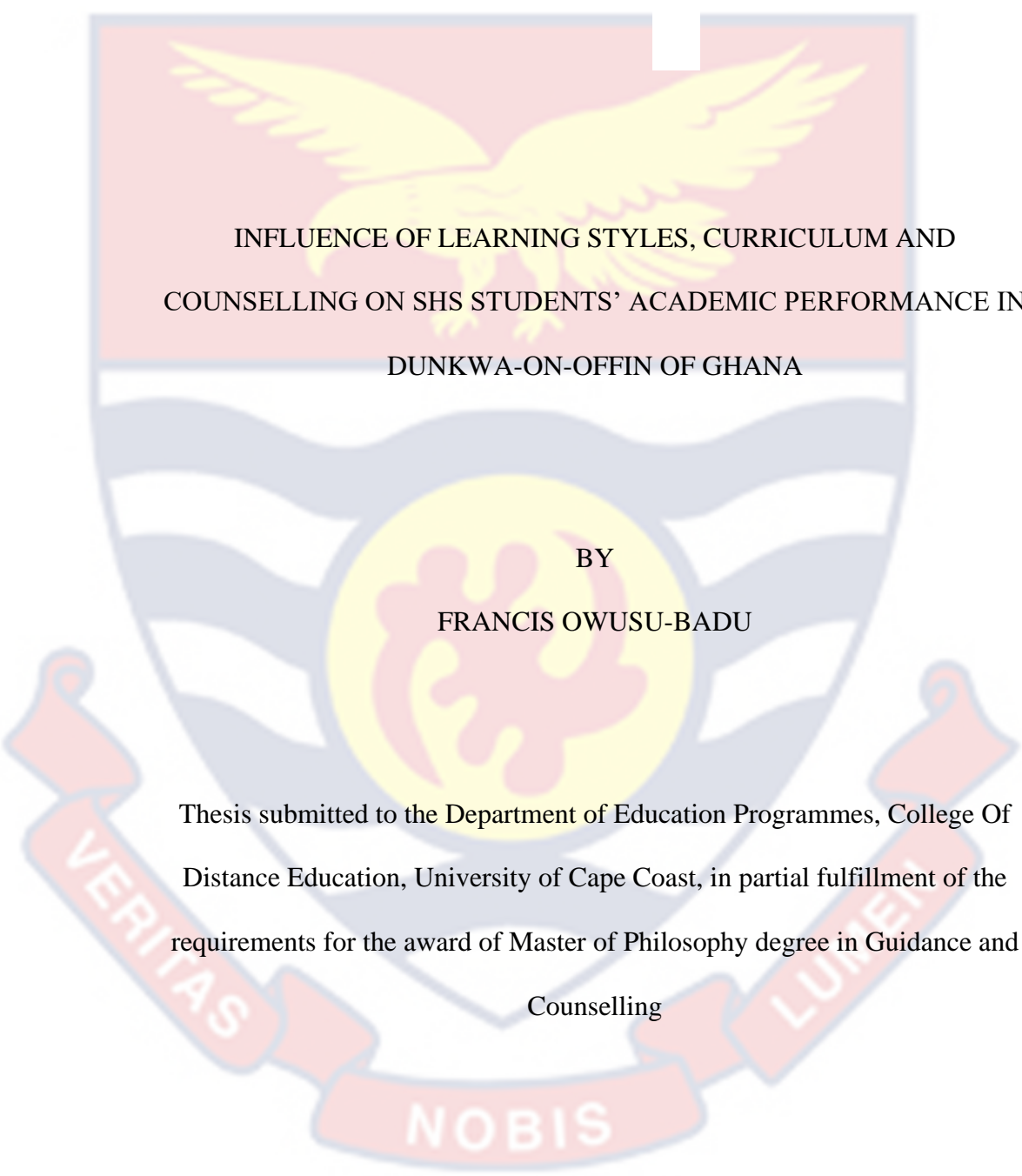


UNIVERSITY OF CAPE COAST



INFLUENCE OF LEARNING STYLES, CURRICULUM AND
COUNSELLING ON SHS STUDENTS' ACADEMIC PERFORMANCE IN
DUNKWA-ON-OFFIN OF GHANA

BY
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This thesis submitted to the Department of Education Programmes, College Of
Distance Education, University of Cape Coast, in partial fulfillment of the
requirements for the award of Master of Philosophy degree in Guidance and
Counselling

OCTOBER 2022

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature..... Date

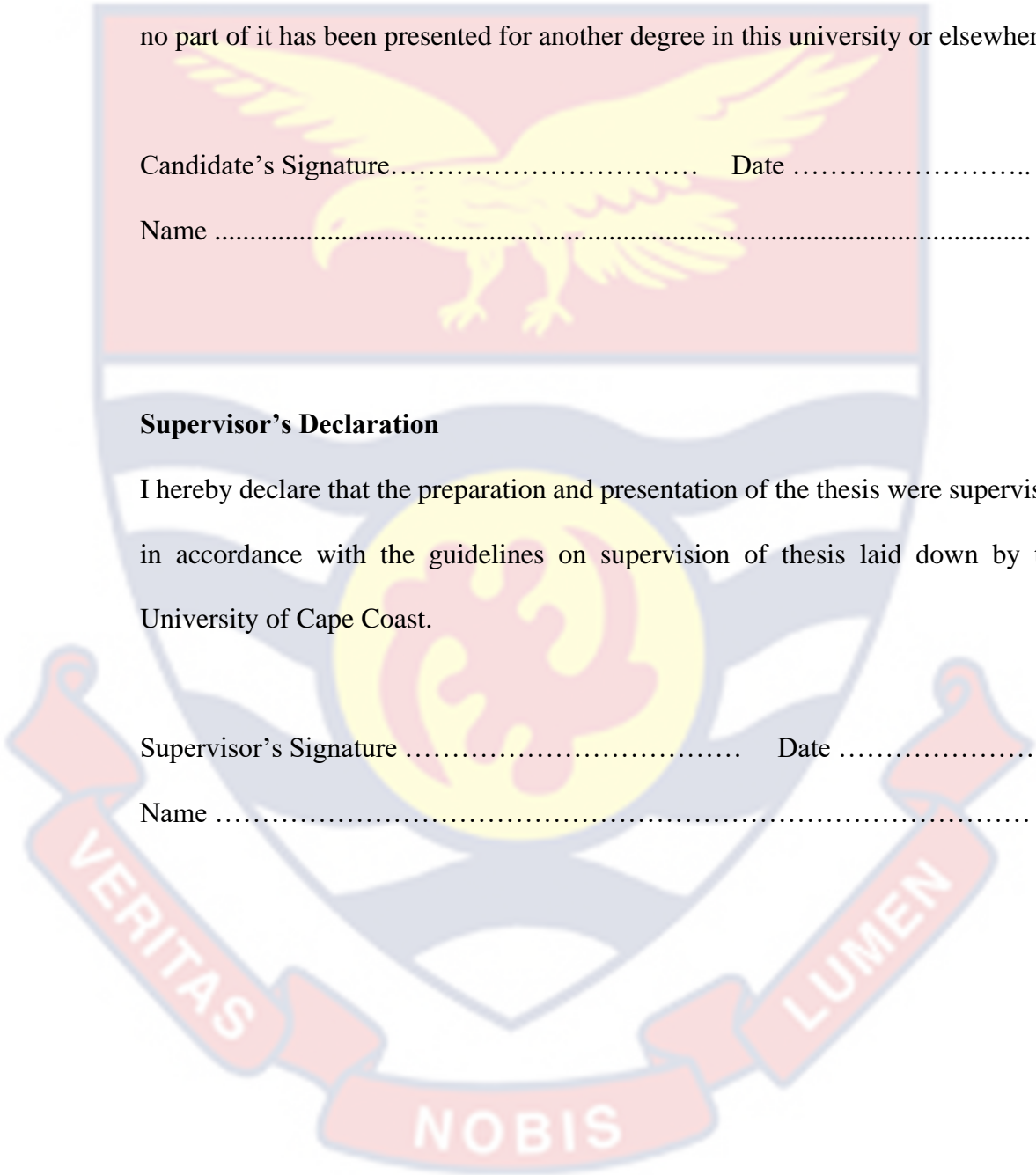
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Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature Date

Name



ABSTRACT

The study is on “influence of learning styles, curriculum and counselling on SHS students’ academic performance in Dunkwa-On-Offin of Ghana.” It is worth for such an investigation to take place at the SHS due to the crucial nature of education at that level. The study employed mixed-method design using concurrent approach. Both random and purposive sampling procedures were employed to select a sample of 117 subjects which consisted of 18 educators and 99 students. Students’ and educators’ questionnaires, interview guide, documentation and performance test were employed to collect data for the study. Both inferential and descriptive statistics were used for the qualitative aspect of the study. Content analysis was employed for the qualitative aspect of the study. Pearson’s product correlation coefficient, frequency and percentage tables, means and standard deviations were employed to analyse the quantitative data that were gathered. The findings of the study revealed that the variables under study such as learning styles of students, SHS objective-based core curriculum of learning and counselling were contributory factors affecting academic performance at the SHS level. The study recommended that stakeholders such as the government and policy makers of education come out with a more workable SHS core curriculum of learning. It is again recommended that SHS educators appropriately implement the core curriculum of learning while applying appropriate teaching strategies taking into consideration the students’ learning styles, and effective application of counselling. SHS students are also expected to learn hard making good use of their most preferred learning styles and availing themselves for counselling activities for their academic performance to be improved better.

KEY WORDS

Academic performance

Curriculum

Counselling

Educants

Examination

Learning styles



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DEDICATION

To Rev. Fathers and the entire Owusu-Badu family.



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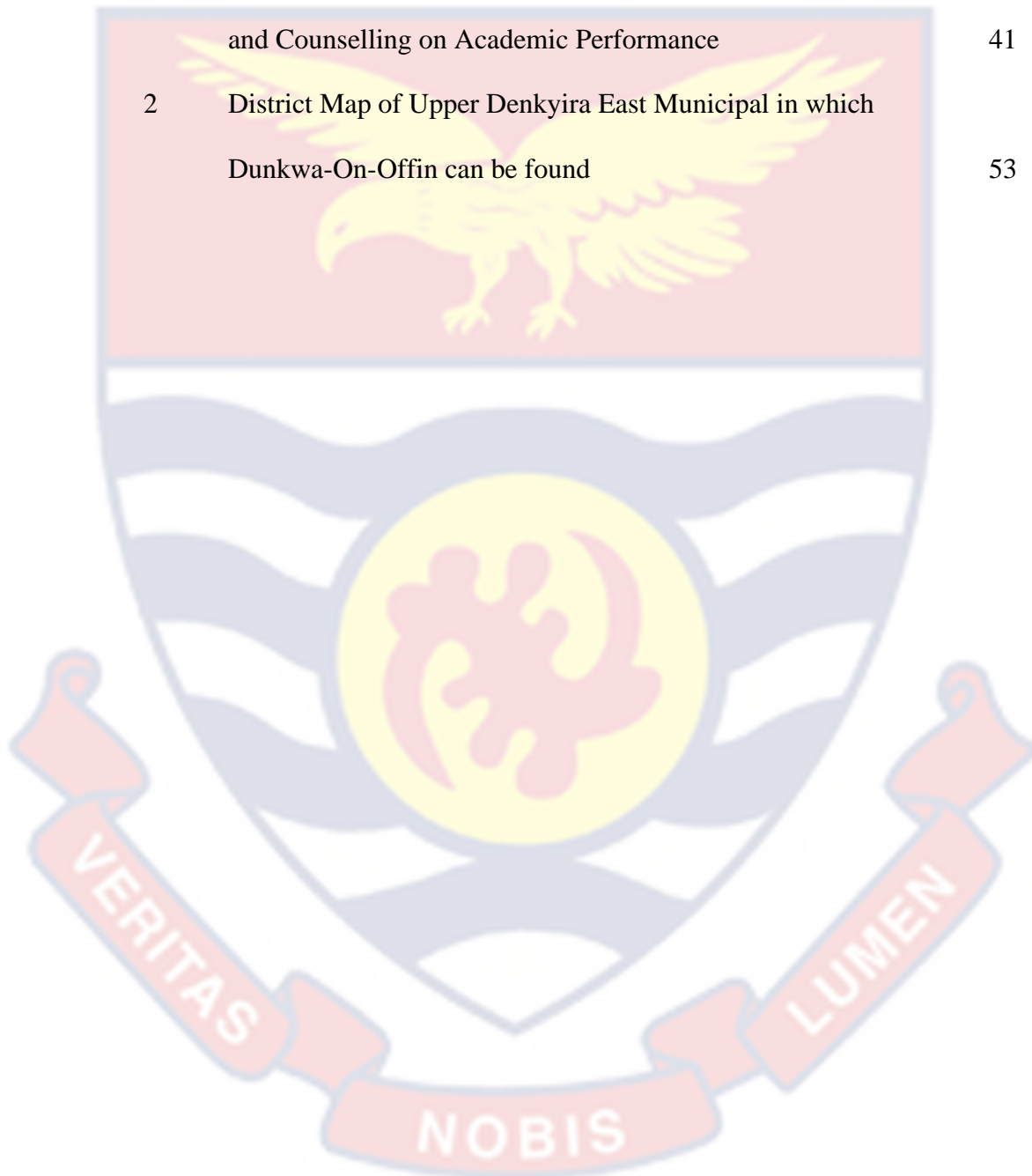


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LIST OF ACRONYMSThe background of the page features a large, semi-transparent watermark of the University of Cape Coast logo. The logo is a shield-shaped crest with a yellow eagle with outstretched wings at the top. Below the eagle is a yellow circle containing a red and white emblem. The shield is flanked by two red banners with white text: 'VERITAS' on the left and 'LUMEN' on the right. At the bottom of the shield is a red banner with white text: 'NOBIS'.

AIDS –	Acquired Immune Deficiency Virus
BECE –	Basic Education Certificate Examination
CRDU –	Curriculum and Research Division Unit
G&C –	Guidance and Counselling
GDP –	Gross Domestic Product
ESP –	Educational Strategic Plan
GES –	Ghana Education Service
GoG –	Government of Ghana
HIV –	Human Immuno Virus
JHS –	Junior Secondary School
LI –	Legislative Instrument
MOE –	Ministry of Education
NaCCA –	National Council for Curriculum and Assessment
NEP –	National Education Plan
NCCE –	National Commission on Civic Education
SABER –	Systems Approach for Better Education Results
SHS –	Senior High School
SPSS –	Statistical Package for Social Sciences
SSSCE –	Senior Secondary School Certificate Examination
STEM –	Science, Technology, Engineering and Mathematics

UNESCO – United Nation’s Educational Scientific and Cultural Organisation

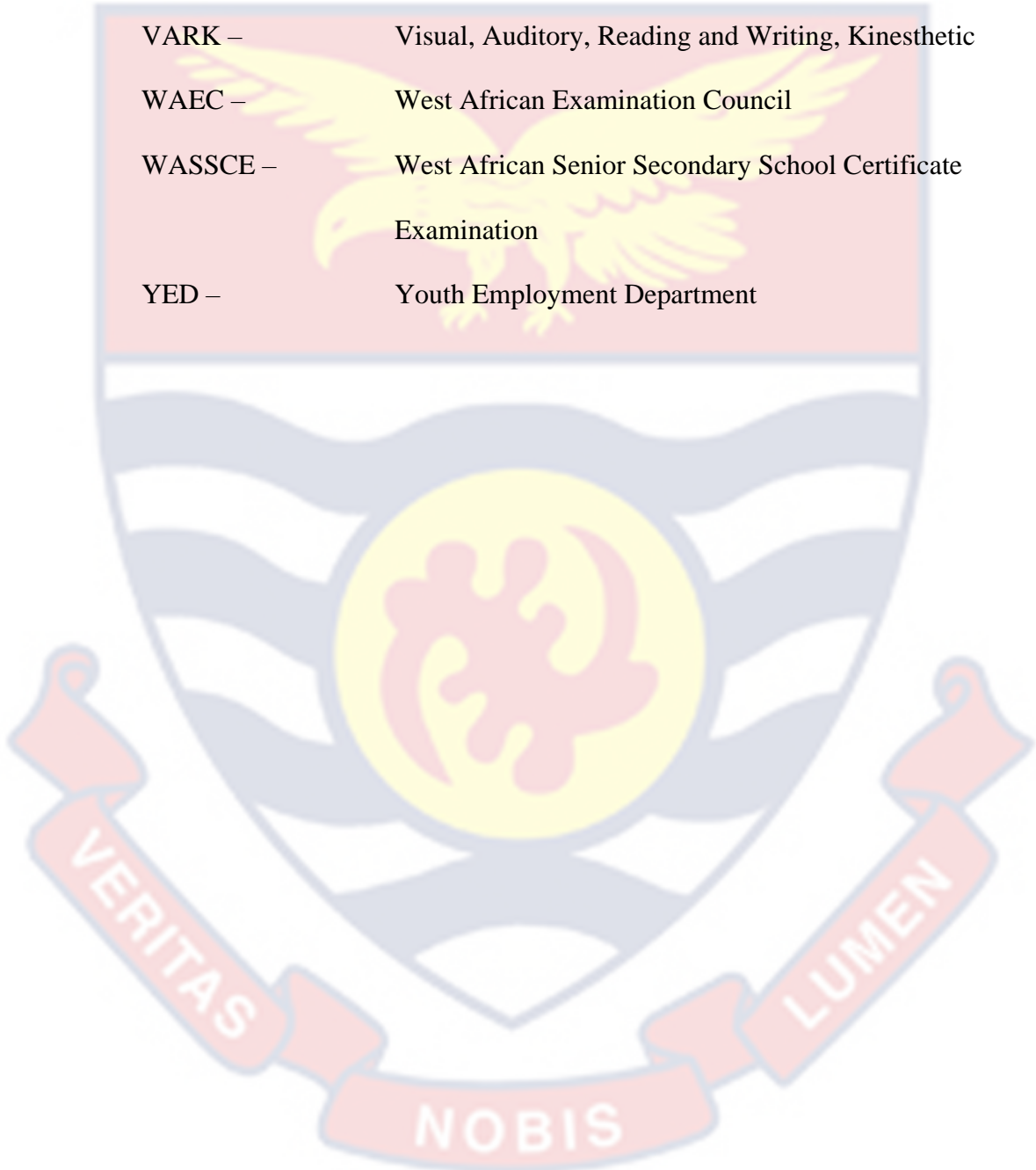
UNICEF – United Nation’s Children Education Fund

VARK – Visual, Auditory, Reading and Writing, Kinesthetic

WAEC – West African Examination Council

WASSCE – West African Senior Secondary School Certificate Examination

YED – Youth Employment Department



CHAPTER ONE

INTRODUCTION

Globally, the pursuit of academic excellence is the dream of all and sundry (Romerhausen, 2013). All over the world, and Ghana specifically, the growth of education and the development of human resource in education are considered as an efficacious antidote in qualitative increase in man. High academic standard of educants has been the brain behind the fundamental aims of planners in education. Educants can unearth their natural gifts and capacities guided by the aims of education. A yardstick to assess high standard of education is how educants excel in schooling. In the light of this, excelling well academically is now a pressing need of all stakeholders such as educants, educators, guardians, institutional administrators and the vast society. Researchers have tried in varied means in diagnosing what is behind poor academic performance (Ikpi, Enya & Umoh, 2014). Numerous researchers priority have been into making enquiring into the nature of the institution, delivering approaches, the environment of the institution, availability of educants and instructors' resources, educators' qualification together with their know-how. The brain behind the study is to also make enquiry into this canker of abysmal academic performance using students' learning styles, SHS objective-based core curriculum of learning and counselling to ascertain their influence on this worldly canker.

Background to the Study

In contemporary times, education is of no doubt the backbone to the development of all nations. No society can progress socially, economically,

culturally, politically, religiously as well as scientifically without education (Owusu-Badu, Pantah, & Seinu, 2007). According to Parankimalil (2012), education a step by step means in which an infant or a grown-up person acquires knowledge, experiences, skill and sound attitude. Parankimalil added that it inculcates in a person an attitude of civilization which makes him/her well-polished, mannered and educated. Amaah, Ato-Davies and Kpeyibor (2019) also consider education as helping students develop their natural talents and skills so that they can exert greater agency over their lives and more fully realise their potential. In this age of rapid technological development and widespread international exchange, they see education as essential to success in any endeavour. It is intrinsically tied to an individual's happiness and prospects for a better life, and it plays a critical part in the accumulation of human capital.

The growth of human resources and the economy of a country can only benefit from a robust educational system that can evolve with the times (Amaah et al., 2019). Schools are instituted with a sole motive of transferring knowledge and skills to the beneficiaries. Amaah et al. further indicated that academic performance based on examination results and other indicators such as the level of skills and knowledge the products bring to bear in their sphere of life are some of the major criteria stakeholders of education use to assess the quality of education. This leads to a quest of enhancing the academic performance of students. The most important entity for any educational institution is the learners. This assertion holds only when academic performance of students is well enhanced. The emphasis of this work is on influence of learning styles, curriculum and counselling on SHS students' academic performance in Dunkwa-On-Offin. The ability of students academically at the senior high

school grade in Ghana seems to be a challenge because a lot of researches have been done on poor academic performance of students in Ghana's senior high schools in many ways over the years. For instance, Asamoah, Quainoo, Adom-Fynn, Yally and Afranie (2020) enquired into home and students factors influencing students' academic performance in core mathematics in the Kumasi Metropolis of Ghana.

State and local education officials and communities can use students' academic performance as a yardstick for evaluation. This aids them in selecting an acceptable curriculum, administrative laws, health programme, staff development activity, and evaluation plan. Policies that increase academic achievement through coordination, consistency, and coherence are encouraged. In the context of education, scholastic students' performance is frequently seen as an indicator of programme excellence. The pursuit of academic performance is a quest as old as humanity itself (Mukhopadhyay, 2005). Mukhopadhyay claimed that academic performance is the impetus behind every human accomplishment. Mukhopadhyay makes it apparent that determining academic performance of students in education is difficult because it involves the most delicate creature on the planet: human beings. Mukhopadhyay's argument is that unlike the manufacturing sector, education does not produce anything tangible at the end.

According to World Declaration on Education for all in 1990 (as cited in Zainul-Deen, 2011), the poor academic performance of students in education is a barrier to the socio-economic development of nations, especially the undeveloped ones. Therefore, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) advised that high-quality education that

produces excellent academic performance be made broadly available and be very useful to the socio-economic needs of nations (UNESCO, 2005).

The World Declaration on Education for all in 1990 noted that poor academic performance of students in education is a hindrance to the socio-economic development of nations especially the underdeveloped ones. United Nation's Educational Scientific and Cultural Organisation (UNESCO) therefore recommended that quality education leading to high academic performance of students should not only be made universally available but also more relevant to socio-economic needs of nations (UNESCO, 2005). The Declaration affirmed that quality should be seen as a prerequisite for achieving high academic performance of students and the fundamental goal of equity. What makes it challenging is that bringing education to the door step of everybody is not enough to lift up academic performance and the qualitative increase of man and where he finds himself (UNESCO, 2005). In view of this, the World Bank (2013) identifies and maintains that equitable access to quality secondary education is a factor enhancing academic performance and a country's economic growth performance.

On the other side of the coin, quality education leading to high academic performance has currently become very necessary in African's quest to be at par with the developed continents. Quality of education leading to high academic performance has resulted in the need for Africans to seek assistance internationally to expand and improve their educational system (Ankomah, Koomson, Bonsu, & Oduro, 2005). Ankomah et al. further stated that Africa searches for means to let those of school going age to attend school and be retained at school, improving upon students' academic ability, increasing the

number of the teaching force, and adequate provision of time for learning and addressing other challenges which adversely affect students' academic performance at the various levels of education more specifically; at the senior secondary grade.

Governments which have ascended the throne to govern have attempted to improve the educational system by formulating and implementing new policies, and even better, by forming committees to evaluate or make reformation on the system of education in an effort to give it a fresh look (Ankomah et al., 2005). Nonetheless, there are various factors preventing the current educational system in Ghana from meeting the necessary expectations (Ankomah et al., 2005). Quist (2003) found that the primary issue affecting students' academic performance in Ghana's second-cycle institutions was inadequate funding. In his perspective, money apportioned for the sector of education is insufficient and almost 90 percent of that money for the second cycle education is use to pay wages and salaries and the remaining is used in the investment of education. The resultant effect of this is poor education infrastructure leading to abysmal academic performance of students at the second cycle. Fortunately, Quist's claims of inadequacy of funding in education affecting students' academic performance has come to be addressed by the National Educational Plan. The Plan has targeted six percent of the GDP to boost up investment in the education sector. From 2008 to 2019, government spending fluctuated with the highest flows recorded in 2011 of 8.14 percent GDP and 7.92 percent GDP in 2012. Over the five years leading to 2018, the government allocated between 12 and 15 percent of the national budget to education (Sasu, 2020).

Though Mosha (2006) came out that teachers are the roots of educational growth leading to good academic performance of students in learning at every grade level, there are inefficiencies in the second cycle institutions in Upper Dunkwa-On-Offin despite the hardworking of the teachers.

The place has been encountering with some factors influencing academic performance of students at the SHS level if examination results and other qualitative indicators are used as yardsticks.

No senior high school in the town has ever been part of the first ten top schools in the region. WAEC WASSCE data released (as cited in Ghana Education Service, 2019) on 2018 WASSCE results league table on how the schools in Central Region performed, both Boa-Amponsem and Dunkwa Secondary/Technical were not among the “Ten Best Performing” schools out of the 69 schools in the region not to talk of the national league table.

Besides the poor academic performance of students in WASSCE examinations, qualitatively, anecdotal reports I made through my observation in both Boa-Amponsem and Dunkwa Sec/Tec schools also attest to poor academic performance. Also, the interview I conducted in these two schools with some educants and educators in these two schools have proven that academic abilities of students in these second cycle institutions are very weak. Through students’ portfolio obtained in the school, it has revealed that most of the SHS students are unable to perform simple academic tasks which are even below their standard. According to one of the assistant headmasters of the schools, most of the students cannot work out simple arithmetic problems meant for the primary level. They are unable to understand and express themselves clearly in the English Language both orally and written. Most of them, fluent

reading too is a challenge to them. Their understanding level and grasping of facts and concepts meant for the SHS level of education are very poor. There are reports from some of the staff of the schools to indicate that the outcome of both the informal and formal assessment of the students is poor. These go a long way to buttress the point that there are indeed some factors influencing academic performance in these schools.

Factors accounting for educants' performance academically remain a subject of great concern to all Ghanaians. It is necessary to obtain adequate information that can assist me to explain these variables influencing students' academic performance at the SHS level. When workable solutions are found and adapted by all and sundry, senior high schools would be properly developed to witness good academic performance of students. In this way, institutions of higher learning will end up producing people who may possess adequate knowledge to push the country in its quest to become a middle-income country. Hence, the need to make enquiry into the influencing variables affecting educants' academic excellence in senior high institutions in Dunkwa-On-Offin.

Statement of the Problem

There are many ways for people to make it in life globally in which education is one of the means. However, tremendous efforts have been put up to enable students to perform better at school. (Bell, 2017). According to Bell, guardians take their children's academic excellence seriously due to the versatile opportunities attached to education in the world of work. Owing to how wearisome poor academic performance is to everybody, researchers continue to research into it to find an antidote to minimise it, if not to eradicate

it. In an advanced country like the USA, Kaylee, Marissa, Carrie and Sean (2022) researched into the recent trend in academic performance in USA using precision-weighted random effects. In a developing country like Tanzania and Ghana respectively, Jamillah (2016) also researched into the factors affecting students' academic performance in some public secondary schools in Tanzania, while Yakubu (2021) also researched into the factors influencing the academic performance of girls in the Tolon district of Ghana using an assessment framework. What is creating a knowledge gap are the differences in environments such studies were conducted, the variable factors employed and the approaches used including the theories underlying my work. For instance, for the approach, while quantitative and qualitative approaches were used for such similar studies as mentioned above in USA and in Ghana respectively, I employed mixed-method for this study.

Bell (2017) view's is the quest of all stakeholders of education including governments. According to the government of Ghana (2019), the Education Strategic Plan (2018 - 2030) has three main goals. These are; sustainable and efficient management, financing, and accountability of education delivery; increasing equal access to and participation in inclusive quality education at all levels; and improving the quality of teaching in STEM (science, technology, engineering, and mathematics). The Education plan as stated above proposes allocating 4-6% of GDP or 15-20% of government spending on education as an international baseline. In an attempt to implementing the above plan, government is seeing to it that education becomes better and accessible at all grades by expanding and increasing the number of schools especially at the second cycle. Government is again providing books, furniture and some other

needed resources such as teaching and learning packs at the senior high school level. Notwithstanding the government's efforts, due to the crucial nature of education, most parents and other stakeholders also invest many resources to ensure quality education leading to good academic performance of students.

The educational system is such that it is those who perform very well academically who are deemed suitable for prestigious jobs (Owusu-Badu, Pantah, & Seinu, 2007). Owusu-Badu et al. further claimed that those who fail to perform creditably are made to resort to less prestigious and less lucrative jobs which the economy is able to provide. Hence, students' success has been the dream of all stakeholders of education especially parents. Despite the attempts of the government and those others who have a stake in education, it appears the academic performance of the students academically in the second cycle institutions in the town depicts a disturbing picture. Whenever students fail to reach the desired level of academic performance, they are stigmatized as being a waste and what is more, a failure. It is in this light that the factors influencing students' academic performance at the SHS level have become a disturbing issue in the town and the country as a whole.

The senior high schools in Dunkwa-On-Offin has been experiencing abysmal students' academic performance if examination and other qualitative indicators are used as yardsticks. West African Senior Secondary School Certificate Examination (WASSCE) outcomes over the years and qualitative indicators such as anecdotal records, students' portfolio and interviews depict a state of poor academic performance.

WASSCE analysis from both schools from 2016 to 2018 threw more light to the state of academic performance in both schools. The interpretation of

the grades as appear in the analysis are as follows; A1 – Excellent (Grade1), B2 – Very Good (Grade 2), B3 – Good (Grade 3), C4 – Above Average (Grade 4), C6 – Average (Grade 5), D7 – Below Average (Grade 8) and F9 – Fail (9).

Boa-Amposem WASSCE Results Analysis for the Core Subjects

Total Number of Candidates - 465

Table 1: 2018 WASSCE Results Analysis

Grades	English	%	Maths	%	Science	%	Social Stds	%
A1 – B3	6	1.3	11	2.4	18	3.9	158	34
C4 – C6	110	23.7	42	9.0	151	32.6	164	35.2
D7 – E8	233	50.1	170	36.6	250	53.4	89	19.2
F9	116	24.9	242	52.0	46	9.9	54	11.6

Source: From Boa-Amposem School Administration (2019)

Total Number of Candidates - 585

Table 2: 2017 WASSCE Results Analysis

Grades	English	%	Maths	%	Science	%	Social Stds	%
A1 – B3	22	3.8	193	33	110	18.8	126	21.5
C4 – C6	375	63.9	285	48.7	344	58.8	269	46
D7 – E8	149	25.5	98	16.8	123	21	134	22.9
F9	40	6.8	9	1.5	8	1.4	53	9.2

Source: From Boa-Amposem School Administration (2018)

Total Number of Candidates – 522

Grades	English	%	Maths	%	Science	%	Social Stds	%
A1- B3	84	16.1	446	85.4	47	9	98	18.9
C4 – C6	342	65.5	74	14.4	313	60	245	46.9
D7 – E8	90	17.2	0	0	151	28.9	110	21.3
F9	10	1.0	2	0.4	11	2.1	67	12.9

Source: From Boa-Amponsem School Administration (2017)

In 2018 WASSCE analysis by Boa-Amponsem school as shown above, out of the 465 candidates who wrote the examination as shown in Table 1, the following candidates had A1 – B3 in the various core subjects. English – six (6) representing 1.3%, Mathematics – 11 representing 2.4%, Integrated Science – 18 representing 3.9% and Social Studies – 158 representing 34%. Those who failed (F9) in the various core subjects stood to be; English – 116 representing 24.9%, Mathematics – 242 representing 52%, Integrated Science – 46 representing 9.9% and Social Studies – 54 representing 11.6%. In all, with the exception of Social Studies, students who failed were more than those who obtained quality grades.

Also, in 2017 WASSCE analysis by Boa-Amponsem school, out of the 585 candidates who wrote the examination as shown in Table 2, the following candidates had A1 – B3 in the various core subjects. English – 22 representing 3.8%, Mathematics – 198 representing 33%, Integrated Science – 110 representing 18.8% and Social Studies – 126 representing 21.5%. Those who failed (F9) in the various core subjects stood to be; English – 40 representing 6.8%, Mathematics – nine (9) representing 1.5%, Integrated Science – eight (8) representing 1.4% and Social Studies – 53 representing 9.2%. In all, the number

of candidates who had quality grades (A1-B3) in each of the various subjects were less than half of the total number of the candidates.

Moreover, in 2016 WASSCE analysis by Boa-Amponsem school, out of the 522 candidates who wrote the examination as shown in Table 3, the following candidates had A1 – B3 in the various core subjects. English – 84 representing 16.1%, Mathematics – 446 representing 85.4%, Integrated Science – 47 representing 9% and Social Studies – 98 representing 18.9%. Those who failed (F9) in the various core subjects stood to be; English – 10 representing 1.0%, Mathematics – two (2) representing 0.4%, Integrated Science – 11 representing 2.1% and Social Studies – 67 representing 12.9%. In all, it is only English and Mathematics the number of candidates who had quality grades (A1-B3) was more than half of the total number of the candidates. However, basing on core Science and Social Studies as a visa needed to add to both Mathematics and English for further studies, the implication is that more than half of the candidates cannot further their education.

Dunkwa Secondary/Technical Results Analysis for the Core Subjects

Total Number of Candidates - 307

Table 3: 2016 WASSCE Results Analysis

Grades	English	%	Maths	%	Science	%	Social Stds	%
A1 – B3	2	0.7	0	0	2	0.7	12	4
C4 –C6	56	18.3	89	29	30	9.8	48	15.6
D7 – E8	124	40.4	185	60.3	114	37.1	82	26.7
F9	125	40.6	33	10.7	161	52.4	165	53.7

Source: From Dunkwa Secondary/Technical School Administration (2019)

Total Number of Candidates – 248

Table 4: 2017 WASSCE Results Analysis

Grades	English	%	Maths	%	Science	%	Social	%
							Stds	
A1 –B3	0	0	21	8.5	20	8.1	15	6.0
C4– C6	21	8.5	50	20.2	49	19.8	47	19
D7 - E8	81	32.6	80	32.3	40	16.1	64	25.8
F9	146	58.9	97	39	139	56	122	49.2

Source: From Dunkwa Secondary/Technical School Administration (2018)

Total Number of Candidates - 529

Table 5: 2016 WASSCE Results Analysis

Grades	English	%	Maths	%	Science	%	Social	%
							Stds	
A1– B3	13	2.6	47	8.9	9	1.7	66	12.5
C4– C6	148	27.9	184	34.8	60	11.3	140	26.5
D7– E8	226	42.7	231	43.7	242	45.8	74	14
F9	142	26.8	67	12.6	218	41.2	249	47

Source: From Dunkwa Secondary/Technical School Administration (2017)

In the same way, for Dunkwa Secondary/Technical WASSCE analysis by the school as depicted above, out of the 307 candidates who wrote the examination as shown in Table 4, the following candidates had A1 – B3 in the various core subjects. English – two (2) representing 0.7%, Mathematics – zero (0) representing 0%, Integrated Science – two (2) representing 0.7% and Social Studies – 12 representing 4%. Those who failed (F9) in the various core subjects stood to be; English – 125 representing 40.6%, Mathematics – 33 representing 10.7%, Integrated Science – 161 representing 52.4% and Social Studies – 165 representing 53.5%. In all, the number of candidates who had quality grades (A1-B3) in each of the various subjects was completely insignificant.

Also, in 2017 WASSCE analysis by Dunkwa Secondary/Technical school, out of the 248 candidates who wrote the examination as shown in Table 5, the following candidates had A1 – B3 in the various core subjects. English – zero (0) representing 0%, Mathematics – 21 representing 8.5%, Integrated Science – 20 representing 8.8% and Social Studies – 15 representing 6.0%. Those who failed (F9) in the various core subjects stood to be; English – 146 representing 58.5%, Mathematics – 97 representing 39%, Integrated Science – 139 representing 56% and Social Studies – 122 representing 49.2%. In all, the number of candidates who had quality grades (A1-B3) in each of the various subjects was very insignificant.

Furthermore, Dunkwa Secondary/Technical 2018 WASSCE analysis as shown in Table 6, out of the 529 candidates, the following number of candidates

had A1 – B3 in the various core subjects. English – 13 representing 2.6%, Mathematics – 47 representing 8.9%, Integrated Science – nine (9) representing 1.7% and Social Studies – 66 representing 12.5%. Those who failed (F9) in the various core subjects stood to be; English – 142 representing 26.8%, Mathematics – 67 representing 12.6%, Integrated Science – 218 representing 41.2% and Social Studies – 249 representing 47%. In all, the number of students who failed were also more than those who obtained quality grades.

Despite the attempts taken by those who have stake in education with the purpose of improving the academic performance of students in the senior secondary schools in the town, the performance is still nothing good to write home about. This implies that there might still be some unidentified factors influencing academic performance of students in the senior secondary schools which are depicting this disturbing picture in the town. What is agitating my mind is, “What are these possible factors influencing academic performance in these two secondary schools? These unknown factors have consequently lured me to research into the area in order to explore further some of these factors influencing academic performance in the second cycle institutions in the town. There is the need to thoroughly look into the problem because of the disturbing nature of the academic performance of the students in these senior secondary schools used for the study. It seems to me that no such study has been done on the schools especially employing the variables such as learning styles of students, SHS objective-based core curriculum and counselling holistically to investigate into the problem though a lot of studies have been done on each of these variables as related to academic performance. Rahmani (2011) of Malaysia has examined how different styles of learning correlates to student’s

academic performance. Chukwure (2017) of Botswana found out that the curriculum of Botswana is not effective to enhance academic performance. Finally, Odhiambo (2012) of Kenya has also found out through a study that ineffective guidance services affect students' performance.

Purpose of the Study

The rationale of the study was to use learning styles, SHS objective-based core curriculum of learning and counselling to investigate into how these variables influence academic performance of senior secondary schools in Dunkwa-On-Offin. Specifically, this investigation was guided by three (3) objectives.

Research Objectives

1. To investigate how students' learning styles influence their academic performance at the SHS level in Dunkwa-On-Offin.
2. To analyse how the SHS's objective-based core curriculum of learning influence students' academic performance at the SHS level in Dunkwa-On-Offin.
3. To examine the influence of counselling on academic performance of students at the SHS level in Dunkwa-On-Offin.

Research Questions

The study therefore sought to answer the following research questions.

1. How can learning styles of students influence their academic performance at the SHS level in Dunkwa-On-Offin?

2. How can SHS's objective-based core curriculum of learning influence academic performance of students at the SHS in Dunkwa-On-Offin?
3. How can counselling influence academic performance of students at the SHS level in Dunkwa-On-Offin?

Hypotheses

The following are the research hypotheses both null hypotheses (H_0) and alternative hypotheses (H_1) formulated to direct the argument of the study;

1. H_0 : There is no statistically significant relationship between learning styles of students and their academic performance at the SHS level in Dunkwa-On-Offin.
 H_1 : There is statistically significant relationship between learning styles of students and their academic performance at the SHS level in Dunkwa-On-Offin.
2. H_0 : There is no statistically significant relationship between the SHS's objective-based core curriculum of learning and academic performance of students in Dunkwa-On-Offin.
 H_1 : There is statistically significant relationship between the SHS's objective-based core curriculum of learning and academic performance of students in Dunkwa-On-Offin.
3. H_0 : There is no statistically significant relationship between counselling and academic performance of students at the SHS in Dunkwa-On-Offin.
 H_1 : There is statistically significant relationship between counselling and academic performance of students at the SHS in Dunkwa-On-Offin.

Significance of the Study

The study targets the factors influencing students' academic performance at the SHS level in Dunkwa-On-Offin. The outcome of this study will be made available to the reading public/parents, facilitators/individual educators, headmistresses/headmasters, educational planners/ other administrators including the government and researchers. It is hopeful that the outcomes of the investigation will be beneficial to all and sundry. This will help to educate them on the factors challenging educants on their performance academically at the SHS. Parents and the reading public when well informed about these challenging factors leading to students' abysmal performance academically will be able to adopt strategies that will assist the students and the schools so that students' academic performance can be improved tremendously.

In schools, facilitators can base on the information to bring variety in their delivery strategies to suit the individuality of the educants at the senior high school level. It will also create a simulating environment for effective learning. Students will also be able to plan and adjust their ways of learning to improve their academic performance. Headmasters/headmistress will also get to know the factors influencing students' academic performance after reading the work. It will let them act on time to curb down these influencing factors affecting academic performance negatively for the situation to be reversed for academic performance to be well enhanced.

Policy makers (educational planners, administrators and the government) as stakeholders of education are also not left out. With the kind of work they do, an adequate knowledge of factors which are contributory factors

to students' academic performance will place policy makers in a better position to put in place appropriate measures on these challenges working against the academic performance of educants. Researchers and would be researchers would also benefit from it. In the sense that it will be material available to researchers for them to refer to as well as would be researchers who would want to embark on similar study in the future.

Delimitations

In investigating into the problem of study, I confined my variables to students' learning style, SHS core curriculum of learning and counselling. These variable factors were chosen because apart from few studies on academic performance which have employed such variables, no study has been conducted using such named variables holistically.

The investigation was also confined to two schools; Dunkwa Senior Secondary/Technical and Boa-Amponsem Senior Secondary schools in Dunkwa. These two senior secondary schools have been chosen because of their performances in WASSCE over the years which is depicting that there are factors leading to the abysmal performance of students academically at the SHS level in Dunkwa-On-Offin.

Also, my focus on the research was on public senior secondary schools and a geographical area, Dunkwa-On-Offin. These two schools were the only public senior secondary schools in the place. I also anticipated that restricting myself to these only two schools and the variables used in investigating the phenomenon will yield the needed and reliable results for generalization.

Limitations

Investigative findings and their potential applications may be constrained by factors outside of the researcher's control, as described by Best and Kahn (1998). Though the use of mixed-method made it possible for both the qualitative and quantitative data to cover up the weaknesses of each other for the study, there is the need to make known some of such weaknesses of each of them which are embodied in the mixed-method.

Questionnaire and test failed to give detailed picture on the experiences of the respondents. Again, I was not able to follow up on respondents' responses when there was the need to do so for further probing. Some of other challenges were delay in answering of items of the questionnaire, inappropriate feedbacks from respondents and some blank items detected in the responded questionnaires and test. In instances too, there were inadequate responses from the respondents. I did effective monitoring to be able to overcome these challenges.

Furthermore, interviewing the educators such as the headmasters, assistants and the counselling co-ordinators was challenging due to their busy schedule. Furthermore, this qualitative instrument was restricted to only some few educators for the study which excluded students due to its time-consuming nature. Though the interview was scheduled, yet getting the time and attention of the participants was somehow hectic.

Also, obtaining up-to-date readily documented data was challenging. However, I devotedly and patiently used diplomatic means in obtaining them and ensured their accuracy.

A large sample size would have been used, using both the quantitative and qualitative instruments for the study. But due to challenges such as inadequacy of time and busy schedule of the subjects as well as time consuming nature of the use of some of the instruments like interviewing, the investigation was confined to few respondents and participants in the two institutions in Dunkwa-On-Offin of Ghana. The study's restrictions to a sample of only two (2) senior high schools and only three factors used to investigate into it, and limited sample size might have affected the generalization of the findings.

Definition of Terms

Academic performance – It refers to how well a person excels in examination in the course of instruction and after a course of instruction through testing.

Anecdotal records – Consist of quick, handwritten notes taken immediately after observing a student.

Core curriculum – It is subjects for an institution considered as requirement or basic in acquisition of skills or common knowledge in which all students must pursue.

Curriculum – The interaction of students with instructional content, materials, resources, and processes in order to assess their attainment of educational goals.

Educational system – It incorporates the laws, policies, and regulations, public funding, apportion of resources and methods for computing levels of funding that are necessary to educate students in public schools.

Examination – Assessment of one's level of expertise in a particular field using a series of standardised questions.

Learning style –People’s own unique way of learning that takes into account their individual preferences, talents, and weaknesses.

Objective-based curriculum- a set of guidelines for achieving academic success, with objectives having a direct bearing on student's enrolment in certain courses.

Portfolio –It is a well-organized, tightly-focused compilation of student work meant to demonstrate growth over time.

Standard-based curriculum –It is a curriculum established by analysing (district, state, or national) requirements and defining the abilities, knowledge, and attitudes that students must display to satisfy these criteria.

Organization of the Study

The thesis has been divided into five chapters. Chapter one dealt with the introduction to the study, which included background to the study, statement of the problem, purpose of the study including research objectives, research questions and the research hypotheses. Others were the significance of the study, delimitations, limitations, definition of terms and finally, the organization of the study.

Chapter two covered the review of the related literature. Areas covered included students’ learning styles, the curriculum of learning and guidance and counselling.

Chapter three dealt with the methodology that was used in the research. The chapter addressed research design, study area, population, sampling procedure, data collection instruments and validity and reliability of the instruments. Others were data collection procedures and data processing and analysis.

Chapter four outlined the results and discussion of the study. Finally, chapter five covered the summary, conclusions, recommendations and suggestions, and counselling implications of the study.



CHAPTER TWO

LITERATURE REVIEW

Overview

Factors influencing students' academic performance in senior secondary schools in Dunkwa-On-Offin of Ghana were the study's primary focus. The chapter presents previous research on the subject. The literature review offered the results, assertions, and observations of multiple authors on a number of characteristics thought to be among those influencing performance of students academically in senior high schools. The literature on variables such as students' learning styles, curricula, and guidance and counselling as elements considered to contribute to academic performance are reviewed. Furthermore, this chapter captured the conceptual framework and empirical studies on these variables under study. Finally, a summary of the reviewed literature is given.

Theoretical Framework of the Study

Theoretical framework is a theory that relates or underpins a study. In this study, I employed the following theories as the study's theoretical framework; Elger's theory of academic performance, Frederick Taylor's revised scientific theory of school administration and the theory of educational management by Tony Bush.

The theory of academic performance (TOP) was developed by Elger (2007). It hammers on six basic concepts to come out with a structure to be applied to understand performance together with how performance can be improved. The rationale in performing is expecting a satisfactory end product. A performance is a co-operative attempt which a single person or a team can

undertake. Achieving excellence is a course, and how well one excels is the end resultant of the course. The attained excellence rests on six factors put together as one: context, level of knowledge, level of skills, level of identity, personal factors and fixed factors. The axioms are assumed to yield excellent outcome.

They comprise a performer's mindset, immersion in an enriching environment, and being involve in reflective practice.

Performer's mindset deals with ways that result to improving emotions. For instance, aiming to overcome a difficult task, seeing failure as means of achieving high excellence, and provision of enabling environment to make a performer secured.

Immersion is putting in place physical, social, and intellectual place that can improve and sustain performance and professional improvement. What goes into it comprises social intercourse, comportment, knowing something, directly involvement in studying, feelings (both positive and negative) and spiritual equilibrium.

Reflective act comprises acts that enable an individual to be attentive in learning from experiences. Instances are taking note of the current status of achievement, marking achievements, delving into to identify success chalked and where amends needs to be made and raising acquisition of knowledge.

In applying Elger (2007) theory in this study, schooling is a course (developing performance) and the destination of the course is academic excellence which holistically depends on context, level of knowledge, skills and identity, personal factors and fixed factors. The variables (axioms) proposed for effective academic performance are utilization of students' preferred learning styles (immersion), workable curriculum of learning (performer's mindset in an

enriching environment), and effective counselling (engagement in reflective practices).

Moreover, applying Frederick Taylor's revised scientific theory of school administration, Taylor (1909) proposed that like factory machinery, humans may be programmed to operate successfully and efficiently. According to Taylor in this "man-the-machine" perspective, it was thought that in any organization, employees must be given appreciable moral and monetary motivation and equip them with conventional furnishings as inputs, and adequate supervision as a process input to constantly direct them to achieve maximum production.

Academic performance can also be emphasized in this study by putting it in a broader context (input and output). For the input process, schools have to be provided with functioning and workable curriculum (conventional furnishings), and opportunities for students to be able to effectively utilize their preferred learning styles (motivation). While intensifying counselling in schools (supervision). The resultant effect of all these factors interacting contributes to outcome of a commendable academic performance (maximization of output).

The theory of educational management by Tony Bush is also applicable to the study. The students' academic excellence is perceived as something ongoing in a form of input-output approach. The theory opines that educational management is a discipline that deals with operationalization of institutional issues. Bush (2007) claims that people have focused on educational leadership due to the conception that good leadership brings to bear efficient and effective management in schools which result to positive educants' academic results. Educational leadership ensures that inputs such as functioning and workable

curriculum, and celebrating environment for students to be able to utilize their most preferred styles of learning are provided. While counselling is also intensified for it to become a guiding process to students in the teaching-learning process. The output is the resultant effect of the interplay between these variable factors which is good academic performance.

Conceptual Review

Concept and Indicators of Quality Education

Educators do not agree on a single definition for the term "quality education." The capacity to be able to become a literate, or even better, to grasp quantitative concepts, are yet taken into account as measures of educational success (UNESCO, 2005; Watkins, 2000). The first global conference dedicated to raising education standard, the World Conference on Education for All – Jomtien in 1990 featured quality as one of the primary goals of the initiative (Bergmann, 1996). The focus, in earlier times, has been on growth. The norms that are set by the quality of education are what shape the intellectual climate, which in turn shapes educants' and graduates' worldviews and a country's capacity to run its institutions efficiently.

The World Declaration on Education in 1990 as (cited in Zainul-Deen, 2011) firstly reaffirmed the necessity of quality education in making it globally available and necessary. This proclamation asserts that high-quality education is a right for all children and that educational standard contributes greatly in determining the number of educants enrolled and how successfully they go through school. The characteristics of "the learners" (healthy, motivated students), "the processes" (effective educators employing appropriate methods

of teaching), "the content" (effective needed curricula), and "the systems" (efficient governance and fairly distribution of resources) are all part of the broader definition of "quality education" (UNESCO, 2005). This definition falls short since it does not provide a means of quantifying the features it describes.

Mosha (2006) defines quality as "the degree to which expectations are exceeded," and argues that "the quality of education is a multidimensional concept that involves a study of the interaction between contextual factors, inputs, and processes of teaching and learning in order to realise cherished goals" (inputs and outcomes).

According to Otieno (as quoted in Nghambi, 2014), there are two main ideas that make up what it means to have an excellent education. The first factor is how much information and expertise people expect schools to give their students. This component of quality of education examines the amount of either academic or value achievement to define what constitutes quality of education. The second component is the educational setting characterized with development of students' skill sets, knowledge bases, and ethical frameworks through instruction. Here, schooling takes on the characteristics of a business, with input, procedure, and product all being crucial to its success.

The five main components of UNICEF's (2000) definition of excellent education are student health, school environment, curriculum, and learning outcomes. It elaborated on these points to stress that;

1. In order for students to fully engage in their education, they need to receive the care and encouragement of their families and communities.
2. The classroom should be a place where all students, regardless of their gender, feel secure and supported by the teachers and administrators.

3. Learners should gain not only literacy and numeracy skills but also an understanding of gender, health, nutrition, HIV/AIDS prevention, and the promotion of peace through the curriculum that is developed.
4. In order to eradicate discrimination in the classroom, trained educators should employ a child-centred approach and an appropriate method of testing.
5. Learning should lead to the acquisition of knowledge, abilities, and values that are useful for contributing to national progress and taking part in democratic decision-making.

It is worthy to note that variety groups and stages of the educational system have different ideas of what constitutes a high-quality education. According to Chapman and Adams (as cited in Zainul-Deen, 2011), there will never be a time when all stakeholders will agree unanimously on what constitutes quality education, how to measure it, and how long it will last.

Influence of Learning Styles on Academic Performance

As defined by Hsieh, Jang, Hwang, and Chan (2011), a person's learning style comprises their unique combination of aptitudes, interests, and inclinations in terms of how they take in and make sense of new materials. Ghaedi and Jam (2014) offer a similar definition of learning styles: variations in the way students rely on different sensory information to process and remember what they learn. Learning styles refer to the numerous approaches in which students learn. It aims to provide light on the process of learning by predicating on the idea that everybody learns differently. Learning styles places a premium on the problem of individual difference. Since everyone learns in his own unique way, this is

taken into account. Learning styles can therefore be seen as an individual's approach to taking in, analysing, making sense of, and remembering new knowledge.

The learning styles of students are affected by their surroundings, their emotions, and their thoughts, as well as their prior experiences. In contrast to content, learning style focuses on the process of learning (Gokalp, 2013; Fardon, 2013).

Intelligence theories, experiential theories (Kolb, 1976), sensory modalities thus the VARK model (Fleming & Mills, 1992), and cognitive styles (or psychological kinds) are just some of the numerous theories on which the various classifications of learning styles are based. The visual, auditory, kinesthetic, global analytical, impulsive, introspective, individual, and group components make up Dunn and Dunn's (1989) model of learning styles. Desire (2019) proposes a model of learning styles known as VARK, which categorises people into four distinct groups based on how they approach and retain information. These four primary styles of learning are visual, aural, read/write and kinesthetic. These approaches to education were divided into the physiological, psychological, and social categories. The five senses (sight, sound, touch, and taste) belong to the field of physiology; the global, analytical, impulsive, and reflective processes belong to the field of psychology; the individual and the group levels of sociology are also represented (Dunn and Dunn, 1989).

It must however be noted that none of these learning styles; visual, auditory, kinesthetic and the others is isolated in teaching and learning processes. None of them can be used independently. They are interdependent of

each other in learning. But there are variations in its application in learning. While some students apply one learning style more in learning, others apply such a style less in their learning (Owusu-Badu, 2020). According to Mozaffari (2019) too, applying a certain style of learning more than the others by educators can be due to their area of study, pedagogical approach, insight in learning, content of the curriculum and overload of what is to be learnt. Mozaffari based on this to say that educators take into consideration these varied styles of learning pertaining in their students in planning their lesson.

Ha (2021) is of the view that kinesthetic students prefer learning method that allows the movement of their physical body, and what they have already encountered in class such as games and role play. Ha says that students who use kinesthetic style do not feel at ease when they sit for a longer period. Since they are not shy about sharing their thoughts in class, they will likely ask a lot of questions and make themselves heard. They are not good in listening, therefore, they do not learn better in lectures that require them to sit still and take notes (Mozaffari, 2019).

Ha (2021) is further with the view that visual learners receive information through visual stimuli. According to Ha, if what the learners learn is visually and vividly presented, it will form in learners' brain a very clear images. Ha further argues that a person's ability to memorise and comprehend new information is correlated with their success in school. Ha further indicated that educators whose preference in learning is visual method are more likely to excel academically and prefer to take notes sitting in front of the classroom, where they can better benefit from the use of visual aids like diagrams, pictures and charts to help them better understand the material being covered. Visual

learners are perceptive and attentive learners who benefit from visual cues including demonstrations, body language, and facial expressions (Mozaffari, 2019).

According to Mozaffari (2019), reading-writing learners learn through reading text and writing notes on them. Mozaffari says that writing and reading help them more than listening alone in the classroom. Additionally, Mozaffari says that they want to study or read in peace and solitude, and they value a peaceful setting. This is because they are easily distracted by clutter (Mozaffari, 2019). This category of students benefit greatly from having the opportunity to read aloud and record their thoughts on paper or a whiteboard. Their study weapons are word books, the web, power-point presentations, written answers, and textual displays (Ha, 2022).

Ha (2021) is again of the view that auditory students base on what they hear. According to Ha, auditory students learn better when they are taught through methods like verbal explanation and class discussion but do not benefit when they are taught using visual learning style method. Students in this category prefer to learn through audio means. Hearing aids like lectures, recordings and conversations provide a means of acquiring knowledge in one's surroundings for those who have this sense (Mozaffari, 2019).

Influence of Curriculum of Learning on Academic Performance

The Nature of Ghana's Education System

The Educational Act of 1961 marked the beginning of a process of "tempering with" the educational system that had been passed down to Ghana from its colonial masters (Mankoe, 2002). Mankoe went on to remark that the

reforms in education were a good thing since the prosperity of this country depends on education. Therefore, Ghana has wanted to create an educational system that is unique to its developmental requirements; hence, any time the goals, structure or the content of the public education become challenged, and therefore do not fit into today's or tomorrow's socio-economic expectations of the country, an attempt is then made to reform the education system (Adasah, 2020).

Education is a public good that has to be provided to all citizens of a country and occurs in many forms through many institutions. Due to this, a separate ministry, the Ministry of Education (MOE), was established to oversee educational matters and make policy decisions, while other agencies, including the Ghana Education Service (GES) carried out the actual implementation of MOE initiatives at the pre-tertiary level. There are a variety of institutions in Ghana that grant diplomas, including those dedicated to early childhood education, basic education, senior high education (which is gradually being included into basic education), and post-secondary education. Professionals and working adults now have access to non-traditional education and training opportunities. Ghana, has since independence had a number of educational policies with the view to improving upon education and to make it accessible and relevant to Ghanaians. An educational policy can affect a whole educational system, a section of the educational system or a subject area. That is why education-related policies including those regarding school size, class size, school choice, school privatisation, tracking, teacher selection, education, and certification are all viable options. Values that schools are required to uphold

and represent, as well as teachers' salaries, teaching techniques, curriculum content, graduation criteria, school infrastructure investment, and more.

The objective-based nature of its pre-tertiary curriculum which is now being switched to standard-based curriculum places less emphasis on acquisition of skills. Okrah, Ampadu and Yeboah (2019) made a claim that the mass unemployment of the youth today has mostly been attributed to the irrelevancy of the school curriculum. The education system's mode of selection of products too to benefit for further education, world of work or other prestigious positions in the country is determined by performance in examinations. Danso (2018) said that the senior high school is a terminating point for majority of the students and it turns out school leavers without marketable skills to go into employment. It can therefore be said that Ghana's education system by nature predominantly prepares its products for white collar jobs the economy can provide for those who excel academically while the failures are left to struggle for themselves in life.

Pre-Tertiary Education Learning Curriculum

A school's curriculum refers to the way in which students are expected to engage with and respond to the course's content, resources, and methods of assessment (Indiana Department of Education, 2010). The goal of Ghana's national pre-tertiary education curriculum is to produce graduates who can think critically and creatively, who are self-assured in their abilities, and who are prepared to make meaningful contributions to their communities and the world at large.

Changes in curricula have been implemented in schools all over the world in an effort to equip learners with skills that will give them an edge in the global labour market. The United States of America, Kenya, and Rwanda are just few of the countries that have begun educational system reform in order to produce highly sophisticated individuals who are prepared for the labour market of the 21st century (Waweru, 2018). To this aim, the Ministry of Education and the Ghana Education Service collaborated to update and publish the SHS curriculum with the goal of making it more applicable to both student and national growth. Career guidance, as well as technical and vocational training, are now part of the required curriculum. The curriculum is collaboratively developed with input from all relevant parties in order to develop the best and needed curriculum out of them. Teachers are also trained to familiarise themselves with the educational system, its syllabi, and any curricular shifts in their respective subject areas (MOE, 2003).

NaCCA was given the responsibility of updating the pre-tertiary curriculum in Ghana to align with worldwide best practises by the government in 2017 (Aboagye & Yawson, 2020). The President of Ghana stated in his State of the Nation Address in February 2019 that beginning September 2020, a new standard-based curriculum would be implemented (Ghanaweb, 2019). To this aim, the objective-based curriculum that has been in used since the beginning of formal education was replaced in 2019 by the standard-based curriculum, which was implemented by the Ministry of Education through the National Council for Curriculum and Assessment (Aboagye & Yawson, 2020).

As could be anticipated, the standard-based Curriculum represents a significant departure from the objective-based model that Ghana has used since

the establishment of compulsory education. The Ministry of Education recognised in 2018 the need for a paradigm shift from the objective-based curriculum to the standard-based approach due to the former's many flaws. These flaws included an emphasis on test-taking at the expense of human capital development, excessive content, and an assessment system that did not adequately support the advancement of teaching and learning, which goes to influence the performance of student on standardised tests (Aboagye & Yawson, 2020).

Basically, the curriculum review is to satisfy the priority of the nation by changing the education system's structure and content from just excelling in examinations to character building, values nurturing, producing literates, building confidence and producing citizens who are critical thinkers, as stated by the NaCCA (2018) as embodied in the National Pre-tertiary Education Curriculum Framework for developing subject curricula. And as a consequence, to improve pre-university education, with a focus on science and mathematics as essential groundwork for further academic achievement or immediate employment. It is imperative that the national curriculum's content be able to compete internationally, hence curriculum review is being done to solve the inherent problems in the current curriculum. NaCCA (2018) gave the below as some of the reasons in changing the objective-based curriculum of learning

- i. Although there was some justification for individual subjects, the educational system as a whole lacked well defined ideologies, goals, and aspirations.
- ii. The absence of performance standards to inform pedagogy, curriculum, assessment, and grading.

- iii. Lack of a set of minimal national standards (i.e., the key/core knowledge, attitudes, and skills that are regarded for the national education entitlement of all learners for the conclusion of each cycle).

According to NaCCA (2018) again, the following difficulties with the objective-based curriculum have also been identified;

- i. Objectives (intended to give an emphasis on knowledge) rather than quantifiable criteria (emphasising proficiency and driven by reasoning and application) inform Ghana's pre-tertiary curriculum.
- ii. The curriculum has not been regularly assessed and strategically reviewed to ensure it fosters the growth of the skilled workforce the country requires.
- iii. To evaluate teaching and learning and enhance the quality of pre-tertiary education, the data provided by the examinations that are part of the assessment system are insufficient.
- iv. Academic and examination-based in both its content and its implementation, the assessment system is not without its difficulties. Classroom assessment techniques in Ghana are generally inadequate, and there are few institutional mechanisms in place to check their quality, according to the World Bank (2013) "Systems Approach for Better Education Results" research.
- v. The medium (language) of instruction policy (language in education policy) is not being properly implemented in the primary grades;
- vi. Children in Ghana do not seem to place a high importance on studying their nation's past.

- vii. The curriculum still has too much information, and several subjects overlap with each other. The number of required courses is excessive, with seven in kindergarten and eight in primary school.
- viii. There is a lack of flexibility in the existing curriculum that would allow for the early identification and development of students' unique skills and passions in order to better prepare them for the workforce, professional advancement, and sustainable growth, and many high school and elementary school leavers are not ready for college or enter into the workforce, and many who do graduate are not literate.
- ix. NaCCA (2018) further justifies that the selectivity is very strong in Ghana's senior high school programmes. The SHS education system has been criticised for being very selective for two main reasons: first, not all students are accepted at all senior high schools regardless of their ability, and second, the selection procedures used to determine admission. The first is that the BECE's stanine grading system has some serious flaws. It is debatable whether or not the Basic English Competency Examination (BECE) grades provide an appropriate basis for categorising children according to their ability for placement into programmes. The second is that the social system of unequal value has been perpetuated by selection based on ability.

Many middle-class families may now afford to send their children to selective high schools (SHSs) with greater academic and financial resources. This is because children from lower socioeconomic backgrounds are significantly underrepresented in selective high schools (SHSs) compared to

those from higher socioeconomic backgrounds due to the high tuition and additional costs imposed by these schools. (NaCCA, 2018).

Influence of Guidance and Counselling on Academic Performance

According to a UNESCO training module from 2000, guidance and counselling is "a package of services to individuals based on their requirements, including academics and its contributing variables. Counselling can be categorised into two: individual sessions and group sessions. Individual counselling is confidential, private sessions between a therapist and a single client. The objective is for the client to gain insight into his or her own character and motivations, and to gain clarity and focus in order to make an informed choice.

Guidance and counselling has been found to be good for learners' academic performance (Siahi & Maiyo, 2015). According to Collins (2007), students receive help with self-control and adaptability to their academic, social, and physical environments through guidance and counselling. Collins further opines that students' academic, social, emotional, and professional growth are hindered by a lack of or poor guidance and counselling in schools.

Guidance and Academic Performance in Second Cycle Institutions

The motive behind any effective guidance and counselling programme should be to help each client reach his or her fullest potential and contribute meaningfully to their own and society's well-being. According to Harshberger and Jones (2018), psychological causes (besides teaching and learning methods in the classroom) impact on performance academically. Zhao (2021) also says

that the students in the secondary school are in the stage of adolescence and adolescents tend to be unstable due to a lot of changes that take place in their roles and responsibilities which adversely affect their learning. As a result, they conclude that guidance and counselling are essential during this adolescent stage to help young people comprehend and adapt to the changes that are occurring in their bodies and minds. Students might also benefit from guidance and counselling programmes that assist them in identifying and pursuing realistic professional goals.

According to Cheruiyot and Simatwa (2016) students' academic performance is enhanced when there is an opportunity for effective and continuous counselling activities while Tina and Ugochukwu (2014) are of the view that due to more workload of school counsellors, guidance and counselling has not been effective in improving academic performance. The Kenyan Ministry of Education both emphasise the need for heads of schools in ensuring effective counselling and guidance programmes (Nyaegah, 2011). According to Nyaegah, every guidance activity in the school needs the approval of the school head before it can be executed. Therefore, heads of schools should take all guidance and counselling programmes very important. According to Negro (2022), it is necessary for all secondary schools in Kenya to benefit from guidance and counselling activities. Negro also said it is necessary to have holistic implementation of counselling activities targeting all the needs of learners. Leaving secondary school students on their own without controlling their independence, self-awareness, motivation, and problem-solving abilities by a skilled counsellor is not effective, according to Napier (as cited in Odhiambo, 2014).

Mutie and Ndambuki (as cited in Odhiambo), training in efficient study methods and test-taking strategies is essential for academic success. Mutie and Ndambuki (as cited in Odhiambo) further says that poor reading habits, in which most students read slowly and fail to comprehend what they read affect the academic abilities of many second cycle educants.

According to Kendra (2022) self-concept is the image one has about himself/herself including his/her interactions with important people in his/her life. Self-esteem tends to decline in early adolescence, and adolescents with high levels of self-esteem tend to experience positive self-expressions (Pang, Wang & Sun, 2019), high quality interpersonal relationships (Cameron & Granger, 2019) and better physical and mental health (Li, chan, Chung & Chui (2010) which have influence in their learning and academic performance.

Many students' academic performance has also suffered as a direct result of indiscipline. Koomson, Brown and Dawson-Brew, Ahiatogah and Dramanu (as cited in Nyeseh, Tordzo, Asamoah and Achiaa, 2019) say that the aim of school discipline is to ensure a safe and happy learning environment. Again, Mandler and Sarason (as cited in Odhiambo, 2012) says that anxiety causes internal strife and frustration, which in turn generates stress and disrupts their ability to focus on school work. This implies that for senior secondary students to be able to overcome all these challenges in their learning for their academic performance to be improved, guidance and counselling is very imperative in their lives.

Conceptual Framework of the Study

A conceptual framework is a proposed theoretical structure for analysing the interrelationships between various factors thought to contribute to students' academic performance. This study's objective was to assist the reader to immediately grasp how the study variables related to student performance.

Students' academic performance can be enhanced by a combination of the variables used for the study such as school's learning core curriculum, the students' individual learning styles, and counselling. Counselling, the learning core curriculum, students' preferred learning methods, and students' academic performance are all shown as interconnected nodes in the conceptual framework (Figure 1). The implication is that students will be able to produce the desired academic performance (output) when both the causes of their under-performance (input; core curriculum of learning and learning styles) and the process of applying those causes (input; counselling) are handled professionally. Students' low academic performance may be exacerbated by factors such as an improper curriculum and a defective learning style of students, as depicted in figure 1.

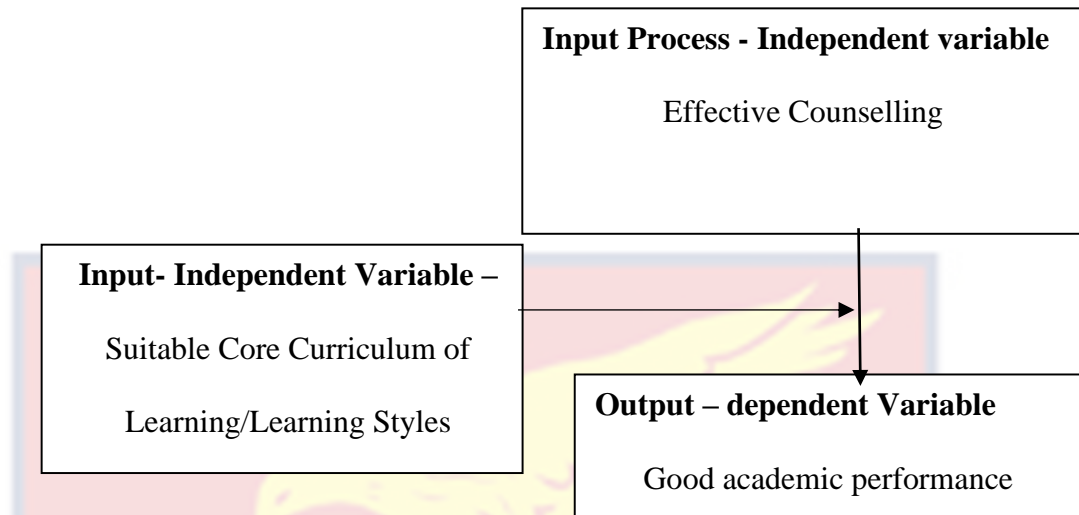


Figure 1: The Influence of Learning Styles, Core Curriculum of Learning and Counselling on Academic Performance

Empirical Review

Influence of Learning Styles of Students on Academic Performance

Mozaffari (2019) embarked on a research to find out the relationship between the categories of styles of learning used and academic performance of some Saudi Arabia's dental students. The result was that both strong and weak students mostly use read and write learning style in their learning. Rahmani (2011) also examined how different styles of learning and students' overall performance correlates in one Malaysian school system and it was found out that certain styles of learning lead to high performance. The favourable correlation between learning styles and students' performance was found by Dalmolin, Mackeivicz, Pochapski, Pillati, and Santos (2018). Magulod Jr. (2019) discovered a similar correlation between students' preferred learning methods and their overall academic success. Students prefer learning with diverse learning styles, according to research by Fatemeh and Camellia (2018),

because it improves their academic performance. Grapragasem (2013) conducted a study on the relationship between students' preferred learning methods and their academic performance in Malaysia's Arts and Science streams. Iranian high school female students were studied by Rahmani and Azali (2012) who sought to determine whether or not certain learning styles were associated with higher academic performance.

Idris (2015) investigated the use of audiovisual aids in teaching and acquiring oral communication skills in Nigeria's Katsina State secondary schools for younger students. The Pre-tertiary Student's Learning Style and Learning Environment Inventory was created by Owusu-Badu (2020) and used to evaluate the academic progress of a sample of students in Ghana. Owusu-Badu observed that the majority of the students' preferred learning styles did not align with the classroom setting hence attributing the poor state of student's academic performance at the senior secondary school level in Ghana partly to inability of the students to utilize their most preferred learning style. Many studies conducted by professionals have shown that students and learners have distinct preferences in how they learn best which influence their academic performance.

Influence of Learning Curriculum on Academic Performance

According to Naeem (2009), the education system in Pakistan is in a sad and deteriorating state because of the curriculum, which points many fingers at the education department of Pakistan, whose officials so confidently sing songs of success whenever they make an appearance. A study was conducted to find out why a lot of school graduates do not get work to do and unable to further

their schooling by (Otunga & Nyandu) and (Balarin & Benavides, 2010). All the studies attributed those problems to the nature of the curriculum. Some researchers have studied the skill requirements of students and the design of the curriculum as the possible major cause. Research by Enwereji, Mbukanma, and Chukwuere (2017) on the nature of the curriculum of learning in Botswana found that the system of education currently going on in Botswana is ineffective.

World Bank's "Systems Approach for Better Education Results (SABER)" research (2013) agrees that Ghana's classroom assessment techniques are usually weak and that there are few institutional mechanisms in place to monitor their quality. The study concluded that the assessment system is problematic since both its content and its implementation are based on academic performance and examinations. This suggests problems with the existing assessment-based curriculum. One of the goals of Ghana's policy on quality education for second-cycle institutions to enhance students' academic performance is to increase the curriculum's relevance. This goal was included in the country's Education Strategic Plan document, the operational period of which began in 2003 and is set to end in 2015 (Ministry of Education, 2003).

According to NaCCA (2018) of Ghana, although a five-year review cycle is mandated by the Ministry of Education to be reviewing the curriculum, this has not occurred in the past two decades. The present kindergarten curriculum was written in 2006; the P1-JHS3 curriculum, written in 2007, was revised in 2012 solely in four areas (English Language, Mathematics, Integrated Science, and Ghanaian Languages and Culture); and the SHS curriculum was reviewed in 2010. Curriculum material overload within and between disciplines, as well as newer topics, were targeted in these analyses. However,

the underlying worries and obstacles that prevent students from participating in the education programmes and practises that will allow them to contribute to the development of Ghanaian society have not been addressed by the reviews conducted in 2006, 2007, 2010, or 2012.

Okrah et al. (2019) research finding made them to conclude the relevancy of the curriculum in inculcating what is worthwhile to educants but it lacks the requisite knowledge and skills needed in the job market. Also, few students are able to continue their schooling after completion of senior high school while 90% are considered as drop-outs for no fault of theirs (Ghana Education Service, 2010). This is attributed to the nature of the curriculum.

Aboagye and Yawson (2020) surveyed Ghanaian educators to learn their thoughts on the new curriculum, as well as any problems they encountered or recommendations they had for improving it. Teachers generally agreed that the new curriculum was an improvement over the old, and that it fostered group work and helped pupils acquire transferable skills. Therefore, it may be concluded that the traditional curriculum is not effective at raising the bar for education and boosting students' academic performance. The Government of Ghana (2019) introduced a new curriculum to the country's educational system in an effort to fix the problems with the old one, such as students being overwhelmed by too much information, the shortcomings of an objective-based approach, and the inability of the assessment system to provide sufficient data on which to base instructional decisions and ultimately, students' academic performance (Anamuah-Mensah, Effah & Sarkodie, 2002).

The Development of Guidance and Counselling Programmes in Secondary Schools in Ghana

The first formal guidance and counselling sessions were held in 1955 in Ghana (Essuman, 1996). Many of those into education have realized the value of guidance services for schools. In view this, Ghanaian Ministry of Education worked to decentralise guidance services to districts and schools. Dankwa (1981) gave numerous public lectures on the importance of instituting guidance and counselling in second cycle level across the country.

Dankwa claims that the initial effort to organise guidance in Ghana was made in 1995, when the Ministry of Labour and the Ministries of Social Welfare and Education created the Youth Employment Department. This was a response to a demand by Ghanaian parents for improved educational opportunities for their children, which was a reflection of the country's need for skilled labour. The mission of the Youth Employment Department (YED) was to help young people under the age of 20 who are out of work after graduating from middle school by connecting them with meaningful employment opportunities and providing them with necessary career counselling. Moreover, the then-current administration used it to monitor employment trends over time. By 1961, there were roughly 30 YED Centres across the country (Ackumey, 1989). In 1962, the Ministry of Labour and the Chief Education Officer recognised the growing demand for vocational counselling and collaborated to create a national system of vocational guidance with the following goals in mind, as reported by Ackumey:

1. The Ministry of Education will oversee the distribution of specialised books about various occupations to schools (perhaps elementary and secondary levels).
2. The Employment Service Centre needs better channels of communication with other government agencies.
3. To make use of administrative help in order to streamline the hiring process.
4. YED's committee members, representing the Ministries of Labour and Education, need to communicate more effectively with one another.

However, it was not until the late 1960s that the Curriculum Research Development Unit (CRDU) was established to provide for School Welfare Services, Education for the Handicapped, and Guidance and Counselling in the nation's schools. The Ghana Education Service (GES) issued a directive in 1976 mandating the inclusion of guidance and counselling in all schools, regardless of the level of education, after a significant success was achieved in the field in 1976. About 200 trained guidance coordinators were employed by GES in 1981, most of them in second-cycle, colleges or regional or district offices. According to Essuman (1996), in 1979 the Ghanaian government issued a policy for the formation of G&C in second cycle institutions via a directive from the Ghana Education Service (GES).

The following reasons partly accounts for why guidance and counselling programmes were first introduced in schools:

- 1) One motivation was the need to find ways to uplift the standard of education while also satisfying the nation's growing demand for skilled workers. The government of Ghana implemented a new educational system and

curriculum in 1974. The policy mandated the inclusion of business and technical studies at the junior high and senior high school levels. Due to these shifts, guidance and counselling became crucial in terms of course placement.

- 2) Experts in guidance and counselling were able to flourish with the late 1960s founding of the Curriculum and Research Division Unit (CRDU).
- 3) The fact that the country already had a sizable pool of qualified professionals was also beneficial. By 1973, for instance, Ghana had welcomed roughly six guidance and counselling specialists.

Influence of Guidance and Counselling and Academic Performance

Mikaye (2012) looked into the effect of guidance and counselling on student behaviour in public secondary schools in the Kabondo Division of Kenya. According to his research, students who are more self-controlled and who receive quality guidance and counselling at school perform better academically. However, schools that lack or have insufficient access to quality guidance and counselling often see a negative correlation between these social problems and students' academic performance. The results of a study on the effect of guidance and counselling on students' grades in Kenya done by Odhiambo (2014) corroborated the findings of the study. Moreover, in a study conducted by Shehu, Badi, Dangaya, Abubakari and Sahabi (2021), the finding was that academic performance of eighty percent of the students improved after undergoing through counselling activities. Ebizie, Enajedu and Nkechi (2016) study on counselling and academic performance was similar to the findings of Kyauta (2017) who discovered that students' academic performance improves

better due to good study habits through counselling activities. Also, Atsuwe and Achugbulu (2018) and Simatwa (2016) found a positive correlation between counselling programme and academic achievements of students in Benue State, Nigeria.

Multiple Ghanaian stakeholders have called for better decentralisation of guidance services from the national level of education to local districts and individual schools. According to Essuman (1996), in 1979 the Ghanaian government issued a policy for the formation of G&C in second cycle institutions via a directive from the Ghana Education Service (GES). This demonstrates the impact that guidance and counselling have on the academic performance of students in Ghana and elsewhere. In view of this, according to Essuman, guidance and counselling has been recognized by the various governments policies document in recent times. This and among other reasons have led to the creation of G&C offices at the Ghana Education Service headquarters, regional and district levels all over the country. Guidance services are now going on in all Ghanaian schools at all levels.

Chapter Summary

Students' performance academically has been a major priority of all stakeholders globally. A country Ghana sees education as the main engine of growth for it to develop in diverse ways. Therefore, investing in education for it to be of highest quality for her human resource to be able to improve is inevitable. Achieving quality education is to ensure good academic performance which is the main basic goal of educational planners. Students can unearth their natural gifts and develop their capacities to correspond to educational goals

through good academic performance. Though different learning abilities will always let academic performance of students differ, review of literature on variables such as learning style of students, guidance and counselling, and curriculum of learning showed that these variables have impact on academic performance. This creates gap that this study seeks to bridge, how these variables can enhance academic performance.



CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter describes the procedures and strategies used during the research. The methods' justifications are presented as well. The necessary information was gathered using a mixed-method. In this section, the study's methodology is discussed which include the study's overall design, sampling strategy, data gathering procedures, and analysis strategies. Besides, the description of the area under study was also looked at. The research utilised both qualitative and quantitative strategies, hence the mixed-methods approach (pragmatic approach). No single approach is adequate, hence the philosophical underpinnings of the two approaches have been discussed. Creswell and Plano-Clarke (2011) state that a mixed method approach allows for more in-depth understanding to be created than it would be possible with a purely quantitative or qualitative strategy. Additionally, it gave me a set of rules to stick to his investigation. I employed a mixed method research strategy, which necessitated concurrent or parallel data collection procedures within the study. Since both qualitative and quantitative data could be taken simultaneously or concurrently, I opted for the concurrent research strategy.

The approach enabled me to get off hand quantitative results and qualitative findings so as to be able to reconcile the two methods for a better and reliable data. The methodology used was reflective of the participants' perspectives. Qualitatively, the approach empowered research participants to share their perspectives and made sure that results were based on real-world relevance. Whereas, quantitatively, the approach made it possible to use the data

obtained as a yardstick to reality, and to establish or confirm relationships of the study's findings.

Research Design

Kothari (2019) defines research design as the theoretical frameworks that guide the investigation being done. It serves as a guide for how information will be measured and analysed. Concurrent mixed-method design was used. According to Creswell (2014), qualitative and quantitative data are taken simultaneously or in parallel in concurrent mixed-method research methodologies. Creswell explains that under this method, qualitative and quantitative data are gathered simultaneously the same study.

The research design entailed a single study that concurrently has to be used to collect both qualitative and quantitative data. The goal of choosing this type of research design is to corroborate the results of one methodology with those of another.

Both the quantitative and qualitative techniques of the study were given equal attention as the nature of the design expects. It was justifiable to use the concurrent mixed-method design because the general aim of the study was to get a better insight into the phenomenon under study. Also, both the qualitative and quantitative data were collected from the same subjects used for the study. Again, I decided to go by that design because combining the collection of the two types of data made me to benefit from both the detailed and insightfulness of both the qualitative and quantitative data. The strength of one type of data mitigated the weakness of the other. However, the use of the design was time consuming and its used needed skills to analyse both sets of data.

Study Area

Dunkwa-On-Offin is the seat of Upper Denkyira East Municipality. The Municipality is one of the Central Region's seventeen (17) Administrative Districts and Municipalities. The natural environment of Dunkwa-On-Offin includes its climate, vegetation, relief and drainage, location, and size, as well as the social and cultural environment in which its residents live. Therefore, the physical and socio-cultural settings are crucial elements or determinants in the area's economic growth.

According to Upper Denkyira East 2012 Annual Report (as cited in Ghana Statistical Service, 2014), the Municipality in which Dunkwa-On-Offin is found and serving as its capital was founded in 2007 from what was then known as the Upper Denkyira District and officially opened to the public in February 2008, was established by Legislative Instrument (LI) 1877. Its coordinates are one degree west of the Greenwich Meridian and five degrees north of the equator. It is bounded on the south and north by Adansi, on the east by the Assin North Municipality, on the west by the Atti- Morkwa District, and on the north-west by the Upper Denkyira West District. Nearly one-seventh of the Central Region's total land area, Upper Denkyira East Municipality spans a total of 501.9 square kilometres.

According to ghanadistricts.com. (as cited in Ghana Statistical Service, 2014), more than 340 schools can be found in the Municipality right now, including 126 preschools/kindergartens, 132 elementary schools, 77 junior highs, and five senior high schools (three public and two private). Four of these senior secondary schools in the municipality are found in Dunkwa-On-Offin, the heart of the municipality.

Most residents of the town hold strong religious beliefs. Christians form a resounding majority. Islam and traditional religions are examples of additional communities. Given Christianity's prevalence, houses of worship could serve as gathering places where people can share ideas and resources in order to spur growth and progress in their neighbourhoods.

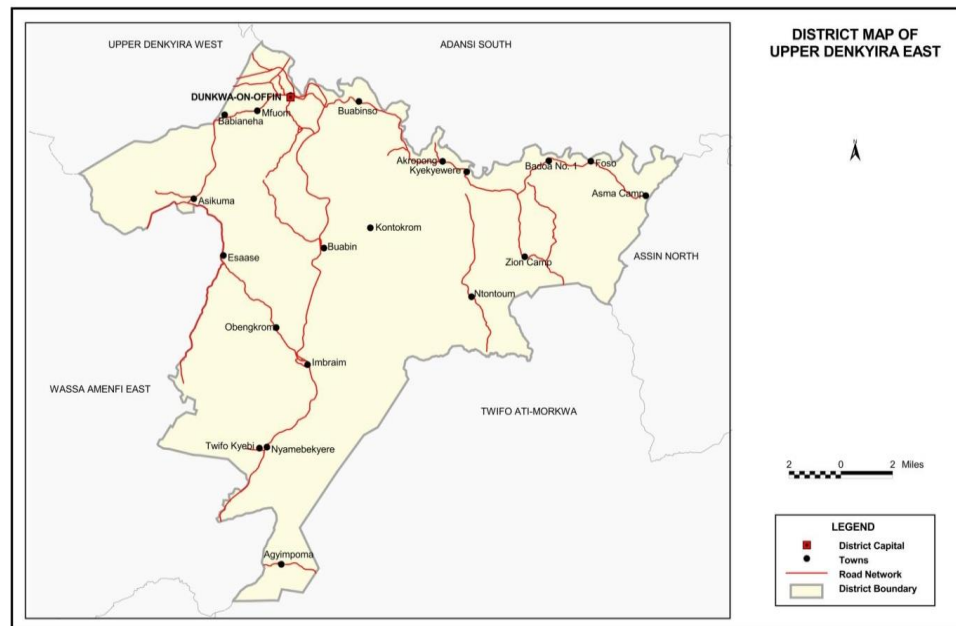


Figure 2: District Map of Upper Denkyira East Municipal in which Dunkwa-On-Offin can be found

Source: Ghana Statistical Service (2014)

Population

The target population for the study comprised all high school students and teachers including headteachers, form teachers, and counsellors in both Boa-Amposem SHS and Dunkwa Secondary/Technical in Dunkwa-On-Offin. The total number of the population was 4399 which was made up of 4,217 and 182 students and educators (teachers, school counsellors, form masters and

heads of the schools) respectively from both schools I used for the study. For Boa-Amponsem, the target population was 102 educators and 2441 students. Also, for Dunkwa Secondary/Technical, the target population was 80 educators and 1776 students. It comprised both males and females. The population for the study was purposively selected. This was because the nature of the study and its interest merited such categories of population with their respective characteristics to be able to arrive at reliable findings.

The accessible population was all the educators and form three students of both Boa-Amponsem Secondary and Dunkwa Secondary Technical who were drawn out from the target population of the study for a purpose. I used the form threes of both Boa-Amponsem and Dunkwa Secondary/Technical as an accessible population because the nature of the study demanded such category of students who are experienced in the SHS school system for quite a long period to be able to obtain detailed, adequate and reliable information. For the educators, the researcher used all the target population as an accessible population to draw sample from because they had similar characteristics for any of them to be used to arrive at the needed findings/results.

For Boa-Amponsem, the accessible population comprised 672. There were 102 educators and 570 students. In the same way, the accessible population for Dunkwa Secondary/ Technical was 500 comprising 420 students and 80 educators.

Table 6: Summary of Population for the Study

School	Target Population		Accessible Population	
	Educators	Students	Educators	Students
Boa-Amponsem	102	2441	102	570
Dunkwa Secondary/Tec	80	1759	80	420
Total	182	4200	182	990

Source: Field Survey (2022)

Sampling Procedure

To generalize about a larger population, researchers often examine subsets of that population, called samples (Creswell, 2014). Fowler (2009) argues that the purpose of sampling in research is to select a subset of the population that is statistically and practically equivalent to the whole.

In this study, both probability sampling technique (random sampling) and non-probability sampling technique (purposive sampling) were used to select the sample for the study from the accessible population. One hundred and seventeen subjects were sampled for the study from both Boa-Amponsem and Dunkwa Tec/Sec. Ninety-nine were students who were randomly selected and 18 were educators who were selected using both random and purposive techniques.

For the students, 57 and 42 respondents were respectively selected from both Boa-Amponsem and Dunkwa Sec/Tec proportionally. For the educators, ten (10) and eight (8) subjects were respectively selected from both Boa-Amponsem and Dunkwa Sec/Tec. Ten of these educators were purposively selected because they could not be left out of the study. They comprised two

heads and their two assistants, four form masters and two school counsellors from both schools. The rest of these educators were selected proportionally. Five (5) were from Boa-Amposem and three (3) from Dunkwa Sec/Tec.

The total number of respondents was obtained based on Gay's (1996) recommendation. According to Gay, for a descriptive research, sample size of 10% from the accessible population is adequate to arrive at reliable findings and logical conclusions.

Table 7: Summary of Sample Composition for the Study Subjects

Type of Subjects	Number of Subjects	
	BOASS	D/SEC TEC
Students (Form Threes)	57	42
Other Teachers	5	3
Administrators (Head/Assist)	2	2
School counsellors	1	1
Form Masters	2	2
Total	67	50

Source: Field survey (2022)

Data Collection Instruments

Data were gathered with the help of the instruments such as interview guide, documentary, test and questionnaire. The instruments were self-made with the exception of the documentary instrument. All of the tools utilised were developed in accordance with the study's aims, assumptions, and research

questions. Accordingly, the study's aims, research questions, and hypotheses were all adequately addressed by the characteristics of the instruments used.

Documentary data as described by Scott and Marshall (2015) makes use of both individual diaries and official records. The documentary materials used for the study were school reports, examination results analysis, students' anecdotal reports and portfolio. Others were theses, dissertations, periodicals, newspapers, pamphlets, reports, journal articles, brochures, and other information retrieved from the internet. I tried to obtain documentary information that was up to date, reliable and free from biases.

Data obtained from documentary sources was used to support the other instruments used for the study. It was most especially used in developing chapters one and two of the work. Example, it was used for the background of the study and statement of the problem. The documentary data was both qualitative and quantitative. Therefore it was used to support both the qualitative and quantitative aspects of the study.

According to Connaway and Powell (2010), interview guide might be thought of as a type of instrument which allows a large number of in-depth, one-on-one interactions conducted with a select group of respondents to learn about their experiences and opinions on a specific topic. The interview instrument for this study was structured interview guide. The interview was organized under three thematic areas, each comprising a number of probing questions. The thematic areas were questions on learning styles of students, SHS objective-based core curriculum of learning and counselling.

A questionnaire is a method of gathering information wherein a series of forms with questions printed on them is used (Kothari, 2004). Two different

sets of questionnaires were designed and distributed to both teachers and students to respond to them separately. They were closed and open ended questions. The questionnaire items for both the educators and the students were twelve (12) and seven each respectively including the demographic information of the respondents. For both students and educators, the items had three open-ended questions each. There were nine (9) close-ended questions for the students and five (4) close-ended questions for the educators. The questionnaire had four parts. The first part of the questionnaire asked respondents to provide basic demographic data. The second segment focused on the different ways that students learn. The content of the SHS core curriculum of learning was the focus of the third section. The fourth section was on counselling. Each one was designed to help with the study's stated goals, address the research questions and test hypotheses.

Besides, the three main instruments which were utilized in the data collection of the study, a teacher made test in line with the learners' curriculum and their level on the four main core subjects; mathematics, science, english language and social studies to test students' performance level. It was meant to obtain data on their performance so as to be able to use it to test the hypotheses of the study. The test items were in objective form, twenty questions in all. Five questions each for each of the core subjects.

All of the aforementioned methods and tools were used because they were suitable for answering the study's specific research questions, achieving its specific goals, and answering the hypotheses. Another justification was to ensure the triangulation of the data that was obtained. Creswell and Plano-Clarke (2011) argue that it is more advisable to use many research instruments

to collect data from a variety of sources and to employ multiple approaches in a unified, effective layout.

Pilot Testing of the Research Instruments

A pilot test was carried out in three different schools to enhance the validity of the instruments (questionnaire and performance test items) for the collection of quantitative data. The pilot test included educators (three headmasters, three school counsellors, and three form masters) and nine students from Ayanfuri Senior High School, St. Andrews and Oxford Senior High Schools. Whereas Ayanfuri Senior High School is located at Upper Denkyira West District, both St Andrews and Oxford High Schools are found in Upper Denkyira East Municipality. Nine students and nine educators were used for the piloting on the performance test.

These institutions were selected for the piloting because their characteristics were not all that different from the institutions selected for the main study. This was done to see to it that the study's instruments were able to successfully collect the data that was needed. Through this, suitable items were retained. Those that needed to be changed or modified were done. To increase the reliability and validity, the questions that were found to be too vague or insufficient were revised.

Validity and Reliability of Instruments

According to Mulisa (1990), validity is a measure of acceptance that determines whether the results are likely to be accepted for comparable cases or areas encompassing the same domains, while reliability is a measure of

correctness of the findings and suggests the truthfulness of the acquired data. I performed a pretest procedure to ensure the reliability and the content validity of the questionnaire and performance test items. The educators' and the students' questionnaire and test instruments had a high internal consistency as Cronbach's alpha co-efficient values were 0.77 and 0.70 respectively. These were within the acceptable range of 0.7 as DeVellis (2003) recommended. See Appendix F for the results of the reliability test.

To be able to know the validity of the instruments, trustworthiness and the authenticity of the interview guide, test items and documentary data were done through an inquiry audit in order to get to know their dependability. To be able to achieve this, the investigator sought the assistance of his supervisor and some colleague investigators to help in reviewing and scrutinizing these instruments. Data obtained using these instruments was scrutinized to be sure that the findings obtained out of the data were consistent and reliable.

Ethical Considerations

Before the commencement of the study, I applied for ethical clearance from the Institutional Review Board, University of Cape Coast. After assessing my study and its ethical issues, the study was approved by the Board. I was accordingly issued ethical clearance to be able to conduct the study. For ethical clearance, refer to Appendix G of the research work.

The laid down ethical modalities on the study such as the right to privacy, voluntary participation, anonymity, confidentiality and harmlessness to participants were adhered to. Educators' and students' rights to privacy were respected at every point in time. Every subject used for the study was pre-

informed. To add to this, respondents' willingness to participate was not downplayed. I made it known to the subjects that a study of this nature requires sacrifices in terms of time and energy which could affect their scheduled activities. I again made the purpose and relevance of the study known to the subjects for them to be aware before they exercised their voluntary right to take part in the study. I saw to it that the investigation becomes injury free in the form of physical, psychological or emotional to everybody irrespective of whether the person was used as part of the investigation or not. On this note, interrogations were done in a manner that gave the subjects the opportunity to give varied replies or feedback without any compulsion.

Moreover, I conducted the study in a manner to protect the dignity, wishes and the identity of the subjects. To hide the identities of the subjects, I used a technique that saw to it that the subjects' anonymity and confidentiality were well catered for. I created trust in the subjects on the secrecy of their information given by them. I, being aware of the seriousness of plagiarism in this study did his best not to be victim of it. I tried not to falsify, distort information or plagiarises the work of others which I succeeded. I was very principle by following the acceptable scientific behaviour in conducting research so as to not become a victim of plagiarism. Every information gathered from the subjects was carefully analysed before its usage.

Data Collection Procedures

Before the collection of the data, the heads of the institutions used for the study were written to for permission to carry out the investigations in their schools. With ethical clearance and introductory letter from the Institutional

Review Board and the Head of Department of Guidance and Counselling, University of Cape Coast respectively, I and my two research assistants made a trip to these two institutions. The authorities of these schools were notified about the study upon my arrival in those schools. After that the students and the educators that were selected to take part in the investigations were approached. The brain behind the investigation was made known to these subjects (students and educators). After that data collection commenced.

Questionnaires were given out to the selected respondents to complete them. It must be emphasised that the researcher administered the questionnaires with the help of the two field research assistants to the 117 respondents. Out of 117 respondents, 99 were students and 18 were educators. Performance test was also administered to the students with the aid of two research assistants. The mode of the administration of the questionnaires varied from one set of a group to the other. Research assistants who were teachers administered the questionnaires to the respondents in their respective schools. I arranged with the authorities concerned to take the respondents through the filling of the questionnaire during one of the times classes were in session in both schools at different occasions. Owing to the tight schedule of some of the respondents who were educators, I gave them a maximum of two days to finish with the filling of the questionnaire for collection. However, for the respondents who were students, I collected the questionnaires as soon as they finished responding to them. The respondents were assured of confidentiality and anonymity. The duration for this exercise was 40 minutes.

Test of performance on the four main core subjects were also administered to the respondents (student) in both schools on the same day of the

questionnaire collection. The test took 40 minutes. This was to give students ample time to work at their own pace devoid of pressure and tension. This was also done with the help of the research assistants. Students answered the questions as expected which were objectives even though some were afraid in taking it. This was made successful after psyching them on the purpose of the test.

Alongside data on test and questionnaire was the data collection using interview and documentation. I paid three separate visits to each of the schools for both documentary data and conduct of interviews. In each of the schools, documentary data such as students' portfolio, anecdotal records, schools' reports and examination results analysis data were collected. I again interviewed the heads, their two assistants, two form masters, and the guidance and counselling co-ordinator of each school.

Data Processing and Analysis

Performing data analysis entails cleaning, sorting, and tabulating the information gathered (Kothari, 2019). The subjects in this study were both students and educators of the two schools under investigation. The study combined quantitative and qualitative approaches to data analysis. Analysis of the quantitative data was done with inferential and descriptive statistics. Analysis of the qualitative data was also done using content analysis approach.

Descriptive statistics such as Means and Standard Deviations were used to analyse the data on the three research questions. Pearson's product correlation coefficient was used to examine all of the research hypotheses. There was an in-depth content analysis of the study's qualitative data in light of the research

questions. Frequency and percentage tables, as well as means and standard deviations were generated in SPSS and Microsoft Word, and used for analysis, interpretation, justification, and conclusion. The hypotheses tests were performed at 0.01 and 0.05 levels of significance. All statistical testing was conducted at a predetermined level of confidence of 95%.

The qualitative and quantitative data collected were both maintained by me. The process of managing qualitative data was dynamic, involving data collection, analysis, modification, expansion, and additional collection and analysis. They were coded, theoretically arranged, interrelated, appraised and utilised as spring-board for further data collection. There was simplification, classification, and analysis of data. Data cleansing, normalisation, classification, prediction, and statistical testing were all part of the quantitative data management process.

Chapter Summary

The chapter provided a detailed account of how the researcher selected certain study methods and approaches to investigate the factors influencing students' academic performance in Senior Secondary Schools in Upper Denkyira East Municipality. The methods and apparatus for data collection were laid bare. Data collection and analysis strategies reflected the focus of the research.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

Analysis and interpretation of the pragmatic method data are depicted in this section. Both quantitative and qualitative surveys were used to collect data from the subjects of this study. The study aimed at researching into the influence of students' learning styles, SHS objective-based core curriculum and counselling on students' academic performance of SHS in Dunkwa-On-Offin of Ghana. The study looked into how different learning styles influence students' academic success, how the SHS's objective-based core curriculum of learning influences students' academic success, and how counselling influences students' academic success at the SHS level in Dunkwa-On-Offin. One hundred and seventeen subjects consisting of 99 students and 18 educators were sampled for the study. Results for the study are presented in this chapter including the findings of the study.

Results

Background Data About the Respondents

The demographic information about the students is presented in Table 8. These include Gender, Age, and Programme.

Table 8: Demographic Characteristics of Student Subjects-I (N=99)

Variable		Frequency	Percentage
Gender	Male	53	53.5
	Female	46	46.5
Total		99	100.0
Age	16-17	12	12.1
	18-20	69	69.7
	21-23	18	18.2
	Total	99	100.0
Programme	General Science	24	24.2%
	General Arts	33	33.3%
	Agric	9	9.1%
	Business	11	11.1%
	Home Economics	11	11.1%
	Technical	11	11.1%
Total		99	100.0

Source: Field survey, 2022

In relation to gender, males were more than the females. While males were 53 representing 53.5%, females were 46 representing 46.5%. Also, when it comes to age, majority were within the ages of 18-20 years. Sixty-nine of the students representing 69.7% were in that age bracket. Eighteen of the students representing 18.2% were within the ages of 21-23 years. Few of the students totalling 12, representing 12.1% were within the ages of 16-17 years. With regards to the programme of study, over one-third representing 33.3% offered

general arts. This was followed by general science who were 24 in number, representing 24.2%. Students offering business, home economics and technical was 11 each in number, each representing 11.1%. Agricultural science was the least recorded programme among the respondents with 9.1% of the students offering it.

Table 9: Demographic Characteristics of Teacher Subjects (N=99)

Variable		Frequency	Percentage
Gender	Male	10	55.6
	Female	8	44.4
Total		18	100.0

Source: Field survey, 2022

In relation to gender, there were more male teachers - 10 (representing 55.6%) than female teachers – eight (representing 44.4%).

Research Question One

How can learning styles of students influence their academic performance at the SHS level?

This research question sought to find out from the teachers if learning styles of their students can influence their students' academic performance at the SHS level in Dunkwa-On-Offin. Both quantitative and qualitative data were taken from teachers.

A total of four close-ended questions on a four-point Likert scale representing Excellent (4), Good (3), Fair (2), and Poor (1) were used to collect quantitative data on respondents' view on how learning styles of students can

influence their academic performance. The results were presented using means (M) and standard deviations (SD) such that mean scores 2.5 and above indicates respondents viewed the statement as an influencing factor to students' performance and less than 2.5 indicates the respondent view on the statement as not an influencing factor to students' performance. Results are presented in the table 10 below.

Table 10: Learning Styles of Students and Academic Performance

Student Learning Style	M	SD
My students learn with their sense organ of hearing	2.99	.90
My students prefer learning by reading and writing down on a paper or board	3.22	.81
My students prefer involving themselves in the activities of learning	2.33	.84
The sense of sight influences my students in their learning	3.39	.85

Source: Field survey, 2022

Teachers revealed that their students' sense of sight influences their learning (M=3.39, SD=.85). It was also revealed that their students preferred learning by reading and writing down on a paper or board (M=3.22, SD=.81). Teachers again revealed that their students learn with their sense organ of hearing (M=2.99, SD=.90). Teachers also indicated that their students preferred involving themselves in the activities of learning (M=2.33, SD=.84).

Qualitative data were collected on the influence of learning styles on students' academic performance. Most of the participants expressed their views in varied ways as a proof that learning styles can influence academic performance.

Participant four specified that *“Inadequacy of teaching and learning materials are affecting students’ style of learning which is greatly affecting students in their academic performance”*.

Participant two expressed view that *“Inability of teachers to vary their methods of teaching does not benefit all students due to the differences in learners’ style of learning”*.

On teachers’ views on the influence learning styles of students have on their academic performance, several participants were of the view that effective learning styles by students can go a long way to influence academic performance positively. Participants also added that a positive school environment enhances safe and sound students learning, makes them appreciative and pay attention to their studies. Majority of the participants were of the view that by making sure that there are resources such as textbooks and board markers for teachers and employing different methodologies to suit different learning styles provides an enabling environment for students to perform well in their academics. Several participants also indicated that teachers are aware of different learning styles of their students and as such they take into consideration these different learning styles in their mood of delivering.

For instance, on whether students’ learning styles influence their academic performance, Participant three indicated that *“It determines the rate at which students learn on their own”* Participant one also added that *“Comprehension is based on learning style”*. In addition, Participant four and seven specified that learning styles can *“help students to choose the appropriate programmes to enable them exhibit their skills”* and *“that appropriate learning styles serve as source of motivation”* respectively.

Participants further expressed their views on how a school's learning environment influences one's learning style. Participant three for instance specified that *"By putting in place adequate resources to help students to learn"* and *"a positive school environment enhances safe and sound students learning"* respectively. Furthermore, Participant one added that *"it makes them appreciative and pay attention"*. Participant four also specified that *"an environment that encourages students to learn will force non-performing students to try and learn to be at par with their mates"*, while Participant five added that *"Students who study in a positive learning environment have shown to be more motivated and engaged in teaching and learning"*.

The majority of the participants also specified that teachers are aware of the different learning styles of their students and as such, they take into consideration these different learning styles in their mode of delivery. However, Participant five indicated *"yes but they are still using the normal way (audio) or lecturing"*

Research Question Two

How can SHS's objective-based core curriculum of learning influences academic performance of students at the SHS?

Research question two sought to explore teachers' views on the influence the SHS's objective-based core curriculum have on the academic performance of students. Both quantitative and qualitative data were taken from teachers.

A total of five close-ended questions on a four-point Likert scale representing Excellent (4), Good (3), Fair (2), and Poor (1) were used to collect

quantitative data from the teacher respondents on their views on students' core curriculum of learning and their academic performance. The results were presented using means (M) and standard deviations (SD) such that mean scores 2.5 and above indicates respondents viewed the statement as an influencing factor to students' performance and less than 2.5 indicates respondents viewed the statement as not an influencing factor to students' performance. Results are presented in the Table 11 below.

Table 11: Influence of the SHS's Objective-Based Core Curriculum of Learning on Academic Performance of Students

Objective Based Core Curriculum	M	SD
Students are overloaded in their learning because the SHS objective-based core curriculum is overloaded/overlapped	3.0	.84
The number of years for my students to complete the syllabus for the SHS course is adequate	1.72	.83
I accept that there are performance standards of the core curriculum to guide teaching and learning in improving academic performance	2.61	.70
I am satisfied with the nature of the assessment system of the SHS objective-based core curriculum	2.61	.98
The core curriculum is appropriate in identifying and nurturing talents and interest of my students in improving their performance	2.44	.86

Source: Field survey, 2022

Majority of the participants agreed that students are overloaded in their learning due to the overload/overlap of the SHS objective-based core curriculum ($M=3.0000$, $SD=.84017$). Participants also accepted that there are performance standards on the core curriculum to guide teaching and learning in improving academic performance ($M=2.6111$, $SD=.69780$). Participants further indicated that they were satisfied with the nature of the assessment system of the SHS objective-based core curriculum ($M=2.6111$, $SD=.97853$). However, they disagreed that the core curriculum is appropriate in identifying and nurturing talents and interest of their students in improving their performance ($M=2.4444$, $SD=.85559$). Participants also disagreed that the number of years for their students use to complete the syllabus for the SHS course is adequate ($M=1.7222$, $SD=.82644$).

Qualitatively, many of the teacher participants agreed that the nature of the core curriculum is a factor influencing academic performance of students at the SHS level. Several participants expressed their views on how the nature of the core curriculum influences academic performance of students at the SHS level. Participants noted that the curriculum determines the rate at which students learn. If it is practical and relate to students' interest, they perform well, however, the core curriculum is overloaded and gives little time to finish it.

According to participant three "*It determines the rate at which students learn*". Participant one added that "*If it is practical and relate to their interest, they perform well*". Also, Participant five indicated that "*It gives students enough period to study*", however, Participants six held contrary opinion, indicating that "*The curriculum is overloaded and the duration of the programme is short*". Participant eight also added that "*It is objective-based so*

students are made to learn for exams purposes". However, other participants identified shortcomings with the curriculum. According to Participant four "*The objective-based emphasizes on knowledge rather than the affective and the psychomotor skills*".

Participants were also asked to express their views on the content of the current SHS objective-based core curriculum in respect to the duration of the programme. All participants were of the view that the time frame for the SHS programme is limited. Thus, the time allocated is lesser than the objectives to be covered in the core curriculum. For instance, Participant three noted that "*the students need enough time in terms of duration*", while Participant two noted "*The core curriculum is overloaded but with limited duration*".

Participants were also asked to comment on the mode of the assessment prescribed by the core curriculum. Majority of the participants indicated that the assessment procedure was not the best. For instance, Participant six noted "*Not of the best because the mode of the assessment is not all that perfect*". According to Participant seven it is "*very bad*", Participant eight added "*It does not encourage the holistic learning of the students*", while Participant four suggested "*It should be formative which should also be used at WASSCE*".

Accordingly, participants made several suggestions to improve the mode of assessment used at the SHS level. One major suggestion was for more time to be provided to complete the core curriculum and the curriculum ought to address the needs of learners. Participant three suggested "*It should be expanded to cover a number period*". Other responses included it should be "*reviewed*" (Participant one), "*more time should be given so as for the teachers to cover all the syllabus*" (Participant five), "*the core curriculum should be*

made to address the needs and interest of learners” (Participant eight) and *“it should seek to address the needs and interest of the stakeholders* (Participant seven).

Research Question Three

How can counselling influence academic performance of students at the SHS level?

Research question three sought to explore teachers’ views on how counselling can influence academic performance of students at the SHS level in Dunkwa-On-Offin. Both quantitative and qualitative data were taken from teachers.

A total of four closed-ended questions on a four-point Likert scale representing Excellent (4), Good (3), Fair (2), and Poor (1) were used to collect quantitative data on respondents’ views on how counselling can influence their students’ academic performance. The results were presented using means (M) and standard deviations (SD) such that mean scores 2.5 and above indicates respondents viewed the statement as an influencing factor to students’ performance and less than 2.5 indicates viewed the statement is not an influencing factor to students’ performance. Results are presented in the table 12 below.

Table 12: Influence of Counselling on Students' Academic Performance

Counselling	M	SD
I accept that counselling can help my students to make proper subject choices leading to good academic performance	2.78	.94
Counselling can help my students to be able to study well	2.17	.86
I accept that counselling can instil discipline in my students to focus on their learning	1.83	.79
I agree that counselling can relieve my students from anxieties to be able to learn better	3.33	1.03

Source: Field survey, 2022

From the analysis of the data as shown in Table 13, respondents agreed that counselling can relieve their students from anxieties to be able to learn better ($M=3.3333$, $SD=1.02899$). It was also revealed that majority of the respondents accepted that counselling can help their students to select appropriate subjects leading to good academic performance ($M=2.7778$, $SD=.94281$). However, respondents disagreed that counselling can help their students to adapt to school life to be able to study well ($M=2.1667$, $SD=.85749$). Respondents further disagreed that counselling can instill discipline in students to focus on their learning ($M=1.8333$, $SD=.78591$).

Qualitatively, all participants were with the view that ineffective counselling was a factor influencing academic performance of students at the SHS. Participants therefore suggested several strategies to improve school counselling. According to Participant three, counselling could improve students' academic performance *"By offering appropriate remedies to enhance students' performance"*. Participant five added that *"counselling can facilitate*

the development of educational and personal goals of the students” and “helping them to learn, identifying their weakness to improve upon it, relieving them of problems that affect their learning” respectively. In addition, Participant four added that “Counselling will guide students to choose the appropriate courses” while Participant seven indicated that “It motivates the students to boost their confident levels”

Participants also commented on the state of counselling activity in their schools. Several participants were of the view that counselling activity was improving in their school. For instance, Participant one noted, *“There has been improvement”*, while Participant five added that it is *“improving day by day”*. According to Participant four, *“It is guiding students in their choice of career”*. However, other participants were of the view that counselling was in a *“Bad state”* (Participant seven) and that *“It is not effective: (Participant eight).*

Participants were also asked to indicate some of the challenges faced by the counselling unit in their schools. Majority of the participants identified lack of resources as the major challenge. This included *“facilities”* (Participant one), *They do not have offices of their own to have private discussions* (Participant four), *“No counselling office, no facilities and lack of commitment”* (Participant six), *There is no office designed to take care of it* (Participant seven), *“No office for counselling coordinators and “No orientation has been given to the coordinator in relation to his work* (Participant eight). Other participants also specified *“Students find it difficult to attend counselling sessions”* (Participant three) and *“Students’ inability to benefit from counselling and the time frame is too short”* (Participant five).

Due to the numerous challenges identified, participants were asked questions on what could be done to strengthen and improve counselling activity in their schools. These questions were mostly focused on improving the resources available to counsellors. For instance, Participant six indicated counsellors should receive *“Support from the head/staff of the school and also support from the government and other stakeholders”* while Participant seven noted that *“Office must be created for the guidance and counselling coordinator in the school”*. According to Participant four *“Qualified counsellors should be employed to help improve counselling activity in the school”* and Participant eight added that *“Counselling unit should be made active”*.

With regards to suggestions on improving the role of teachers, Participant seven noted that *“Workshop must also be organized for teachers to also assist the coordinator in terms of providing guidance services”*. Furthermore, Participant eight added that authorities should *“Organize orientations for teachers to also get involve in addressing the needs of the learners”* while Participant three added that *“Teachers should refer students with weak academic performance”*.

Participants also noted that *“students should have interest and patronize counselling and students should be educated and encouraged to seek guidance services”* (Participant six). Finally, Participant five added that the influence of counselling on students' academic performance could be positive by *“Allowing the students to go for counselling on their free will and extending the time for the service.”*

Research Hypothesis One

There is no statistically significant relationship between learning styles of students and their academic performance at the SHS level.

The first research hypothesis sought to find out the relationship between learning styles of students and their academic performance at the SHS level. Learning styles was a multidimensional scale with four sub-scales, five questions each on a four-point Likert scale which focused on visual style of learning, auditory style of learning, read/write style of learning and kinesthetic style of learning. Academic performance was measured using students' test scores on the four main core subjects.

Table 13: Correlation Between Learning Styles and Academic

		Performance						
S/N	Variable	M	SD	1	2	3	4	5
1	Visual Style	12.17	3.12	1	.484*	.548*	.556*	.375*
2	Auditory style	13.41	2.88		1	.476*	.515*	.385*
3	Read and write style	12.67	3.19			1	.641*	.859*
4	Kinesthetic style	12.25	3.22				1	.511*
5	Core subjects scores	12.73	2.26					1

Correlation is significant at the 0.01 level (2-tailed) **

Correlation is significant at the 0.05 level (2-tailed) *

Source: Field survey, 2022

N= 99

Pearson's correlation coefficient revealed that read and write learning style had a statistically significant correlation with academic performance ($p < .01$, $r = .859$). There was a positively strong correlation between using read and write learning style and academic performance. This means higher scores on read and write learning is associated with higher academic performance and vice versa. This was the strongest correlation among the four learning styles.

The study further revealed that kinesthetic learning style had a statistically significant correlation with academic performance ($p < .01$, $r = .511$). There was a positively moderate correlation between using kinesthetic learning style and academic performance. This means higher scores on kinesthetic learning style is associated with higher academic performance and vice versa, although this correlation is moderate.

The study further revealed that auditory learning style had a statistically significant correlation with academic performance ($p < .01$, $r = .385$). There was a positively weak correlation between using auditory learning style and academic performance. This means higher scores on auditory learning style is associated with higher academic performance and vice versa, although this correlation is weak.

Pearson's correlation coefficient again revealed that visual learning styles had a statistically significant correlation with academic performance ($p < .01$, $r = .375$). There was a positively weak correlation between using visual learning style and academic performance. This means higher scores on visual learning is associated with higher academic performance and vice versa, although this correlation is weak.

Research Hypothesis Two

There is no statistically significant relationship between the SHS's objective-based curriculum of learning on the core subjects and academic performance of students at the SHS level.

The second research hypothesis sought to find out the relationship between students' perception on the SHS's objective-based core curriculum of learning and academic performance of students at the SHS level. Students' perception on the SHS's objective-based core curriculum of learning was measured using five close-ended questions on a four-point Likert scale. Academic performance was measured using students test scores on the four main core subjects.

Table 14: Correlation Between Perception SHS's Objective-Based Core Curriculum of Learning and Academic Performance

S/N	Variable	M	SD	1	2
1	Curriculum perception	13.18	3.30	1	.350**
5	Core subjects scores	12.73	2.26		1

Correlation is significant at the 0.01 level (2-tailed) **

Correlation is significant at the 0.05 level (2-tailed) *

Source: Field survey, 2022

N= 99

Pearson's correlation coefficient revealed that perception of the SHS's core curriculum had a statistically significant correlation with academic performance ($p < .01$, $r = .350$). There was a positively weak correlation between perception on the SHS's core curriculum and academic performance. This means higher scores on perception of the SHS's core curriculum is associated with higher

academic performance and vice versa, although this correlation is weak. Thus, students who have a positive perception on the SHS core curriculum also have higher academic performance.

Research Hypothesis Three

There is no statistically significant relationship between counselling and academic performance of students at the SHS

The third research hypothesis sought to find out the relationship between students' perception on counselling and academic performance of students at the SHS. Students' perception of counselling was measured using four close-ended questions on a four-point Likert scale. Academic performance was measured using students' test scores on the four main core subjects.

Table 15: Correlation Between Perception Counselling and Academic

		Performance			
S/N	Variable	M	SD	1	2
1	Counselling perception	11.28	2.42	1	.296**
5	Core subjects scores	12.73	2.26		1

Correlation is significant at the 0.01 level (2-tailed) **

Correlation is significant at the 0.05 level (2-tailed) *

Source: Field survey, 2022 N= 99

Pearson's correlation coefficient revealed that perception on counselling had a statistically significant correlation with academic performance ($p < .01$, $r = .324$). There was a positively weak correlation between perception on guidance and counselling and academic performance. This means higher scores on perception of counselling is associated with higher academic performance

and vice versa, although this correlation is weak. Thus, students who have a positive perception on counselling also have higher academic performance.

Discussion of Results

Research Question One: How can learning styles of students influence their academic performance at the SHS level?

Quantitative data revealed that a school's environment that suits one's learning style enhances academic performance. Teachers are aware of different learning styles of students that can make them learn better and that they vary their teaching methodology to suit the different learning styles of students to enhance understanding of the lesson. However, the learning school environment of the schools were not appropriate for the different learning styles of students. Thus, from the above, teachers are aware of the influence learning styles of students have on their academic performance but their schools were not well prepared to meet the unique learning styles of their students.

The qualitative data revealed that learning styles determines the rate at which students learn on their own, and comprehension is based on learning style. Participants also added that a positive school environment enhances safe and sound students learning. It makes them to appreciate and pay attention to their studies. Majority of the respondents were of the view that making sure that there are resources such as textbooks and board markers for teachers and employing different methodologies to suit different learning styles provide an enabling environment for students to perform well in their academics.

Thus, both quantitative and qualitative data revealed that teachers are aware of the influence learning styles of students have on their academic

performance but their schools were not well prepared to meet the unique learning styles of their students. Also, learning styles determines the rate at which students learn on their own and comprehend what they learn.

Grapragasem (2013) discovered that there is a relationship between students' preferred learning styles and their academic performance in Malaysia.

Idris (2015) also saw a relationship between academic performance and the use of audiovisual aids and oral communication as styles of learning. Similarly, Owusu-Badu (2020) found out in his study that most of the students' preferred learning styles did not correspond with their learning environment. Owusu-Badu's finding attests that the poor academic performance at the SHS level is partly as a result of the students' inability to utilize their preferred learning styles. Taylor's revised scientific theory of school administration also supports the findings. According to the theory of the study, appropriate students' learning style as an input factor in the teaching and learning process yields an output effect of good academic performance. The implication of the theory is that the resultant effect of not considering students' preferred learning style in the teaching and learning process is poor academic performance of students.

Research Question Two: What are the influence of the SHS's objective-based core curriculum of learning on academic performance of students at the SHS?

From the quantitative data of the study, respondents indicated that students are overloaded in their learning due to the overload/overlap of the SHS objective-based core curriculum. Participants also accepted that there are performance standards of the core curriculum to guide teaching and learning in

improving academic performance. Participants further indicated that they were satisfied with the nature of the assessment system of the SHS objective-based core curriculum. However, they also noted that the curriculum is not appropriate in identifying and nurturing talents and interest of their students in improving their performance. Participants also noted that the number of years for their students to complete the syllabus for the SHS course is inadequate.

Qualitative data also revealed that the curriculum determines the rate at which student learn, if it is practical and relate to students' interest. Some of the students perform well, however, the core curriculum is overloaded and gives little time to finish it. All participants were of the view that the time frame for the SHS programme is limited. Thus, the time allocated is lesser than the content to be covered in the core curriculum. One major suggestion was for more time to be provided to complete the core curriculum and the curriculum ought to address the needs of learners.

Thus, both qualitative and quantitative data revealed that the SHS objective-based core curriculum determines the rate at which students learn, if it is practical and relate to students' interest, they perform well. However, the core curriculum is overloaded and gives little time to finish it. They also noted that the core curriculum is not appropriate in identifying and nurturing talents and interest of their students in improving their performance. One major suggestion was for more time to be provided to complete the curriculum and the curriculum ought to address the needs of learners.

The current study found similar results with past studies that stressed that the curriculum of second cycle institutions affected the educational attainment of students. Naeem (2009) specified that the saddening and

deteriorating condition of the educational system due to the nature of its curriculum in Pakistan raises many fingers on education department of Pakistan, whose representatives, so confidently sing songs of success in every of their appearance. Chukwere (2017) conducted research in Botswana and the study revealed that the current curriculum of education in Botswana has been unproductive. These studies agree with the current findings of this study that the SHS curriculum is overloaded and as such, it affects the academic performance of students. Aboagye and Yawson (2020) also added that the new curriculum proposed by the GES encourage group work, assist students to get lifelong skills among others unlike the objective-based curriculum still being used.

Taylor's revised scientific theory of school administration also supports the findings of the study. According to the theory of the study, workable and functioning learning curriculum as an input factor in the teaching and learning process yields an output effect of good academic performance. The resultant effect of unsuitable curriculum in the teaching learning process is poor academic performance of students.

Research Question Three: How can counselling influence academic performance of students at the SHS level?

Analysis of the quantitative data revealed that counselling can help students to make proper subject choices leading to good academic performance and that counselling can relieve their students from anxieties to be able to learn better.

Qualitative data on counselling revealed that all participants were of the view that ineffective counselling was a factor contributing to the poor academic performance of students at the SHS. Participants were of the view that improving the resources available to counsellors such as offices, providing professional development, receiving support from relevant authorities in their schools could improve counselling provided at schools to help students improve their academic performance. Also, workshops should be organised for teachers on counselling and students should also be encouraged to seek services of counsellors.

From the analysis, it was established that counselling can improve influence students' performance. However, resources should be provided to counsellors. Teachers should be well educated on counselling, and also students should be encouraged to seek counselling services. This confirms previous research that counselling has an influence on students' performance. Mikaye (2012) specified that schools with effective guidance and counselling have provided discipline to students and improved academic performance. While schools with no or ineffective counselling experience infractions such as assault, arson, fighting, theft, and vandalism, destruction of school properties, harassment, riots, rape and loss of lives which result to poor academic performance of their students. Lindsay as (cited in Odhiambo, 2014) argued that low academic performance and drop out of students are due to the absence of guidance and counselling activities in schools. The outcome of Odhiambo study on the effects of guidance and counselling on students' grades in Kenya came to confirm what Lindsay said.

Taylor's revised scientific theory of school administration also supports the findings. According to the theory of the study, effective application of counselling as an input factor in the teaching and learning process yields an output effect of good academic performance. The resultant effect of not applying counselling in the teaching and learning process is poor academic performance of students.

The conceptual framework of the study also goes to summarise the findings of the study that variable inputs of the study such as suitable curriculum of learning, appropriate learning styles of students when injected with another variable input; effective counselling have a strong positive correlation with good academic performance. In the contrary, output variable; students' low academic performance may be exacerbated by input factors such as an improper curriculum, defective learning style and ineffective counselling.

Research Hypothesis One: There is no statistically significant relationship between learning styles of students and their academic performance at the SHS level.

The study found a positive relationship between visual learning style and academic performance, auditory learning style and academic performance, read and write learning style and academic performance and kinesthetic learning style and academic performance. There was a positively weak correlation between using visual learning style and academic performance. There was a positively weak correlation between using auditory learning style and academic performance. There was a positively strong correlation between using read and write learning style and academic performance. There was a positively

moderate correlation between using kinesthetic learning style and academic performance. However, read and write style of learning had a stronger positive relationship with academic performance than all other learning styles.

Several researchers have also found positive correlation between learning styles and academic performance. Research by Dalmolin, Mackeivicz, Pochapski, Pillati and Santos (2018) detected a strong link existing between students' performance academically and that of their styles of learning. Magulod Jr. (2019) also researched into styles of learning and academic performance and came out with an impacting relationship that exist between styles of learning and academic performance of students. Thus, the current study found similar results with that of previous studies.

Taylor's revised scientific theory of school administration also supports the findings. According to the theory, appropriate students' learning style as an input factor in the teaching and learning process yields an output effect of good academic performance. The resultant effect of not considering students' preferred learning style in the teaching and learning process is poor academic performance of students.

Research Hypothesis Two: There is no statistically significant relationship between the SHS's objective-based core curriculum of learning and academic performance of students at the SHS level.

There was a positively weak correlation between perception of the SHS's core curriculum and academic performance. This means higher scores on perception of the SHS's core curriculum is associated with higher academic performance and vice versa, although this correlation is weak. Thus, students

who have a positive perception of the SHS core curriculum also have higher academic performance. This comes to confirm the findings of Aboagye and Yawson (2020) on their perception on the objective-based curriculum. According to them, the curriculum's content is overloaded and its assessment system do not support in the improvement of teaching and learning leading to poor academic performance of students. Taylor's revised scientific theory of school administration also supports the findings of the study. According to the theory of the study, workable and functioning learning curriculum as an input factor in the teaching and learning process yields an output effect of good academic performance. The resultant effect of unsuitable curriculum in the teaching learning process is poor academic performance of students.

Research Hypothesis Three: There is no statistically significant relationship between counselling and academic performance of students at the SHS.

There was a positively weak correlation between perception counselling and academic performance. This means higher scores on perception counselling is associated with higher academic performance and vice versa, although this correlation is weak. Thus, students who have a positive perception of counselling also have higher academic performance. Odhiambo (2014) also specified that counselling have positive impact on the academic performance of students. This confirms the findings of the current study.

Taylor's revised scientific theory of school administration also supports the findings. According to the theory, effective application of counselling as an input factor in the teaching and learning process yields an output effect of good academic performance. The resultant effect of not applying counselling

effectively in the teaching and learning process is poor academic performance of students.

Chapter Summary

This chapter presented the results and discussions of the study. The study revealed that learning styles of students, SHS objective-based curriculum on the core subjects and counselling are some of the causes of poor academic performance. It also gives strategies to improve low academic performance of students. The study also revealed that teachers are aware of the influences learning styles have on their students. It continued to present and discussed the influence SHS's objective-based core curriculum of learning has on the academic performance of students, and also how counselling can influence academic performance of students. Lastly, the study continued to look at the statistically significant relationship between learning styles, SHS objective-based core curriculum, counselling and academic performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents an overview of the study, the results made, ideas and recommendations for subsequent studies based on the findings. The study's contributions to knowledge, counselling implications and suggestions for further research have also been presented in this chapter.

Summary

Influence of learning styles of students, SHS objective-based core curriculum and counselling on academic performance of senior high level at Dunkwa-On-Offin was the focus of this investigation. The goals of the study were; (a) to investigate the influence of students' learning styles on academic performance of students at the SHS level in Dunkwa-On-Offin. (b) to analyse the influence of the SHS's objective-based core curriculum of learning on students' academic performance at the SHS level in Dunkwa-On-Offin. (c) to examine the influence of counselling on academic performance of students at the SHS level in Dunkwa-On-Offin.

This study used a mixed-method design, which entailed the use of both qualitative and quantitative techniques. In this work, mixed-methods approach was used to combine the strengths of both quantitative and qualitative research strategies. All students and educators (headteachers, form teachers, and counsellors) of Boa-Amponsem and Dunkwa Senior High Schools in Dunkwa-On-Offin were surveyed. The total number of the subjects as sample size for the study was 117 comprising 99 students and 18 educators.

Most of the students were between the ages of 18 and 20, and they were majoring in either general science or general arts; those studying business, home economics, technology, or agriculture were in the minority. Majority of the educators were men within the age range of 38 to 41. Data was gathered through the use of questionnaire, interview guide and documentation and the use of test. In this study, I tested the instruments and found that they were both valid and reliable. Descriptive statistics such as means and standard deviations were used to analyse the research questions whereas inferential statistics such as the Pearson's product moment correlation was used to examine the research hypotheses of the study. The qualitative data on the other hand was analysed using content analysis. The significance level used in testing the hypotheses were 0.01 and .05.

Main Findings

The following were the main findings of the study:

- i. It was revealed by both quantitative and qualitative data the effects of students' learning styles on students' academic performance. For the hypothesis testing, the strongest students' learning style was read and write while for the research question, majority agreed on visual style of learning. From the findings of the study, academic performance of students is well enhanced when educators adopt an instructional strategy of incorporating students' learning styles while students themselves effectively utilize their most prefer styles of learning.
- ii. The study also revealed the influence the SHS'S objective-based core curriculum of learning on students' academic performance at the SHS

level. Majority agreed that content overload/overlap was the main challenges of the curriculum. The outcome of the study indicated that students' academic performance improves better if the core curriculum is very workable and functioning to suit their learning.

- iii. It was furthermore revealed by the study the influence of counselling on academic performance of students at the SHS level. Majority agreed that counselling could relieved students from anxieties to be able to learn better. The finding on it was that effective application of counselling by educators and its reciprocal utilization by students enhances their academic performance.

Conclusions

Based on the findings of this study, the following conclusions have been made:

On students' learning style, it was deduced that the factors which influence academic performance of students at Boa-Amponsem and Dunkwa Secondary/Technical schools centred on inappropriate learning styles of students. Furthermore, it was also concluded from the study that non-functional and non-workable core curriculum of learning at the SHS level impact negatively on students' performance of both Boa-Amponsem and Dunkwa Secondary/Technical schools. Finally, for students at Boa-Amponsem and Dunkwa Secondary/Technical Schools, findings indicated that counselling is indispensable tool in improving academic performance.

Recommendations

Based on the research findings and conclusion, the following recommendations have been made.

1. Appropriate mechanisms should be put in place so as to make it conducive for the students to utilize their various most preferred learning styles to the fully. With this, the school authorities should help put in place a very good celebrating environment to be able to accommodate students with varied and diverse learning styles. This is very important because both qualitative and quantitative data of the study obtained on students' learning styles have proven that students' academic performances are negatively affected due to the mismatch of their most preferred learning styles and their learning environments. Owusu-Badu (2020) found out in his study that most of the students' preferred learning styles did not correspond with their learning environment. Owusu-Badu's finding attests that the poor academic performance at the SHS level is partly as a result of the students' inability to utilize their preferred learning styles.
2. The core curriculum of learning currently in use should be revised to be able to eradicate all forms of hindrances that affect students learning so that their academic performance can be improve. With this, recommendation is made to the government and policy makers on education the need to periodically review the SHS core curriculum of learning to make it very relevant to modern trends and the global market. This is very necessary since most of the findings of the study on the curriculum revealed the nature of the existing curriculum is a factor

leading to poor academic performance. Chukwere (2017) conducted research in Botswana and the study revealed that the current curriculum of education in Botswana has been unproductive.

3. Knowing the essential role counselling plays on students' academic performance, the GES as a body in charge of education at the pre-tertiary level and heads of senior high schools must intensify counselling in senior high schools. Most of the subjects for the study admitted that counselling can improve academic performance of students. Mikaye (2012) specified that schools with effective guidance and counselling have provided discipline to students and improved academic performance. While schools with no or ineffective counselling experience infractions such as assault, arson, fighting, theft, and vandalism, destruction of school properties, harassment, riots, rape and loss of lives which result to poor academic performance of their students.

Counselling Implications

Nyaegah (2011) said that it is important for heads to develop keen interest in guidance services in their schools because no guidance activity can take place without their involvement. This is because the essence of guidance services to improve students' academic performance cannot be underrated. Below are some of the counselling implications based on the findings of the study.

1. School counsellors should have well-furnished offices, the needed funds and resources for them to function effectively. They should embrace the

support of the heads of schools and other staff members to make their work more effective.

2. School counsellors should also design programmes that embrace all the needs of students. For instance, they should make the various subjects, courses, programmes of study and their chances in the world of work, and all what it entails in pursuing them be known to the students. Counselling should inculcate self-discipline among students in all aspects including their learning habits. Collins (2007) indicates that through counselling, students are assisted to be discipline and become able to deal with challenges and realities they face in their academic, social and physical environment. He went on to say that lack or ineffective counselling do not facilitate the educational, personal, social, emotional and career development of students in schools.
3. Students should be encouraged by counsellors to put themselves in counselling activities. Counselling activities should be placed at vantage points for the students to see or be aware.

Suggestions for Further Research

It is recommended that the same constructs be examined using a larger sample size spread through other schools in the region. It is also recommended that other constructs, such as students' stress level and their parental involvement be studied as key dimensions of academic performance.

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APPENDICES**APPENDIX A**

Questionnaire for Students

This questionnaire has been designed on “Influence of learning styles, curriculum and counselling on academic performance of SHS in Dunkwa-On-Offin of Ghana” It is meant solely for academic purposes so you are assured of confidentiality.

You are however requested to answer all the questions that follow as frankly and as openly as you can. Thank you.

DEMOGRAPHIC INFORMATION

1. Gender

a. Male []

b. Female []

2. Age

a. 13 – 15 yrs []

b. 16 – 17 yrs []

c. 18 -20yrs []

d. 21 – 23 yrs []

e. 24+ []

3. Programme

a. General Science []

b. General Art []

c. Agric []

d. Business []

e. Home Economics []

f. Technical []

STUDENTS' LEARNING STYLE**Visual Style of Learning**

4. Tick the appropriate column: Excellent (4), Good (3), Fair (2), and Poor (1)

in the table provided below to show how best you learn using the visual learning style.

ITEMS	1	2	3	4
1. My sense of sight influences my learning and performance				
2. There is availability of learning materials that help me to be using my sense of sight to learn and perform well				
3. There is availability of media movies, power point presentation and videos in my learning				
4. I am able to observe and look into detail in learning which make me to learn better				
5. I have a quiet learning environment which makes me to learn better				

Auditory Style of Learning

5. Tick the appropriate column: Excellent (4), Good (3), Fair (2), and Poor (1) in the table provided below to show how best you learn using the auditory learning style.

ITEMS	1	2	3	4
1. Instructions that deal with my sense of hearing makes me to learn effectively				
2. I am able to follow oral instructions which make me learn better				
3. I am able to do recordings during learning to facilitate my learning				
4. I have the opportunity in doing discussions in my teaching/learning				
5. I have the opportunity in involving myself in debates and arguments in my learning				

Read/Write Style of Learning

5. Tick the appropriate column: Excellent (4), Good (3), Fair (2), and Poor (1) in the table provided below to show how best you learn using the read/write learning style.

ITEMS	1	2	3	4
1. I prefer learning by reading and writing down on a paper or board				
2. There is availability of learning materials such as dictionaries to facilitate my studies				
3. I have easily access to the internet to obtain information to aid me in my learning				
4. I have the access to learn through the use of power-point presentations				
5. There is availability of written responses and text signs in my learning				

Kinesthetic Style of Learning

7. Tick the appropriate column: Excellent (4), Good (3), Fair (2), and Poor (1) in the table provided below to show how best you learn using the kinaesthetic learning style.

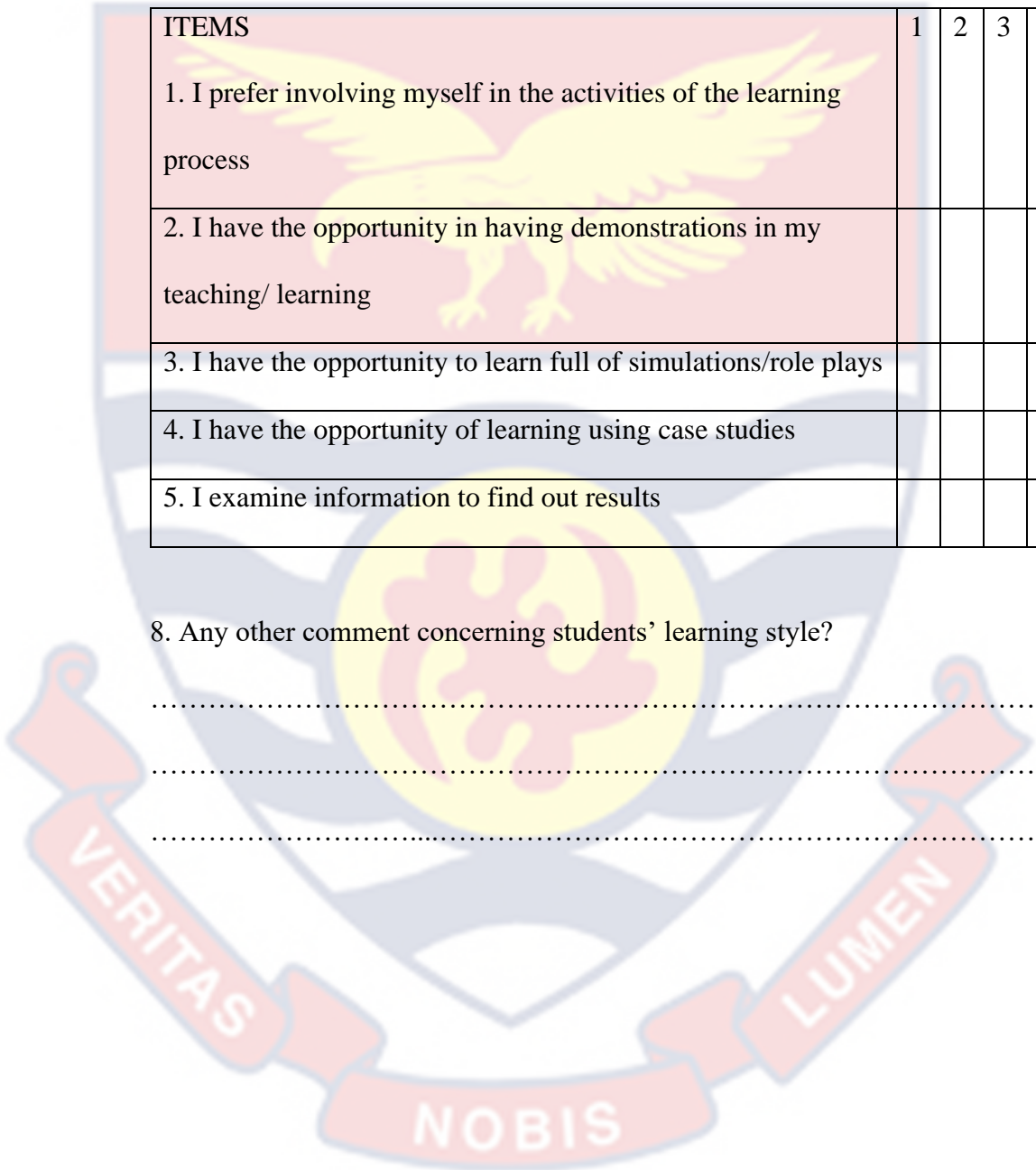
ITEMS	1	2	3	4
1. I prefer involving myself in the activities of the learning process				
2. I have the opportunity in having demonstrations in my teaching/ learning				
3. I have the opportunity to learn full of simulations/role plays				
4. I have the opportunity of learning using case studies				
5. I examine information to find out results				

8. Any other comment concerning students' learning style?

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SHS OBJECTIVE-BASED CORE CURRICULUM OF LEARNING

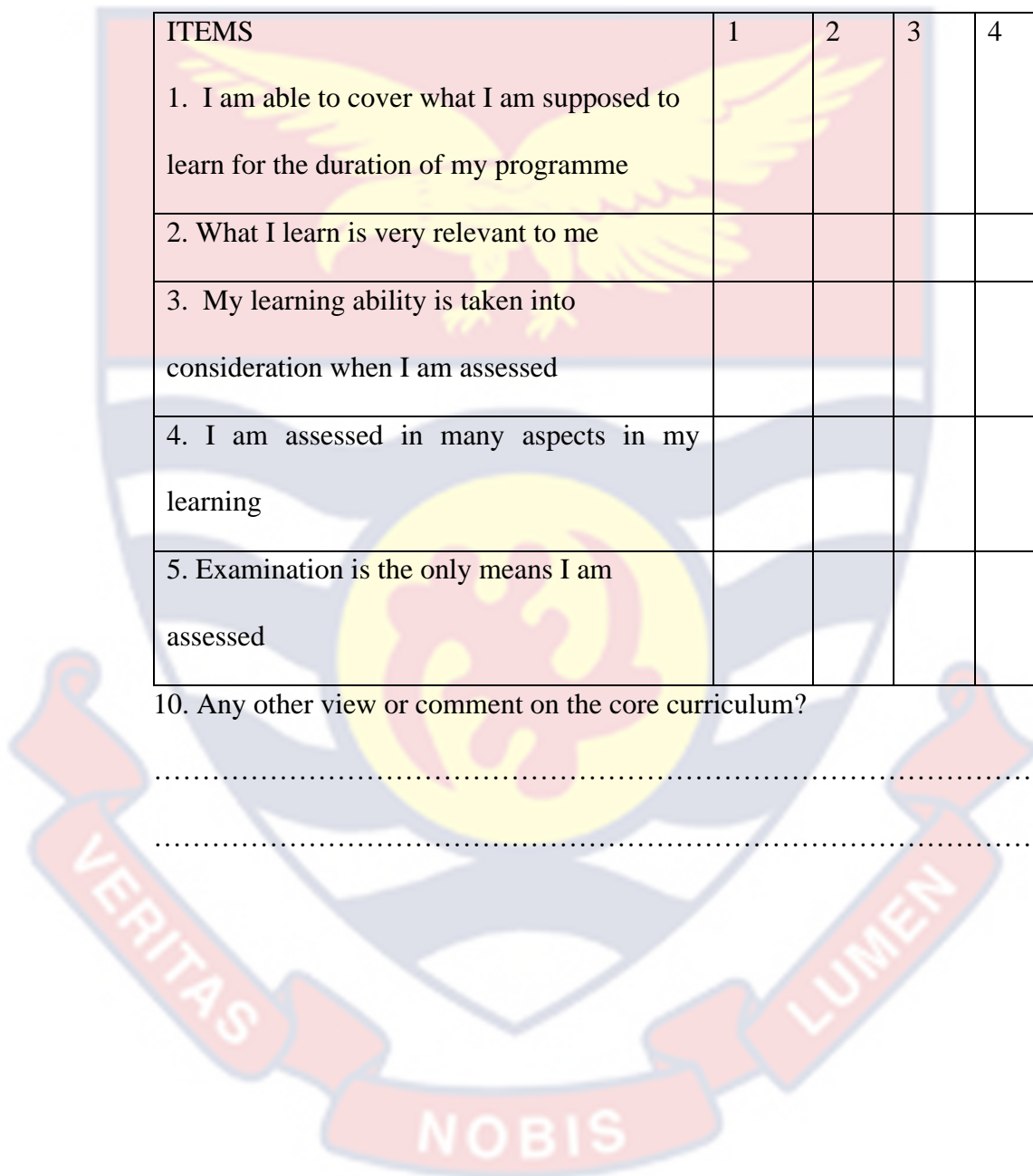
9. Tick the appropriate column: Excellent (4), Good (3), Fair (2), and Poor (1) in the table provided below to indicate your views on the SHS objective-based curriculum.

ITEMS	1	2	3	4
1. I am able to cover what I am supposed to learn for the duration of my programme				
2. What I learn is very relevant to me				
3. My learning ability is taken into consideration when I am assessed				
4. I am assessed in many aspects in my learning				
5. Examination is the only means I am assessed				

10. Any other view or comment on the core curriculum?

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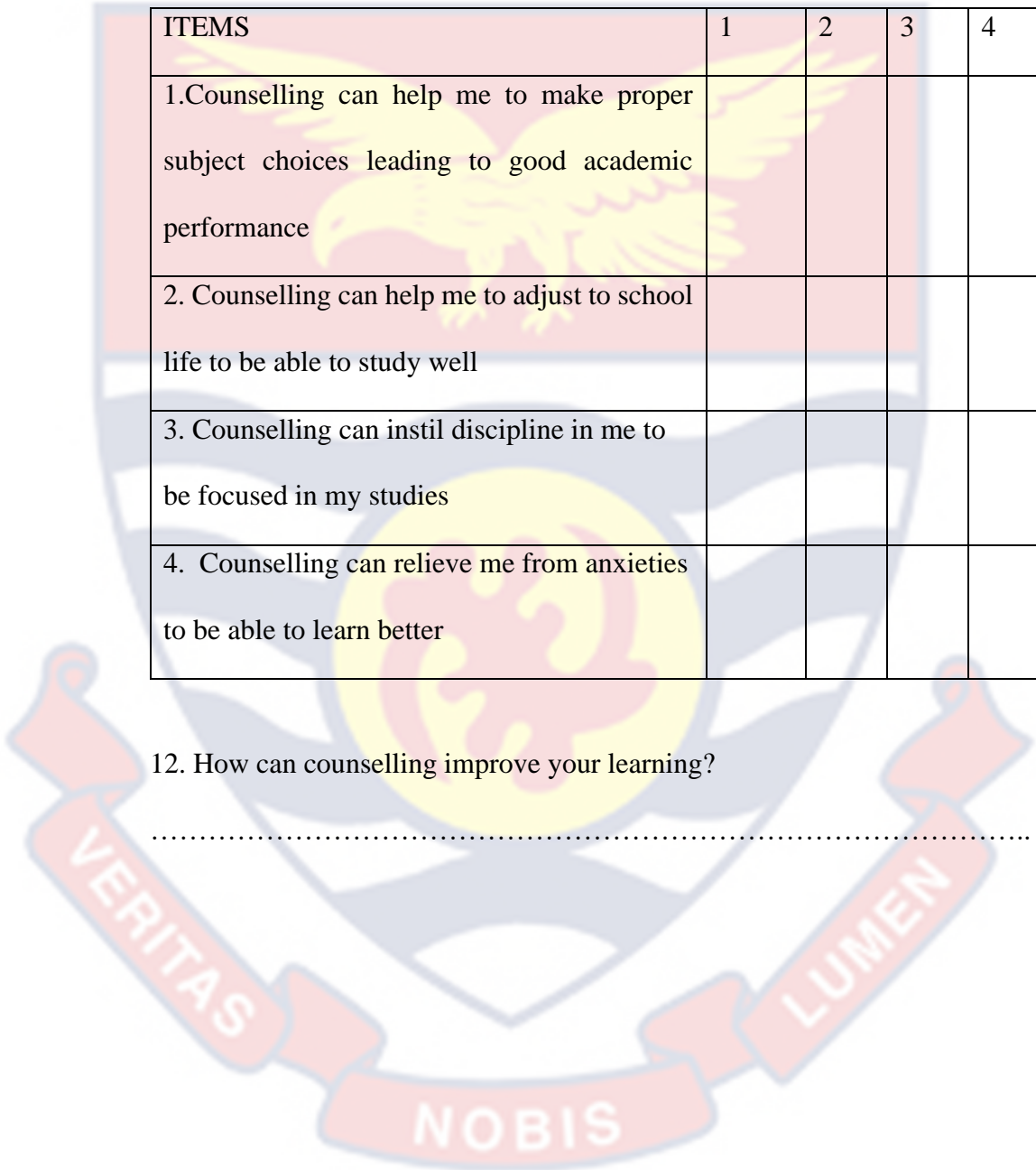
COUNSELLING

11. Tick the appropriate column: Excellent (4), Good (3), Fair (2), and Poor (1) in the table provided below to indicate your views on counselling in your school.

ITEMS	1	2	3	4
1. Counselling can help me to make proper subject choices leading to good academic performance				
2. Counselling can help me to adjust to school life to be able to study well				
3. Counselling can instil discipline in me to be focused in my studies				
4. Counselling can relieve me from anxieties to be able to learn better				

12. How can counselling improve your learning?

.....



APPENDIX B

Questionnaire for Educators

This questionnaire has been designed on “Influence of learning styles, curriculum and counselling on academic performance of SHS in Dunkwa-On-Offin of Ghana” It is meant solely for academic purposes so you are assured of confidentiality.

You are however requested to answer all the questions that follow as frankly and as openly as you can. Thank you.

DEMOGRAPHIC INFORMATION

1. Gender

a. Male []b. Female []**STUDENTS’ LEARNING STYLE**

2. Tick the appropriate column: Excellent (4), Good (3), Fair (2), and Poor (1) in the table provided below to indicate your views on students’ learning style.

ITEMS	1	2	3	4
1. My students learn with their sense of hearing				
2. My students prefer learning by reading and writing down on a paper or board				
3. My students prefer involving themselves in the activities of the learning				
4. The sense of sight influences my students in learning				

3. Comment on how learning style can influence academic performance.

.....

SHS OBJECTIVE-BASED CORE CURRICULUM OF LEARNING

4. Tick the appropriate column: Excellent (4), Good (3), Fair (2), and Poor (1) in the table provided below to indicate your view on the SHS objective-based curriculum.

ITEMS	1	2	3	4
1. Students are overloaded in their learning because the SHS objective-based core curriculum is overloaded/overlapped				
2. The number of years for my students to complete the syllabus for the SHS course is adequate				
3. I accept that there are performance standards of the core curriculum to guide teaching and learning in improving academic performance				
4. I am satisfied with the nature of the assessment system of the SHS objective-based core curriculum				
5. The core curriculum is appropriate in identifying and nurturing talents and interest of my students in improving their performance				

5. Any other view or comment on the core curriculum?

.....

COUNSELLING

6. Tick the appropriate column: Excellent (4), Good (3), Fair (2), and Poor (1) in the table provided below to indicate your views on counselling in your school.

ITEMS	1	2	3	4
1. I accept that counselling can help my students to make proper subject choices leading to good academic performance				
2. Counselling can help my students to school life to be able to study well				
3. I accept that counselling can instil discipline in my students to focus on their learning				
4. I agree that counselling can relieve my students from anxieties to be able to learn better				

7. How can counselling improve your students' learning?

.....

.....

APPENDIX C

Interview Guide for Educators

Thematic and Probing Questions for Educator's Interview

Dear participants,

All information given will be used only for academic purposes and the information you provide will be treated with utmost confidentiality it deserves. The purpose of this interview is to explore the opinions of the participants on “Influence of learning styles, curriculum and counselling on academic performance of SHS in Dunkwa-On-Offin of Ghana”

1. Questions on Learning Styles of Students

- (a) Does learning style of students have an impact on academic performance of students at the SHS?
- (b) If so, how can students learning styles impact on their academic performance?
- (c) How can a school's learning environment influence one's learning style?
- (d) How have your school put in place an enabled learning school environment to suit different learning styles of your students?
- (e) Can it be justified teachers are aware of different learning styles of your students and as such they take into consideration these different learning styles in their mood of delivering?

2. Questions on the SHS Objective-based Core Curriculum of Learning.

- (a) Can the nature of the core curriculum be a factor contributing to academic performance of students at the SHS?
- (b) If yes, how can the nature of the core curriculum influence academic performance?

(c) How do you see the content of the current SHS objective-based core curriculum in respect to the duration of the programme?

(d) What have you to say about the mode of the assessment of the core curriculum?

(e) What needs to be done on this current SHS objective-based core curriculum so as to improve SHS academic performance?

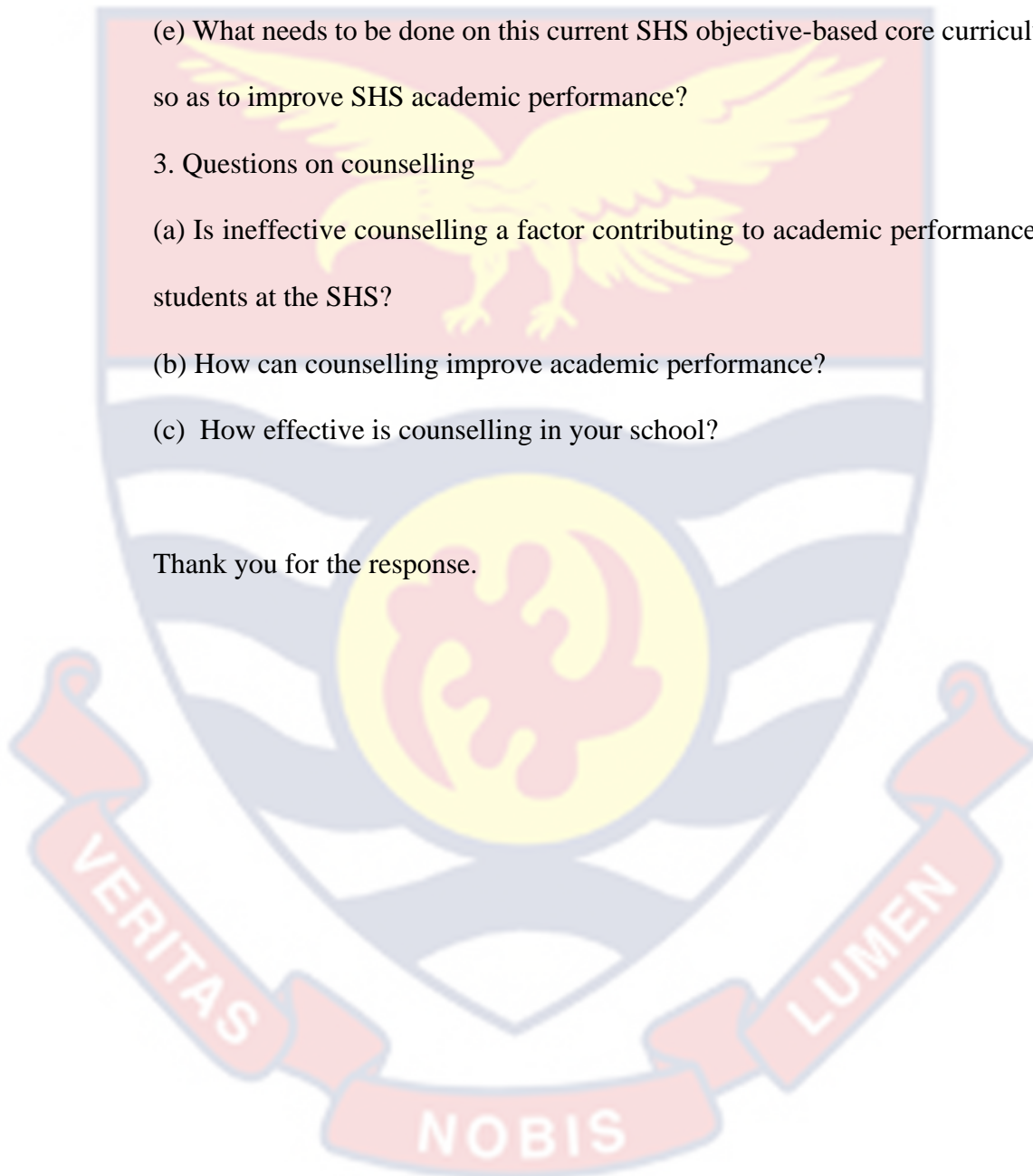
3. Questions on counselling

(a) Is ineffective counselling a factor contributing to academic performance of students at the SHS?

(b) How can counselling improve academic performance?

(c) How effective is counselling in your school?

Thank you for the response.



APPENDIX D

Documentation

Sources of information/data of the study on “Influence of learning styles, curriculum and counselling on academic performance of SHS in Dunkwa-On-Offin of Ghana” through documentary sources will be retrieved from the following documents;

1. Students’ Portfolio – Collection and analysing of learners’ work to show their progress over time. Examples are class work, assignments and class assessment tasks
2. Anecdotal Records of students – Consist of brief notes written down shortly after learners’ observation.
3. School’s Reports such as staff meetings minutes, headmasters’ reports, PTA minutes, etc
4. The schools’ examinations results analysis reports such as WASSCE.
5. Other sources are dissertations, published and unpublished theses, newspapers, pamphlets, reports, journal articles, brochures and other resources downloaded from the internet.

APPENDIX E

Test on Core Subjects Academic Performance

Answer all questions in this section

ENGLISH LANGUAGE

1. The doctor advised me to abstain.....alcoholic drinks.
A. with B. from C. upon D. without
2. There are people who are specialized.....helping young drug addicts.
A. in B. at C. with D. from
3.had the bus arrived at the station than the rain started.
A. After B. No sooner C. Early D. Before
4. Some people are addicted watching TV.
A. to B. at C. with D.in
5. Has he really given.....smoking?
A. off B. down C. up D. out

MATHEMATICS

1. If $P = \{\text{prime factors of } 210\}$ and $Q = \{\text{prime number less } 10\}$, find $P \cap Q$.

A. $\{1, 2, 3\}$

B. $\{2, 3, 5\}$

C. $\{1, 3, 5, 7\}$

D. $\{2, 3, 5, 7\}$

2. Simplify: $\frac{3\sqrt{5} \times 4\sqrt{6}}{2\sqrt{2} \times 3\sqrt{3}}$

A. $\sqrt{2}$

B. $\sqrt{5}$

C. $2\sqrt{2}$

D. $2\sqrt{5}$

3. What must be added to get $(2x-3y)(x-2y)$?

A. $5y-x$

B. $y-x$

C. $x-5y$

D. $x-y$

4. Convert 35_{10} to number in base 2.

A. 1011

B. 10011

C. 100011

D. 11001

5. Solve for x in the equation: $\frac{1}{x} + \frac{2}{3x} = \frac{1}{3}$

A. 5

B. 4

C. 3

D. 1

SCIENCE

1. Which of the following is the correct expression for newton in base units?

- a) 1kgm/s b) 1kgms c) 1kgm/s^2 d) $1\text{kg}^2\text{ms}$

2. Which of the following cannot be used to measure the volume of a liquid?

- a) pipette b) metre rule c) burette d) measuring cylinder

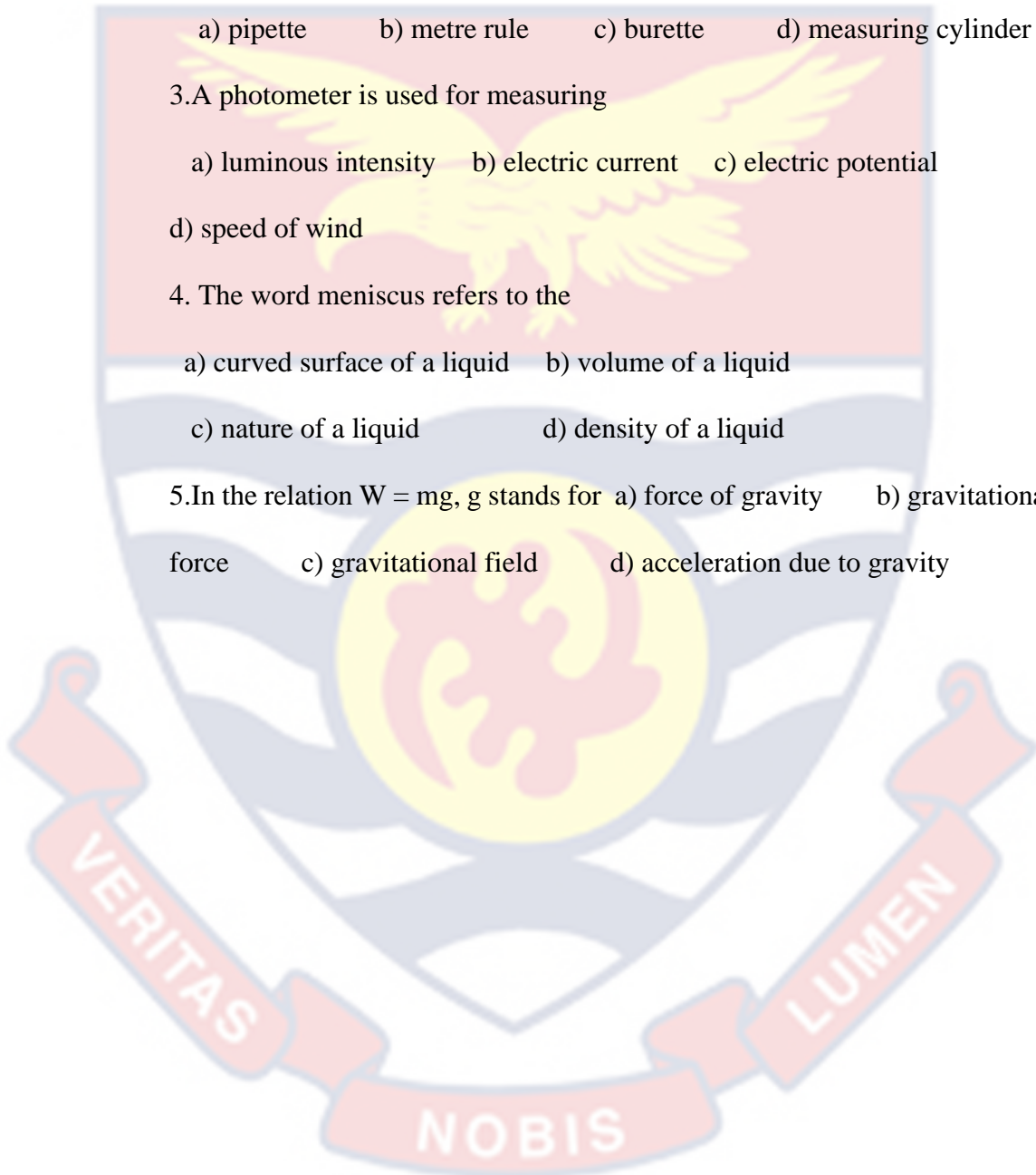
3. A photometer is used for measuring

- a) luminous intensity b) electric current c) electric potential
d) speed of wind

4. The word meniscus refers to the

- a) curved surface of a liquid b) volume of a liquid
c) nature of a liquid d) density of a liquid

5. In the relation $W = mg$, g stands for a) force of gravity b) gravitational force
c) gravitational field d) acceleration due to gravity



SOCIAL STUDIES

1. Which of the following statements is true about the economic development of Ghana?

- A. Ghana is a developed country.
- B. Ghana is an under-developing country.
- C. Ghana is a fast-developing country.
- D. Ghana is a slow-developing country.

2. The name Ghana was adopted for Gold Coast from the old Ghana Empire because the people

- A. had people with the same colour.
- B. had the same leaders.
- C. had the same ancestors.
- D. were very rich in gold.

3. The right that allows every citizen to use, any public facility without difficulty constitutes?

- A. economic right.
- B. political right.
- C. social right.
- D. natural right.

4. The following festivals are all celebrated in Northern Ghana except

- A. Foo.
- B. Hogbetsotso.
- C. Damba.
- D. Kobine

5. Political stability is said to exist when

A. the governance of a country is not disturbed by internal and external forces.

B. there is irregular overthrow of elected governments.

C. a country is ruled by a wicked president.

D. an elected government stays in power for as long as possible.



APPENDIX F

Reliability

Reliability Statistics for Educators

Cronbach's Alpha	N of Items
.762	13

Reliability Statistics for Students

Cronbach's Alpha	N of Items
.681	29

APPENDIX G

ETHICAL CLEARANCE

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309
 E-MAIL: irb@ucc.edu.gh
 OUR REF: UCC/IRB/A/2016/1353
 YOUR REF:
 OMB NO: 0990-0279
 IORG #: IORG0009096

12TH MAY, 2022

Mr. Francis Owusu-Badu
 College of Distance Education
 University of Cape Coast

Dear Mr. Owusu-Badu,

ETHICAL CLEARANCE – ID (UCCIRB/CoDE/2022/04)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research **Factors Contributing to Students' Academic Performance in Senior Secondary Schools in Upper Denkyira East Municipality of Ghana**. This approval is valid from 12th May, 2022 to 11th May, 2023. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Samuel Asiedu Owusu, PhD
 UCCIRB Administrator

ADMINISTRATOR
 INSTITUTIONAL REVIEW BOARD
 UNIVERSITY OF CAPE COAST