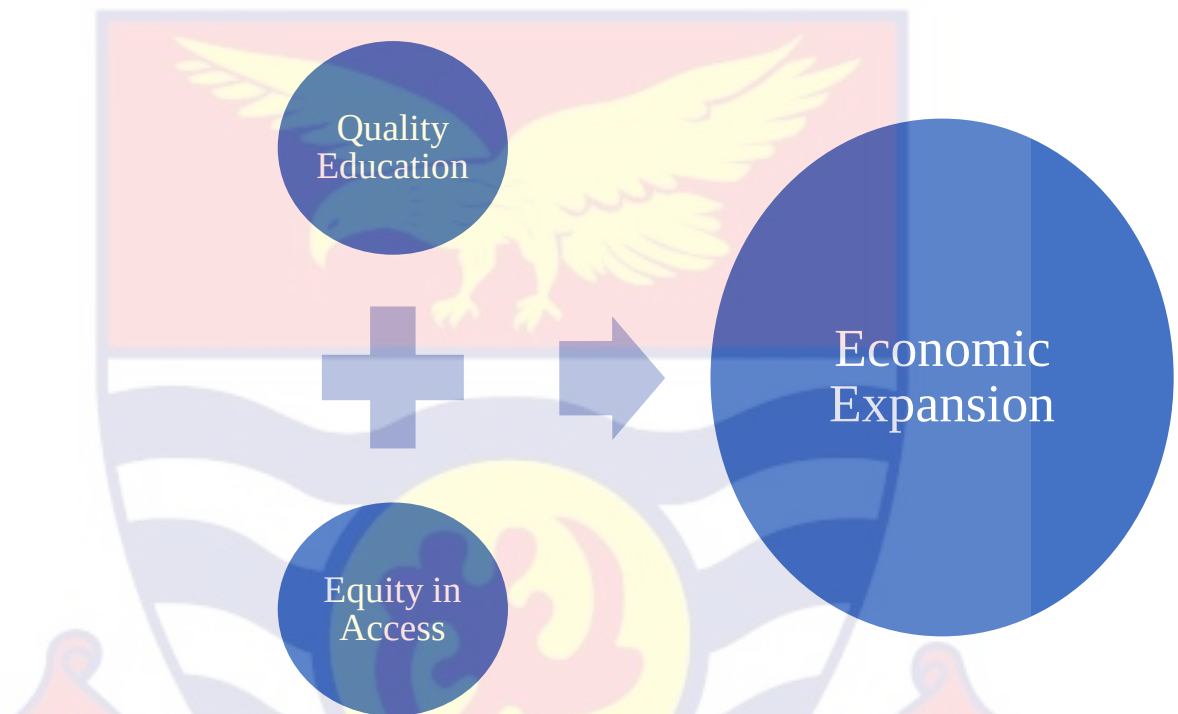


*Figure 7: Framework for Interpreting Knowledge-Based Economy
(source: author)*

A recurrent feature across the studies of Young and Levin, 1999; Bello, 2007; Adu-Gyamfi, Donkoh, and Addo, 2016; Apeanti and Asiedu-Addo, 2016, view educational reforms as indispensable initiatives for restructuring the educational content to meet the dynamic developmental targets of every nation. The assertions as expressed by the aforesaid scholars underpin Taylor, Rizvi, Lingard, and Henry's (1997) affirmation that:

“Governments around the world are trying to come to terms with new technologies, new social movements and a changing global economy. As a result, education

policy finds itself at the centre of a major political struggle between those who see it only for its instrumental outcomes and those who see its potential for human emancipation”.

This position is buttressed by Rohlen (1999) cited in Fullan (2000) who posits that learning procedures that better reflect the changing nature of the workplace must be taught in our schools. According to Rohlen, educational changes should focus on fostering the acquisition of fundamental knowledge and behaviours needed to address societal issues. (p. 7). President Lyndon Johnson excerpted by Cuban (1990, p. 8) in furtherance indicated that education is the single word that will solve all their national problems. He considers the schools as possessing the requisite experiences to find an antidote for all national problems.

Essentially, scholars like Perkinson, 1968; Meyer, 1986; Cremin, 1988; and Cuban, 1990, argue that national debates on educational reforms are of necessity because indirectly, they are the discourses about the future of society.

To design an educational structure that meets the goals of both equity and equality, Ghana carried out extensive educational reforms from the pre-colonial era to the present to find perennating solutions to the nation's educational dilemmas, Adu-Gyamfi, Donkoh, and Addo (2016). They define Educational Reforms as changes and policies initiated to improve the educational systems in a country. To them, this occurs sometimes as a result of economic decline, bureaucracy and sheer lack of interest (p. 158).

Adu-Gyamfi et al. (2016) indicated that the inconsistency of the structure of the Ghanaian educational system is a result of excessive politicization, where political parties after gaining power seek to provide reforms that they deem fit, especially regarding their quest to provide quality education for Ghanaians (p. 160). Educational reform is thus seen as policies formulated to bring changes into an educational system or to solve an existing problem relating to education. Some of these educational reforms in Ghana include The Accelerated Development Plan of 1951; the Education Act of 1961 Reforms of the National Liberation Council of 1966, The New Structure and Content of Education of 1974, The Education Reforms of 1987, Educational Reforms of 2007, Educational Reforms of 2017.

Before proceeding to discuss some of these reforms, it is significant to note that, discussions will be grounded on the Free Compulsory and Universal Basic Education and other parallel educational policies of Ghana, thus programmes, and interventions introduced by successive governments from the 1990 to the 2000s will constitute the parameters of this review.

Cuban (1990) avers that reforms do come back time and time again, albeit not in the same form or with the same circumstances. Cuban's research into the educational policies in the United States of America from a historical perspective ascertains that specific reform plans keep recurring forming what he termed reform waves.

This consequential pattern of emergence and failure of reforms has been investigated by several other scholars including Agbemabiese, 2007; Eising, 2013; Adam and Kafle, 2013; Boakye, 2019; and many others, with some positing that reforms emanate from inadvertent power shifts either

through stable or unstable political exchanges, and others perceiving it as conscious changes directed at attaining a definite set of goals. These educational punctuations as Eising (2013) preferred to term educational reforms occur when institutional friction transcends a threshold due to interest mobilization thereby shifting policy images (p. 19).

Given the resemblance of Eising's educational punctuations that occur as a result of intermittent insurgency, Boakye (2019) finds that since Ghana attained republican status in 1960, the country has witnessed four separate republics due to sporadic regime changes. He noted that the prevailing political administrative narrative of Ghana depicts eleven disparate administrations consisting of seven democratically elected and four stratocratic administrations (p. 69). Available evidence however suggests that the country has consolidated her democracy with an additional election in 2020 augmenting Boakye's statistics to eight democratically elected governments and four military regimes. Accordingly, education has remained the key component of national development to all these regimes, hence, the engagement in a series of interventions to revamp the sector.

Sequencing educational reforms from the past three decades, Agbemabiese (2007, p. 12) proposes three major periods into which any explanation of educational reforms in Ghana must be taken into account. These three periods he opines have delineated Ghana's educational history based on the socio-political changes experienced in the country. These include (i) The Dzobo Reforms of 1975; (ii) The Anfom Reforms of 1987; and (iii) The Basic Sector Improvement Programme, also known as the Free Compulsory and Universal Basic Education Reform (FCUBE) of 1996. Agbemabiese widely considered

these periods to be the channel that expedites the implementation of government developmental policies and programmes in Ghana.



Figure 8: Framework for Interpreting Agbemabiese's Reform Classifications
(source: author)

With the tenets in the above framework in mind, some of the categories mainly the third will constitute the inception of this review. Ghana introduced Free Compulsory and Universal Basic Education (FCUBE) in 1996. This reform is constitutionally enshrined to ensure the universalism of basic education for all Ghanaian children of school-going age. Apeanti and Asiedu-Addo (2016) in accord with Akyeampong (2005) reckon that the new structure of education recommended by the Dzobo committee in 1974 was an educational sector policy known as the Free Compulsory Universal Basic Education (FCUBE) which was introduced by the National Democratic Congress government in 1996 and abstracted from the 1992 constitution (p. 3). The 1992 Constitution of the Fourth Republic of Ghana according to Little (2010) significantly marked a paradigm shift as far as conducive political settings for sustained educational policy formulation and implementation are concerned (p. 22). A perusal of the constitutional provisions reveals that a major role in the sphere of education is anticipated from the central government.

. The constitution provides equal rights and educational opportunities to all Ghanaian children, boys and girls alike, to be able to compulsorily complete a full course of primary schooling without paying fees, Ghana's Constitution (1992, p. 29). Article twenty-five (25), Clause one (1) Act Section (a) and (b) of Ghana's constitution stipulates that:

“All persons shall have the right to equal educational opportunities and facilities and to achieve the full realization of that right; (a) basic education shall be free, compulsory and available to all; (b) secondary education in its different forms, including technical and vocational education, shall be made generally available and accessible to all by every appropriate means, and in particular, by the progressive introduction of free education” (Ghana's Constitution, 1992, p. 29).

The past educational reforms uncoupled basic education from the secondary system. The 2019 reform in education however redefined basic education to include senior secondary education, an implication of the government absorbing the full cost of fees of students in the senior high schools. Republic of Ghana (1992). More details on this can be found in the subsequent reviews (specifically under the structure of education in Ghana).

The inception of FCUBE by implication makes the policy inescapable to successive governments. This suggests that no government can run away from its implementation because it is constitutionally driven. It also seeks to perpetuate as well as reinforce the principles of free primary education set out in 1951 and the free and compulsory education clauses in the 1961 Educational Act, which provides all citizens of Ghana the legal right to free and compulsory education.

According to Osei, Asem, Owusu, and Afutu-Kotey (2009) even when tuition is low, school fees have a significant impact on the enrollment of low-income, excluded, and vulnerable children. (p. 4). The objective of the FCUBE policy therefore is to make schooling from Primary one to Junior Secondary School (JSS) three free and compulsory for all children of school-going age in the country by the year 2005, Kadingdi (2006) cited by Boakye (2019, p. 96). On their part, White, 2004; Akyeampong, 2010; and Boakye, 2019, found that the introduction of the FCUBE had profound consequences on Ghana's education due to the increment in enrolment figures. They reckon for instance that, enrolment of pupils in the basic schools increased from approximately 13,000 in the 1980s to over 18,000 in the year 2000. It is unclear however whether the trend of enrolment proliferation has impacted learning outcomes.

This, however, seems to parallel recent experiences in other parts of Africa. For instance, studies by Raja and Burnett, 2004; Oketch and Rolleston, 2007; indicate that the experiences of Kenya, Uganda, and Tanzania concerning the cost removal policies at the primary level of education have greatly increased enrollment. In exemplify this relationship, that is between free education and its impact on access, Oketch and Rolleston (2007) explain what has been shown in a growing number of studies including Vos, Bedi, Kimalu, Manda, and Nafula, 2004; Shrestha, Williams, Al-Samarrai, Geldermalsen, and Zaidi, 2019, that Kenya reintroduced free primary education in 2003 with the impression of establishing universalism in primary education as well as meeting the Education For All (EFA) target and Millennium Development Goals of universal access by 2015 (p. 141). Oketch

and Rolleston established that the provisional target of a net enrollment rate of 85% was achieved in the year 2005.

The case of South Africa is without exception. Shrestha et al. expound that the Nelson Mandela-led government championed racial equality, which also includes the introduction of an integrated and equitable national education system after assuming power. Accordingly, the government concentrated its efforts first on improving access to education with a primary net enrollment rate reaching nearly 95% (p. 106).

Paradoxically, there are several reports including; IMF 2003; World Bank 2004; Government of Ghana 2007b; and GES 2008a; that indicated that there is an utter disparity in access relating to gender and disability, as well as geography, despite the good intentions and contribution of the FCUBE policy. CARE International 2003; Kuyini and Alhassan 2009; Ghanaweb, 2010; for instance, reported that, as of 2009 there were communities that still lacked basic schools in Northern Ghana thereby challenging the universality of the policy. Kuyini (2013) citing the World Bank education report (2010) complemented the above assertion that geographical inequalities in the pre-tertiary system are huge barriers to educational access hence, school fees have a major impact on the enrolment of low-income, excluded, and vulnerable students even when tuition is minimal (p. 166).

The inability of the government to provide the needed resources for effective and efficient administration compelled some school managements to initiate charging of unapproved levies which is an attempt of stampeding the free component of the policy, as well as a gross violation of article twenty-five of the constitution. It is reported that these levies mostly take the nomenclature

of Parent-Teacher Association (PTA) dues Development levies etc. (GNECC, 2005; Oduro, 2000; Chao and Alper, 1998).

Boakye (2019) noted that the government was aware of the unapproved levies being charged in the schools but could not stop them for two major reasons. First, the government did not have the financial muscle to sustain the efficient administration of the schools; and secondly, the government gauged Ghanaians' willingness to share the costs for basic education (p. 97). As a consequence, the government lost the political and moral authority to enforce the policy's mandatory provisions. This ostensibly alters the enrolment figures, especially in the rural areas as suggested by Chao and Alper, 1998; Oduro, 2000; GNECC, 2005, because the unapproved levies were too expensive for low-income parents, for the greater the inequality, the harder it is for the poor to pay the fees (Kattan and Burnett, 2004).

It is therefore profoundly paradoxical that, while FCUBE desires to eliminate financial barriers to basic education, the government's inability to successfully navigate the economy to satiate the innumerable demands of the schools, subsequently reinstituted the unconstitutional levies in the schools. This compliments Boakye's assertion that insufficient fiscal resources, and the over-reliance on external sources for funding educational reform programmes since independence have led to unsatisfactory outcomes, which in most instances incapacitate most reform objectives and render them unachieved (p. 102). This simply suggests that the constitutional rhetoric does not match the practical delivery.

To keep the constitutional momentum strong, the new Administration of the New Patriotic Party (NPP) that replaced the National Democratic

Congress (NDC) in the 2000 general election built upon the previous administrations' efforts to conserve Article twenty-five of the constitution (FCUBE). Between 2003 and 2007, the government of Ghana set out to improve the FCUBE programme that was previously languishing in equity as a result of the introduction of the cost-sharing system in a way that was inconsistent with the national constitution.

The government also intends to meet the Initiative launched by the World Bank and UNICEF in 2005 on the Abolition of School Fee. This is corroborated by Boakye in concordance with the studies of Osei, Asem, Owusu, Afutu-Kotey, 2009; Osei-Fosu, 2011; Osei-Owusu, Ampofo, Ampomah, 2020, that the Capitation Grant and the School Feeding Programmes were introduced by the new government to tackle the cost-sharing challenges associated with the FCUBE implementation, as well as to attain the United Nations goal of universal primary education by 2015 and the Millennium Development Goals on education.

The fundamental premise of instituting the grant according to Osei-Fosu is to remove the extra cost and levies on things like examination, facilities management, security charges, games and sports that parents usually pay as school fees in the public schools (p. 56). The introduction of the capitation grant coupled with absolute cost obliteration within Ghana's basic educational context aligns with similar schemes developed in other African countries across the sub-Sahara. In a study conducted by Al-Samarrai and Zaman (2006) on the impact of school fee removal on educational access and equity in Malawi, they acknowledge Malawi as one of the pioneering countries in Africa to have adopted the policy of school fee removal. They

established that enrolment rates at both primary and secondary educational levels increased drastically as a result of abolishing school fees in Malawi. This parallels USAID, 2007; Osei et al. 2009, report that the intervention in Tanzania, Cameroun, Lesotho, and Uganda doubled the enrolment figures just a year after its introduction.

In furtherance to the introduction of the capitation grant, the government in 2005 began the implementation of the school feeding programme (GSFP) on a pilot basis. According to Boakye, pupils were served one hot nutritious meal prepared from indigenous food crops each day at school to provide the underprivileged basic school children with adequate nutritional meals, to reduce poverty and hunger among them (p. 98). This is corroborated by the Ministry of Gender, Children and Social Protection's (MGCSP) report on the National School Feeding Policy (2015) that the policy is an effective mechanism that seeks to address child nutrition, educational enrolment as well as retention and hygiene issues within the basic educational enclave (p. 17).

By extension, a review of MGCSP's report (2015) affirms that the GSFP is one of the social protection intervention programmes introduced to boost the status of education, especially within the rural communities in Ghana, intending to motivate parents to enrol their children in basic schools, improve attendance, sustain the attention span of pupils in schools as well as to improve the dietary nourishment of children in rural areas, Yendaw and Dayour (2015, p. 341).

The World Food Programme Report (2020) on the State of School Feeding globally in 2020 reveals that 93% of governments effectuate school

feeding programmes jointly with complementary health and dietetic interventions (p. 42). This presupposes that policies on school feeding have become a global phenomenon that is attracting rigorous fiscal commitment from governments all over the world. This parallels the African Union's (2021) findings that:

“Over the past decade, African Union (AU) member states have made significant efforts to increase their budget allocations and adopt rigorous policy frameworks for school feeding. These efforts have not only led to the feeding of more children but also to improving the quality of school health and nutrition interventions across the continent” AU Report (p. 10).

Analysis of the AU biennial report on home-grown school feeding between 2019 and 2020 affirms that 65.4 million children benefited from the school feeding programme across Africa in 2019, which is a 71% increase from 38.4 million in 2013, (p. 10). It is also estimated that one out of every two primary school children or 388 million children benefited from school nutritional programmes worldwide, hence between US\$41 billion and US\$43 billion is globally expended on school feeding programmes by various governments, WFP Report (p. 41).

In examining the consequences of school nutritional programmes on school enrolment in Kenya, Vermeersch and Kremer (2005) cited in Osei-Fosu (2011) found that enrolment increased in preschools where free breakfast was served compared to schools without breakfast (p. 57), which is a testament to the reports of WFP and AU. School feeding programmes thus provide the antidote to the despairing statistics of; low educational enrolment and

attainment, remarkable levels of school dropout, and chronic malnutrition among school children, AU (p. 18).

The World Bank cited in Nasiba (2016) revealed that school uniforms, as well as fees for stationery inter alia, significantly impair universal basic education, especially in developing countries. It is acclaimed that though many countries have abolished school fees from their education, there are other significant costs such as fees connected with the provision of school uniforms and textbooks that still hinder free educational provision, (p. 1). For instance, Lincove (2009) cited in Evans and Ngatia (2020) asserts that with the removal of school fees from Nigeria's education context, the cost of books and school uniforms was 2.5 times more than the official school fees before their elimination (p. 1).

These non-tuition fees accordingly are reported to have impacted school enrollment negatively. The Nigeria situation resonates well with the historical facts of Ghana where students were expelled from school for indecent appearance that is, non-compliance to the uniform rules of their schools, a situation that impinges on the objectives of the FCUBE policy.

School uniforms are one of the requirements in both public and private pre-tertiary schools in Ghana. This according to Koranteng (2015) is to standardize dress codes, reduce indiscipline as far as indecent dressing is concerned, as well as to create a unique identification for all students in public basic schools across the country (p. 25).

It can therefore be inferred from Koranteng's work that school uniforms represent totemic emblems that embody the attributes of schools, and provide a level playing field for learners because it minimizes the competition of

showcasing expensive fabrics among pupils and inevitably disadvantaged children from low-income homes. It is on this tangent of realizing the relevance of free school uniforms as a means of solidifying Article 25 of the constitution, as well as building upon the interventions introduced by the previous administration to construct educational equity that led to the introduction of the policy of free school uniform and free sandals for Basic school children in Ghana by the National Democratic Congress government (NDC) after winning the election 2008 and 2012 respectively.

Boakye affirms that the Atta-Mills led administration given the resemblance of the initiatives of former President John Agyekum Kuffour in 2004 and 2005 instituted the Free School Uniform (FSU) project in 2010 to reduce the educational cost on parents, as well as maximizing enrolment in the basic schools. Over a million uniforms are thought to have been supplied nationwide as of the end of 2012 (p. 99). Boakye in furtherance noted that the second term of the NDC under President John Dramani Mahama in 2015 continued with successive efforts to eliminate financial obstacles to primary education. This accordingly, was accomplished through the supply of Free School Sandals to basic school pupils (p. 100).

Though proponents believe the intervention policies have greatly impacted educational delivery in Ghana, critics presume they are not without major defects. The Ghana Education Service cited in Osei et al. (2009) admittedly indicated that the capitation grant scheme is not without challenges. Ultimately, an upsurge in numerical strength requires a high demand for supplementary classrooms, qualified teachers, provision of instructional resources such as textbooks, and more (p. 6).

Analysis of the USAID Report (2017, p. 18) on the evaluation of the sustained outcome of Ghana indicates that even though the country spends over 20 per cent of its annual budget to promote education at the school level, Head Teachers are still constrained with resources in maintaining the quality of the school environment. Reviewing the works of Oketch and Rolleston, 2007; Armah, 2017; UNICEF Report, 2009; Osei-Owusu, Ampofo, Ampomah, 2020, in consonance with the USAID Report of 2007, have indeed provided support to the notion that the elimination of school fees may be detrimental to the quality delivery of education, although it is identified to have a positive impact on school enrolment.

Because the aforementioned interventions were mainly targeted towards enrolment proliferation, there is the likelihood of the figures overwhelming the available school facilities including the students-teacher ratio, and provision of other relevant educational stationeries. The phenomenon of free education versus quality seeks to reverberate the experiences of mixed educational outcome trends in countries like Tanzania, Kenya, and Malawi. Analysis of the study of Osei et al. (2009) for instance divulges that cost removal on education in Malawi consequently affected the ratio of pupils to classroom, the ratio of pupils to teachers, as well as the ratio of pupils to textbooks. They contend that the student-to-teacher ratio rose to 119:1, while student-to-teacher and student-to-book ratios both increased reaching 62:1 and 24:1 respectively (p. 2). This episode unquestionably will have profound paradoxical consequences on the educational quality of any country.

In sum, the literature review on the post-colonial educational reforms in Ghana with a focus on the FCUBE and other analogous policies, points to the fact that there were several positive elements introduced by successive governments that seem promising in the quest for providing equitable and quality education to Ghanaian citizenry from the basic level to the senior high level of the educational continuum which is the main focus of this study. The emerging explanations from the studies reviewed indicate that multi-party democracy has played a major role in ensuring the continuity of most of the intervention programmes that are geared towards achieving the constitutional mandate of 1992. This corroborates the assertion that democratic governance best serves investments in basic education.

Affirming this, Stasavage, 2005; Oketch and Rolleston, 2007, contend that exponential growth in basic school admittance in the last few years in Kenya, Uganda and Tanzania is connected to the (re)introduction of democratic elections in these countries. Oketch and Rolleston for instance alluded to the fact that when political competition is present, leaders are more likely to introduce measures that are well-liked by the electorate (p. 142).

Ostensibly, it has been established from literature that successive governments either in quest of consolidating political power during elections or positioning for electoral victory make promises that resonate with the electorates. It is assumed that a high-profile educational policy manifesto promise greatly wins the support of the electorates across the country. Literature also reveals that Ghana does too little impact assessment of her previous educational policies even before engaging in new ones which is a lacuna this impact study aims at filling. The findings so far from this aspect of

the review establish a positive correlation between the various interventions introduced by successive governments and an upsurge in enrollment figures of basic school pupils.

The findings on the FCUBE and other analogous policies are therefore very beneficial to the current study because they provide the fundamental premise for rigorous evaluation of how the key tenets of the Free SHS Policy positively or negatively impact learning outcomes in music education. The Conceptual Endogenous Framework of Ghana's Educational Reforms in the Fourth Republic establishes FCUBE (constitutional provision) as the foundational intervention for free access to education in Ghana. It is the rock that bears all other interventions including the Free SHS Policy.



Figure 9: Conceptual model of Ghana's 4th Republic Educational Interventions (source: author)

Effects of Cost Sharing on Pre-Tertiary Education in Ghana

Fundamental to every educational reform is the funding mechanism that underpins its successful implementation. Cost-sharing forms one of these dimensions in the discussion of educational funding. Several scholarly works

(Weidman, 1995; Diarra, 1997; Penrose, 1998; Johnstone, 2003; 2006; Eldin, 2014) reckon cost-sharing as transferring part of the educational cost to other stakeholders. Kiveu and Mayo (2009) posits cost-sharing as a situation where governments, on the one hand, share funding responsibilities with households and communities (p. 273). In reviewing the works of Johnstone and Marcucci (2010), Callender (2017) asserts that these costs can be viewed as being absorbed essentially by four main alliances including; governments, students, families of students, and philanthropists (p. 3).

In a study by Marcucci, Johnstone and Ngolovoi (2008), it is established that financing higher education across the globe is characterized by three universal demands: thus, for improved standards, more access, and greater equity. From their findings, no country has been able to achieve these goals solely through public spending, especially in countries where resources are highly constrained (p. 4). Their research on dual-track policies in Tanzania, Kenya, and Uganda shows that these countries have had to increase resources from nonpublic sources, including tuition fees. In nations with strong opposition to tuition fees and where the difficulty of taxation is combined with competing for public sector needs, a dual-track tuition policy is implemented whereby the most qualified applicants are sponsored from public resources and other qualified students are allowed admission based on fee paying.

This situation ostensibly suggests that governments are coming under increasing pressure to lower the cost of products and services like education so that constrained public funds can be used to address other needs. It also presupposes that most governments engage in private revenue

supplementation for the support as well as expansion of their educational systems. In most cases; teacher salaries, classroom facilities, furniture pieces, library materials, and laboratory equipment are financed with state funds, while other costs such as; school uniforms, school facility user fees, boarding fees, sports and cultural levies, etc. are paid for by students and their families as a measure of sharing costs (Johnstone [1986, 1992, 1993b, 2002, 2003; Kasiringua, 2007]).

In furtherance, a collaborative study by the World Bank and UNICEF (2009), it was reported that; in Kenya for instance, local communities were assigned the role of constructing school facilities as well as financing other projects in both primary and secondary public schools. They were also expected to pay the salaries of other auxiliary staff who had been recruited in the schools to augment the efforts of the government. Mobilization of funds for school activities was left predominantly to school management committees (SMCs) and Parent-teacher associations (PTAs), while the state on its part is required to train and employ teachers in the primary and secondary public schools.

Consequently, the report confirmed that many school facilities were constructed through fundraising efforts (Harambee) marshalled by SMCs and PTAs and supported by community leaders through self-imposed levies (pp. 127-128). In consonance with the above report, Wambugu, 2013; Ndulu and Moronge, 2015; underscore the World Bank and UNICEF's conclusion, and establish the fact that the cost-sharing system in Kenya projects the state as a sponsor of 40% of the country's secondary education, while households contribute to the rest 60% of the cost. This disparity in figures reveals the

fiscal stress on families in financing secondary education in Kenya which will significantly impact enrolment figures.

Johnstone (2003) opines that several factors conspire in contributing to the cost-sharing phenomenon. Principal among them include; economic, political, and ideological assumptions (p. 353). The first rationale explaining the ascendancy of cost-sharing policies according to Johnstone is the sheer need for governmental revenue to solve economic problems. In explaining this assertion by Johnstone, studies by Williams, 1992; UNESCO, 1995; and Callender, 2017; posit that after the Second World War, many developing countries were confronted with serious macroeconomic challenges including budget deficits, intolerable balance of payment deficits, and high inflation.

As a means of economic restructuring, these countries embarked on reimbursement agreement negotiations with their creditors which led to the setting of diverging trajectories of cost recovery as well as fiscal parameters within which debtor countries reimburse their mortgages (p. 1). These agreements resulted in structural adjustment programmes (SAP) which are meant to re-establish an economic equilibrium, as well as stabilize micro and macro-economic policies in these economically challenged nations; and by extension translate into cost-sharing in many social programmes like education and health. This therefore calls for the reallocation of resources away from these social programmes to support other sectors of the economy, which advocates for a greater distribution of the costs of education to the beneficiaries, thus students and families (World Bank, 1994; Zideman and Albrecht 1995).

The second rationale for cost-sharing according to Johnstone is established on expediency rather than on principle which is an assertion that those who benefit from an educational process ought to partake in contributing to its costs (p. 354). It is worth assuming from Johnstone's postulation that, beneficiaries in education especially at the higher level are most likely to be middle or high-income earners and, hence can invest part of their resources in educating themselves.

This corroborates the work of Eldin (2014) who concludes from the studies of Harris (1962) that because taxpayers contribute to public spending on higher education, it is unfair that high-income households profit from these investments. Harris believes not squeezing those families with salaries in the top third of the range would be a mistake to some amount, otherwise, low-income groups would be footing a sizable portion of the high-income groups' tab through the payment of state and local taxes (p. 14).

The above assertion explains the Human Capital Theory which valorizes the private benefits at the expense of the state. The human capital theory views education as an investment that benefits the individual more than the state. The student is perceived to become the recipient of higher earnings as well as attain greater societal prestige. It is therefore justifiable to share the costs of knowledge acquisition with such beneficiaries (World Bank, 1986, 1994; Ball, 2008; Callender, 2017). However, in a sharp rebuttal, Colclough, Manor, 1991; Colclough, 1996; Kasiringua, 200; Eldin, 2014; drew attention to the major bottlenecks in implementing cost-sharing policies, especially in economically challenged countries. They opined that those who are least likely to reap high financial benefits and gain educational advantage tend to come

from poor backgrounds. Research has repeatedly proven that the imposition of fees always results in low enrolments.

In Ndulu and Moronge's (2015) study, for instance, it was concluded that astronomic charges of school fees in Kenya's cost-sharing system significantly affected the enrolment of students as well as their academic performances in secondary schools negatively (p. 481). In furtherance, the work of Kasiringua (2007) underscores the earlier assertions that while the Namibian government has achieved equity in access, the cost-sharing system resulted in destitution because the economic realities cannot afford poor parents to pay for the high cost of fees being charged by the schools (p. 12). For many impoverished parents, the cost-sharing issue is an obstruction. It is a barrier to educational access at any level because the individual faces liquidity constraints that prevent him/her from accessing educational opportunities. The resultant effect is that cost-sharing will engender endemic poverty.

The third justification given by the proponents for cost-sharing in education as attested by Johnstone is his neoliberal economic notion that cost-sharing will make the patrons more discerning consumers and the institutions more cost-conscious providers. Ultimately, a robust system of student financial support to the learning institutions is important for quality outcomes. This is because institutional responsiveness to the demand of students will to a significant extent depend on the revenue availability which will go a long way to promote the desired quality. It is also commonly known that students become serious with what they paid for and hence will make the best out of it. Parents and other funding partners have inputs to make regarding the quality of their ward's education because of their financial commitments.

Contextually, the Ghanaian government has pursued major educational reforms from independence aimed at delivering high-quality education that is also affordable to everyone. Abukari, Kuyini, and Mohammed (2015) for instance hold that, until the early 1980s, Education and health care services in Ghana were free; because the state has offered its citizens free basic and higher education and universal health care since independence. (p. 1). However, several studies underscored the major bottlenecks in sustaining these universalist programmes. Predominant among these obstructions was the prolonged macro-economic turmoil which impacted every facet of the economy in the 1980s reported by Tagoe, 2014; Abukari, Kuyini, Mohammed, 2015; and Aziabah, 2017.

Abukari et al. (2015) for instance, argued that the government had implemented cost recovery and reduced spending on social programs, such as education and healthcare, in an effort to salvage the economy at the time. To these authors, the decline of Ghana's economy coupled with the rapid population growth of the country at the time obligated the government to discuss a bailout plan with the World Bank and IMF. As a consequence, the nation consented to a Structural Adjustment Programme (SAP) by the IMF/World Bank, which accordingly impacted the existing universal welfare programmes in education and health care (p. 2).

In consonance, studies by Konadu-Agyemang, 2000; Kuyini, 2013, believed that the SAP compelled the government to reconsider its role as the exclusive financier of welfare programmes in the country, an implication that, government to a significant extent was expected to introduce a cost-sharing mechanism in which the costs of education and health care programmes are

apportioned among various stakeholders, including the government, students/families as far as SAP was concerned.

It is worth pointing out also that, the incapacity of the government to supply the required resources for effective and efficient administration compelled school management to initiate charging of unapproved levies which is an attempt to stampede the FCUBE policy, as well as a gross violation of article twenty-five of the constitution. According to Boakye (2019), the government was aware of the unauthorized levies being collected in the schools but was powerless to do anything about it for two main reasons. First, the government lacked the financial resources necessary to maintain the effective management of the schools. Second, the government took this opportunity to gauge Ghanaians' willingness to share the costs of basic education (p. 97).

The posture assumed by the government concerning these unapproved levies by extension presupposes an endorsement of the act in the schools. It is reported that these levies mostly take the nomenclature of Parent-Teacher Association (PTA) dues Development levies and many more (GNECC, 2005; Oduro, 2000; Chao and Alper, 1998). It is observed that, although Ghana's constitution's Article 25 stipulates the nation's overall educational strategy for the nation stating that: (a) basic education ought to be made available to everyone, free of charge, and mandatory: (b) secondary education should generally be made accessible, available, and gradually free, which gives the central government a preeminent obligation to provide public basic education to its citizens, scarcity of state resources however remained major bottlenecks to achieving this goal.

The ActionAid report (2017) for example indicates that funding for education as a percentage of total expenditure by the government has been shrinking ever since and that despite the FCUBE policy families still pay extra levies, such as PTA fees, sports and cultural levies, examination fees, etc. for their wards in schools. These hidden charges have a consequential impact on education because a significant number of students were prevented from gaining access to education as well as dropping out of school. The report confirms that the government's budgetary allocation of 27.2% to education in 2012 dwindled to 13.5% in 2016. This corroborates the World Bank's (2009) report in concordance with the Results for Development's (2015) findings that though tuition fees have been eliminated in countries like Ghana, household expenditure on education remains high due to the non-tuition charges they are expected to pay for.

It is perceptible from section (b) of Article 25 of the 1992 constitution that secondary education is expected to be made progressively free, an assertion that conspicuously alluded to the fact that cost sharing is permitted once students get to senior high schools of their education. In supporting this view, the Ghana Education Economic News (2013) pointed it out that as students start commence senior high school education, schooling is no longer free because fees and charges are involved. School costs are a regressive levy on low-income families, as well as their enrolment in schools (Osei, Asem, Owusu, Afutu-Kotey (2009, p. 4). This simply implies that, although poor households value education as much as their counterparts from rich backgrounds, it is apparent that rich families have a better choice of secondary



underpins this study until 2017 was cost-sharing between the central government on one hand, and the student/family on the flip side.

Secondary-level education incontrovertibly prepares students to enter tertiary institutions in Ghana as well as provides students with the advanced, specialized skills needed in the job market. Boaduo (1998) corroborated by Kasiringua (2007) believes that secondary schools are strategic formal institutions legitimized with the responsibility of shaping the youth to become academically, socially, politically and economically oriented (p. 11).

It is therefore puzzling to undermine the very essence of students' knowledge acquisition at a stage where they should be positioning themselves as indispensable educated labour in the globalized knowledge economies. This is because the phenomenon of cost-sharing will undisputably have a profound paradoxical consequence on the employment status as well as income levels of individuals with low levels of education. Although Penrose (1998) contends that cost-sharing policies provide governments with breathing space for allocating resources to the other sectors of their economies (p. 120), it is evident its dynamics will inevitably be detrimental to students from less endowed backgrounds. Ultimately, studies by Anyinam, 1993; Kasiringua, 2007; World Bank and UNICEF, 2009; Eldin, 2014; Ndulu and Moronge, 2015, conclude that issues of cost sharing are consequences of; low enrolment, high drop-out rate, impediments to access, as well as negatively impacting students' academic performance in schools.

The annual completion rate as reported by ActionAid (2017, p. 31) from 2010/11 to 2014/15 academic years in the Senior High Schools in Ghana was 36.4%. Statistics of this report are further tabulated and explained below



To these authors, educational cost is considered as a disincentive for academic pursuit by many families, because it either forestalls access to schooling or leaves them as drop-outs. The above postulation also valorizes the Ghana Education Economic News (2013) report that two-thirds of pupils in Ghana discontinue their formal education after junior high school since there are fees and expenditures associated with senior high school education.

Correspondingly, a literature review on students' bill sheets during the final stages of the cost-sharing policy authenticated the earlier assertions that cost-sharing has impacted the academic progress of Ghanaian senior high school students. Rummaging through the financial documents of Awudome SHS, one of the renowned senior high schools in Ghana reveals for instance that; aside from purchasing items specified on the admission kit list, prospective students within the 2016/17 academic year were expected to pay GH¢ 2,391.60 for their first year in the school. They were also expected to pay GH¢1,735.60 and GH¢1,492.90 respectively for their second and third years in the school. On the whole, a student is supposed to pay GH¢5,620.10 before completing school. A breakdown of these figures can be seen in page 71:



contribute to secondary education. This phenomenon has however become an impediment to access and academic performance because it negatively impacts students' enrolment and creates mass school dropouts and high failure rates with most victims coming from low-income homes. The literature on cost sharing and its implication on education in Ghana apparently delineates that cost sharing has become a discouraging factor to secondary education for many families in Ghana because it has caused many children from these families to drop out of school.

It is disheartening to realize that many children may never have the opportunity in life to quantum leap from primary education to secondary school due to financial challenges. The resultant effect is that cost-sharing engenders endemic poverty within these families. One major hypothesis this study seeks to test is to determine whether there is a significant gap in music educational outcomes of students between the FSHS and cost-sharing systems of education in Ghana as well as to establish the influence of the FSHS policy on music instruction in general.

The analysis of the relevant literature has indicated that, as long as funding for Ghana's secondary education is based on cost sharing, many students are anticipated to drop out of school, or to a significant extent have their results impacted by the phenomenon. Ultimately, this will have a profound effect on music education in the country. Enrolment in the discipline will doubtlessly decline as a result of escalated costs, irregular class attendance of students is highly anticipated because debtors are likely to be sent home frequently based on owing fees thereby interrupting classes, and

access may also be challenged such that prospective candidates who envisioned to pursue music education will have their ambitions truncated.

In effect, this review is essential for this study because it has provided the framework for interpreting the results as they emerge from data collected from WAEC concerning students' enrolment in music education as well as their performance outcomes within the two regimes under consideration. This, in turn, will help achieve the purpose of the study which is to assess the impact of FSHS on music education in the senior high schools of Ghana.

The Free Senior High School Policy of Ghana

Education is considered indispensable in the process of creating an enlightened labour force that is desirous to effectuate the developmental aspirations of countries, as well as eliminating poverty worldwide (Psacharopoulos and Woodhall, 1997; Becker, 1992; Zidan, 2001; Almendarez, 2011). There is compelling evidence of the link between human capital formation and education which demonstrably is connected to future growth. This assertion underscores the UN's Sustainable Development Goals on education which call for free, fair, and high-quality elementary and secondary education that provides students with the necessary information and abilities to support sustainable development (UN 2018, p. 5).

As a consequence, the UN's overarching SDG 4 inter alia actuates governments across the world to formulate policies and strategies that seek to invest in education, especially at the pre-tertiary level. Countries from sub-Saharan Africa like Kenya, Uganda, Tanzania, South Africa, and Ghana have all introduced free secondary education by offsetting all costs, as well as

enhancing access and retention of senior high school students (Gikie, Karoki, Kinyanjui, 2020; Duflo, Dupas, Kremer, 2021).

One of the policies of the government of Ghana is the Free SHS programme, which entitles every eligible Ghanaian pupil from junior high school to enrollment in a public senior high school. According to this regulation, the government will be responsible for paying all expenses, including meal fees, tuition, and any other costs associated with a student's entrance to a senior high school. The Free Senior High School policy according to UNESCO-UIS, 2018; Chanimbe, and Dankwah, 2021, satisfies the global commitment to education for all, which the government of Ghana subscribed to.

Animah (2018) acknowledges that the launching of FSHS in 2017 served as a consolation to the majority of parents who cannot afford the exorbitant fees at the senior high level of education due to financial constraints (p. 7). The Ghana Education Economic News (2013) pointed out that, once students start their secondary school careers, education is no longer free because fees and costs were in place prior to the introduction of the FSHS policy. These fees according to Osei, Asem, Owusu, and Afutu-Kotey (2009) represent a regressive taxation on poor families, as well as their enrolment in schools (p. 4). In consonance Studies by Kwegyiriba and Mensah, 2021; Duflo, Dupas, and Kremer, 2021, ostensibly established the fact that prior to the implementation of the FSHS programme, secondary education in Ghana was expensive.

Again, the study by Babah, Mensah, Frimpong, Ofori, Mensah and Ewusi (2020), corroborated by Kwegyiriba and Mensah (2021) reports for

example, that before the implementation of free SHS, school administrators, particularly from the wealthy schools, arbitrarily set high cut-off admission standards to weed out less talented and students from rural areas. (p. 69). Ultimately, the above dynamics of the school administrators to a significant extent tend to restrain the average Ghanaian child in terms of equity in accessing secondary school education.

By implication, the FSHSP is anticipated to lessen the cost burden of secondary education on parents and guardians, decrease the illiteracy rate, as well as alleviate poverty entirely among the citizenry. In furtherance, the policy is anticipated to narrow the gap between the societal affluent and the underprivileged to enable each person to acquire functional and productive skills (Asumadu, (2019; Matey, 2020; Mensah, 2020; Gikie, Karoki, Kinyanjui, 2020; Armah, 2021; Kwegyiriba and Mensah, 2021).

By FSHS, all qualified students are anticipated to receive equitable treatment under the policy regardless of gender, social class, ethnic background, or physical and mental disability. By its costless nature, it presupposes that there will be free: admission fees, tuition, library fees, textbooks, fees for ICT, science laboratory user fees, payment of utility fees, examination fees, and boarding and meals for students (Ngeno and Simatwa, 2015; Ndolo and Simatwa, 2016; Abdul-Rahaman, Abdul Rahaman, Ming, Ahmed, Salma, 2018; Kwegyiriba and Mensah, 2021).

The fundamental objectives of the policy according to the government of Ghana are to; expunge all cost elements that seek to barricade secondary education, to expand infrastructure in senior high schools to address the anticipated increase in enrollment, improve quality and equity (by providing



fees recommended by the Ghana Education Service (GES) Council for SHS students (Free SHS Ghana - 2018).

The approved fees for the first-year students in the 2017/2018 academic year for instance encompass; Feeding Fees made up of three square meals per boarding student at the cost of GH¢4.80 and 1 hot meal for all-day students at the cost of GH¢1.60 per student at daily basis (these figures are multiplied by the number of days students stay in school to get the total cost on feeding). The government is also expected to pay GHC20 annually as the PTA portion is dedicated towards teacher motivation, Free SHS Ghana (2018). This ostensibly establishes the fact that PTA dues are no longer compulsory for parents and guardians.

The following items were also supplied by the government of Ghana to all students who require them for their academic pursuits. They include; exercise books, physical education kits, notebooks, core textbooks, technical drawing instruments, technical drawing boards and tee squares, school clothes, school uniforms, house dresses etc. (MoE Education Sector Performance Report, 2018; Kwegyiriba and Mensah, 2021).

The removal of the above costs is a reduction of the economic burden on parents and guardians on the backdrop of; redeeming them from the huge financial burdens and pressure of getting their wards through senior high education, as well as improving their living standards (Asumadu, 2019; Matey, 2020).

At the opposite end of the spectrum, several scholarly works also reckon the flip side of removing the cost variable. Studies by Addo, 2019; Mensah, 2019; Chanimbe and Dankwah, 2021; Tamanja, and Pajibo, 2019,

corroborated by Matey (2020) who concludes from the study of Asumadu (2019) pointed that, there are numerous obstacles plaguing the implementation of the policy.

Predominant among them is overcrowding due to the surge in enrolment in senior high schools. Chanimbe and Dankwah posit for instance that, though there was enrolment proliferation by 17% and 31% in 2017 and 2018 respectively; the situations in schools were profoundly paradoxical because the increment led to overcrowding as a consequence of infrastructural deficits (p. 6). The infrastructural setbacks according to Matey (2020) led to the adoption of the double-track or shift system, which allows students to attend school in batches., thus while one group is engaged in school, the other is on holiday intending to adequately manage the exacerbated population through reduction of class sizes, increasing contact hours as well as the number of holidays (p. 28).

The double-track, aside from its uniqueness to manage the overly subscribed enrolment, is not without consequences in its operationalization. Matey's work for example revealed that there were swelling figures of teenage pregnancies recorded in the senior high schools as a result of spending longer periods at home, as well as breeding of truancy among students. Matey (2020) also opines that taking holiday studentships has also increased because students who are meant to be in school were not genuinely distinguished from the slackers in the batch of students scheduled for vacation.

Furthermore, there are compelling pieces of evidence from the schools that suggest that textbooks for elective subjects such as music, history, and others are lacking under the cost removal system, and parents are seen

spending more on extra classes to ensure quality for their wards (Matey, 2020; Chanimbe and Dankwah, 2021).

Infrastructural Expansion

Research has shown that quality infrastructure is key to promoting effective academic work in schools. Reviewing the works of Barrett, Treves, Shmis, Ambasz, and Ustinova (2019), it is affirmed that, a better physical learning environment enhances students' performance in schools (p. V). This supports the United Nations' developmental agenda for all countries in the world, to construct and improve gender- and child-sensitive educational facilities, as well as to provide inclusive, secure, and effective learning environments for all (Barrett et al., 2019; UNESCO, 2021). Barrett et al. in furtherance believe the prerequisite for achieving equity is for schools to be safe from natural disasters, as well as have the needed space, furniture, and other equipment required to effectively deliver the school curriculum (p. 10).

In consonance, studies by Matungwa (2019), and Earthman (2002), also acknowledged the influence of school infrastructure in increasing the attendance rate, as well as enhancing students' performance. They opined that the provision of quality school infrastructure, coupled with renewed spaces, makes it possible for students to feel motivated and attracted to coming to school regularly. It is therefore worth investing in school infrastructure, because ultimately an amalgamation of modern and environmentally friendly infrastructure, promotes classroom concentration of students during learning which impacts their achievement scores, as well as reduces dropout rates. Higher concentration aids memory retrieval of learnt materials and promotes appropriate responses to questions which facilitates an excellent pedagogical

climate in the classroom (Teixeira, Amoroso, Gresham, 2017; Matungwa, 2019; Earthman, 2002).

School infrastructure inter alia may consist of; classroom blocks, a well-equipped library that houses a stock of very useful books or informative and interesting video facilities, science laboratories, music laboratories/studios, computer laboratories, sanitation facilities, a water supply system, open fields for games (Adede, 2012; Teixeira, Amoroso, Gresham, 2017; Barrett, Treves, Shmis, Ambasz, and Ustinova, 2019).

Despite these global necessities for serene academic engagements, the Global Program for Safer Schools (GPSS, 2022) reported that there is an absolute disconnection between educational policies and infrastructural provision in developing countries. A possible logical explanation to this observation by GPSS indicates the urgency on the part of various governments in formulating very profound educational policies that seek to address issues of inequality and access but fail to provide the parallel infrastructural exigencies to meet the expected enrolment proliferations to improve the qualities anticipated from these educational policies.

Scholarly works by Sabates, Akyeampong, Westbrook, and Hunt (2010) for instance contend that inadequate facilities, especially the physical nature of the school buildings are the predominant causes of school drop-out rates in Ghana and Tanzania (p.12). The authors underscore the fact that though these countries have subscribed to free education, infrastructural deficit remained a bottleneck to access to quality education which by default is affecting school completion rate. The assertion as expressed by the aforementioned scholars underpins Matungwa's study (2019, p. 21) which

concludes that infrastructure conditions in schools are a prerequisite for students' academic achievements (p. 21).

Infrastructural provision is one of the central pillars of the Free SHS policy in Ghana. Significantly, it is anticipated to address the complications of the surging demands of students in senior high schools. The education sector performance report by MoE (2018) indicates the fact that the government is collaborating with relevant stakeholders to expand physical infrastructure by completing all ongoing projects in twenty-six selected SHS, as well as providing thirty-one new physical infrastructures of diverse forms for the selected schools. The facilities as indicated by the Ministry of Education include: (i) fifteen dormitory blocks; (ii) six 12-unit classroom blocks, (iii) one dining hall with kitchen, (iv) assembly halls, (v) one administration block; and (vi) one science laboratory block.

In furtherance, the report indicates the procurement and supply of the following ancillary facilities by the government of Ghana to senior high schools. These also include furniture and laboratory equipment comprising of: (i) 96,413 mono desks; (ii) 32,172 dining hall furniture made up of 11,057 dining hall tables and 21,114 pieces of dining hall benches), (iii) 12,953 pieces of bunk beds, (iv) 1,505 pieces of teachers' tables, (v) 1,533 sets of teacher chairs, (vi) 5,135 computer lab chairs, and (vii) 7,774 sets of whiteboards and accessories. By extension, the report captured the completion and operationalization of thirteen (13) of the E-block projects under the Secondary Education Improvement Project (SEIP) as part of the government's efforts to improve school infrastructure in senior high schools (p. 26).

At the opposite end of the spectrum, a variety of academic studies including Animah, 2018; Amissah, 2019; Asumadu, 2019; Matey, 2020; Chanimbe and Dankwah, 2021, have reckoned infrastructural deficit as the predominant factor impeding the Free SHS policy's implementation. For instance, Amissah (2019) which is corroborated by the research work of Chanimbe and Dankwah (2021), and further re-echoed in Asumadu's work as well as Matey's (2020) study, increased class sizes, overcrowding inter alia were cited as the overriding consequences of inadequate infrastructure in the various SHSs in the country.

It is reported that classrooms, dormitories, dining halls and other social amenities are overly populated in the schools. Sometimes, students sit on the bare floor to study during lessons in the classroom, food as well is served under trees because there are no dining facilities to contain them.

In consonance, Animah (2018) also discovered that inadequate infrastructure and facilities such as dormitories, dining halls, assembly halls, and inter alia have compelled students in the over-populated schools to sleep on verandas and floors in their dormitories due to the unavailability of beds. The author stipulated that; some dormitories do not have beds, and the only alternative for students is to sleep on the floor with their mattresses (p. 42).

Ostensibly, it can be inferred from the above scholarly reports that there will be excruciating environmental ambient such as high temperatures, and high noise levels, which are recipes for interpersonal disputes, hostilities, as well as violence, Barrett et al. (p. 8). Juxtaposing the MoE's Education Sector Performance Report (2018) with the discoveries of the aforementioned authors, a profoundly paradoxical experience is established, which

presupposes that, certain rhetoric of government does not correspond with the realities in the schools. Perhaps it is appropriate to state at this point that there is still a lot of work to be done or the government certainly ought to up its game by fixing the existing challenges about infrastructural development in the senior high schools.

Teacher Rationalization/Deployment

Teachers are indispensable in the educational delivery system, because of the critical roles they play in the developmental process of learners. Target 4. c of the SDGs has prioritized teachers as one of the fundamental conditions for quality education. It therefore behoves every government to make a concerted effort to ensure an effectual supply of quality teachers in every classroom to achieve SDG 4 (UNESCO, 2015). The report of the UNESCO Institute of Statistics (UIS, 2016) establishes that there is a whopping global shortage of teachers, most especially across sub-Saharan Africa and South Asia, and thus, 69 million new teachers ought to be recruited and trained to achieve global universal primary and secondary education.

This is corroborated by the USAID (2018, p. 51) report that the expeditious revolution of schools across Ghana has precipitated demand for more qualified teachers, which also underscores the study of Owusu-Acheampong and Williams (2015) that Ghana barely has a fourth of the teachers it requires to provide a high-quality elementary education to its citizens. These positions were further echoed by Nungu (2011) contained in the USAID report that, at the basic school level alone, there is a shortfall of approximately 40,000 teachers in the country. This episode unquestionably will have profound paradoxical consequences on education in Ghana, because

there will be classrooms without teachers, and ultimately when the fundamentals are weak, thus, from the basic schools, then the future of learners will be in jeopardy.

The above findings also resonate with Petrie's (2015) study which has profoundly demonstrated that teacher shortage is one of the major challenges confronting the pedagogical delivery of music in senior high schools in Ghana. Petrie's account reveals that most schools refrain from pursuing music education because teachers are not available to teach the subject.

To a greater extent, the deficit compelled schools to have fewer numbers which amounts to a limited aggregate of instruction in the discipline (p. 326). Again, there are apparent contradictory situations where teachers become redundant in some schools when others have deficits. This ostensibly suggests that, despite the under-enrolment of some schools, the ministry continues to post more teachers to those same schools which are in contraposition to the recommended Pupil Teacher Ratio (PTR) norm (USAID report, (p. 6). From another perspective, Cobbold (2015) also argued that teacher shortage should not be entirely fixated on an inadequate number of qualified teachers in a school, but goes beyond to be connected with teacher deficit in particular subject areas, levels of the school system, or geographical and socio-cultural locations (p. 73). It is therefore imperative that certain schools have an adequate supply of teachers, nonetheless, some subjects especially the more endangered areas may have shortfalls in the same schools. Teacher shortfall apparently can either be a whole school or subject-based phenomenon.

Within these frames of reference, there are required policies that can ensure that teachers are properly rationalized and deployed to ensure teacher equity in all schools, and for all students to maximize the approximate excellence, viz teachers ought to be posted to locations where their actual services are needed to ensure even distribution to all schools across the country.

Teacher rationalization targets resolving teacher surplus-related issues in schools, while teacher deployment involves mostly the transfer of redundant teachers from an over-staffed school to meet the operational demands of underserved schools, that is schools with teaching vacancies USAID (p.17). Equity and quality enhancement is one of the major pillars on which the Free SHS policy braced itself. This is expected to be achieved through the provision of supplementary readers and core textbooks, as well as teacher rationalization and deployment. This study however focuses on teacher rationalization and deployment as the means to improving academic outcomes of students in music education across the senior high schools of Ghana.

The proportion of students to teachers in the senior high schools of Ghana as of 2019 as reported by Index-Mundi, 2019; UNESCO Institute for Statistics, 2020, is 19.60 (approximately 20) which implies that 20 students are supposed to be in class and be taught by one teacher. The student/teacher ratio according to UNESCO (2006) estimates the quantum of students per teacher. This also manifests the teacher's workload as well as proximate services to the students they teach (p. 109). Though the figure seems to fluctuate substantially in recent years, thus 21.0 in 2017, and 23.37 in 2018, it tended to decrease through the period of 2019 ending at 19.6 students per teacher. This explicitly perpetuates negligibility, that is, juxtaposing the student-teacher situation in

Ghana to the other global educational systems. For instance, the ratio in Latvia is 8 to 1, and in the United Kingdom, there are 14 students per 1 teacher in the general programmes (OECD - 2019, p. 379).

Candidly, Ghana is a developing nation that is already grappling with resources to finance her education sector, and though does not have the same economic muscles as these advanced countries to budget for a robust educational system, she can still manoeuvre to reduce teacher attrition rates and manage the existing policies on deployment (UNESCO - p. 101).

Research has repeatedly demonstrated that smaller class sizes are best for student achievement.

Undoubtedly, individual students especially those with learning difficulties tend to receive more attention and support from their teachers when class sizes are small as opposed to large classes that promote rowdiness which has serious consequences on academic outcomes (UNESCO, 2006; Brown, 2022; OECD, 2019; 2022). Many times, teachers' focus on students has to be divided based on the proportion of students they have in their classrooms at any given time. This presupposes that some students may not get the needed one-on-one engagement with their teachers when the class sizes are large. Significantly, for subjects like music that require individualized instruction from teachers, large class sizes may lead to ineffective ensemble instruction, poor classroom management, poor planning and assessment, as well as encourage disruptive behaviour that frustrates teachers' efforts.

In a study by Best (2005), it was concluded that not more than twenty students should be allowed to be in class. Best was with the opinion that class sizes should not exceed fifteen students (p. 74). Costello (2005) in alignment

with Best, also opines that a normal music ensemble's class size is different from a typical general education classroom size (p. 12). The requirement for SHS music education in Ghana is such that, students are expected to be taken through the theory of music and composition, ensemble performances, and music appreciation.

In furtherance, these students are also expected to be proficient in their major musical instruments for final performance. Again, the music curriculum for the senior high schools in Ghana, as well as the demands from WAEC require school candidates to take three separate papers including music 2 (theory of music), music 3A (aural), and music 3B (performance test). These by themselves are so overwhelming for any one individual music teacher. Legitimately, it is worth finding out how all these amalgamated areas can effectively be approached with large class sizes by individual teachers. Best and Costello were sincere in their postulations that seek to emphasize small class sizes for music education because it will ensure effective delivery of teachers as well as enhance the achievement of students. It will also ensure individualized instruction which is a recipe for proficiency.

It is thus worth investigating the experiences of the music teachers in the SHSs relating to the surging enrolment figures as reported by various authors mentioned earlier in this review, to check whether the number of students measures up to the available teaching resources in the schools under investigation.

In sum, the literature on Free Senior High School policy points to the noticeable fact that the policy has indeed alleviated the cost burdens associated

with secondary education on parents, and though it has significantly proliferated the enrolment of students, it is without corresponding issues.

The emerging explanations from the literature indicate that there are infrastructural deficits that are creating an uncondusive pedagogical ambient in the schools. Issues of inadequate infrastructure according to Mensah, 2019; Addo, 2019; Chanimbe and Dankwah, 2021; Tamanja and Pajibo, 2019; and Matey, 2020, have generated overcrowding and pressure on the existing facilities in the schools. It is believed government in the quest to manage the situation has introduced the double-track system. The intervention from the government aside from reducing class sizes and increasing contact hours has also increased teenage pregnancies, as well as promoted truancy among students.

A review of literature has also indicated that textbooks for the elective subjects are lacking in the schools, and that, parents are spending more on extra classes and purchasing of textbooks for the elective subjects, to ensure their wards passed with quality grades. In furtherance, an acute shortage of teachers in the schools was also revealed through this review. It is believed that most senior high schools do not pursue music education because of this situation. It is also established that teacher shortfall can either be wholistically attributed to an entire school or can be a subject-based phenomenon where particular subject teachers may be lacking though such a school may have enough teaching resources.

The findings from the review of literature on the Free SHS Policy in Ghana are beneficial to this study which aims to find out if there are correlations, thus, between some major pillars of the FSHS policy such as 1)

cost removal (F1), 2) infrastructural provision (F2), and 3) teacher rationalization and deployment (F3), and the academic outcomes of music students in the examinations organized by WAEC under the policy regime. The review has summoned sufficient attestation in support of the assertion that the F1, F2, and F3 correlate with students' achievement scores. The primary focus of this study is to investigate if these findings are related, that is; if the F1, F2, and F3 correlates with students' achievement scores, and to determine the type of correlation. This review thus, provides yet another essential criterion for evaluating the results that will be obtained when the survey instruments are administered.

Teacher Effectiveness and Students' Achievements

Scholarly works on teacher effectiveness have profoundly shaped policies on education over the last decade. This is a consequence of the high demand for accountability concerning students' academic achievements, as well as the growing interest amongst educators and economists in exploring the pedagogical space.

Teachers are considered the baseline essentials for guaranteeing educational quality across the global space. Their roles are key to the achievement of all the SDG 4 targets (UNESCO Report, 2015, p. 21). The equity gap in education is glimpsed to have been exacerbated as a consequence of inadequate professionally trained teachers, especially in underprivileged communities. Target 4c of the SDGs thus provides that, by 2030, there should be an increased supply of qualified teachers, especially in the least developed countries through international cooperation for teacher training to ensure educational quality worldwide (SDG Report 2022).

In consonance, the main goal of the No Child Left Behind (NCLB) Act is to make sure that every child receives instruction from a highly qualified teacher. Various countries are therefore expected to establish criteria for teachers to fulfil to be deemed highly competent (Birman, Le Floch, Klekotka, Ludwig, Taylor, Walters, Wayne, Yoon, Vernez, Garet, O'Day, 2022, p. 1).

The caveat as contained in the above scholarly reports is for the teachers to possess the necessary, suitable, and pertinent pedagogical training to instruct at the chosen continuum of education and possess the required academic credentials in the subject or subjects they are expected to teach (UNESCO REPORT, p. 21). Literature on teacher effectiveness therefore underscores the United Nations' position to ameliorate pedagogical practices across the global educational landscape in attaining the No Child Left Behind Act, and the SDG 4 objectives.

The definition of teacher effectiveness has remained an old pedagogical dilemma in education due to the variances surrounding what constitutes the concept (Darling-Hammond, 2010; Goldhaber, 2002; McCaffrey, Lockwood, Koretz, and Hamilton, 2003; Seidel and Shavelson, 2007; Heck, 2009).

The music educational landscape is no exception as Travers, 1981; and Brand, 2009, acknowledged that though there is consensus on getting highly competent music teachers in every classroom, rehearsal hall, and studio, there is an absence of unanimity in establishing and describing music teacher effectiveness concept, especially given that teaching of music involves the amalgamation of different tasks, and as these tasks vary, so do the criteria for evaluating them vary. Perhaps the absence of a common ground for the

definition of the prevailing concept could appropriately be attributed to the classical argument of whether teaching music should be considered an art or a science.

It must be noted that, while music teacher effectiveness is presumably not amenable to scientific inquiry, scholars like Wise, Darling-Hammond, McLaughlin and Bernstein (1984) construe teaching as a craft, labour, profession, and art, and conceive each of these components as being evaluated and researched differently. This underscores Taebel's (1992) corroborated by Brand's (2009) position that effective music teachers reflect the amalgamation of pedagogical talents, musicianship, personal magnetism, artistry, knowledge, and organizational and communication effectiveness; contextually within the cultural, political, and community of a teaching/learning setting, which buttresses the artistic and scientific nature of the discipline.

Undoubtedly, effective teachers significantly impact the success of their students (Gordon, Kane, and Staiger, 2006; Malechwanzi and Murage, 2020). And even though the advancement of students' cognitive development which mostly culminates in their achievement scores is perceived as one of the prime consequences of effective teaching, many scholars believe teacher effectiveness transcends the evolution of the cognitive domain.

In their study, Little, Goe, and Bell, (2009) find it constricted, that is, if the prevailing concept of effective teaching should be narrowed to the teachers' ability to engender gains in students' achievement scores as measured in standardized test only (p. 1). To these authors, teachers cannot be exclusively held accountable for the learning behaviours of their students. Teachers can strive to significantly impact their learners' academic outcomes,

but their efforts can be thwarted by a host of factors such as; the environment, family, school resources, peers, school climate and many others.

Learning surmounts just achievement gains in standardized tests. Many studies thus opined that the definition of the concept should encompass the social development of students as an extension of the formal academic goals (Brophy and Good, 1986; Campbell, Kyriakides, Muijs, and Robinson, 2004; Little, Goe, and Bell, 2009). While Cohen, 2011; Lampert, 2001; Pianta and Hamre, 2009; cited in Blazar, 2016; believe high-quality teachers contribute immensely to raising test scores of students through the delivery of accurate content, as well as supporting critical thinking, they also underscore the emotionally supportive environments that these teachers must offer to their students to promote their social and emotional development (p. 53). This position is further echoed by Ko and Sammons (2016) who also hold that the comprehensive and robust view of teacher's work protrudes the pedagogical space to encompass wider roles such as: assisting colleagues with their instruction, taking on larger leadership responsibilities, improving the quality of instruction through personal reflections, and participating in professional development programmes (p. 13).

In consonance, Hammond (2000; Goldhaber, 2002; McCaffrey, Lockwood, Koretz, and Hamilton, 2003; Neild and Ripple, 2008; corroborated by Heck (2009, p. 229) also opined that definitions of the concept must be considered from the perspective of the teachers' knowledge, as well as the quality of teacher preparation before engaging students. In their study, Byrd and Rasberry (2011) found that standardized tests are intended to gauge students' quick recall of a relatively small body of information, and many of

them fail to adequately reflect the learning gains they exhibit in other more precise evaluations (p. 4). This position of Byrd and Rasberry significantly valorizes the aforementioned views that there are other non-cognitive pedagogical behaviours expressed by teachers which shape the attitude of students that may not influence test scores, hence no need to restrict teacher effectiveness to academic outcomes of students.

Undoubtedly, effective teachers significantly impact the success of their students (Gordon, Kane, and Staiger, 2006; Malechwanzi and Murage, 2020). Even though the advancement of students' cognitive development which mostly culminates in their achievement scores is perceived as one of the prime consequences of effective teaching, many scholars believe teacher effectiveness transcends the evolution of the cognitive domain.

Again, it is assumed that test scores are limited in the information they provide and may not be enough to measure the effective pedagogical characters of teachers, the majority of which are out-of-classroom contributions to making students develop holistically. Otchere, Amuah, and Numekevor (2016) in quoting Aristotle, claim that different aspects of humans need development, thus, educating students solely with their minds and ignoring their hearts is a waste of educational resources.

It is quite evident from the above argument that it is ineffectual for the cognitive to be given all the attention, or for a particular domain to be considered more esteemed for preferential attention to the neglect of the other domains, for which reason teachers can only be adjudicated for students' academic outcomes that are labelled as purely a cognitive exercise.

Knowing that the quality of education in the country significantly depends on the effectiveness of teacher practices in the sector, as well as valorizing the No Child Left Behind Act that legitimizes countries to set standards for their teachers, the Pre-tertiary Teachers' Standards for Ghana, established by the Ministry of Education and the National Teaching Council, outline the professional knowledge, practice, conduct, attitude, rights, and obligations expected of teachers working in the pre-tertiary levels of education (PTTSG). The standards are presumed to guide teachers to be abreast with the quantum of knowledge required at each level of practice in Ghana (qualifications), and how to exercise the requisite knowledge to improve the gains of those they teach - National Teaching Council (2017, p. 3).

For an effective pedagogical practice in Ghana, the standards require teachers among other things to show proficiency in the pertinent subject(s) and curriculum areas; show proficiency in learning about the learners' learning styles; show proficiency in understanding how different learning styles affect teaching; show proficiency in reflecting on the effectiveness of teaching strategies; show proficiency in understanding how to use assessment to support learning; and recognize their own training needs and assume responsibility for meeting them (p. 7).

These Standards have been categorized into three broad domains with their sub-divisions, encompassing what teachers should value, know and do. These include; 1) Professional Values and Attitudes (Professional Development, and Community of Practice), 2) Professional Knowledge (Knowledge of Educational Frameworks and Curriculum, and Knowledge of Learners), and 3) Professional Practice (Managing the Learning Environment,



throughout their careers (p. 54). This, in alignment with Malechwanzi and Murage's work in Kenya, along with scholarly works by Smittle, 2003; Goe, Bell, and Little, 2008; Stronge, Ward and Grant, 2011; Aina, Olanipekun, and Garuba, 2015; Ko and Sammons, 2016; Blazar, 2016; Bird, 2017; and Ghana's Teachers' Standard (2017), have presented a sound argument for the teacher's professional development as an instrument for teacher effectiveness.

The national teachers' standards for instance alluded to the fact that, as part of the professional development of its practitioners, teachers ought to critically reflect on their works, as well as to ensure lifelong learning and continuous professional development activities that include taking courses, attending professional workshops and conferences, reading professional journals, and writing professional articles to advance their pedagogical practices. Though considered time-consuming, professional development is considered crucial to effective teacher development, because it helps teachers deal with the inherent trends in contemporary educational delivery (Buskist, Sikorski, Buckley, and Saville, 2013; Malechwanzi and Murage, 2020).

Also, research has profoundly demonstrated that the professional knowledge (Subject mastery) of the teacher significantly impacts the academic success of students (Cross, 2000; Smittle, 2003; Malechwanzi and Murage, 2020). Correspondingly, academic standards need to be streamlined in alignment with school curriculum to which students will advance, hence the Knowledge of educational frameworks and curriculum, as well as the ability to convey that knowledge to students in the various disciplines as stated in the National Teachers' Standards, is a pre-requisite for effective pedagogical practice, because, the teacher's ultimate responsibility is conceivably the

translation of educational policies into action in the classroom. Accordingly, the NTC anticipates that all instructors will be able to:

Demonstrate acquaintance with the educational system and major guiding principles, 2) Possess an in-depth understanding of the official school curriculum, including learning objectives, and 3. Possess specialized knowledge for the school and grade they teach in, including topic knowledge, pedagogical knowledge, and pedagogical content knowledge (NTC, 2017, p. 14). In parallel, the NTC expects practitioners to reckon with the diverse cultural, linguistic, and socio-economic backgrounds, students' development and learning needs, and adapt instruction to meet their needs.

Within the Professional Practice domain, teachers are expected to manage; the learning environment, teaching and learning, as well as conduct assessments for learners (NTC – 2017, p. 15). Scholars like Smittle, 2003; Pascarella Terenzini, 2005; Malechwanz and Murage, 2020; have explained that Students can be engaged electronically through; chat rooms, emails, telephone calls, or letters, but humans must feel that sense of belongingness. They argue for instance that, the outcome of learners is improved when contact between students and teachers is extended beyond the formal classroom to informal non-classroom settings, and also, students who are connected to the classroom are less likely to drop out of school.

Presumably, these authors suggest that the educational landscape is so broad, that knowledge acquisition is unlimited to the classroom space, but a safe, encouraging, positive, and neatly organized learning environment is captivative for an optimized performance. Unarguably, the status quo of corporal punishments in schools has consequently created inequity in the

learning environment. Teacher effectiveness though the epitome of discipline and morality, must be exercised with the utmost decorum. The 21st-century teacher is also expected to collaborate with school administrators, parents, and education professionals to ensure student success, particularly the success of students with special needs and those who require remediation (Goe et al., 2008, p. 8), and appropriately design instructional strategies to grapple with multilingual, multi-age classes, gender, and mixed ability cases.

Ultimately, the literature on teacher effectiveness indicates an absence of a single widely recognized definition of the term, which is challenging. Various authors in providing a more comprehensive definition for the concept proffer dimensions that were surmised to be used in characterizing it. Literature also reveals that the educational quality of every country significantly depends on the effectiveness of teacher practices in the sector. Effective teachers thus have a significant impact on the success of their students (Gordon, Kane, and Staiger, 2006; Malechwanzi and Murage, 2020). Academic standards need to be streamlined in alignment with the school curriculum to which students will advance, and teachers are considered elemental in dismantling this narrative. Ostensibly, learning transcends just achievement gains in standardized tests. There are other non-cognitive pedagogical behaviours expressed by teachers that also help in shaping the attitude of students which may not imperatively influence test scores of students, hence there is no need to restrict teacher effectiveness to only academic outcomes of students. The definition of teacher effectiveness therefore should encompass the social development of students as an extension of the formal academic goals (Brophy and Good, 1986;

Campbell, Kyriakides, Muijs, and Robinson, 2004; Little, Goe, and Bell, 2009).

There are several distinct differences between this study and previous studies described in this review. Significantly, while most of these studies have focused predominantly on the correlation between teacher effectiveness and students' outcomes in the core subjects (English, Mathematics, and the Sciences), this study has however chosen to investigate the relationships between the performance outcomes of students in the WASSCE Music Paper and several teacher quality variables across multiple content areas. One major hypothesis this study seeks to test is to find out if teacher effectiveness has significantly affected music educational outcomes of students in the Senior High Schools of Ghana under the FSHS programme, where standard multiple regression statistics would be used to test how various independent variables (Teachers; technical/pedagogical competence, commitment to teaching, musical instrument/ICT integration, and professional development) have conspired to influence the outcomes of candidates spanning 2020 to 2021 academic years. In effect, literature on teacher effectiveness is essential for this study because it has provided the framework for interpreting the results as they emerge from data collected from both WAEC and the sampled schools. The result of the study aside from helping to achieve the study objectives, would also furnish school administrators, music teachers, and other relevant stakeholders on the necessity of adopting best pedagogical practices and approaches in enhancing the effective delivery of Music, as well as promoting the discipline in the Senior High Schools.

The conceptual framework that guides the formulation of teacher effectiveness survey questions is presented on the next page. It is worth noting that, the conceptual framework has been adapted from Malechwanzi and Murage (2020, p. 51). This was however modified to correlate with the current study. The dominant distinction between Malechwanzi and Murage's work and this study is that, while Malechwanzi and Murage explore six variables (commitment to teaching, subject mastery, non-cognitive issues, innovative learning environment, communication high standards, and professional development) as their definition of teacher effectiveness, this study only explores four independent variables. Significantly, Malechwanzi and Murage tested their independent variables against students' satisfaction as the dependent variable, while this study uses the outcomes of students as its dependent variable in hypothesis testing.

Technical/Pedagogical Competence Module

Under the Technical/Pedagogical Competence, music teachers are expected to exhibit mastery of the subject matter (music) as well as possess the requisite knowledge and skills that link theory and research to teaching and learning in general, Ningtiyas, Jailani (2018, p. 2). The current SHS syllabus has been organized into three sections namely; theory of music and composition, performance, and appreciation for the 3 years, with each section containing several units (MoE, 2010, p. ii). In furtherance, the WASSCE music paper consists of an amalgamation of three separate papers that are distinctly organized. These include; music 2 (theory of music), music 3A (aural), and music 3B (performance test) papers. Under each of these, the candidate is expected to exhibit a high level of dexterity and proficiency to

attain the standard set by WAEC. In most cases, it is only one teacher that chaperons all these areas of knowledge acquisition hence, the need for the music teacher to be knowledgeable about the music curriculum content, and develop strategies for interpreting it to students.

Questions under this module would therefore focus on the teacher's up-to-date knowledge in interpreting the music curriculum to students which include; musicianship skills like music reading and writing, ear training, performance, composition, improvisation, and transcription. The teacher's technical inclination in handling all WASSCE-related stuff, the ability to combine varieties of teaching strategies in lesson delivery, the ability to use different evaluation methods and techniques in music education to assess students' performances, as well as establishing and maintain professional relationships with colleagues and all other stakeholders in the school and beyond.

Teacher commitment Module

Teacher commitment is one of the most critical factors in effective teaching. It is conceived as the emotional bond teachers exhibit toward their work. It is that internal force that drives teachers to invest more time and energy resources in the school to ensure students succeed in their endeavours, Altun (2010, p. 417). This disposition to promote the school according to Altun, creates an emotional link between teachers and the school which ultimately stimulates teachers to create a congenial learning environment that propels students to reach their targets.

Teacher commitment in this study combines the non-cognitive propensities of the teacher in contributing to the achievement of students. The

classroom consists of many unique individuals with special needs that must be met. It is required of committed teachers to experiment with various teaching strategies, such as direct instruction, grouping pupils, and rearranging the groups as necessary to fit the requirements of each student.

Lynch (2015) opines that reaching out to individual students requires motivation, providing an opportunity for all to learn at their unique pace, and ensuring that all students have the needed resources to succeed in their exploits. Studies by Day, 2004; Somech and Bogler, 2002; Carbonneau, Vallerand, Fernet, and Guay, 2008; Altun, 2010, hold that teacher commitment is synonymous with unquestionable loyalty to the institution of practice, as well as satisfaction with teaching. It is being passionate and enthusiastic about teaching, giving hope to students, motivating and encouraging students to be deeply involved in school activities thereby creating zealous learners, and providing students with innovative instructional strategies that can lead to better achievement.

The questionnaire on teacher commitment for this study will hence be focused on teacher preparedness for music classes, his/her punctuality as well as being regular in class, the ability to motivate students to learn music, his/her availability for students' consultation, and the readiness to arrange extra meetings with students beyond the normal study time.

Musical Instrument/ICT Proficiency Module

Proficiency in musical instruments refers to the expertise of playing a musical instrument. In a study conducted by François, Grau-Sánchez, Duarte, and Rodriguez-Fornells (2015), it has been theorized that learning musical instruments improves memory power, thus cognitive memory and muscle

memory. They opined that learning to play musical instruments requires the use of both the right and the left parts of the brain which impacts memory (p. 1). Learning to play musical instruments has so many benefits such as building the confidence levels of students, as well as enhancing their social lives. At the moment, several testable musical instruments must be mastered by individual students as part of the requirements for the Music 3B paper (performance test). These include; Voice, Violin, Descant Recorder, Atenteben, Trumpet, Saxophone (alto in E flat), and piano. It is therefore imperative for the music teacher to exhibit dexterity in at least one or more of the above instrument categories to be able to instruct as well as prepare students to meet the standard set for the paper.

In furtherance, ICT (information and communication technology) has been incorporated into many subject areas as a new teaching method in recent years, and as a result, it is having a significant impact on all subjects taught in schools, including music education. In the study of using ICT tools in music education: Do they contribute to improving learning and music skills by Bravo, Molto, and Bravo (2012), the authors maintain that music teachers ought to integrate new technologies such as interacting with multimedia (image, audio or video), knowing how to edit scores, using MIDI electronic instruments, or manipulating sound by computer into their lessons to better develop students' competence in music. There are musical ICT software such as Finale, Cubase, and Sibelius that support the easy creation of music, production, expression, dissemination, and promotion of music, both in and outside the composition class that students are expected to be introduced to, in order to keep them abreast with the contemporary classroom. It is the role of

the music teacher to increase students' digital processing awareness which is globally acclaimed to be the generic competence of the era.

Questionnaires under this theme will hence focus on the music teacher's musical instrument proficiency, the ability to combine ensemble skills with pedagogical knowledge, integration of ICT in lesson delivery etc.

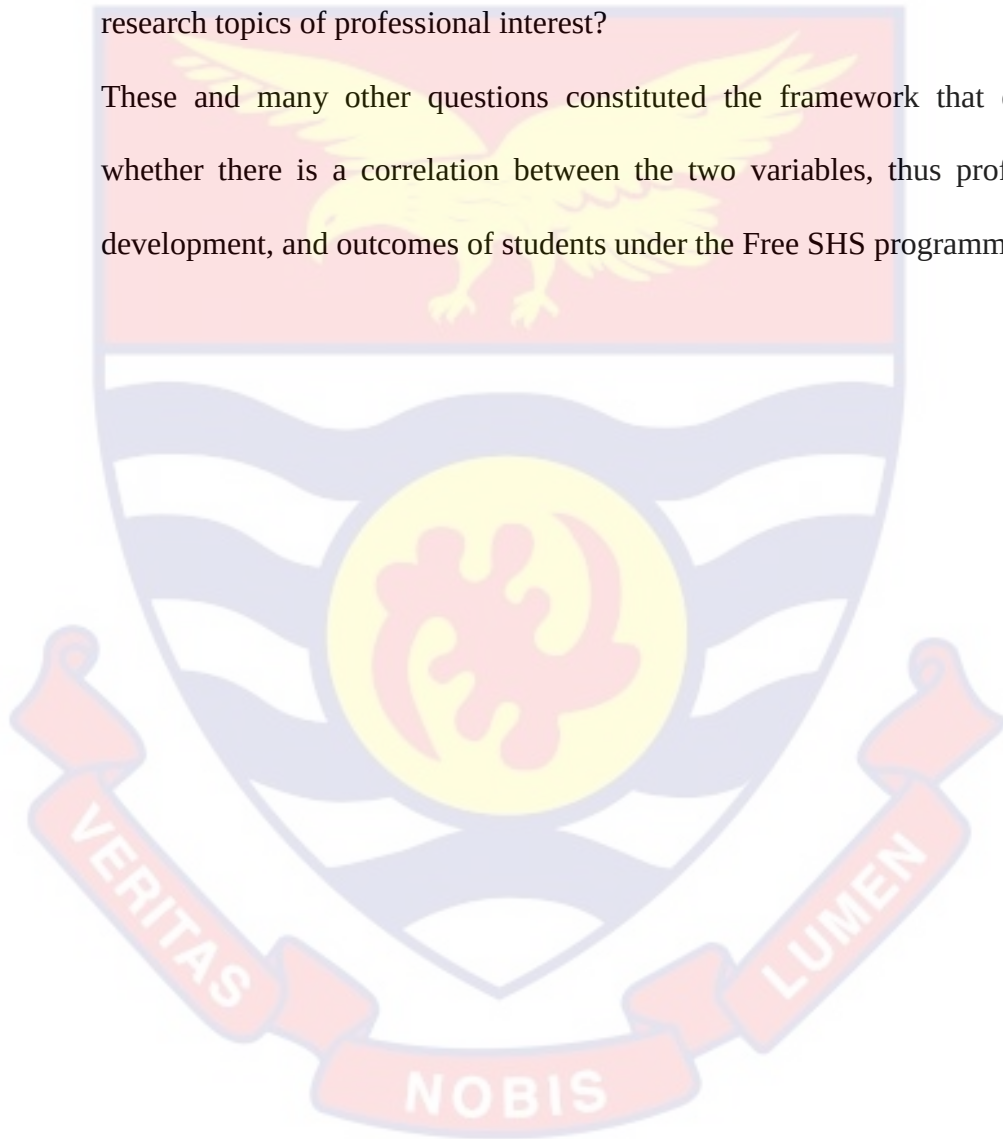
Professional Development Module

Continuous lifelong learning is indispensable in our modern world. This is done to make sure that educators are equipped with the necessary information and abilities to get kids ready for the global economy. Professional development connotes the continuation of one's career growth and striving to reach set targets. Education is never an ending process, and students never stop learning. Teachers must therefore improve their pedagogical experiences to become more proficient as well as be able to deliver effective education that meets the changing needs of students in the 21st century. Mizell (2010) for example argued that professional development sessions are the surest alternative through which educators can learn to improve their techniques and expertise needed to keep pace with the digitally changing priorities (p. 3). These sessions usually come through formal meetings such as conferences, workshops, and seminars collaborative learning among members of a team; as well as informal settings including conversations among coworkers, personal reading and study, watching a coworker at work, or other opportunities to learn from a peer (p. 5).

The questionnaire in this module will seek to find out whether opportunities exist for music teachers in the selected senior high schools to further their studies. Do these teachers network with other music teachers

outside their schools to exchange ideas that will improve their pedagogical experiences? Are there opportunities to attend workshops that will enable them to discuss methods and current trends in teaching music with other teachers? Do they have the opportunity to attend conferences and seminars as well as make presentations? Do these teachers individually or collaboratively research topics of professional interest?

These and many other questions constituted the framework that establish whether there is a correlation between the two variables, thus professional development, and outcomes of students under the Free SHS programme.



CHAPTER THREE

METHODOLOGY

This Chapter presents the procedures designed and implemented to accomplish the study. It specifically covered the research design adopted for this study, the population and sample, the sampling process, the type of data collected, the research instruments utilized, pilot testing, validity and reliability, the data collection procedure, and the data analysis procedure(s).

Research Design

Research design is considered as a reflection upon an investigator's ideas which are essentially concerned with the nature of the research problem, the intent and plans within the practical constraints of the study's location, the time frame involved, the resources available to the researcher, the degree to which study subjects are (or are not) manipulated, and the level of discourse or generalizability (Asenahabi, 2019; Creswell and Creswell, 2018; Neuman, 2003; McMillan and Schumacher, 2001; Hakim, 2000).

Many types of designs exist in research, each with its unique priority and practice (Neuman, 2003), which presupposes that the preference for any particular design by an investigator is highly dependent on but not limited to the factors outlined by the above scholars. The choice of a research design for this study should therefore obviously be backed by several carefully examined variables, employing the aforementioned dimensions as a sort of checklist.

This study represents the Postpositivist assumption, a worldview also known as the empirical or scientific method. This philosophical assumption holds that laws or hypotheses governing the world exist in the study and must be validated, improved, and tested for comprehension (Creswell and Creswell,

2018, p. 54). In the case of this study, the FSHS policy is taken as a unique enactment that requires to be tested against academic consequences of students in Music. The paramount reason for subjecting the policy to statistical tests is to determine the contribution of the various predictor variables to students' achievement variable. Lincoln, Lynham, and Guba, 2011; Kuhn, 1962; 1974, define a paradigm as a worldview or framework through which knowledge is filtered. With the above spectrum of opinions serving as a kind of compendium, the research design for this study is silhouetted below:

By function, this study employs a non-experimental cross-sectional survey method of research which is the correlational design in which the investigator uses correlational statistics to describe and measure the degree of relationship between two or more variables (Creswell, 2012, pp. 54-56). By examining a sample of that group, survey research, according to Creswell and Creswell (2018), provides a quantitative or numerical depiction of trends, attitudes, or opinions of a population (p. 56). In this case, the researcher can gather data at a single point in time using the cross-sectional design (Edmonds and Kennedy, 2017, p. 159). Cross-sectional and longitudinal studies using questionnaires or structured interviews for data collection with the goal of extrapolating from a sample are two categories into which a survey can be placed (Fowler, 2008). The present study falls under the domain of cross-sectional research. The study involves sampling a cross-section of the subjects (mainly from the senior high schools) in the population in a comparably short frame of time, soliciting responses from them, analysing the responses and concluding.

Furthermore, this study is a classical example of correlational research. According to Glenberg and Andrzejewski (2008), Correlational research focuses on establishing a connection between two or more variables (p. 478). Schober et al. (2018) considered correlation as a measure of an association between variables that typically involves statistical quantification to ascertain the strength of the relationship (p. 1763). This relationship between any two can be classified into strong, weak, to none. Devi, Lepcha, and Basnet (2023) also defined correlational research design as a non-experimental research technique that examines connections between/among two or more variables to determine the degree to which these variables are related, with the idea that changes in the values of one variable tend to be predicted by changes in the values of the second variable. The authors opined that in examining these relationships between/among variables, the researcher does not control or manipulate any of the variables (p. 62).

Considering the present study, the variables include predictor/independent variables such as; the key pillars of the Free SHS Policy (cost removal, infrastructural expansion, and teacher rationalization and deployment), teacher effectiveness on one hand, and the academic outcomes of students in music education (criterion/dependent variable) on the other extreme on which data was collected from. The degree to which these variables relate with one another was ascertained using statistical analysis to establish the extent of their relationship. Again, these variables were not manipulated thus, the relationship was only detected through statistical analyses, and with the current study satisfying all the foregoing descriptions, it was therefore necessary to classify it as a correlational design.

In furtherance, scholars such as McCombes, 2023: Leavy, 2017: and Babbie, 2015, have classified research into three main types: descriptive, explanatory, and exploratory. Among these categories of research, this study best fits into descriptive research, where researchers describe situations and events and look at the implications of the discovered patterns. To these authors, descriptive research may be carried out for many different purposes such as; comparing, gauging data trends, verifying current circumstances, characterizing respondent characteristics and many more.

Leavy for instance opined that Descriptive research's primary objective is to accurately and methodically characterize a population, situation, or phenomenon. McCombes in consonance believed that Descriptive research is a good choice when the objective of the study is to identify characteristics, frequencies, trends, and classifications. McCombes again opined that when discourse is uncharted or little is known about the subject, descriptive research is helpful because it is necessary to comprehend how, when, and where something occurs before you can investigate why it occurs.

The main purpose of the present study is to follow the modern trends in music education in senior high schools in Ghana and to establish any possible correlation between the current practices in the schools and students's results as well as to compare and contrast both current and the previous performances, hence the purpose of adopting the descriptive research for this study. Besides, this study has relatively not been charted and this forms the other basis for using the descriptive approach. This is because it has provided novel insights that describe the FSHS programme and its contribution to the study of music in senior high schools.

In summary, the correlational research methodology used in this study employed a non-experimental correlational design where correlational statistics were used to quantify the level of relationship between two or more variables.

Population

This refers to individuals, groups, organizations, or other entities who possess variable characteristics for which the findings of research can be generalized (Shukla, 2020; Creswell, 2012). By extension, population creates frontiers (such as geography, age, gender, race/ethnicity, sexual orientation, education, occupation, marital status, income, household composition, and so forth) for the scope of a study because it provides environmental and context cues within which variables or experiences of interest are operationalized for the reader, as well as afford the investigator with the rightful focus so as not to proffer a set of results that is deemed a one-size-fits-all (Casteel and Bridier, 2021, p. 343). The population of this study comprised all music candidates who participated in the West African Senior Schools Certificate Examinations (WASSCE) between the 2017/18 to 2020/21 academic years, as well as all Teachers teaching Music at the public Senior High Schools and their school administrators in the Volta and Oti regions of Ghana.

Otchere (2014, p. 124) opines that a population's members should exhibit some common traits that must represent a properly chosen sample. Individuals in this group have certain traits in common, like; running the same curriculum for SHS music, writing music papers during WASSCE within the 2017/18 and 2020/21 academic years, teaching music in the SHS as well as being in management positions at the SHS level within the period under

investigation. The selection of this population was not without reason. First, the results of the students constitute bulk secondary data for analysis, while the school heads as well as their music teachers are considered the frontline officers in the policy implementation process in the schools, and are expected to provide relevant information on the policy implementation which is fundamental to achieving the purpose of this study.

Sampling Techniques

The study employed the multistage sampling technique that includes cluster and stratified random sampling techniques. Fowler (2014) believes multistage sampling offers a viable method when there is not a sufficient channel directly leading to the population (p. 21). There is no direct sampling source for this study because it is not every senior high school that pursues music as an elective subject; hence the needed strategy to link the population members to some kind of grouping that can be sampled. The study, therefore, used two sampling methods, which include: cluster and stratified random sampling methods. A multistage process involves the researcher first locating clusters (groups or organizations), obtaining the identities of those persons, and then selecting samples from within those clusters (Creswell, 2012, p. 264). Cluster sampling is deemed to be the best option according to Babbie (2015) that is, when it is difficult or impractical to generate a list of the components making up the population.

Data from 2018 WASSCE results in music was clustered on regional bases and summarized in Table 1:

Table 1: Regional cluster of 2018 WASSCE results in music (source: author)

Region	Number of Schools
Greater Accra	16
Eastern	04
Central	21
Western	09
Ashanti	24
Volta	42
Brong Ahafo	06
Upper East	01

Available data from the regional clustering in Table 1 suggests that the Volta and Oti Regions have the greatest number of senior high schools that consistently present candidates for WASSCE in music in Ghana. Besides, the preliminary stages of this study commenced when the Volta and Oti regions were fused as one region (Volta). This presupposes that until the regional re-demarcation in Ghana in 2018, the investigation has already commenced hence the selection of both regions for the study.

Stratified random sampling also known as proportional random sampling or quota random sampling according to Hayes (2024) and Thomas (2023) is the selection of random samples that are proportionate to the population from stratified categories. Thomas (2023) views this technique as splitting a population into homogeneous subpopulations known as strata depending on particular traits including age, location, race, and gender identity. This technique includes breaking down the population into smaller groups or strata so that the sample reflects the genuine proportion of people in the population who have particular characteristics (Creswell, 2012, p. 266).

In this sampling process, I first identified all schools that pursue music in the two regions. Secondly, a minimum duration of not less than five years

of engagement with music educational practices was used to stratify the clustered schools. This was used as an inclusion criterion, a common characteristic of all stratified respondents. This inclusion criterion was chosen because it is believed five years offers enough experience to respondents to provide a distinction between the two policies (cost-sharing and Free SHS policy). Persons who did not meet this criterion were excluded from participating in the study. After clustering and stratifying, a total number of 30 schools thus, 25 from the Volta region, and 5 from the Oti region have been randomly sampled to be included in the sample size. In all, the 30 schools that were sampled produced 4,612 participants for this study. This therefore formed the sample size for the study. Out of this sample size, 4552 were senior high school candidates who pursued music as one of their elective subjects as well as sitting for the WASSCE music papers within the years under investigation. The remaining 60 participants include SHS administrators (Heads/Assistant heads of Academics/Heads of Departments in charge of music), and music teachers in the schools. The summation of the sampled participants for the study is indicated in Table 2:

Table 2: Participants for the study (source: author)

PARTICIPANTS	NUMBER OF PEOPLE
School Administrators	30
Teachers	30
Music Candidates:	
2018	952
2019	933
2020	1240
2021	1427
TOTAL	4,612

Addressing the sample size of this study, Glenberg (1988/2010) cited in Otchere (2014, p. 126) showed that a sample size of even 30 people, who are well chosen from a population, is sufficient to demonstrate very distinctive characteristics of the group from which it is drawn. As a result, the sample size was carefully chosen to accurately reflect the majority of the target population's characteristics, and above all, the sample used in this study was necessarily large enough to provide a generalized result.

In conclusion, this study selected participants who met the requirements of the study's objectives while also exhibiting the inclusion criteria of the population.

Sampling procedure

This section describes the precise steps taken to apply the sampling techniques to determine the precise sample size. First of all, I wrote officially to the West African Examination Council (WAEC) requesting the results of music candidates between the 2017/18 and 2020/21 academic years. I made follow-ups on different occasions to Accra, and finally, the data was transferred to Ho where I have opted to receive it. The data from WAEC representing secondary data for this study, provided relevant information on all the schools offering music in Ghana, and by extension, indicated all schools that have attained consistency as far as registering candidates for the annual schools' exam was concerned.

This enabled me to put the schools into regional clusters which formed the basis for my sampling. Evidence from the secondary data after clustering suggested that 42 senior high schools have presented candidates for the WASSCE in music as of the 2017/18 academic year from the two regions

under study. With this evidence, I then embarked on the journey of stratifying these schools using my first inclusion criterion which is for schools to maintain consistency in presenting candidates for WASSCE for at least five years. During the stratification process, nine (schools) were eliminated for not meeting the first criterion, and that is when students' results were used. This reduced the figure to 33 schools in the sample.

Also, to ascertain whether the teachers of these students and the school administrators have met the criterion of serving at least five years at the post, I visited all 33 schools to make formal enquiries on the staff for the inclusion of their schools in the sample size.

It is worth noting that this visit was also to acquaint myself with these stakeholders as well as to establish contact with them since the survey was going to be administered electronically. Results of these enquiries suggested that 32 schools have met the inclusion criteria both in the consistency of presenting candidates for WASSCE as well as having long-serving personnel at the helm of affairs. I then used the random approach to select 30 schools for inclusion in the sample size. All these 30 senior high schools were then included in the sample size for the study.

Research Instruments

The questionnaire was the primary tool used to collect data for the current study. Two separate sets of questionnaires: one soliciting information from the music teachers on the key pillars of the FSHS policy (cost removal, infrastructural expansion, improvement in teacher quality through rationalization and deployment) and the other soliciting information from the school administrators on the effectiveness of their music teachers in the

schools (this includes; professional development, commitment to teaching, technical/pedagogical knowledge, musical instrument proficiency/integration of ICT resources).

In all, these seven dimensions have led to the development of 40 operational items using closed-ended questions through an extensive review of the literature. This was later reviewed into 35 items after the pilot test that will subsequently be discussed. According to Babbie (2014), a closed-ended survey questionnaire uses a format that allows the respondent to select a response from among a list provided by the researcher (p. 249). The survey items in this study were developed on a five-point Likert scale ranging from strongly disagree, disagree, neutral, agree and strongly agree to collect data from the respondents. This offers the respondents the option to choose an appropriate response.

The first set of questionnaires consisted of four components with the goal of gathering various types of data about the key pillars of the FSHS policy. Each section consisted of five items. Section One was used to gather information on the support of school administrators in promoting music education in the schools. Section two collected information on the cost removal and its effect on the FSHS policy in general. Section three also solicited information from respondents on the level of infrastructure development as well as its influence on academic activities in the schools. Finally, the fourth section was geared toward gathering data related to the improvement in teacher quality through rationalization and deployment of teachers to the schools.

Similarly, the second set of questionnaires which solicited information on the teacher effectiveness attributes also consisted of four sections, that is, each section representing one of the constructs under the teacher effectiveness model. Section one collected data from the administrators on the professional development variable, while section two gathered data relating to the commitment levels of the teachers to teach. Section three served to collect data on the technical/pedagogical knowledge of the teachers, and finally, section four was geared toward gathering information on the musical instrument proficiency of teachers as well as their ability to integrate ICT resources into their lesson delivery.

Pilot Test

A pilot test is mostly conducted to experiment with the feasibility of techniques, methods, questionnaires, and interviews to ascertain their functionality in a particular context (Fraser, Fahlman, Arscott, and Guillot, 2018; Beebe, 2007; Prescott and Soeken, 1989). One of its unique functions according to Fowler (2014) is to test the usability of the data collection instruments, identify design flaws, as well as refine data analysis plans (p. 106). To verify the validity and the reliability of each question, test the clarity and relevance of my survey questions, check the length and format of the survey, examine the response rate and the data quality of my respondents, as well as check the technical and logistical issues of my survey administration in the present study, pilot experiments with the data collection tool was conducted in thirty (30) selected schools in the Central and the Greater Accra regions of Ghana.

Two main sampling techniques were employed for the pilot study. These include simple random sampling and stratified sampling techniques. Simple random sampling according to Glenberg and Andrzejewski (2008) involves randomly drawing participants from the population so that every observation has an equal probability of being chosen for inclusion, and the choice of one observation does not affect the choice of any other observation (p. 96). This aspect of the study has subjected all the regions in Ghana excluding the two regions that have been sampled for the actual study (Volta and Oti regions) to random selection into the sample for the piloting. Consequently, the Central and the Greater Accra regions have been sampled through this medium.

Also, taking into account the possibility that numerous distinct naturally occurring population groupings could have formed various strata for sampling, inclusion criteria such as the age of the subject in the school, the age of both subject teachers and school administrators in the current post, consistency of the school in presenting candidates for WASSCE, and so on; was used to randomly stratify 30 schools within the two regions so that the sample would accurately reflect the population. Fifteen (15) schools were thus sampled from each of the regions. These 30 schools have however produced 60 participants for the pilot test. The sample size for the pilot study therefore includes 30 music teachers and 30 school administrators which aggregates to 60.

The essence of selecting this sample size of two regions and thirty schools for the study was the result of the fact that it supported all the technical and logistical checks of my instrument administration process, as

well as reflected the actual fieldwork experience since the same sample size was chosen for the real work. Based on this, I visited all the sampled schools to obtain permission from the heads as well as gain the consent of my respondents to test my instruments. The results are presented in Tables 3 and 4.

Table 3: Pilot test results of the FSHS survey instrument (source: author)

Constructs/Items	Cronbach's alpha coefficient	Criterion-related validity Score
Administrative Support Construct		
Item 1	0.84	0.435
Item 2	0.83	0.021
Item 3	0.85	0.363
Item 4	0.84	0.182
Item 5	0.84	0.215
Cost Removal Construct		
Item 6	0.84	0.203
Item 7	0.80	0.000
Item 8	0.81	0.000
Item 9	0.86	0.310
Item 10	0.82	0.001
Infrastructural Expansion Construct		
Item 11	0.82	0.000
Item 12	0.81	0.000
Item 13	0.82	0.000
Item 14	0.81	0.000
Item 15	0.81	0.000
Teacher Rationalization and Deployment Construct		
Item 16	0.81	0.000
Item 17	0.82	0.003
Item 18	0.82	0.000
Item 19	0.83	0.012
Item 20	0.81	0.000

Table 4: Pilot Test Results of the Teacher Effectiveness Survey Instrument (source: author)

Constructs/Items	Cronbach's alpha coefficient	Criterion-related validity Score
Professional Development Construct		
Item 1	0.82	0.604
Item 2	0.79	0.009
Item 3	0.80	0.014
Item 4	0.79	0.010
Item 5	0.80	0.040
Committed to Teaching Construct		
Item 6	0.80	0.048
Item 7	0.80	0.000
Item 8	0.80	0.000
Item 9	0.78	0.001
Item 10	0.77	0.000
Technical/Pedagogical Knowledge Construct		
Item 11	0.79	0.002
Item 12	0.80	0.026
Item 13	0.80	0.076
Item 14	0.79	0.032
Item 15	0.78	0.000
Musical Instrument Proficiency/ICT Integration Construct		
Item 16	0.80	0.032
Item 17	0.78	0.000
Item 18	0.79	0.006
Item 19	0.80	0.171
Item 20	0.80	0.098

Validity and Reliability of Test Instruments

An internal consistency has been assessed using a reliability coefficient, or Cronbach Alpha, on the provided set of quality constructs using the SPSS software to determine the validity and reliability of the test instruments. Reliability is defined as the degree of consistency with which an instrument measures the attributes it is intended to assess. While an

instrument's validity is defined as the degree to which it measures what it is designed to measure (Taherdoost, 2016; Fowler, 2014; 2002).

Both reliability and validity are of the utmost relevance for this survey-based research because the instruments are crucial to the accuracy of survey estimates. Straub, Boudreau, and Gefen, (2004) suggest that for efficiency reasons, researchers should prefer utilizing previously validated instruments in situations where they are available. However, these validities must be used more thoroughly when there is no current instrument accessible and a new instrument must be developed and tested for robustness to evaluate established theoretical structures. According to Straub et al., researchers who go above and beyond to develop and validate instrumentation for well-established theoretical constructs are evaluating the robustness of the constructs and the theoretical connections to method/measurement change, and this contributes significantly to the field's scientific practice (p. 56).

Despite being part of well-established theories and models, the constructs used in this study need the creation of novel measures. This is because the unit of analysis used in this study differs from that used in earlier investigations such as Blackman's (2015) study that depended on existing instruments prepared by Abril and Gault (2006, 2008).

Assessing the impact of the FSHS policy on students' academic achievements in music requires designing new items that provide consistent data collection experience for all respondents, effectively measure the theoretical constructs established in the study, as well as produce results that are accurate and reproducible. This consequently necessitates both reliability

and validity estimation of the survey instruments before proceeding with actual data collection (Dwivedi, 2005, p. 68).

Two separate survey instruments were designed for this study. The first one was prepared for school administrators (heads/Assistant heads of academics/HoDs in charge of music education), and the second one was also designed for the teachers teaching music in the schools.

One major hypothesis of this study focused on the effective pedagogical delivery of the music teachers, hence, items for school administrators were intended to solicit information on the teacher(s)' technical/pedagogical competence, commitment, musical instrument proficiency, and professional development (organized into theoretical constructs). Generally, each of these theoretical constructs contained five questions which aggregate to twenty items. A five-point Likert-scale type (1=strongly disagree to 5 = strongly agree) allowed participants to indicate the degree to which they believed these theoretical constructs influence students' academic achievements.

The overall reliability of the Teacher Effectiveness survey instrument reveals Cronbach's alpha coefficient α value of 0.80. According to the recommended guidelines offered by Straub et al. (2004) and corroborated in Dwivedi (2005, pp. 68-69), a survey instrument possesses a high internal consistency (deemed reliable) if the estimated Cronbach's alpha is above 0.70. It is also worth noting that Cronbach's alpha coefficient on each item ranged between 0.77 to 0.82 which are all above the threshold indicated by Straub et al. Following the above guidelines, it is demonstrable that the survey instrument on teacher effectiveness is consistent and reliable to test the hypotheses formulated in this study.

The study also estimated the accuracy and trustworthiness, thus, the criterion-related validity of the test instruments (Huck, 2004; Joint Committee for Standards on Educational Evaluation, 1994). The fundamental premise of criterion-related validity is to check the performance of the measure against some criterion (Malechwanzi and Murage, 2020; Barry, Chaney, Piazza-Gardner, Chavarria, 2014). Criterion-related validity to a greater extent is determined by investigating the relationships between the various constructs and one or more quality performance metrics (Malechwanzi and Murage, 2020; Sakthivel, Rajendran and Raju, 2005). In the present study, students' academic outcome was presented as the dependent variable (outcome) of the four-teacher effective (independent) constructs. It should be noted that approximately 80% of the estimated items (i. e. 16 out of 20) have significant positive correlations with students' academic outcomes, thus establishing a very high criterion-related validity.

The second instrument was designed for the teachers instructing music programmes in the various schools and was intended to solicit information on the implementation of the Free SHS programme in the schools. Survey items were organized into three main theoretical constructs termed Free SHS policy key. Thus, administrative support, cost removal, infrastructural expansion, teacher rationalization and deployment. Each of these constructs also contained five Likert-scale types (1 = strongly disagree to 5 = strongly agree) which allowed participants to indicate the extent to which they believed these theoretical constructs affect students' academic achievements in music. In all, Cronbach's alpha coefficient α on twenty (20) items of the FSHS key pillars survey instrument was valued at approximately 0.832 which also exemplifies a

high internal consistency rate. Also, the Cronbach's alpha coefficient on each item ranged between 0.81 to 0.86 indicating the internal consistency efficacy of all the items to measure the given hypothetical constructs.

In addition, the validity estimation of the FSHS key pillars survey instrument also indicated that only 20% of the administrative support construct achieved validity, and 60% of the cost removal construct was also valid. Both the infrastructural expansion and teacher rationalization and deployment construct have attained 100% validity. In all, 70% of the estimated items (that is 14 out of 20) have significant positive correlations with students' academic outcomes, thus establishing a high accuracy and trustworthiness.

This notwithstanding, the instruments were modified based on the pilot test results before the actual fieldwork. First, all the items based on the administrative support construct were expunged from the survey due to their low validity scores. There were also slight changes made to items 6 and 9 under the cost removal category after consultation with my supervisors. This reduced the number of items to 15 in the key pillars of the FSHS policy category for administration. Also, there were slight moderations made to four items in the teacher effectiveness questionnaire. These include; item one (1) of the professional development category, item 13 in the technical/pedagogical knowledge, item 19 in the musical instrument proficiency/ICT integration construct as well and item 20 also in the musical instrument proficiency/ICT integration category. It can therefore be concluded that the instruments used for data collection for this study, were valid and reliable and by extension have the capability of measuring the established theoretical constructs accurately in the present study.

Data Collection Procedures

Following a successful proposal defence, ethical approval was requested from the University of Cape Coast Institutional Review Board (UCCIRB) Secretariat before the data collection. After receiving ethical clearance, I applied for and was given an introductory letter from the Department of Music and Dance, University of Cape Coast for the commencement of the fieldwork. Both primary and secondary data sets were collected for this study. Data that has been originally collected according to specifically designed content is termed primary data. According to Kabir (2016), this form of data is obtained from first-hand-experience, with the researcher being the first user of the data (p. 204).

Secondary data on the other hand refers to the data that has been collected and used for some other purpose and used by another researcher to achieve a different objective. This might have passed through an already statistical process or could have been analyzed by someone else in another research project or used in responding to a different research question or testing a hypothesis in a different study as expounded by Kabir (2016, p. 205). Pelham, Carvallo, and Jones, (2005) also believe the use of archival data, that is, data that have already been gathered for another purpose is one major approach for conducting correlational research. One major objective of this study is to juxtapose the performances of students within two educational regimes and draw an inference, as well as to establish the correlation between the FSHS variables and the results of students under the FSHS programme. This therefore relied dominantly on the WASSCE results of students which is

archival data which was already collected by the West African Examination Council.

Also, to provide a quantitative or numerical depiction of trends, attitudes, or opinions of my population, I gathered primary data at a single point in time using the cross-sectional design through the administration of questionnaires to my respondents (Edmonds and Kennedy, 2017, p. 159). While in the field to collect my primary data, I sought the necessary permissions from the school heads through the introductory letter I received from the Department of Music and Dance, University of Cape Coast. This was to clarify my mission as well as to gain access to the required staff personnel in the schools to participate in the survey. I then introduced myself to the selected participants and explained the study to them, established the needed rapport, and requested their approval to take part in the study, which was necessary. The way to complete the online electronic survey forms (Google Forms) was explained to the participants after which the Google links to the questionnaires were administered to them. It is worth noting that while the Google forms were administered electronically, the consent forms were however administered in print. Also, since the survey forms were expected to be submitted online, the participants were given some souvenirs immediately after filling out the consent forms as a gesture of expressing appreciation for accepting to participate in the study. Follow-up phone calls were made to the participants as a reminder to respond to the survey items until all the responses were retrieved for further processing.

In furtherance, before the commencement of the fieldwork, I wrote formally to the West African Examination Council (Ghana Office) to request

the results of music candidates between the 2017/2018 to 2020/21 academic years. This was done to gain access to the data on students which constitutes the secondary data for the present study. Follow-ups were done until the data was transferred to Ho (Volta Regional Capital – WAECE Office) for payment and collection.

Data Analysis Procedure

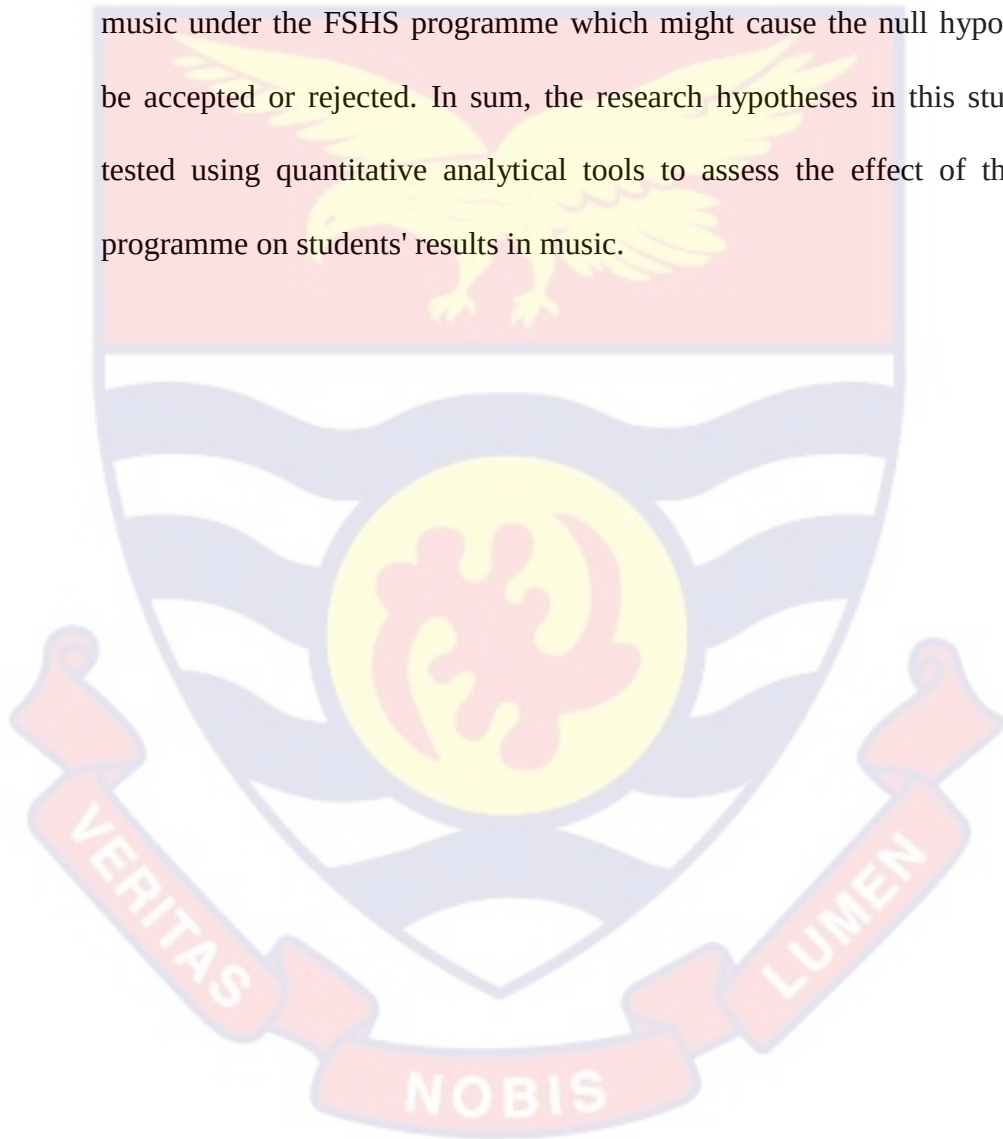
In all, there were five research hypotheses (that is, two major and three sub-hypotheses) that were tested in this study. The first hypothesis had been statistically tested, using both descriptive and inferential statistics. Simple descriptive statistics were used to describe as well as summarize the secondary data (candidates' results obtained from the West African Examination Council) as expounded by researchers who specialized in quantitative analysis such as Leavy, 2017; Fallon, 2016; and Babbie, 2013. The most commonly used descriptive statistics according to Fallon (2016) include the frequencies (counting of the number of occurrences), calculating the mean, median, and mode as well as the standard deviation to quantify central tendency and dispersion, respectively. Among these three categories of descriptive statistics outlined by Fallon, frequencies appear more appropriate for the current study. This is because the data is in a categorical form and therefore more suitable to use frequencies which apply percentages, that is when there are large samples with unequal members within the categories (Fallon, p. 16). The various year batches have very large and unequal populations that present comparison complications, hence analysis can best be conducted when these huge figures are converted into percentages for easy comparison of students' performances as far as the two distinct systems of

education are concerned. To establish whether the proportion of students' performance under the cost-sharing era is significantly different from students under the FSHS era, Pearson's Chi-Square Test was computed to compare the resultant scores (p) to the critical values obtained at the .05 alpha level. The main goal was to determine whether there were any statistically significant differences in students' performance between the FSHS and cost-sharing periods that would support or refute the null hypothesis.

The second hypothesis combines three separate sub-hypotheses on the key pillars of the FSHS policy. These three-in-one hypotheses sought to find out if these pillars (cost removal, infrastructural expansion, and teacher rationalization and deployment) have had a significant effect on students' academic outcomes as far as the study of music in senior high schools in Ghana is concerned. The variables were tested using standard multiple regression analysis to determine if the independent variables significantly affected the dependent variable's prediction. This process involves simultaneously entering all the independent variables into the equation as well as evaluating them in terms of their predictive powers against the dependent variable as explained by Pallant (2005, p. 146). Analysis of these hypotheses was done using the survey data. This presupposes that the survey data were used as the predictor variables and were tested against the results of students during the FSHS era with the rejecting, or accepting the null hypothesis in each case.

The final hypothesis was statistically tested also by using standard multiple regression analysis to examine whether the independent variables (pedagogical and technical competence, commitment to teaching,

instrumental/ICT proficiency, and professional development of teachers) have significantly predicted the dependent variable of students' outcomes in music. Analysis of this hypothesis was also based on primary data. The essence was to test if the teacher effectiveness variables have significantly affected the academic achievements of students who sat for the WASSCE examination in music under the FSHS programme which might cause the null hypothesis to be accepted or rejected. In sum, the research hypotheses in this study were tested using quantitative analytical tools to assess the effect of the FSHS programme on students' results in music.



CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents information gathered on students' academic performance from the West African Examination Council, and survey instruments administered to school administrators and their music teachers. These were statistically presented and discussed. The various aspects of each variable related to the study's sample were highlighted and discussed. The emergent results were presented by briefly reviewing each of the hypotheses and the statistical tests on each of the hypotheses relating to the study.

General Biographical Data

Out of the 30 sampled schools that produced data on 4,612 participants for this study, 4552 were senior high school candidates who offered music as one of their elective subjects as well as sitting for the WASSCE music papers within the years under investigation. The breakdown is presented in Table 5.

Table 5: Music candidates and their year groups (source: author)

YEAR	TOTAL NUMBER OF CANDIDATES
2018	952
2019	933
2020	1240
2021	1427

The WASSCE results of candidates produced data for analysis of hypothesis one. The remaining sixty participants include SHS administrators and music teachers within the sampled schools. Thirty of the sixty respondents were school administrators, and the rest were teachers who instructed musical lessons in the schools. These also produced data for the remaining hypotheses in this study.

Results for Hypothesis 1

The analysis in this section was based on the data on students' results received from the West African Examination Council to ascertain whether there was a substantial distinction between the academic outcomes of students within the two systems of education. The following hypothesis was tested:

H₁: There are statistically significant differences between the academic outcomes of students within the cost-sharing and the FSHS systems of education in Ghana.

To determine the differences between students' results under the cost-sharing and the FSHS as well as their statistical significance, both descriptive and inferential statistics were computed to compare the WASSCE grades of music candidates from 2018 to 2021. The aim was to provide quantitative insights which are data attributes of students' overall academic performance in music within the periods under investigation.

One important tool that has been used to track students' musical competencies and proficiency at the senior high school level is the West African Senior School Certificate Examination (WASSCE) results. The WASSCE is a comprehensive standardized test that is administered to senior high school candidates at the end of their final year of education. In Ghana, it serves as a credential for the selection of qualified applicants for tertiary institutions (WAEC, 2013).

The WASSCE paper in music like other academic disciplines is conducted annually and consists of three main areas of testing, thus music 2A and B (theory of music), 3A (Aural), and 3B (performance practical). The grading system adopted by the West African Examination Council for this

data is criterion-referenced, thus from A1 to F9. Grading of students' performance in the above exam is therefore done on the standard nine intervals (Stanine). This includes; A1, B2, B3, C4, C5, C6, D7, E8, and F9. Thus, to determine students' grades, a fixed percentage is allocated to each of the nine grades, A1-F9. The focus is to determine whether or not students have met appropriate standards of competence (Fletcher, 2018, p. 6). This provides room for comparison of students' performance on an annual basis. The results of four thousand, five hundred and fifty-two (4552) candidates were involved in this analysis. The results of the descriptive statistics on candidates' performance in the WASSCE in music from 2017/18 to 2020/21 academic years are displayed in Table 6.

Table 6: Results of the descriptive statistics on candidates' performance
(source: author)

GRADES WASSCE	YEARS/FREQUENCY			
	2018	2019	2020	2021
A1	136	84	87	171
B2	60	56	122	105
B3	234	170	273	295
C4	48	56	141	66
C5	64	92	116	131
C6	146	178	192	203
D7	73	100	118	160
E8	62	69	78	121
F9	117	79	67	118
Absent	12	49	46	57
TOTAL	952	933	1240	1427

From Table 6, about 14.3% of the total population of nine hundred and fifty-two (952) students obtained a grade of A1 in the 2017/18 academic year. About 6.3% obtained grade B2, and 24.6% got grade B3. Five per cent (5.0%) of the population attained C4 in the examination, about 6.7%. were within C5

categories, while 15.3% of the candidates also registered grade C6, 7.7% produced grade D7, 6.5% of the candidates obtained grade E8, and 12.3% of the entire population attained grade F9 in the same exam. About 1.3% of the students were however absent from taking the exam in the 2017/18 academic year.

In furtherance, a total of nine hundred and thirty-three (933) candidates were registered for the WASSCE 2018/19 music paper. Out of this figure, 9.0% produced grade A1, 6.0% got B2, about 18.2% obtained B3, 6.0% attained C4, about 9.9% registered C5, and 19.1% obtained C6. 10.7% got D7. While 7.4% of the students recorded E8 in the exam, approximately 8.5% of the total figure obtained F9. Students who failed to take the exam amounted to 5.3 %.

The 2019/20 academic year also registered a total of one thousand, two hundred and forty (1240) candidates for the exam. A total of 7.0% registered grade A1. About 9.8% of the candidates obtained B2, while 22.0% attained B3, 11.4% scored C4, 9.4% aggregates C5, and 15.5% accrued C6. 9.5% also scored D7, and while 6.3% of the students obtained E8, 5.4% also attained grade F9. About 3.7% however did not partake in the exam in the 2018/19 academic year.

The 2020/21 exam presented one thousand, four hundred and twenty-seven (1427) candidates. Approximately 12.0% recorded A1, 7.4% produced B2, 20.7% attained B3, 4.6% obtained C4, 9.2% scored C5, 14.2% recorded C6, 11.2% made D7, and while 8.5% recorded E8, 8.3% also aggregated F9. About

4.0% of the candidates failed to partake in the exam in the 2020/21 academic year. This is further explained in Figure 15.

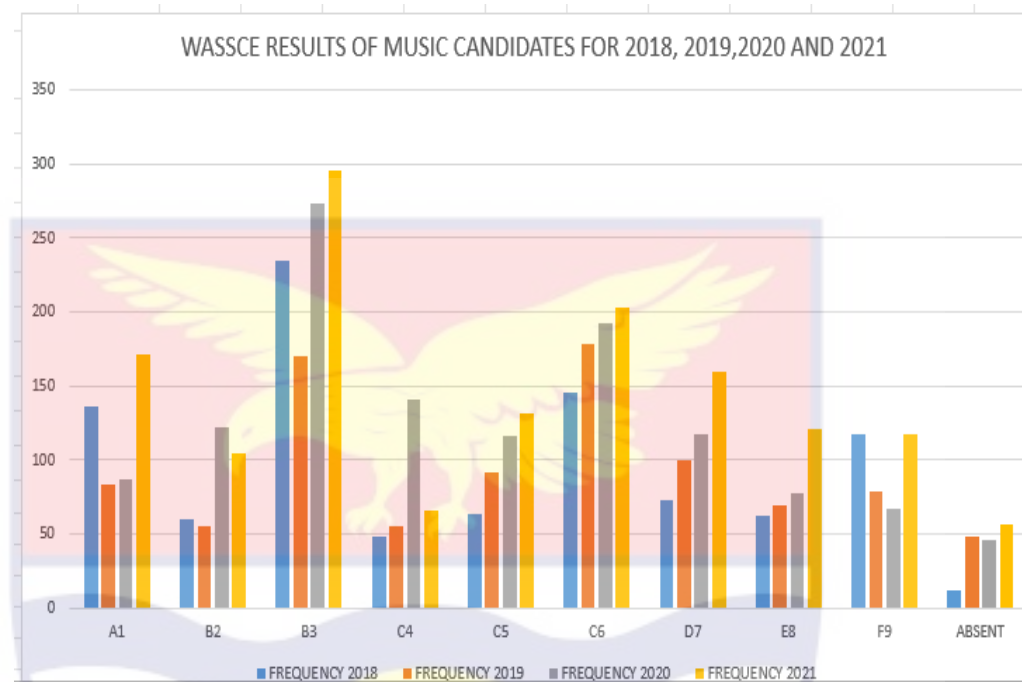


Figure 15: Bar graph of WASSCE results of music candidates from 2018 to 2021 (source: author)

In comparing the outcomes of students during the cost-sharing era with the Free SHS period, data from Table 6 has been compressed to provide details of variances between the two systems. This was done by merging the grades of the two-year groups within each system of education (cost-sharing = 2018 + 2019 results, and FSHS = 2020 + 2021 results). This is presented in Table 7 for analysis.

Table 7: Analysis of Cost-Sharing and FSHS Grades (source: author)

WASSCE GRADES		FREQUENCY		
STUDENTS' RESULTS	Cost-sharing	A1-C6	FSHS	A1-C6
A1	220		258	
B2	116		227	
B3	404		568	
C4	104		207	
C5	156		247	
C6	324		395	
TOTAL PASSED	1324	70.3%	1902	71.4%
D7	173		278	
E8	131		199	
F9	196		185	
ABSENT	61		103	
TOTAL FAILED	561	29.7%	765	28.6%
OVERALL TOTAL	1885	100%	2667	100%

Evidence from Table 7 suggests that 70.3% of the candidates scored between A1 to C6 (which is the benchmark for tertiary education in Ghana) during the Cost-Sharing era as compared to 71.4% under the FSHS regime. It is therefore clear that only these students have the qualification to pursue tertiary education, assuming they passed in other subject areas.

It is ostensibly established also from Table 7 that 29.7% obtained results that were below the tertiary education benchmark in the cost-sharing regime as compared to 28.6% under the FSHS era.

Table 8: Analysis of cost-sharing and FSHS enrolment figures (source: author)

Cost-Sharing System		FSHS System	
2018	952	2020	1240
2019	933	2021	1427
Total	1885	Total	2667

Again, evidence from Table 8 indicates that, out of the total population of 4,552 students presented for the systems, 2018 had 20.9% enrolment, 2019 (20.5%), 2020 (27.2%), and 2021 (31.3%). The cost-sharing regime thus recorded 41.4%, while the FSHS registered 58.6%. With a difference of 17.2%, it can therefore be deduced from Table 8 that, aside from producing more candidates for tertiary education as far as the study of music is concerned, the FSHS policy has also increased enrolment.

Additionally, Pearson's Chi-Square Test was computed to establish the statistical significance of the discrepancies in Table 7.

Pearson's chi-square tests come in two varieties. These consist of the chi-square test of independence and the chi-square goodness of fit test (Turney, 2023; Pallant, 2005). Turney for instance opines that when dealing with a single categorical variable, a chi-square goodness of fit test can be employed. This is because it enables you to determine whether the categorical variable's frequency distribution deviates noticeably from what you had anticipated. In dealing with two categorical variables, Turney again believes that a chi-square test of independence can be applied because it enables us to determine whether there is a relationship between the two variables. Pearson's chi-square of independence test is considered more suitable for data analysis in this aspect of hypothesis one. This is because the data available has met all assumptions that pertain to the computation of the chi-square of the independent test. The result is presented in Table 9.

Table 9: Pearson's Chi-Square test of independence result (source: author)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	25.744	4	.001
N of Valid Cases	2667		

Results from Table 9 yielded statistical significance $\chi^2(N = 2667, df = 4, p = .001)$.

In sum, with a p-value less than .05, there is enough evidence therefore to reject the null hypothesis that there is no statistically significant difference between the academic outcomes of students within the cost-sharing and the FSHS systems of education in Ghana as far as the study of music is concerned in the senior high schools of Ghana.

Results for Hypothesis 2

This aspect of the report constitutes the results for the hypothesis on the key pillars of the Free SHS programme. This was based on the data on students' results during the FSHS era and the survey responses received from the music teachers. This was to ascertain whether the Key pillars of the FSHS programme have influenced the academic outcomes of students. The following hypothesis was tested:

H₁: The FSHS key pillars have a statistically significant effect on student's academic outcomes

To explore this hypothesis, Pearson's chi-square of independence test was used to examine whether the FSHS key pillars have significantly contributed to the

performances of students under the programme. The result is presented in Table 10.

Table 10: Pearson's Chi-Square test of independence result

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.043 ^a	2	.049
N of Valid Cases	2667		

Evidence from Table 10 suggests that the FSHS key pillars have played significant roles in students' academic outcomes under the FSHS programme. This is based on the results from Table 10 which yielded statistical significance with $\chi^2(N = 2667, df = 2, p < 0.05)$. With a p -value less than .05, there is therefore sufficient evidence to reject the null hypothesis that the FSHS key pillars have no statistically significant effect on student's academic outcomes.

Results for Hypothesis 3

This section presents the results of data obtained from respondents on teacher effectiveness and its effect on students' academic outcomes. This aspect as well has aggregated four different constructs which were designed into a model to test teacher effectiveness and its contribution to students' academic achievement in music. This is presented in Figure 16.

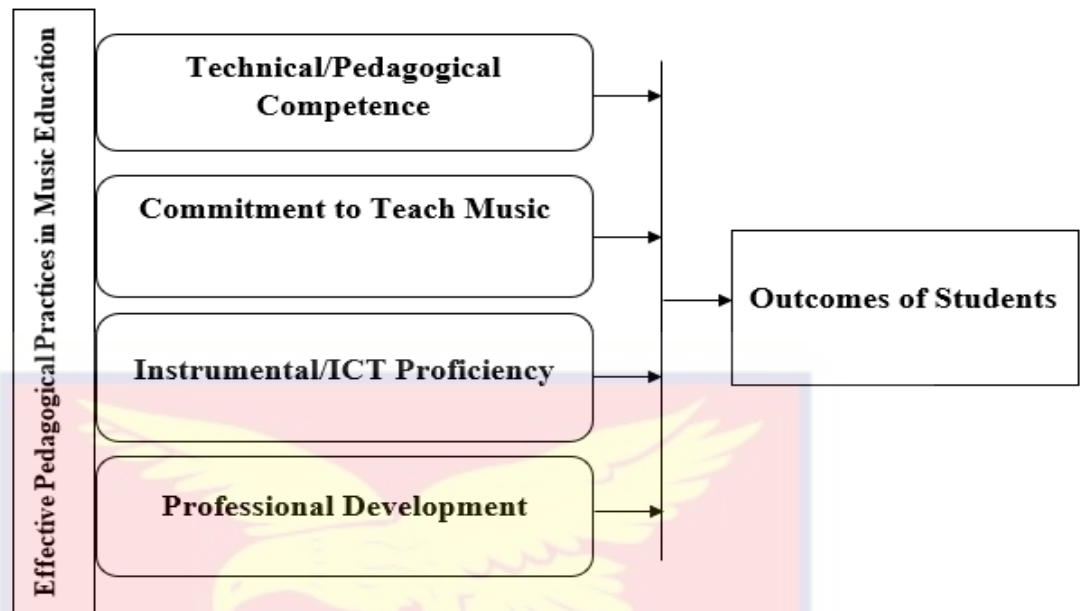


Figure 16: The Teacher Effectiveness Model (source: author)

The model in Figure 16 explains how the various constructs of teachers'; pedagogical and technical competence, commitment to teach, instrumental/ICT proficiency, as well as their professional development have been amalgamated to predict the outcome variable of students' results.

The hypothesis that was tested is:

H_0 : Teacher Effectiveness has no significant effect statistically on the academic outcomes of SHS students pursuing music in Ghana.

To establish whether the aforementioned predictor variables have statistically significantly affected students' academic outcomes, Standard Multiple Regression statistic was again used to explore hypothesis 3. The results of the test statistics are displayed in Table 11.

Table 11: Results Summary of Teacher Effectiveness Constructs (source: author)

Constructs	N	Sum of Squares	F	Standardized Beta	t-value	Sig	Correlation
	29	0.697	0.920			0.589	
PD				-0.066	-0.554		-0.108
CT				-0.331	-0.71		-0.138
TK				0.365	0.211		0.041
MIP				-1.05	-2.521		-0.491

From the results presented in Table 11, it is noted that students' academic achievement was regressed on predicting the four dimensions of teacher effectiveness variables. With $F(4, 29) = 0.920$, $p < 0.589$, with R^2 at 0.70, the adjusted R^2 value of 0.697 (indicating that approximately 70% of variances in the dependent variable are predicted by the statistical model), assessment of the statistical significance of the results from Table 11 indicates that the model has not reached statistical significance. With a significance level of 0.589 which is greater than the p-value set for this study at 0.05, there is no sufficient evidence to reject the null hypothesis. In other words, there is no sufficient quantitative evidence to support a relationship among the four constructs as well as their relationship with the dependent variable. This suggests that the pedagogical and technical competence of teachers, their commitment to teaching the subject, their instrumental/ICT proficiency, as well as their professional development have no statistically significant effect on students' academic outcomes in music.

It also suggests that the four constructs have not significantly contributed to the regression model and hence could not be used as factors in

predicting the outcomes of students. In effect, teacher effectiveness has no statistically significant effect on the academic outcomes of SHS students pursuing music in Ghana under the FSHS programme.

In comparing the contributions of the three constructs to the prediction of the dependent variable, it is largely perceived from Table 11 that none of the constructs has significantly contributed to students' academic outcomes under the FSHS programme due to their insignificant contribution to regression, and hence could not be used as factors in predicting the dependent variable, with PD ($t=-0.554$, $p=2.535$), CT ($t = -0.71$, $p = 2.476$), TK ($t = 0.211$, $p = 3.829$), and MIP ($t = -2.521$, $p = 1.616$).

Also, though none of the constructs demonstrated a significant contribution toward students' academic achievement, the musical instrument/ICT proficiency construct has shown to be the most important aspect of all the constructs with a coefficient Beta value of -1.05 . This is followed by technical/pedagogical knowledge (0.365), commitment to teach with (-0.331), and professional development (-0.066) in that order. The musical instrument/ICT proficiency construct has thus become the strongest unique contributor to explaining the dependent variable when the variance is explained by all other variables in the model as controlled for. Again, with a part correlation coefficient of $(-0.491)^2 = 0.241$, the musical instrument/ICT proficiency construct uniquely explains students' academic achievement variable at 24%. This is followed by commit to teach $(-0.138)^2 = 0.019$ (1.9%), professional development $(-0.108)^2 = 0.012$ (1.2%), and technical/pedagogical knowledge $(0.041)^2 = 0.002$ (0.2%) in that progression.

Discussion of Findings

Analysis of hypothesis 1 indicates that the Free SHS programme has significantly witnessed the enrolment proliferation of music students in the senior high schools of Ghana, which is a profound transformation of public discourse surrounding education policy in Ghana. This supports several scholarly *a posteriori* observations that offsetting the expensive costs of secondary education has offered opportunities to all those who were unable to afford it (Duflo, Dupas, Kremer, 2021; Kwegyiriba and Mensah, 2021; Chanimbe and Dankwah, 2021; Matey, 2020; Gikie, Karoki, Kinyanjui, 2020; Addo, 2019; Asumadu, 2019).

Addo (2019) for instance alluded to the fact that the operationalization of the policy has surged enrolment figures from 32.2% in the 2017/2018 academic year (p. 77). It is worth noting however that, Addo's report was based on the general enrolment figures and not limited to subject specifics. Analysis of data in this study also reveals that enrolment of music candidates has increased by 17.2% in 2021, that is comparing the enrolment figures of the four years under investigation. It is therefore a precise confirmation of a widespread perception that cost-free education ultimately upsurges the numerical strengths of schools. This justifies Kwegyiriba and Mensah's (2021) assertion that the continuous budgetary investment in the FSHS policy has increased enrollment figures in the senior high schools in Ghana (p. 71).

Again, juxtaposing the findings in this study and those in the literature (Agyei, 2023; Lartey, 2023; Chanimbe, and Dankwah, 2021; UNESCO-UIS, 2018), there appear to be some points of convergence with some findings from the previous studies. Agyei (2023) for instance reports that, the number of

students benefiting from the FSHS programme in the 2021/22 academic year stood at 1.3 million. This concurred with findings from this work which reveals an enrolment upsurge of approximately 17.2%, which aligns with the global commitment to education for all, which the government of Ghana has subscribed to, which is to provide equal opportunity to all students that qualify to enter into public senior high school regardless of gender, social class, ethnic background, and so forth.

Again, the IMF as quoted in Agyei's report also disclosed that, although the introduction of the FSHS programme has increased enrolment, its detrimental effects on students' learning outcomes meant that the policy was not well targeted. This was the IMF's country report in response to Ghana's request for a bailout of \$3 billion to salvage her economy as well as sustain her debt while exploring stringent fundamentals for expanded growth. This conceivably, is amenable to economic analysis that, Ghana's expenditure of 4% GDP on education only yielded positive results in terms of enrollment but with absolute insignificance with regards to the learning outcomes of students (Myjoyonline, May 23rd 2023). In furtherance of Agyei's report, the MyJoyOnline Report of 28th March 2022 also points to some of the negative consequences arising from the implementation of the FSHS policy. Addae-Mensah noted in the aforementioned report that, though the government commits about GHC7.5 billion to the implementation of the policy annually, it has lowered the standard of education as well as its quality.

The former Vice-Chancellor of the University of Ghana has however admitted to the fact that the policy has been successful in upsurging the enrolment figures as compared to the past regime of education (MyJoyOnline,

2022). However, in a sharp rebuttal, President Akufo-Addo believes otherwise. The President opines that the release of WASSCE 2021 results by WAEC, which is the second batch of students under the Free SHS policy, gave credence to the success of the policy (MyJoyOnline, 2022).

There seems to be mixed evidence on the extent to which the policy is impacting the academic achievement of students in senior high schools in Ghana. From one perspective, the programme has lowered the academic standards of the country, and from the other extreme, the programme has qualified more students to pursue tertiary education. This observation provides important leads for further research that is, in all subjects being pursued in the senior high schools of Ghana under the FSHS system to validate the actual claims by the various stakeholders as mentioned above.

It would be profoundly paradoxical, for a programme that is expected to improve the education sector to experience such inconsistencies especially when so many resources have been apportioned to its implementation by the state to ensure its success. Hence, the surest way to establish a synergy is for further scrutiny of the programme to be able to produce students who will be ready to transition to the tertiary level, as well as to inspire intellectual capital that takes precedence over the country's natural resources as suggested by very renowned academic scholars such as Addae-Mensah, Stephen Adei, Ato Essuman etc. and institutions such as the IMF.

The findings in this study have however shown some caveats, where the performance of students in music under the policy has rather revealed some positives in students' performance, which is in contrast to some assertions expressed earlier by some scholars in this work, and at the same

time, aligning very well with other literature. Comparatively, the analysis of the results indicates that the performance of students under the FSHS programme with approximately 71.4% has qualified more students to pursue tertiary education as juxtaposed to the cost-sharing performance of 70.3%, and with the p-value of Pearson's chi-square test of independence being .001 indicating a statistical significance, there is, therefore, a logical syllogism that, the FSHS has significantly affected students' performance as far as music is concerned in the senior high schools of Ghana.

It is however worth establishing that, while the findings from this study are narrowed to the performance of students in music, the observation by the aforementioned academic scholars and institutions extends beyond subject specifics with a focus mostly on the core subjects. It is, therefore, not out of place to find a subject like music performing well in a domain where others struggle.

The Key Pillars of the Free SHS Policy

Reviewed literature on this theme (Free SHS Ghana, 2017; Anti Partey, 2017) brought to the fore four main pillars (for example; removal of cost barriers, expansion of infrastructure, improvement in quality and equity through teacher rationalization and deployment, and development of employable skills). Three out of the four pillars were considered very critical to the current study. Concentration was therefore given to these variables.

Symphoniously, the results revealed that students' academic achievement was a multidimensional construct that was affected by cost removal, infrastructural expansion, and teacher rationalization and deployment. With an overall significance level of 0.049, it is obvious that the

key pillars of the FSHS programme has yielded statistical significance, which suggests that, the key tenets of the FSHS policy have statistically significantly affected Students' academic performance in music. Admittedly, these pillars have played significant roles in students' academic outcomes under the FSHS programme.

Cost Removal

Data available has revealed that the government has absorbed the cost component associated with senior high education which has significantly improved enrolment of students, as well as positively impacting results in the discipline. This by implication suggests that every cost related to; teacher salaries, classroom facilities, furniture pieces, library materials, laboratory equipment, school uniforms, boarding fees, examination fees, sports and cultural levies, parent-teacher association levies etc. which are supposed to be paid for by students or their families are financed by the state. This undoubtedly will heave a sigh of relief to parents and guardians, especially those from economically challenged backgrounds who will have to contend with these bottlenecks of getting their wards through SHS.

This finding aligned with the findings from the literature (ActionAid report, 2017; Ndulu and Moronge, 2015; Kasiringua, 2007; Johnstone, 2003; 20021; 1993b; 1992; 1986) who believe the issue of cost in any educational system is a discouraging factor for many poor parents. To these authors, it is a barrier to educational access at any level of the continuum because the individual faces liquidity constraints that prevent him/her from accessing educational opportunities. The resultant effect mostly is that cost-sharing will engender endemic poverty.

In furtherance, Matey, 2020; Asumadu, 2019; Ghana Education Economic News, 2013; Osei, Asem, Owusu, and Afutu-Kotey, 2009, also find that, although poor households value education as much as their counterparts from affluent homes, it is apparent that rich families have a better advantage to secondary education in Ghana, because, school fees represent regressive taxation on financially challenged families, as well as their enrolment in schools. Children from poor backgrounds are vulnerable and sensitive to fees, no matter the amount involved.

Cost removal as one of the key pillars of the FSHS has therefore reduced the economic burdens on parents and guardians on the backdrop of; redeeming them from the huge financial burdens and pressure of financing their wards' senior high education in Ghana, which is an indirect mean of improving their livelihood. This also presupposes that, with all impediments regarding access and equity to secondary education being expunged, it can therefore be postulated based on these findings that, cost removal offers a serene atmosphere for sound academic engagement, and this is what has significantly impacted students' achievement scores in music.

Infrastructure Expansion

Evidence from data again revealed some counterbalances in the provision of the infrastructure in the schools. Figures 18, 19, and 20 provide summary results for further discussion.

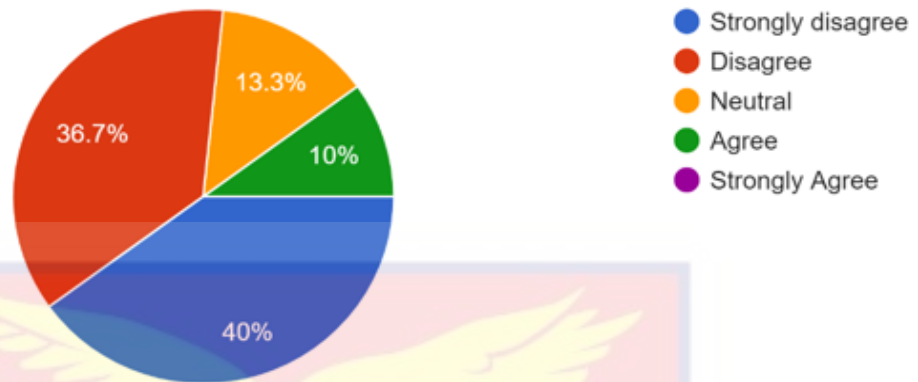


Figure 17: Summary Results of New Classroom Facilities Responses
(source: author)

Data available has revealed that not enough facilities have been provided to contain the significantly improved students' enrolment in the schools. For instance, results from Figure 17 on responses based on whether new classroom facilities have been constructed to support teaching and learning under the FSHS programme indicated 76.7% rejection by the respondents (thus, 40% strongly disagreement, and 36.7% disagreement), 13.3% neutral, and 10% agreement.

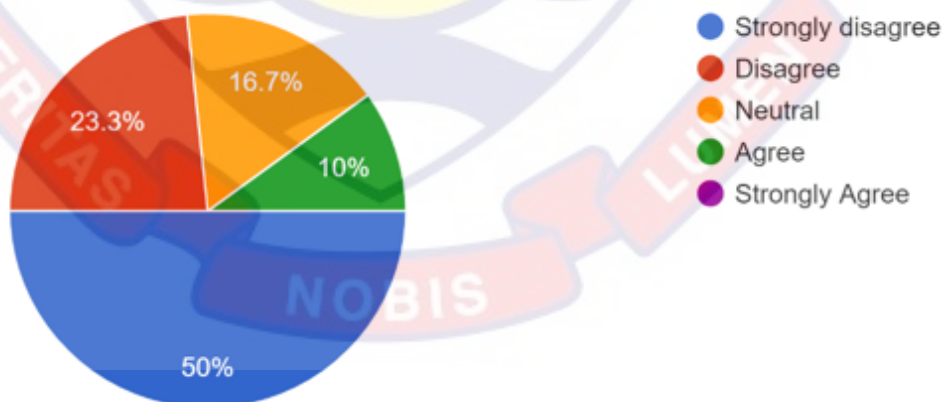


Figure 18: Summary Results of Library System Responses (source: author)

Again, analysis of Figure 18 also revealed that 73.3% of the respondents disagreed with the provision of new, or resourcing of the existing library with reading materials in music for students under the FSHS programme.

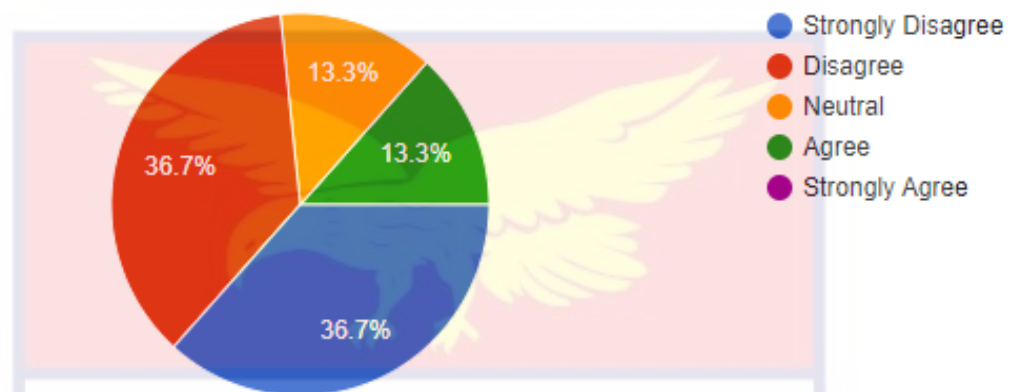


Figure 19: Summary Results of Music Studio Responses

Similarly, 73.4% of the respondents were in disagreement with the provision of well-equipped music studios for practical lessons for music students under the FSHS. Putting the findings in Figure 19 in this study and those in the literature (Chanimbe and Dankwah, 2021; Matey, 2020; Amissah, 2019; Asumadu, 2019; Animah, 2018) side by side, there appear to be some conjoining points. For instance, the Global Programme for Safer Schools (GPSS, 2022) reported that there is an absolute disconnection between educational policies and infrastructural provision in developing countries. This report as indicated by the GPSS aligns with the findings of Chanimbe and Dankwah, 2021; Matey, 2020; Amissah, 2019; and Asumadu, 2019, who also reckoned infrastructural deficit as a predominant factor affecting the implementation of the Free SHS policy in the senior high schools of Ghana. Significantly to these authors, Infrastructural Expansion is anticipated to

address the complications of the surging enrolment of students into senior high schools.

Conversely, large class sizes, and overcrowding *inter alia* in the; dormitories, dining halls and other social amenities are overly populated in the schools. In most cases, students in over-populated schools are compelled to sleep on verandas and floors in their dormitories due to inadequate beds. Sometimes, students are made to eat in batches due to inadequate dining facilities to contain them. Above all, it is found that the introduction of the double-track system is a consequence of the infrastructural deficit in most of the schools in the country.

It can therefore be established from the above findings that there are excruciating environmental ambient such as high temperatures, and high noise levels, which are recipes for disciplinary issues (violence, interpersonal disputes, hostilities).

However, the report of the Ministry of Education (2020) on Secondary Education Infrastructure Development Projects from 2017 to mid-2020 indicated that the government has completed 492 of the initiated 1,011 projects including boarding facilities, classroom facilities, dining room furniture, bunk beds and mattresses in the senior high schools across the country, with the rest 519 projects at the various stages of completion. This was a consequence of salvaging the pressure on the existing facilities in the schools due to the over-subscription of the FSHS programme.

Juxtaposing the findings in this study with MoE's report, it is perhaps fitting to conclude that, there remains a great deal of work to be done by the

government by fixing the challenges of infrastructural development in senior high schools.

Teacher Rationalization and Deployment

Teachers are one of the fundamental necessities for quality education, which underscores the rationale for the target 4c of the SDGs which prioritizes the effectual supply of quality teachers to every classroom to achieve SDG 4 (UNESCO, 2015). The teacher rationalization and deployment concept is expected to resolve teacher-surplus-related issues in schools, as well as ensure the transfer of redundant teachers from over-staffed schools to meet the operational demands of underserved schools, that is schools with teaching vacancies USAID (p.17). However, findings from this study indicate the reverse.

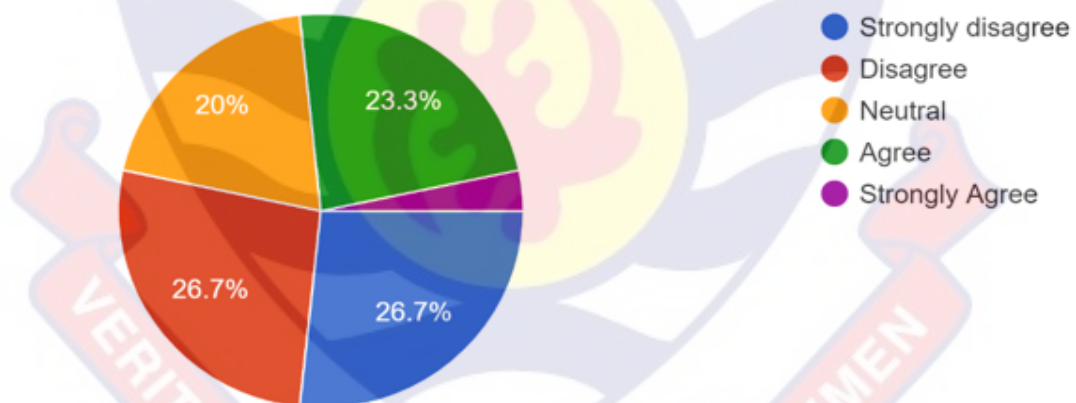


Figure 20: Summary Results of Student-Teacher Ratio in Music Responses (source: author)

Data available has revealed that there is an inadequate number of teachers providing instruction to students in senior high schools. For instance, results from Figure 20 on responses based on whether the schools have an adequate number of teachers instructing music under the FSHS programme revealed 53.4%, disagreement, 20% neutral, and 26.6% agreement to the students-music teacher ratio in the various classrooms. It is evident from this

study that the FSHS programme has increased the enrolment of students studying music in the schools, and thus requires more teachers for effective instruction. It is therefore puzzling to observe that the ratio of class numbers and teachers became so incompatible. Ultimately, this finding is a recipe for large class sizes which are intolerable in any pedagogical context due to the numerous disadvantages associated with them. This is because they will trigger the episode that will unquestionably have profound paradoxical consequences on educational standards.

Research works by Brown, 2022; OECD, 2022; 2019; UNESCO, 2006, have significantly correlated with findings from this study that, smaller class sizes are best for student achievements, and undoubtedly, individual students especially those with learning difficulties tend to receive more attention and support from their teachers when class sizes are small, as opposed to large classes that mostly promotes rowdiness which has serious consequences on academic outcomes. This aligned with the study of Costello (2005) who claims that a normal music group has a smaller class size than a regular general education classroom (p. 12).

Significantly, subjects like music require individualised instruction from teachers, therefore large class sizes are predisposed to ineffective ensemble instruction, poor classroom management, poor planning and assessment, as well as encourage disruptive behaviours. This is also in consonance with the studies of Best (2005) who also maintained that not more than twenty students should be allowed in any class. Ideally, fifteen students should be permitted in a class (p. 74). In furtherance, the findings on inadequate teacher resources for music at the SHS level in Ghana resonates

with the findings of Petrie (2015) who profoundly demonstrated that teacher shortage is one of the major challenges confronting the pedagogical delivery of music in Senior High Schools in Ghana. Petrie also revealed that most schools refrained from pursuing music because teachers were not available to teach the subject. To a greater extent, the deficit compelled schools to have fewer numbers which amounted to a limited aggregate of instruction in the discipline (p. 326).

The standard for senior high school music education in Ghana requires students to be taken through the theory of music composition, ensemble performances, and music appreciation. In furtherance, these students are also required to develop proficiency in their major musical instruments for final performance during WASSCE. Again, the music curriculum for the senior high schools in Ghana, as well as the demands from WAEC mandated school candidates to take three separate papers including; music 2 (theory of music), music 3A (aural), and music 3b (performance test). These by themselves are so overwhelming for any one individual music teacher, and in situations where the status quo has created teacher-deficits inequity in the learning environment, then the broader question of what becomes the hope of the students, as well as the discipline? this calls for broader stakeholder consultation to implicitly or explicitly address the music-teacher deficit phenomenon to salvage music education which has become an endangered discipline in senior high schools.

Teacher Effectiveness

Teachers are considered the fundamental essentials for ensuring quality educational delivery. Reviewed literature on this theme (Birman et al., 2022;

Malechwanzi and Murage, 2020; Little, Goe, and Bell, 2009; Gordon, Kane and Staiger, 2006) brought to the fore four main constructs (technical/pedagogical competence, teacher commitment, musical instrument/ICT proficiency, professional development) that define teacher effectiveness in this study (as in figure 18 of chapter two).

With an overall significance level of 0.589, it is obvious that the model has not attained statistical significance, which suggests that, the teacher effectiveness model has not significantly affected students' academic performance in music. The four constructs could not have played any significant role in the academic successes of students under the FSHS programme due to their insignificant contribution to regression. Notwithstanding the insignificant contribution of the model to regression, it is interesting to note that the four constructs have however made some unique contributions to explaining the dependent variable when the variance is explained by all other variables in the model as controlled for, as well as correlating with students' achievement scores at various levels.

The musical instrument/ICT proficiency construct has been demonstrated to have the strongest effect on students' outcomes when all the independent variables are compared due to its magnitude beta coefficient. This was followed by technical/pedagogical knowledge, commitment to teaching, and professional development in that progression. Also, analysis reveals that the musical instrument/ICT proficiency construct has correlated substantially with the dependent variable, that is when the effects of all other constructs in the model are excluded.

Juxtaposing the findings from this study and those in the literature (Blazar, 2016; Pianta and Hamre, 2009; Little, Goe, and Bell, 2009; Cohen, 2011; Lampert, 2001), there appear to be some points of a merger, although significant differences were not observed between the broader teacher effectiveness constructs. Undoubtedly, effective teachers significantly impact the success of their students (Malechwanzi and Murage, 2020; Gordon, Kane and Staiger, 2006), but Little et al. (2009) for instance argued that the concept of effective teaching should not be narrowed to the teachers' ability to engender gains in students' achievement scores as measured in standardized tests only. Little et al. (2009) believe that teachers cannot be exclusively held accountable for the learning behaviours of their students. This to an extent suggests that other factors can equally account for the learning outcomes of students, though the teacher factor cannot be expunged entirely.

Also, even though students' cognitive development is mostly prioritized by many, and as such regarded as the prime consequence of effective teaching, many scholars (Blazar, 2016; Cohen, 2011; Pianta and Hamre, 2009; Lampert, 2001) believe teacher effectiveness transcends the evolution of the cognitive domain. The aforementioned authors believe that, though quality teachers contribute immensely to raising test scores of students through the delivery of accurate content, as well as supporting critical thinking, they also advance the social and emotional development of their students. This in a way aligned indirectly with the findings from this study that, though teacher effectiveness has not statistically significantly affected students' academic achievement scores, other domains of the same students could have been positively affected by the respective constructs. This allows

for further research to establish how these same variables directly affect the psychomotor and affective well-being of the students.

This agrees with the position of Ko and Sammons (2016) who also hold that the comprehensive and robust review of teacher's work protrudes the pedagogical space. This encompasses wider roles such as: facilitating colleagues' teaching; engaging in broader leadership roles, reflecting on one's teaching practices and participating in professional development programmes. This can improve the quality of instruction (p. 13). In furtherance, the study of Byrd and Rasberry (2011) found that standardized tests are often designed to measure children's quick recall of a relatively small range of knowledge, and many of them fail to capture the growth they exhibit in other more accurate evaluations (p. 4). This assertion as expressed by Byrd and Rasberry significantly valorizes the earlier opinions of Blazar, 2016; Ko and Sammons, 2016; Cohen, 2011; Pianta and Hamre, 2009; Lampert, 2001. These authors believed that there are other non-cognitive pedagogical behaviours expressed by teachers which shape the attitude of students which may not affect test scores. There is therefore no need to restrict teacher effectiveness to the academic outcomes of students only.

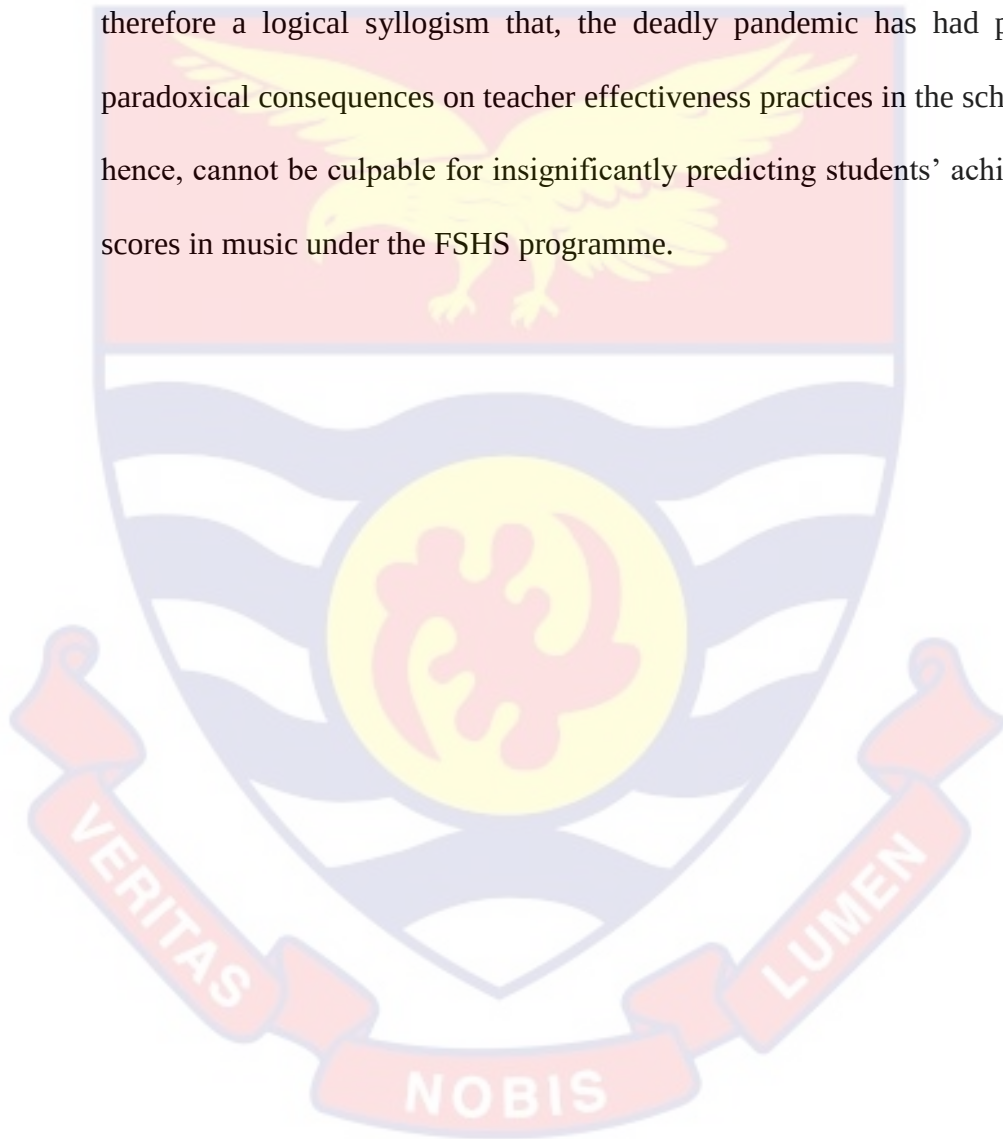
It is presumed that test scores are limited in the information they provide on students, and may not be enough to measure the effective pedagogical characters of teachers. It is also estimated that many times, teachers perform roles, the majority of which are out-of-classroom supports to make students develop holistically. Otchere, Amuah, and Numekevor (2016) in quoting Aristotle, claim that different aspects of humans need to be developed, therefore, educating students solely with their minds and ignoring

their hearts is pointless. It is quite evident from the above argument that it is ineffectual for the cognitive to be given all the attention, or for a particular domain to be considered more esteemed for preferential attention to the neglect of the other domains, for which reason teachers can only be adjudicated for students' academic outcomes that are labelled as purely a cognitive exercise.

Furthermore, studies by Chanimbe and Dankwah, 2021; and Matey, 2020, revealed that parents/guardians spend more money on extra classes for their wards both during vacations as well as after classes during normal school sections to ensure quality results for them. The issue of extra classes is so indispensable in the contemporary educational context. It augments regular tuition, as well as provides extra opportunities for extra practice for students since formal contact periods have insufficient durations making it impossible for requisite knowledge dissemination (Abreh, 2023; 2019; Nguyen, Hafeez-Baig, Gururajan and Nguyen, 2021). Abreh (2023) for instance reports that, in most cases, parents/guardians make special arrangements for their children to attend these classes so that attention can entirely be focused on them individually (p. 2). This invariably tends to affect the grades of students irrespective of the pedagogical practices in the schools. It can therefore be surmised that, though the teacher effectiveness variable has not significantly impacted students' academic achievement scores under the FSHS policy, other hidden variables like extra classes contributed significantly to students' academic attainment under the era under investigation.

Most significantly, the challenges of the COVID-19 pandemic cannot be disregarded since all schools were closed down, especially in 2020. This

made it preposterous for quality student-teacher engagement, as well as for teachers to have an outstanding grip on the curriculum before the WASSCE examinations. Though to an extent, some interventions were made by the government in collaboration with the teachers to have extra engagement with students before the examination, the effectiveness cannot be estimated. It is therefore a logical syllogism that, the deadly pandemic has had profound paradoxical consequences on teacher effectiveness practices in the schools and hence, cannot be culpable for insignificantly predicting students' achievement scores in music under the FSHS programme.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

A summary of the full study is provided in this chapter. These include the recapitulation of the study's objectives, a discussion of the research hypotheses raised, a summary of the key points of the relevant literature reviewed, an overview of the research methods used, a description of the different types of data analysis used, and a summary of the key conclusions. After the summary, conclusions and suggestions are based on the research's findings. The chapter is then concluded with recommendations for further study.

Summary

Though much research has been conducted concerning the FSHS Programme and its effects on general academic activities in the senior high schools in Ghana, little research has been done on its impact on the various subjects to ascertain whether they are considerably making strides, or require immediate interventions.

A review of the literature reveals among other things that educational reforms have contemporarily become a generic set of jargon as well as global discourses being charted by different countries, which is an indication that there is an established nexus between global educational policies and national educational ideologies (O'Donovan, 2020; Novelli, and Altinyelken, 2012; Gopinathan, 2007; Hannum, 2005; Schriewer, 2000; Huckle, 1993; Orr, 1992). The literature review by extension reveals that as a consequence of globalization, most of the reforms engaged in by Ghana emanated from the international conventions the country has ratified and these have profoundly

impacted the educational sector. Programmes such as; the FCUBE, Capitation Grant, School Feeding, Free School Uniform, Free Sandals, and many others including the recent policy on FSHS, are perceived to have a global connotation. These local policies are reckoned to be the instruments through which the country seeks to reach global goals including Education for All, Millennium Development Goals, and Sustainable Development Goals on education to ensure quality and equitable educational provision.

It is also observed from the literature that, Article 25 of Ghana's 1992 constitution provides an overarching educational policy for the country; stating that (a) basic education should be made free, compulsory, and available to all: (b) secondary education should generally be made available and accessible, and be made progressively free. This gives the government of Ghana a preeminent obligation to provide public basic education free to its citizens as enshrined in the 1992 Constitution. It can be conceived from section (b) of Article 25 of the constitution that secondary education is no longer free once students begin their senior school careers because fees and costs apply (ActionAid report, 2017; Ghana Education Economic News, 2013; Osei, Asem, Owusu, Afutu-Kotey, 2009). Parents/Guardians were therefore expected to share the cost of their wards' secondary education through payment of levies such as; admission fees, boarding fees, facility user fees, PTA fees, sports and cultural levies, examination fees, etc.

The approach to Cost-Sharing represents regressive taxation, especially to students from disadvantaged backgrounds, as well as a major bottleneck to their academic breakthrough. These charges have a consequential impact on Ghana's education because a significant number of students were prevented

from gaining access to education as well as increasing the dropout rate of students. This among other factors led to the introduction of the FSHS programme in 2017.

A review of the literature on the Free SHS policy reveals that the government has expunged all cost elements that seek to barricade secondary education and this has reduced financial burdens on parents and guardians. Apart from narrowing the equity gap between the societal affluent and the underprivileged in terms of SHS education, it has proliferated the literacy rate of the country because it has offered each qualified individual the opportunity to acquire functional and productive skills (Armah, 2021; Kwegyiriba and Mensah, 2021; Matey, 2020; Mensah, 2020; Gikie, Karoki, Kinyanjui, 2020; Asumadu, 2019; Free SHS Ghana, 2017; Anti Partey, 2017). Empirically, although the FSHSP is plausible by way of increased enrolment numbers, scholarly reports indicate that it lacked adequate stakeholder consultation leading to inadequate funding and logistics to run the programme in the schools. There were also reports of overcrowding which by consequence is putting undue pressure on scarce infrastructure which virtually increases maintenance costs in the schools (Kwegyiriba and Mensah, 2021; Matey, 2020; Mensah, 2019; Abdul-Rahaman, Abdul Rahaman, Ming, Ahmed, Salma, 2018).

In furtherance, a review of the literature has disclosed mixed evidence on the extent to which the policy is impacting the academic achievement of students in senior high schools. From one standpoint, the programme has lowered the academic standards of students, and from the other extreme, the programme has qualified more students to pursue tertiary education. Thus,

while scholars such as Addae-Mensah, Stephen Adei, Ato Essuman and many others, as well as institutions such as the IMF maintained that, the programme is poorly targeted due to negative consequences on the learning outcomes of students, the government on the other hand believed that the programme is a success (MyJoyOnline Report, 2023; 2022; Agyei, 2023). Against this background, I set out to examine the possible effect of the programme on students' academic outcomes.

Consequently, the general purpose of this study was to assess the impact of the FSHS policy on students' academic outcomes. Four specific objectives for achieving the purpose were: a) to analyze the differences in students' WASSCE results between the cost-sharing era, and the FSHS policy era; b) to examine the effect of the FSHS policy on the music educational outcomes of students in the senior high schools, c) to ascertain whether the key pillars of the FSHS policy such as cost removal, infrastructural expansion, and improvement in quality and equity through teacher rationalization and deployment have contributed significantly to students' academic achievements in music, d) to establish the extent to which music teachers have significantly influenced students' academic outcomes under the FSHS programme.

Three main research hypotheses were set to help gain a deeper insight into the relationship between the predictor variables and the outcome variable:

1. H_0 : There are no statistically significant differences between the academic outcomes of students within the cost-sharing and the FSHS systems of education in Ghana.

H_1 : There are statistically significant differences between the academic outcomes of students within the cost-sharing and the FSHS systems of education in Ghana.

2. H_0 : The FSHS key pillars have no statistically significant effect on student's academic outcomes

H_1 : The FSHS key pillars have a statistically significant effect on student's academic outcomes

3. H_0 : Teacher effectiveness has no statistically significant effect on the academic outcomes of SHS students pursuing music in Ghana

H_1 : Teacher effectiveness has a statistically significant effect on the academic outcomes of SHS students pursuing music in Ghana.

Procedures

The procedures followed in researching the problem included: (1) the identification and use of an appropriate research design, (2) the selection of variables and samples, and (3) the collection of data.

Design of the Study

The non-experimental correlational design was employed in assessing the two educational systems, as well as the effect of the FSHS policy on the academic achievement of students. This correlational design allows the investigator to use the correlational statistic to describe and measure the degree of relationship between two or more variables, as described by Creswell (2012).

Independent and Dependent Variables

The variables included in the study may be subsumed under three areas: pillars of the FSHS policy (cost removal, infrastructural expansion, and

teacher rationalization and deployment), teacher effectiveness, being the predictor variables, and WASSCE results of students between 2017/18 and 2020/21 academic years as the outcome variable.

Sample

The study engaged a multistage sampling technique to cluster as well as stratify 30 senior high schools across the Volta and Oti Regions of Ghana. This sampled schools produced 4,612 participants whose results as well as responses form the data set for this study. Out of this number, 4552 were senior high school candidates who pursued music as one of their elective subjects as well as sitting for the WASSCE music papers within the years under investigation. The remaining 60 participants include SHS administrators (Heads/Assistant heads of Academics/Heads of Departments in charge of music), and music teachers in the schools.

One inclusion criterion which is a common characteristic of all stratified respondents is a minimum of five years of engaging with music educational practices (this includes; schools, teachers and administrators before the administration of the survey forms). This inclusion criterion is chosen because five years offers enough experience for respondents to provide a distinction between the two regimes of education thus, cost-sharing versus Free SHS policy periods. Persons not meeting this criterion were excluded from this study.

Data Collection

The study made use of both primary and secondary data thus; survey responses from the music teachers and school administrators of the sampled schools, as well as the West African Senior Schools Certificate Examination

(WASSCE) results of music candidates between 2017/2018 to 2020/21. It is worth noting that while secondary data was collected from WAEC and analyzed on students' performances, the music teachers and school administrators responded to questionnaire instruments as primary data. The results of these sampled schools were analyzed along with the responses of their music teachers and school administrators.

To ensure a careful and systematic data collection, the following steps were taken: an official application was written to WAEC, with the request for the official results of the candidates who sat for the music papers within the period under investigation. Two sets of questionnaire batteries were designed and administered to the music teachers, and the school administrators

The first set of instruments which was designed for the music teachers initially consisted of 20 items. This was however revised to 15 items after pilot testing, and grouped into three sections. The 5 items of the first section were based on the cost removal construct. The second set of 5 items was based on the infrastructural expansion construct, and the third section was also made up of 5 items based on the teacher rationalization and deployment construct.

The second set of instruments which was designed for the school administrators also consisted of 20 items categorized into four sections that related to Teacher Effectiveness. The 5 items of the first section were based on the technical/pedagogical competence construct. The second section of 5 items was also based on the teachers' commitment construct, the third section of 5 items was based on the teacher's instrumental/ICT proficiency, and the final section of 5 items was based on the professional development of the teacher.

Pilot Test

A pilot test was conducted to examine the reliability and validity of the two data collection instruments designed for the study. Since the sampled schools were not too many, the data collection instruments were pilot tested in thirty selected schools in the Central and Greater Accra regions. the SPSS software was used to estimate the internal consistency and validity.

The first survey instrument was prepared for school administrators and the second one for the music teachers. The guiding hypothesis of this study focused on the effective pedagogical delivery of the music teachers, hence, items for school administrators were intended to solicit information on the teacher(s)' technical/pedagogical competence, commitment, musical instrument proficiency, and professional development (organized into theoretical constructs). Generally, each of these hypothetical constructs contained five questions which aggregate to twenty items. A five-point Likert-scale type (1=strongly disagree to 5 = strongly agree) allowed participants to indicate the degree to which they believed these theoretical constructs affect students' academic achievements. The overall reliability of the Teacher Effectiveness survey instrument reveals Cronbach's alpha coefficient α value of 0.80. According to the recommended guidelines offered by Straub et al. (2004) and corroborated in Dwivedi (2005, pp. 68-69), a survey instrument possesses a high internal consistency (deemed reliable) if the estimated Cronbach's alpha is above 0.70.

It is also worth noting that Cronbach's alpha coefficient on each item ranged between 0.77 to 0.82 which are all above the threshold indicated by Straub et al. (2004). Following the above guidelines, it is demonstrable that

the survey instrument on teacher effectiveness is consistent and reliable to test the hypotheses formulated in this study. The study also estimated the criterion-related validity of the test instruments which is to check the performance of the measure against some criterion, and to a greater extent to examine the correlations of the different constructs with one or more measures of quality performance (Malechwanzi and Murage, 2020; Barry, Chaney, Piazza-Gardner, Chavarria, 2014; Sakthivel, Rajendran and Raju, 2005; Huck, 2004; Joint Committee for Standards on Educational Evaluation, 1994).

In the present study, the students' academic outcome is presented as the outcome variable of the four-teacher effective (predictor) constructs. It should be noted that approximately 80% of the estimated items (i.e., 16 out of 20) have significant positive correlations with students' academic outcomes, thus establishing a high criterion-related validity.

The second instrument was designed for the teachers instructing music programmes in the various schools and was intended to solicit information on the implementation of the Free SHS programme in the schools. Survey items were organized into three main theoretical constructs termed Free SHS Policy Key. Thus, cost removal, infrastructural expansion, teacher rationalization and deployment. Each of these constructs also contained five Likert-scale types (1=strongly disagree to 5 = strongly agree) which allowed participants to indicate the extent to which they believed these theoretical constructs affect students' academic achievements in music. In all, Cronbach's alpha coefficient α on fifteen (15) items of the FSHS key pillars survey instrument was valued at 0.868 which also exemplifies a high internal consistency rate. Also, the Cronbach's alpha coefficient on each item ranged between 0.84 to 0.88

indicating the internal consistency efficacy of all the items to measure the given hypothetical constructs.

Furthermore, validity estimation of the Key Pillars of the FSHS survey instrument also indicates that approximately 86.7% of the estimated items (i.e., 13 out of 15) have significant positive correlations with students' academic outcomes, thus establishing a very high accuracy and trustworthiness. It can therefore be concluded that the instruments used for data collection for this study, had very high validity and reliability scores which by extension, have the capability of measuring the established theoretical constructs accurately.

Fieldwork

Music teachers and School Administrators from thirty sampled senior high schools were involved in the study. Data collection occurred from November 15, 2022, to January 24, 2023. All the schools involved in the study were visited twice by the investigator; first for the verification of staff profiles for sampling, and two, to seek the consent of the respondents (after being sampled) as well as receive their contact details for electronic administration of the survey instruments. The administrative procedures for testing were straightforward. At the meeting with the subjects on the first visit, I briefly related my academic credentials and stated the purpose of the study. I then enquired about the appropriate personnel to check whether they had met the inclusion criterion set for sampling. The respondent's consent forms were administered during my second visit, where the participants were made to read through the forms and offer their approval before the administration of the

research instruments to them. Data collection for the study was subsequently done electronically via Google Forms.

Analysis of Data

The data collected for the study were analyzed with the Microsoft Excel LTSC MSO Version 2303 Build 16.0.16227.20202, and the IBM SPSS version 22. The Microsoft Excel LTSC MSO Version had the capability of running the descriptive IBM SPSS version 22 was also used for statistical analysis and computation. The fact that the instruments produced data on interval/ratio and nominal scales necessitated the use of both descriptive and inferential statistical methods. Frequency was used as summaries of the observations derived from student grades as part of the descriptive statistical techniques, while Pearson's Chi-square of independence test was used to test the statistical significance.

The most effective predictors of students' academic success among the factors of interest (cost removal, infrastructural expansion, teacher rationalization and deployment; pedagogical and technical competence, commitment to teaching, instrumental/ICT proficiency, and professional development of teachers) were identified using Chi-square of independence test and multiple regression analysis.

Summary of Major Findings

Following the trend of analysis and discussion earlier in this study, the summary of findings was done under three main sub-headings (results differentiation between candidates within the cost-sharing and the FSHS era, the key tenets of the FSHS policy and their effect on results of students under

the FSHS era, as well as the effectiveness of music teachers in the current dispensation of knowledge for ease of reference.

Findings on Students' Results

Firstly, an examination of WASSCE results of students between the cost-sharing and the FSHS programme revealed that there was a statistically significant difference between the grades of students in the two educational systems. With an edge of 1.1% difference in students' outcomes (i.e., with approximately 71.4% of FSHS passes as against 70.3% cost-sharing passes) and with Pearson's chi-square test of independence result being .001, it is obvious the FSHS programme is contributing significantly to students' academic outcomes in music. It also seems therefore that, the FSHS programme has qualified more students to pursue tertiary education than the cost-sharing era which is an indication that the programme is having a positive effect as far as the study of music is concerned in the senior high schools of Ghana.

Secondly, an analysis of data in this study also reveals that the Free SHS programme has significantly witnessed the enrolment proliferation of music students in the senior high schools of Ghana. Evidence from data indicates that enrolment of music candidates has increased by 17.2% in 2021, that is comparing the enrolment figures for the four years under investigation. This supports the assertions of several scholarly observations that offsetting the expensive costs of secondary education has offered opportunities to all those who were unable to afford it (Duflo, Dupas, Kremer, 2021; Kwegyiriba and Mensah, 2021; Chanimbe and Dankwah, 2021; Matey, 2020; Gikie, Karoki, Kinyanjui, 2020; Addo, 2019; Asumadu, 2019). This in furtherance is

a precise confirmation of a widespread perception that cost-free education ultimately upsurges the numerical strengths of schools, which is an attestation of the equity gap being narrowed as far as secondary education in Ghana is concerned.

Findings on the Key Tenets of the FSHS Policy

The major finding under this hypothesis is that the key tenets of the FSHS programme have statistically and significantly affected students' academic performance in music. The three key pillars have played significant roles in students' academic outcomes under the FSHS programme. Data available on cost removal has revealed that the absorption of cost elements by the government of Ghana has significantly improved enrolment of students studying music, which is an implication for narrowing the equity gap that existed in the past due to liquidity constraints.

In furtherance, findings on infrastructural expansion divulged that though the government is making some efforts to expand infrastructure in the various schools, there seems to be a great deal of work to be done in fixing the challenges of overcrowding in the various schools. Also, it is evident from this study that though the programme has experienced over-subscription in terms of enrolment of students, the ratio of students to a teacher is so incompatible, which aligns with Petrie's (2015) findings of teacher shortage being one of the dominant challenges confronting the pedagogical delivery of music in the Senior High Schools in Ghana (p. 326). Significantly, subjects like music require individualized instruction from teachers, therefore large class sizes are predisposed to ineffective ensemble instruction, poor classroom management,

poor planning and assessment, as well as will encourage disruptive behaviours.

Findings on Teacher Effectiveness

The findings on this variable signify that the model has not attained statistical significance. This by implication suggests that the teacher effectiveness model has no statistically significant effect on students' academic performance in music. The four constructs could not have played any significant role in the academic successes of students under the FSHS programme due to their insignificant contribution to a regression model. This notwithstanding, the four constructs under the model have made some unique contributions to the regression model. The musical instrument/ICT proficiency construct has demonstrated to have the strongest effect on students' outcomes followed by technical/pedagogical knowledge, commitment to teaching, and professional development in that progression. Also, analysis reveals that the musical instrument/ICT proficiency construct has correlated substantially with the dependent variable, that is when the effects of all other constructs in the model are excluded.

It is also established from this study that teachers cannot be exclusively held accountable for the learning behaviours of their students. This to an extent suggests that other hidden variables (e.g., investment in extra classes by parents) have equally contributed to the learning outcomes of students, though the teacher factor cannot be expunged entirely. The issue of extra classes for instance has become indispensable in the contemporary educational context. Several scholarly works (Nguyen, Hafeez-Baig, Gururajan, and Nguyen, 2021; Chanimbe and Dankwah, 2021; Abreh, 2023; 2019; Matey, 2020) revealed

that parents/guardians spend more money on extra classes for their wards both during vacations as well as after classes during normal school sections to ensure quality results for them. It is therefore believed that, though the teacher effectiveness variable has not significantly impacted students' academic achievement scores under the FSHS policy, other hidden variables like extra classes contributed significantly to students' academic attainment under the same era under investigation.

Another significant hidden variable that militated against the teacher effectiveness variable as identified from the literature is the challenges posed by the COVID-19 pandemic. Closing down of schools, especially in 2020, made it preposterous for quality student-teacher engagement, as well as for teachers to have an outstanding grip on the curriculum before the WASSCE examinations. And though to an extent, some interventions were made by the government in collaboration with the teachers to have extra engagement with students before the final examination, the effectiveness cannot be estimated. It is therefore believed that the deadly pandemic has had profound paradoxical consequences on teacher effectiveness practices in the schools, hence, cannot be culpable for insignificantly predicting students' achievement scores in music under the FSHS programme.

Conclusion

The goal of this study was to measure the effectiveness of the FSHS policy on the overall performance of music students in the West African Senior School Certificate Examination. Even though there seem to be conflicting reports on the extent to which the policy is influencing students' academic outcomes: where from one end of the spectrum; the programme is

perceived to have lowered the academic standards, and at the other extreme, the programme has qualified more students to pursue tertiary education, the findings from this study have revealed that the performance of students in music under the policy has attained statistical significance considering the result of Pearson's Chi-square test of independence at .001. Comparatively, the FSHS programme with approximately 71.4% has qualified more students to pursue tertiary education as juxtaposed to the cost-sharing performance of 70.3% (that is all things being equal, if these students also performed well in other subjects). It is therefore logical to conclude that, the FSHS is significantly influencing students' performance as far as music education is concerned in the senior high schools of Ghana.

Again, evidence from the data has suggested that the FSHS policy has increased enrolment of students studying music in the senior high schools as compared to the past regime, and this is an indication that the equity gap has been narrowed due to the equal access it has offered to all qualified candidates who transitioned from the junior high schools. This comes against the backdrop of removing every cost related to secondary education which by extension made schooling at that level affordable for students from heterogeneous backgrounds.

In furtherance, although the results on the key pillars of the FSHS policy have indicated that the three constructs have played significant roles in students' academic outcomes under the FSHS programme due to their significant contribution to regression, it is obvious that there remains a great deal of work to be done by the government by fixing infrastructural deficits in

the schools, as well as employing more teachers to compliment the teeming population in the classrooms.

Also, the results of multiple regression statistics suggest that the model has not attained statistical significance, thus, the four constructs have not played any significant role in the academic achievement of students under the FSHS programme due to their insignificant contribution to the regression model. This notwithstanding, it is evident that effective teaching transcends the development of the cognitive domain to encompass the advancement of the affective and psychomotor well-being of students. This is to say that there are other non-cognitive pedagogical behaviours expressed by teachers which may not directly influence test scores but have the tendency to develop students holistically. Hence, even though the model failed to predict students' outcomes, it is obvious the effectiveness of teachers cannot be restricted to only the academic achievement of students, and that, teachers to a great extent are engrossed in the social, emotional, physical, mental, and intellectual growth of students.

Most significantly, the obstruction of the COVID-19 pandemic to pedagogical delivery cannot be overemphasized, since its emergence has greatly hindered quality student-teacher engagement, as well as enabling teachers to have an outstanding grip on the curriculum before students write their final examination. It is therefore rational to conclude that, the deadly pandemic has been one of the major factors that hindered teacher effectiveness practices to accurately predict the dependent variable.

In conclusion, this study has given a panoramic insight into the assessment of the FSHS policy and its impact on the academic outcomes of

students in the senior high schools of Ghana. The design, the limitations, the findings and the recommendations for future research, together form a rich aggregate of information that can together act as a very fruitful step for further research.

Recommendations

First of all, a comprehensive review of the entire programme is required. The government should consider engaging parents, educators, administrators, policy analysts, and other key stakeholders to scrutinize the policy and proffer very constructive alternative proposals that will improve the policy discourse.

Significantly, though the FSHS policy has not prioritized the provision of textbooks for elective subjects, the government should make the needed efforts to supply textbooks in music for students to enhance the pedagogical delivery of teachers as well as to guide students. This can be done by engaging the private sector as part of their corporate social responsibilities to lend their support to the programme. For instance, an agreement can be reached with the printing houses to offer their support through the supply of textbooks to students.

Infrastructural deficits including music studios, libraries, classrooms and many others) have been one of the dominant challenges in the schools, and thus required major attention to accommodate the proliferated population of students. Modern trends in education require well-resourced libraries (both digital and print) to enhance access to information.

Also, smaller class sizes are deemed to ensure effective music instruction, and hence, require expansion in classroom facilities. Provision

should be made for well-furnished music studios which are very essential in refining the musical skills of students. This should be provided in every school that pursues music to offer first-hand experiences to the students. Dormitories and other social facilities are not left out, the government should collaborate with the private sector, and old students' associations to expand these facilities in the schools to ensure sound academic engagement, as well as put an end to the double-track system currently being operationalized.

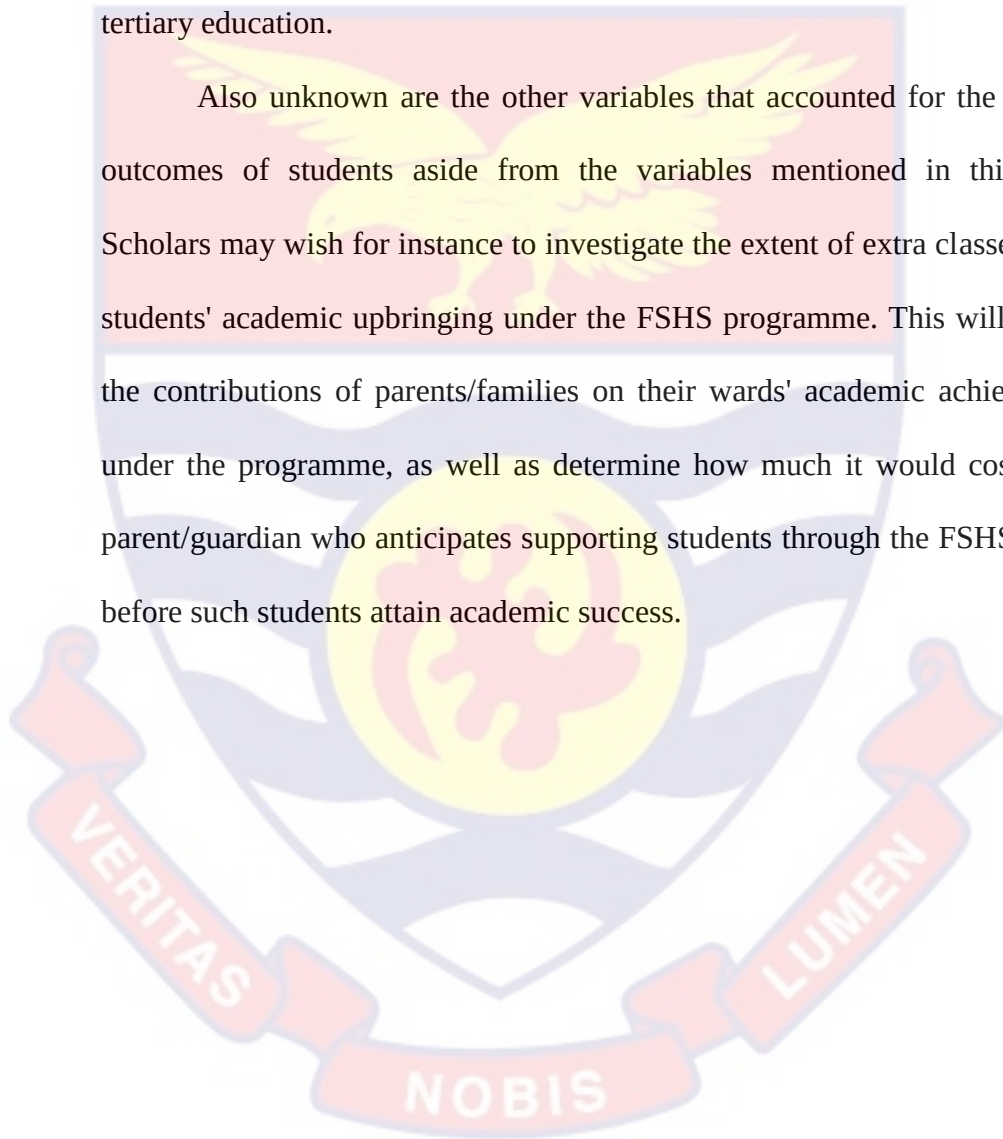
Finally, while we rummage around for strategies to manage large classes which constitute the blueprint for achieving excellent student outcomes in music education, sight must not be lost on the workload and the spiralling effect on the few teachers. The Ministry of Education should as a matter of urgency request financial clearance from the Ministry of Finance to recruit more qualified music teachers to augment the efforts of the existing ones in the classrooms. In lightening the burden of large class sizes on teachers, I recommend a maximum class size of twenty which was advocated for by Best, 2005; Costello, 2005, for effective instruction as well as to improve the performance of students in music. I also recommend that the Ghana Education Service through the District Directors of Education, and the heads of senior high schools should focus on equitable variables of in-service training, seminars, workshops and so forth for their teachers by professionally developing them for improved pedagogical practice.

Further Research

Scholars are advised to focus their attention on investigating the impact of the FSHS policy on students' performance in the other subject areas. For a subsequent iteration of this study, sampling from all the regions in Ghana to

expand the sample size would be advocated for. It will also be interesting to investigate the academic performances of the FSHS graduates in the various tertiary institutions and to juxtapose them with past students' performances. This will provide a true revelation of the extent of knowledge acquisition at the pre-tertiary level, as well as establish the preparedness of students for tertiary education.

Also unknown are the other variables that accounted for the learning outcomes of students aside from the variables mentioned in this study. Scholars may wish for instance to investigate the extent of extra classes on the students' academic upbringing under the FSHS programme. This will unravel the contributions of parents/families on their wards' academic achievements under the programme, as well as determine how much it would cost a new parent/guardian who anticipates supporting students through the FSHS system before such students attain academic success.



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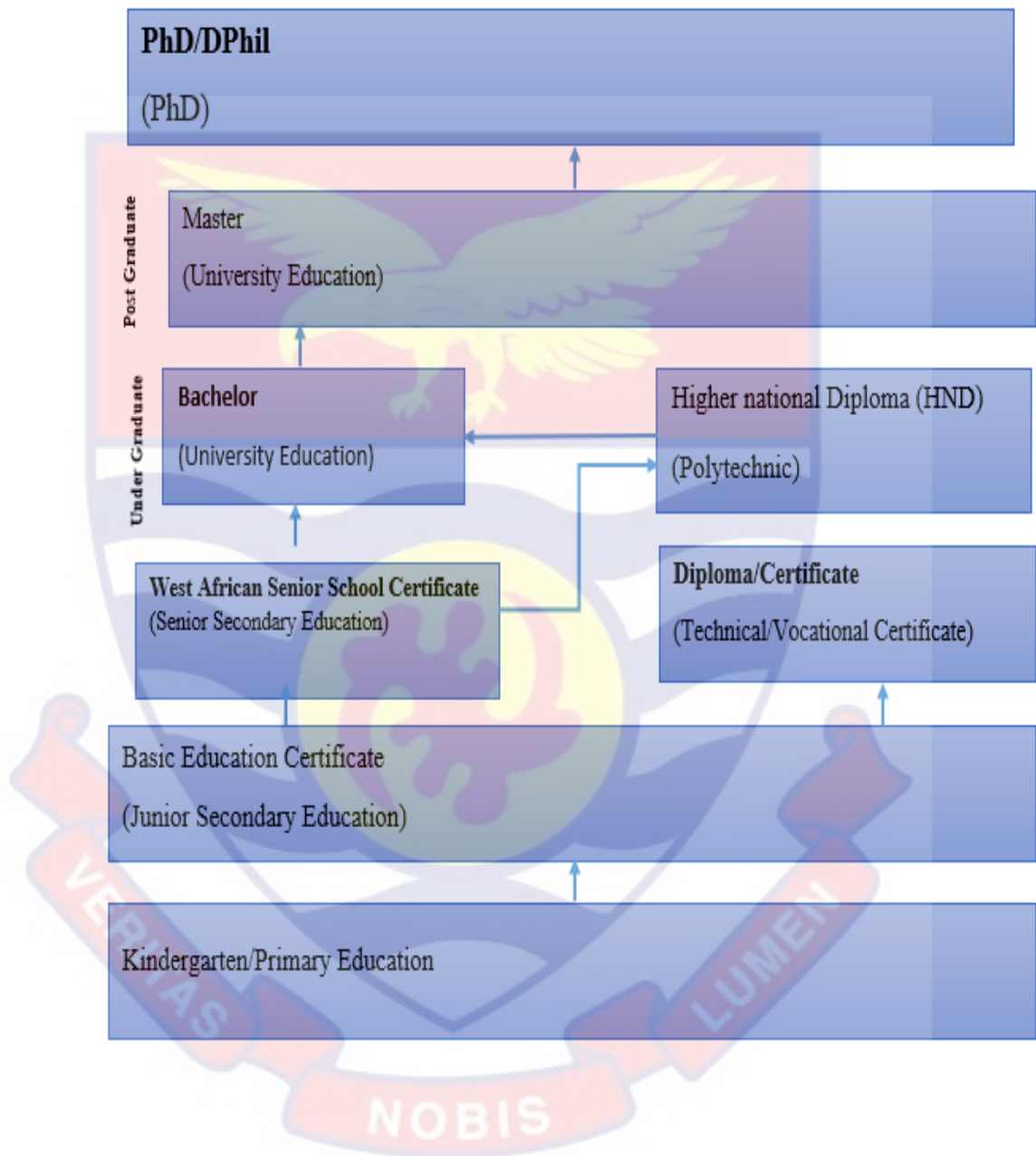






Appendix E

Ghana' Educational Structure



Appendix F

Sample Bill Sheet of Students during Cost sharing Era



AWUDOME SECONDARY SCHOOL

(Ghana Education Service)

P.O. Box 33, Tsito V/R tel. 091-28141

Official Receipt

ASS No.

1 ST YEAR 2016/17	1 ST TERM	2 ND TERM	3 RD TERM	
School Fees	967.20	620.20	719.20	
Second Year 2017/18	524.20	534.20	534.20	
Third Year 2018/19	534.70	957.90	-	
P.T. A	15.00	35.00	35.00	
	35.00	55.00	55.00	
	-	-	-	

Appendix G

Receipt of Payment for Data

THE WEST AFRICAN EXAMINATIONS COUNCIL
P. O. BOX 917
ACCRA.

No. 143784
Date: 14/03/2022 20...

Received from Gayheart Mawuli Mesigbo

the sum of One hundred & fifty
Cedi's only

being payment for research (PHD)
works

1500.00 P

Cash / Cheque / P. O. / Draft No.

CODE :

Signed