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UNIVERSITY OF GHANA

DEPARTMENT OF INFORMATION STUDIES

SCHOOL OF INFORMATION AND COMMUNICATION STUDIES

COLLEGE OF EDUCATION

**CONTRIBUTION OF SCHOOL LIBRARIES IN GHANA TOWARDS THE
ATTAINMENT OF THE UN SUSTAINABLE DEVELOPMENT GOAL 4: A CASE
STUDY OF KASSENAN NANKANA EAST MUNICIPAL ASSEMBLY**



**THIS THESIS IS SUBMITTED TO THE DEPARTMENT OF INFORMATION
STUDIES, UNIVERSITY OF GHANA, IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF MASTER OF PHILOSOPHY(MPHIL)
DEGREE IN INFORMATION STUDIES**

JUNE, 2025

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JUNE, 2025

DECLARATION

I, the undersigned declare that, this thesis is the result of my own research work and that all the references used in this work have been dully acknowledged. This work has not been presented by anyone, to any institution, or this university for the award of any other degree.


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I dedicate this thesis to God, my husband, and my children.



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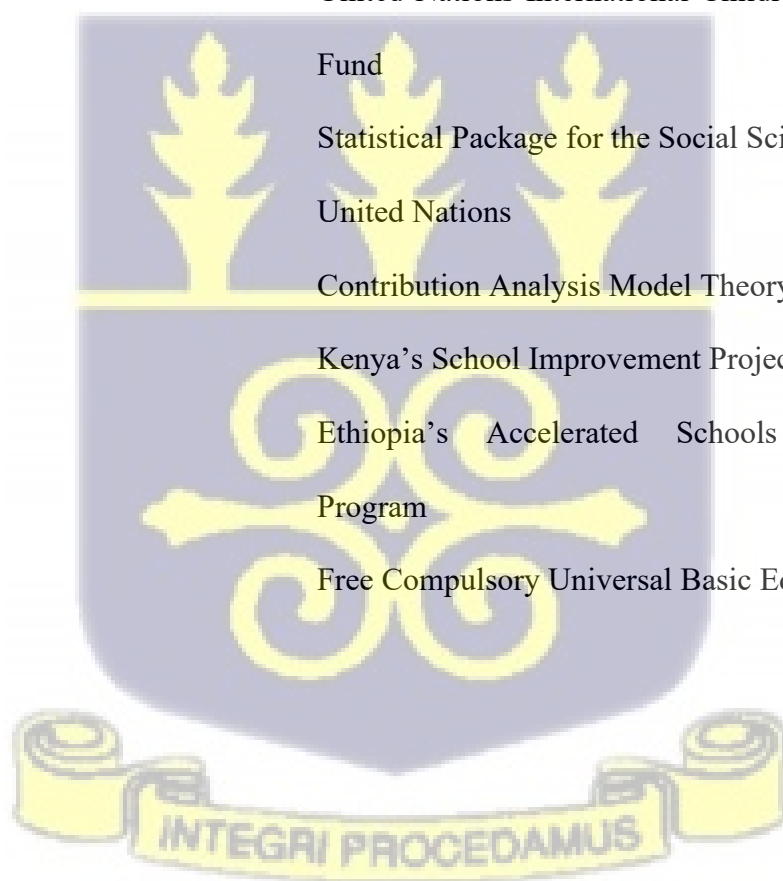


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SDG	Sustainable Development Goals
SDG4	Sustainable Development Goal 4
SHS	Senior High School
KNEM	Kassena Nankana East Municipal
E-Resource	Electronic-Resource
ICT	Information and Communication Technology
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
SPSS	Statistical Package for the Social Sciences
UN	United Nations
CAMT	Contribution Analysis Model Theory
SIP	Kenya's School Improvement Project
ASIP	Ethiopia's Accelerated Schools Improvement Program
FCUBE	Free Compulsory Universal Basic Education



This study examined the role of school libraries in promoting quality education, career readiness, lifelong learning, and global citizenship. Conducted in the Kassena Nankana East Municipal Assembly, Ghana, the research employed a Convergent Parallel Mixed-Methods design, and data was gathered from 207 students, 26 department heads (HODs), five library staff, and seven administrative personnel across four senior high schools. The study assessed library usage, resource availability, and users' perceptions regarding the library's contributions. The findings revealed that 63.8% of students visit the library daily, while 26.1% do so weekly, this indicated its relevance in academic activities. However, 4.8% use it monthly, and 2.9% rarely visit. Among staff, only 7.7% visit the library daily, while 30.8% rarely use it, this suggested underutilization of the school libraries despite recognizing its importance. Library staff confirmed high student patronage but emphasized the need to increase staff engagement. Regarding resource adequacy, 52.2% of students believe the library meets their needs, whereas 29% disagree, and 18.8% remain unsure. Books (70%) were the most-used resource, while digital tools (computers: 2.9%, online resources: 1%) see minimal use. The students advocated for improvements in ICT (44.9%) and learning materials (44.4%). Similarly, 57.7% of HODs believe the library lacks sufficient resources, particularly in ICT, with only 3.8% recognizing its usefulness. Administrative staff unanimously highlighted the need for improved ICT infrastructure. In terms of quality education, 95.2% of students acknowledge the library's role, and 95.2% of HODs agree it enhances learning. Frequent visits (42.4%) and participation in programs (70%) support this perspective. However, for lifelong learning, while 46.2% of HODs reported student engagement, 88.5% noted that no formal activities were organized. The library staff suggested the implementation of reading clubs and workshops to bridge this gap. For career readiness, 98% of students desire more career resources, with 57.1% using available materials daily. Career planning workshops (33.3% participation), resume building, and interview skills training are valued, yet 65.4% of HODs

call for additional initiatives. Funding constraints limit targeted career support, and only 60% of school libraries offering career-oriented materials. On global citizenship, 84.7% of students feel prepared to engage in global issues, with 36.5% emphasizing cultural awareness. However, 76.9% of HODs believe the library lacks sufficient resources in this area, and only 23.1% recognize relevant workshops. Library staff report some engagement in topics like diversity and sustainability, but they cited resource constraints as challenges. Despite their significance in education, school libraries face challenges such as inadequate funding, resource shortages, and staffing limitations. The study recommends policy improvements, increased funding, and enhanced training for library staff to strengthen school libraries' role in achieving SDG4 and fostering an informed society.



CHAPTER ONE

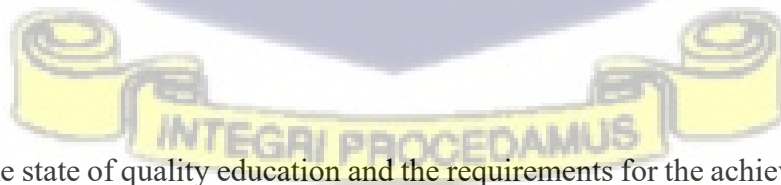
INTRODUCTION

1.1 Background of the Study

Sustainable Development Goal 4 (SDG 4) of the United Nations' 2030 Agenda for Sustainable Development, emphasizes the importance of ensuring *"inclusive and equitable quality education and promoting lifelong learning opportunities for all."* (Tonegawa, 2023, p. 55). Achieving this ambitious goal is particularly crucial in Ghana, where approximately 54% of the population resides. And municipal areas in Ghana have been noted to face significant challenges (Sokey & Adisah-Atta, 2017) in accessing quality education, and thus hinders the country's overall development and progress (Yeboah & Nyarkoh, 2023).

The research sought to look at the contribution of school libraries and how they have contributed to the achievement of UN SDG 4. As targeted by the United Nations (UN) SDGs by 2030, a variety of educational institutions and their stakeholders, especially at the advanced levels, are strengthening strategies to meet the ever-growing demand for equitable and high-quality educational opportunities to address, the lifelong learning needs of the citizens who operate in this global knowledge economy. However, in Africa, a number of problems make it difficult to achieve SDG 4. One enduring challenge is the lack of proper facilities, resources, and competent teachers in many municipal schools, which results in limited access to education (Joyce, 2014). Moreover, education frequently falls short of metropolitan standards in terms of quality. This discrepancy is exacerbated by the same enduring challenges noted by, Joyce (2014), and curriculum that might not be in line with the realities and needs of the economy. As a result, dropout rates are still high in these areas, especially for girls (Weiss et al., 2023).

One would assume that Education in Africa is being successfully advanced by several encouraging initiatives (Society, 2021). For example, the Ghana's school feeding and Free Compulsory Universal Basic Education (FCUBE) programs. These have led to a significant increase in school enrolment and attendance. Another example is the Ethiopia's Accelerated Schools Improvement Program (ASIP). The ASIP improves student learning outcomes by giving teachers in rural Ethiopia resources and training (UNICEF, 2019). It has also been observed that, Kenya's School Improvement Project (SIP) provides financial support and infrastructure support to rural schools in Kenya, these have increased school enrolment and, it is improving student attendance (Capper et al., 1997). In addition, the Rwanda's BRCiS program has also succeeded in providing scholarships and bursaries to girls from deprived backgrounds in Rwanda, these activities of BRCiS have resulted in increased enrolment rates for girls in secondary schools (Somalia, 2023). However, in spite of the success of these programs which have been executed by several governments in Africa, Ghana in particular. It is worth noting that, achieving SDG 4 is a continuous process that calls for coordinated efforts from communities, governments, legislators, and educators. Thus, in order to guarantee a comprehensive and equitable education for all, regardless of location as sought by SDG4, African countries like Ghana can only make progress in tackling the issues of gender disparity, access, and quality by acknowledging the scale of work and responsibility in achieving SDG4 as well as the role of its associated stakeholder contributions.



Evaluation of the state of quality education and the requirements for the achievement of SDG4. The state and role of school libraries still remains a mirage awaiting clarity. In order for Ghana to achieve Sustainable Development Goal 4 (SDG 4), effective education policies that consider the unique difficulties encountered in many areas nationwide are necessary. Furthermore, the

necessity to ensure sustainable development, tailored policy implementation and priority are needed in both rural and urban areas has been highlighted by researchers (Ohene, 2023). Additionally, the study finds that Free Compulsory Universal Basic Education (FCUBE) is the most successful education policy in Ghana (Gloverberg, 2018); however, it also recommends the need for additional policies to guarantee the financial empowerment of households and parents in order to provide high-quality education (Ryumkina et al., 2023). According to Shamo, (2023), education policy must be radically reoriented and linked to larger processes of economic, cultural, and political transformation in order to improve education in Africa and accomplish SDG 4.

A significant obstacle that impedes children's access to education is the unequal assignment of instructors to schools (Adomako et al., 2022). In basic schools, there is an additional difficulty in the shape of out-of-field teachers who find it difficult to instruct students in areas for which they are not qualified, which results in subpar performance (Opoku et al., 2020). Furthermore, the introduction of free secondary education in Ghana has led to a lack of teachers, an increase in workload, deficiencies in classrooms, and subpar teaching supplies, especially in public senior high schools (Kwakyee Apau, 2022). Additionally, there are both positive and negative effects of ICT integration in education for children, which emphasizes the necessity of providing teachers with teaching aid (Chanimbe & Dankwah, 2021). While it is imperative to that policies be created to direct the hiring and deployment of teachers in order to address these issues, and intervention centers on lowering barriers to education, encouraging community involvement, and appreciating areas and cultural capital (Anlimachie et al., 2022). The challenges still persist!

School libraries are fundamental to promoting literacy, supporting curriculum delivery, and fostering lifelong learning habits. In Ghana, however, school libraries face numerous challenges that hinder their effectiveness. These challenges can be categorized into five main areas: infrastructure, resources, management, human resource constraints, and policy.

Many school libraries in Ghana operate in inadequate physical spaces. Some schools lack a dedicated library, while others repurpose small, poorly ventilated rooms. Insufficient seating and poor maintenance further reduce the functionality of these libraries (Alemna, 1998a; Asamoah-Hassan, 2005; Baada et al., 2020; Boye, 1996; Knuth, 1995). In addition, the availability of resources in school libraries is severely limited. Most libraries are understocked, relying on outdated textbooks and reference materials. Digital resources are almost non-existent in rural schools due to financial constraints and limited technological infrastructure (Baada et al., 2020; Boye, 1996; Frimpong & Agyei, 2020). It is important to add that, effective library management is lacking in most schools because most school libraries are overseen by untrained personnel, often teachers or administrative staff with no formal training in library science. This leads to inefficiencies in cataloguing, organization, and resource utilization. Another significant challenge facing school libraries in Ghana is the shortage of qualified librarians. Most schools lack professional librarians, and those employed are often overburdened with additional teaching responsibilities. This results in limited library access and minimal guidance for students in using library resources effectively (Agyekum & Filson, 2012a; Alemna, 1983; Filson, 2018; Omenyo, 2003)

As noted by Alemna (1983) and Knuth (1995), the absence of clear policies and consistent funding for school libraries compounds these issues. While the Ministry of Education acknowledges their importance, limited financial and strategic support has left many libraries

underdeveloped and ineffective (Agyekum & Filson, 2012a; Alemna, 1983; Baada et al., 2020).

Consequently, addressing the challenges facing school libraries in Ghana requires a holistic approach. Investments in infrastructure, resources, and professional training, coupled with clear policies and adequate funding, are essential. Special emphasis must be placed on recruiting and retaining qualified librarians to ensure that libraries effectively support education.

Consequently, to effectively address these challenges and achieve SDG 4 in Ghana, several policy directions should be prioritized (Mohammed, 2017), and some of the policies may include, increase in education investment, promoting equitable access, improving quality education, leveraging on technology, and reinforcing community engagement. However, an obvious lapse is the glaring neglect of the role of the school library in ensuring quality education and making it a strong toll for the achievement of the SDG4.

This study, therefore, sought to provide the needed data on the contribution of school libraries to SDG4 with the hope that the vacuum in data and silence in literature may be filled and provide fertile ground for actualizing the SDG4.

1.2 Statement of the Problem

Despite the global pursuit of Sustainable Development Goal 4, a silent struggle unfolds within many educational landscapes (Matthew & Kazaure, 2022a). One crucial yet often overlooked factor impeding progress is the dire state of school libraries (Atta-Obeng & Dadzie, 2020a). Gbadamosi (2011) reported that, “African students enter universities without ever using any library either in the primary or secondary schools...” (p. 22). Other authors have also reported low library usage, limited resources, and poor furniture as factors affecting library access and

patronage (Agyekum & Filson, 2012a; Alemna, 1983; Atta-Obeng & Dadzie, 2020b; Omenyo, 2003). This lack of access creates a knowledge vacuum, hindering critical thinking, information literacy, and a love for learning (Orji et al., 2023a) essential ingredients for achieving SDG4.

The need for this study arises from the urgent necessity to evaluate and reinvigorate the role of school libraries in supporting educational development. Research by UNICEF (2023) indicates a strong correlation between limited library access and lower academic performance, particularly in less developed areas. This perpetuates cycles of poverty and educational inequality, further jeopardizing SDG4's promise of "inclusive and equitable quality education for all" (UN-Water, 2015). The absence of well-equipped libraries not only stifles individual potential but also undermines the broader goals of poverty reduction, gender equality, and sustainable development enshrined within the broader SDG framework (UN-Water, 2015). It is evident that the consequences extend beyond academic underperformance to broader issues such as entrenched poverty and reduced social mobility.

This study investigates the contribution of school libraries in Ghana, with a focus on Kassena Nankana East Municipal Assembly, toward the attainment of SDG4. Specifically, it explores how libraries support quality education, career preparedness, lifelong learning, and global citizenship. Given the limited empirical literature directly linking school libraries to the fulfillment of SDG4 in this context (Abumandour, 2021a; Dei & Asante, 2022a; Kabudi, 2022a), this research fills a significant gap by contextualizing the potential of libraries as strategic educational resources.

The problem statement links directly to the topic by addressing how the current state and usage of school libraries in Ghana affect the realization of SDG4. Through this lens, the study seeks to illuminate both the challenges and transformative opportunities school libraries present in achieving sustainable educational outcomes. Addressing these challenges is not merely about improving facilities, it is about unlocking the potential of learners to thrive in a knowledge-driven global economy and transforming school libraries into catalysts for national and global development.

Although libraries are recognized as essential partners in advancing the United Nations Sustainable Development Goal 4 (SDG 4) on inclusive and equitable education, empirical research specifically connecting senior high school libraries to SDG4 outcome remains limited and unevenly distributed across contexts. In Ghana, Ntsiful et al. (2023a) established a direct but inconsistent relationship between SHS library services and SDG 4 targets finding measurable impact on students learning and lifelong learning orientation in one school, but not in others highlighting contextual differences in resourcing and integration. Similar studies in Nigeria (Baro and Eze, 2016) and Tanzania (Kabuje and Ntawigaya, 2025) corroborate the link between access to library resources and improved academic performance, reading culture, and skills acquisition, which are fundamental to SDG4 targets. 4.1 and 4.4 in Asia, Harisanty (2019) reported that Indonesian senior high students rely heavily on library resources for assignments and education advancement but face deficits in digital and career focused materials, limiting libraries full contribution to SDG4s skills and lifelong learning dimensions. Literature from some places in Latin America, such as Chile (Mendez, 2024; CRA-MINEDUC, 2023) and Brazil (Miranda 2022) pointed out that there is a positive correlation between student learning outcome and the presence of school library that notwithstanding limitations such as program delivery, staffing and implementation exist. All these studies support the

fact that school libraries can be used strategically to promote the achievement of SDG4. However, this is not without the intervention of good infrastructure dedicated policy framework and trained staff. Sufficient evidence from senior high schools in Ghana is lacking, especially those related to how school libraries enhance Lifelong learning, career readiness and global citizenship. These are the SDG4 targets which require more than the available academic support. So the identified gap points out the need for investigation into the contribution of senior high school libraries in Kassena Nankana East Municipal Assembly to SDG4 achievement.

Therefore, addressing the underdevelopment of school libraries is not just a matter of resource allocation; it is a critical step towards achieving the transformative power envisioned by SDG4 (Abumandour, 2021b; Dei & Asante, 2022b; Kabudi, 2022b; Staff, 2023). Moreover, in the phase of limited literature and data on the role of the school library in establishing the relationship between school libraries and SDG4 in Kassena Nankana Municipal is imperative. Thus, researching the current role of school library in achieving the SDG4 is crucial for empowering students with critical thinking skills, information literacy, and a love for learning, unlocking their potential and giving the way for a brighter future aligned with the core values of SDG4 a future where education is truly inclusive, equitable, and the key to more sustainable tomorrow.



1.3 Purpose of the Study

The aim of this research is to examine the contribution of school libraries in the Kassena Nankana Municipal East Assembly towards the attainment of the United Nations Sustainable Development Goal 4 (SDG4) by assessing their current state, and evaluating how their

services, and operations support quality education, career preparedness, skills development, lifelong learning, and global citizenship among students.

1.4 Objectives

The objectives of the research are as follows:

1. To assess the state of the school libraries
2. To assess how school libraries in the study area support quality education.
3. To determine how school libraries in the study area equip students for careers.
4. To determine how school libraries in the study area boost skills and lifelong learning for all.
5. To assess how school libraries in the study area prepare students for global citizenship.
6. To determine the school libraries' operation towards the attainment of Sustainable Development Goal 4 (SDG4).

1.9 Definition of Terms

The following are some terms which were used in this study:

- 1) **School Libraries:** Physical or virtual spaces within schools that provide access to information resources and services to support learning and teaching.
- 2) **Contribution:** The positive impact that school libraries can have on achieving SDG4 targets.
- 3) **Quality Education:** As defined in SDG4, it ensures inclusive and equitable access to quality education and promotes lifelong learning opportunities for all.
- 4) **SDG4 Targets:** Specific and measurable goals within Sustainable Development Goal 4, focusing on quality education.

- 5) **Lifelong Learning:** The ongoing acquisition of knowledge and skills throughout life.
- 6) **Global Citizenship:** The understanding and awareness of one's own role in the world and how actions impact others globally.
- 7) **Equity and Inclusion:** Ensuring that everyone has equal access to opportunities and resources, regardless of background or circumstances.

1.9 Theoretical Framework

The Contribution Analysis Model Theory (CAMT) is applied for this study as the ideal framework for “Evaluating the contribution of school libraries in achieving SDG4 in Kassena Nankana East Municipal of Ghana” because of its inherent strengths.

The Contribution Analysis Model Theory (CAMT) is adopted as the study's principal analytical framework because it offers a structured, evidence based method for tracing and verifying how institutional activities contribute to desired social outcomes in this case, the attainment of SDG4. CAMT integrates elements of the Theory of Change by establishing causal pathways between library inputs, processes, and educational outcomes, while also aligning with the Impact Planning and Assessment (IPA) Road Map developed by the Bill & Melinda Gates Foundation for measuring library impact. Additionally, its emphasis on iterative learning and stakeholder collaboration resonates with the 5Ps Framework of the UN 2030 Agenda (People, Planet, Prosperity, Peace, and Partnerships). This alignment ensures both international comparability and contextual applicability, enabling a nuanced analysis of school libraries contributes to equitable and quality education in Ghana.

One of the reasons for applying the CAMT is that it acknowledges the complex interplay of factors influencing the educational outcomes at the Senior High School (SHS) level (Table 1.1). It will move beyond simplistic cause-and-effect assumptions. In addition, it is use because of its focus on building a credible “performance story” which aligns perfectly with the research’s objective of understanding the nuanced impact of school libraries on SDG4, rather than seeking definitive proof. Moreover, the CAMT’s iterative nature allows for flexibility in incorporating diverse data sources (CAMT facilitates the gathering and analysis of diverse evidence, including stakeholder perspectives, quantitative data on library usage, and observed changes in student learning) and revising the narrative as understanding deepens, this ensures a comprehensive and adaptable analysis in the resource-constrained context of the study. By embracing this robust framework, the research can illuminate the unique contribution of school libraries in the achievement of quality education in Kassena Nankana East Municipal towards a sustainable future, and ultimately, the attainment of SDG4.

Table 1.1: Relevance of CAMT to the study

CAMT Component	How CAMT Applies to the Study
Theory of Change	The study assumes that school libraries contribute to achieving SDG 4 (quality education). CAMT helps define and visualize this assumed causal pathway.
Attribution	Education outcomes are influenced by many factors. CAMT helps
Problem	explore the extent to which school libraries specifically contribute to those outcomes.

Evidence	Collecting data on the state of libraries, resources, programs, and
Gathering	student experiences to support or challenge the contribution story.
Contribution	Building a narrative that shows how school libraries support quality
Story	education, career readiness, lifelong learning, and global citizenship.
Feedback and	During the gathering and assessment of the data, revision is made to
Refinement	understand the library's impact, and the conclusions are subsequently refined.

The objectives of this study which generally sought to evaluate the contribution of school libraries in supporting quality education, equipping students for careers, boosting skills and lifelong learning for all, and preparing students for global citizenship. The CAMT process which include a focus on the factors of change and attention to prevailing variable which influence the factors, makes it suitable not only for evaluation, but identification of the factors and assessment of their impact (Table 1.2).

Table 1.2: Mapping of CAMT Elements to Research Objectives

CAMT Element	Mapped Research Objective(s)	Explanation
1. Define the Theory of Change	All Objectives (1–5)	Each objective assumes a theory that well-equipped libraries contribute to education quality, career preparation, skills development, and global citizenship.

2. Set out the attribution problem	Objective 2, 3, 4, and 5	Determines whether observed educational or career outcomes are actually attributable to library interventions or other external factors.
3. Gather existing evidence	Objective 1 and 2	Data about the current state of libraries and how they currently support education must be collected and assessed.
4. Assemble and assess the contribution story	Objective 2, 3, 4, and 5	Synthesizes how the libraries contribute to educational outcomes, skill development, career readiness, and global awareness.
5. Seek out additional evidence	Objective 2, 3, 4, and 5	Additional qualitative or quantitative data may be needed to support or challenge the initial contribution story.
6. Revise and strengthen the contribution story	Objective 3, 4, and 5	Based on further evidence, the story of how libraries contribute to long-term learning and citizenship goals is updated and refined.

It is worth adding that the contribution of different factors to the achievement of SDG4 may be measured through various approaches. To transform education in underdeveloped nations like Ghana, one strategy makes use of networked teaching and e-learning, which has shown to be significant from a theoretical and practical standpoint (Matthew & Kazaure, 2022; Rad et al., 2022). Using the ecosystem services (ES) method, which links ecological health and

biodiversity to human well-being, is another tactic. This allows for better planning, policymaking, and decision-making for the long-term protection and sustainable use of ecosystems (Jordan, 2020). Moreover, although it is still in its early phases, scholarly research examining the connection between educational technology and SDG4 is growing (Matthew & Kazaure, 2022) and school libraries are the drivers at school level. It may be observed that these methodologies provide significant perspectives on quantifying the impact of several elements in attaining SDG4, yet the role of school libraries is still disregarded.

Reaching SDG 4 requires several essential components. The development of fair and welcoming environments for kids, encouraging attitudes toward diversity, and offering chances for skill development and socialization, development of highly trained, internationally competitive graduates, utilization of electronic media and networked teaching (Matthew & Kazaure, 2022; Orji et al., 2023b), etc., have been recommended (Matthew & Kazaure, 2022; Rad et al., 2022). And it has been acknowledged by researchers that, School Libraries are required to improve academic skills, motivation, and frequency of reading, all of which are critical for reaching SDG4 (Band, 2022), and the success of school libraries have been found to have factors such as the commitment of senior staff and library staff, involvement of students, and collaboration with the wider school community (Greenwood et al., 2010). It is appropriate to evaluate the contribution of the school libraries using the CAMT.

1.7 Scope and limitations of the study

This research sets its sights on rigorously evaluating the impactful contributions of school libraries in Kassena Nankana East Municipal, Ghana, towards achieving Sustainable Development Goal 4 (SDG4). It delves into the intricate relationship between libraries and

quality education, meticulously examining how they equip students with the knowledge, skills and values envisioned by SDG4. The scope encompasses a comprehensive analysis of factors like library resource availability, usage patterns, librarian roles, and their combined influence on student learning outcomes. By meticulously dissecting these elements within the unique sociocultural context of Kassena Nankana East, the research aims to illuminate the true potential of school libraries as powerful tools for empowering students and driving progress towards a more equitable and sustainable future.

While this research delves into the impactful contributions of school libraries towards achieving SDG4 in Kassena Nankana East Municipal, Ghana, it's crucial to acknowledge its inherent boundaries. The study focuses exclusively on the six senior high schools within the municipality, limiting its generalizability to other educational levels or regions with distinct contexts. Furthermore, the mixed-methods approach, while valuable, might face challenges in seamlessly integrating quantitative and qualitative data. Additionally, relying solely on secondary data sources like existing reports or documents, while providing context, might lack the depth and specificity needed to directly assess library impact on achieving SDG4. Similarly, focusing solely on the perspectives of school administrators, librarians, department heads, and students, while offering diverse viewpoints, might benefit from including teachers and parents to gain broader insights into library usage and its influence on student learning. Finally, disentangling the library's specific impact on student performance within the complex interplay of library services, available resources, and prevailing policies requires careful consideration of potential confounding factors and their interconnectedness. Recognizing these limitations fosters transparency, sets realistic expectations, and paves the way for future research that can refine our understanding of school libraries' contribution to SDG4 in Kassena Nankana East and beyond.

In addition, it's crucial to acknowledge the inherent limitations that might influence our understanding. Data availability might be a hurdle, with scarce official records on library usage and its impact on learning outcomes, hindering definitive conclusions. Even if data exists, studying a limited sample of schools could restrict generalizability, painting an incomplete picture of the bigger picture.

Methodology choices also pose challenges. A cross-sectional snapshot might not capture the dynamic nature of library influence, while relying solely on subjective data like surveys introduces potential bias. Triangulation with objective data could mitigate this, but the complex interplay of socioeconomic factors, cultural norms, and community engagement beyond the library's control makes isolating its specific role a challenge.

Finally, generalizing findings specific to Kassena Nankana findings specific to other Ghanaian municipalities might be difficult. Different contexts and educational landscapes necessitate tailored research. Recognizing these limitations allows for a transparent approach, acknowledging the boundaries of this study and paving the way for future research that refines our understanding of school libraries' contribution to SDG4 in this region and beyond.

1.8 Significance of the study

Investigating the role of school libraries in achieving Sustainable Development Goal 4 (SDG4), Quality Education, in Kassena Nankana East Municipal, Ghana, holds immense significance. School libraries serve as crucial hubs for learning and knowledge acquisition, play a vital role in fostering literacy, critical thinking, and a love for reading. In the context of Kassena Nankana

East, where educational challenges persist, well-equipped and functional libraries can become powerful tools for bridging the gap and empowering students to reach their full potential.

School libraries provide equitable access to information and learning resources, regardless of a student's socioeconomic background. This is particularly relevant in Kassena Nankana East, where poverty rates are high, and access to technology and quality education can be limited. By offering a diverse collection of books, periodicals, and digital resources, school libraries level the playing field, ensuring all students have the opportunity to explore different subjects, develop research skills, and broaden their horizons (UNESCO, 2024a). Additionally, libraries can host literacy programs, workshops, and book clubs, fostering a culture of reading and encouraging students to become lifelong learners (Schultz-Jones & Oberg, 2015a).

Secondly, school libraries can contribute to improved learning outcomes and academic achievement. Studies have shown a positive correlation between library usage and student performance in various subjects, including reading, mathematics, and science (Michele, 2003). In Kassena Nankana East, where educational attainment levels lag behind national averages, libraries can play a crucial role in supporting teachers and providing students with additional learning materials and opportunities to practice their skills. Well-trained librarians can act as instructional partners, guiding students through research processes, teaching information literacy skills, and creating engaging learning experiences (Williams et al., 2013)

In general, this research has the potential to fill critical knowledge gaps about how school libraries in deprived areas of Ghana support student learning and contribute to achieving Sustainable Development Goal 4 (inclusive and equitable quality education). By examining their effectiveness, research can inform policy decisions, improve educational programs, and

enhance library quality, ultimately raising literacy rates, achievement, and educational opportunities for underprivileged children. This is crucial for promoting equity and reducing educational gaps, ensuring all students have access to the tools and support needed for success, regardless of background. The research holds significant value for advancing knowledge, informing policy, improving outcomes, and promoting equity in education.

It is therefore worth concluding that, investigating the role of school libraries in achieving SDG4 in Kassena Nankana East Municipal, Ghana, is not only relevant but essential, because, school libraries can become powerful agents of change, empowering students to reach their full potential and contribute to a more just and equitable society.

1.9 Organization of the study

This study was organized into six chapters. The introduction which includes the background to the study, the statement of the problem, the study purpose, the research questions, and the study setting makes up the first chapter. Aside from these, the introduction also includes the study's theoretical foundation, scope significance and organization. The second chapter will include a comprehensive and methodical evaluation of the literature on the study's main subject topics, with subsections pertaining to each major theme. The methodology, which includes the study design, methods used, study population, sample size, study, data collection tools, data analysis, and discussions, as well as ethical considerations will be covered in the third chapter.

The data analysis will be covered in the fourth chapter. The findings and discussion of the results that will be examined in the context of the literature will be covered in the Fifth chapter.

Finally, the sixth chapter will include a summary of the study's findings, conclusion, and suggestions.

LITERATURE REVIEW

2.1. Introduction

According to Creswell, the process of a literature review is obtaining, organizing, and evaluating current literature on a certain subject (Creswell, 2014b). Examining relevant literature is therefore an approach that can help provide a solid theoretical overview of the existing research findings, theories, and models concerning the specific research problem as Fox & Bayat (2007) indicate. When doing a literature evaluation, it is therefore logical to use quality literature (Punch, 2005). Furthermore, a successful review of related literature “should highlight different perspectives, agreements, disagreements, and prevailing thoughts on the research topic, all of which should be accurately presented and acknowledged within the text” (Stilwell, 2010). Hence, as Boote & Beile (2005) suggest, a researcher must therefore have a solid awareness of the existing literature in the topic of study to conduct successful research.

Books, journals, and all other relevant Internet materials, according to Kumar (2011), are the three principal sources for consulting existing academic material in practically all fields of study. This current study acknowledges that a good review of related literature can help demonstrate an author’s understanding of the subject of study as Creswell (2014b) put forward in literature.

As a result, the literature review broadens the study’s context by clearly defining what is and is not within the scope of the investigation, with the goal of justifying these decisions. According to Blaikie (2010), a study’s review of related literature should focus primarily on the relevant literature in order to adequately address the research questions.

Thus, the literature review for this current study is organized around the study's main subject headings, which are obtained from the research objectives and guided by the theoretical variables.

2.2. School Libraries and Quality Education

No country can prosper without providing its citizens with a sufficient and high-quality education. As such, education is regarded as the cornerstone of any developed society and it is generally understood to be a continuous process of learning that lasts from childhood to adulthood (Usoro et al., 2007). In addition to emancipating the mind, education allows a person to make significant contributions to their community. The UN lists education as one of its sustainable development goals because of the significance of education for long-term, sustainable national growth. The UN's fourth Sustainable Development Goal (SDG) focuses on education, aiming to ensure inclusive, equitable, high-quality education and encourage lifelong learning for all. The development of SDG 4 and its sub-goals was motivated by the idea that every person should have access to high-quality education and lifelong learning (Ilori et al., 2020).

Libraries continue to play an important role in societal development as repositories of information and channels of information transfer (Dei & Asante, 2022a). Libraries provide access to qualitative information through various channels in order to meet their users' information needs. Krolak & Krolak (2006) also asserted that libraries assist individuals in finding, utilizing, and comprehending pertinent information that supports lifelong learning, the development of literacy, informed citizenship, leisure, imaginative play, independent research, critical thinking, and, ultimately, empowerment in an increasingly complex world. Nweke et

al., (2022), again noted that libraries act as catalysts for change, making significant contributions to the advancement of their nation in many crucial areas, including high-quality education, eradicating hunger and poverty, enhancing people's quality of life, gender equality, access to clean water and sanitary facilities, and healthy lifestyles. A library is thus a treasure of valuable books and other information resources for a targeted group of people to use and gain knowledge. It is a very important aspect of an individual's learning process as it enhances the quality of learning by providing the requisite resources for learning.

Libraries and education are two (2) concepts that cannot be separated since they are both essential to and coexist with one another. The two of them serve as a means to an ultimate goal, neither of which is an end in and of itself. According to Uthman (2023), education is a transformative experience that frees people from impure habits, self-centered passions, and dishonourable pursuits. It also provides a person with perfect, adequate knowledge, promotes civic and rational sense, and transports them from complete darkness toward complete awakening, while libraries they maintain provide accumulated and preserved knowledge that subsequently enriches one's mental vision and dignifies his or her habits, behavior, character, taste, attitude, conduct, and outlook on life (Hirst, 2013). They are also tools for independent learning, a source of knowledge and factual information, a center for intellectual recreation, and a beacon of enlightenment.

The school library belongs to the category of libraries found in primary and secondary schools. It is the library of nursery, primary, or secondary levels of education and also of technical colleges (Onatola, 2004). The school library is the academic nerve center of the school system. According to Mahwasane (2017) the school library's goals revolve around improving the foundation of learning (pre-school, primary, and secondary schools), distinguishing it from all other libraries. Busayo (2011) likened an educational institution without a library to a motor

car without an engine and a body without a soul. It is the backbone of functional education without which academic excellence cannot be achieved. Busayo (2011) again stated categorically that both the library and the school are inseparable twins of which one ceases to function well without the other. Library service in schools helps to achieve the objectives of the parent institution and one of the numerous objectives of the school library is to give a sound foundation to future leaders, because if the foundation is not strong enough then there is bound to be a “crisis” along the line. According to Ifijeh et al., (2016), school libraries are found in pre-tertiary educational institutions, with the primary function of expanding students' learning capacity and supporting high-quality instruction. They are critical to the teaching and learning processes in schools because they provide professionals and educators with access to a variety of information sources, allowing them to stay current in this age of erratic information (Putra et al., 2023). These libraries act as centers of learning, providing students with extensive resources to broaden their knowledge in a variety of subjects. School libraries provide both traditional and digital resources, including dictionaries, textbooks, storybooks, e-books, and periodicals, to meet the needs of students' academic and recreational needs to guarantee the provision of high-quality (Mahwasane, 2017; Tachie-Donkor et al., 2019). While students in the Foundation Phase mostly rely on their teachers, by the time they reach high school, they should be capable of independent learning and self-control. Learning outcomes improve as the student's self-reliance increases. Unique and personalized learning experiences enable advanced learning objectives, and libraries are vital for fostering critical reading and presenting students with a plethora of knowledge to help them understand. Libraries allow students to develop into self-sufficient, autonomous individuals (Putra et al., 2023).

Furthermore, school libraries are fundamental to the design and implementation of excellent educational programs in schools. Without the support of an efficient library, the school on its

own cannot successfully achieve the goals of education. It is through library services that the school library will deliver society's cultural values and body of knowledge to the next generation (children and young people) and prepare them for meaningful adult life. The educational aims of school libraries according to Ilori et al., (2020), include: stimulating and enhancing the reading habit, promoting lifelong learning, developing in children the ability to read for information, helping pupils to increase and improve their knowledge of reading, speaking and writing, train children to care for books and make good and intelligent use of the library among others. It is also important to add that the school library prepares both the teacher and students to achieve sound and quality education by the improvement of teaching and enabling the teaching staff to make reference to current books in the preparation of lessons, providing information for teachers and pupils on current affairs, providing a supplementary reading for teachers thereby enriching class work, serving as a laboratory of all books on all disciplines, encourages self-reliance, good use of leisure time, and arouses interest for reading (Ilori et al., 2020; Oyetola & Adio, 2020a).

The importance of school library to children and young people cannot be over-emphasized. For quite a long-time, school library has been playing a critical role in the provision of effective information and educational resources and services. Liliia (2022) stated that, "the school library provides information and ideas that are fundamental to functioning successfully in today's information and knowledge-based society. The school library equips students with life-long learning skills and develops the imagination, enabling them to live as responsible citizens". It must be noted that in order to be fully committed in meeting up with the specified standards of an information society, the school libraries have a key role to play. They should be viable in the provision of information to the young ones (Ilori et al., 2020; Liliia, 2022).

The development of school libraries in Ghana has undergone significant changes over time (Agyekum & Filson, 2012a). The Ghanaian educational system at its early stage was designed and modelled to mirror the British system. The focus thus was on theory and literacy with vocational training being relegated. This resulted in high dropout rates and the churning out of students who lacked marketable skills. Recognizing these shortfalls, the Government in 1987 introduced the National policy on education. This was aimed at providing vocational-oriented programs alongside traditional academic programs. The Junior Secondary School system was thus introduced offering a blend of academic and pre-vocational subjects to equip students with practical skills (Agyekum & Filson, 2012a; Alemna, 1983). Efforts were later made to provide library materials to school children. This included mobile library services. There were, however, shortages of books and other challenges which led to the eventual collapse of these initiatives. Subsequent attempts were made to establish College and School libraries, but these were not successful due to the staffing and funding constraints (Alemna, 1983). The Ghana Book Trust with the help of the Canadian Organization for Development COFD has been at the forefront of donating books to schools and libraries in Ghana. School libraries in Ghana were established and managed by the ministry of education. On paper every School in Ghana must have a library but this the opposite in reality (Alemna, 1998a).

Though libraries are well positioned to drive the attainment of SDG goal 4 they are hindered by several challenges According to a 2011 report by the All-Party Parliamentary Group for Education in the UK, libraries in communities and schools promote reading, but many are closing due to budgetary constraints. Alemna (1998a) identified challenges hindering the development of school libraries in Ghana. He argues that the lack of school library legislation in Ghana has allowed individuals and organizations to register schools without ensuring adequate library facilities. He noted that many heads of schools fail to recognize the vital role

that school libraries play in the teaching and learning process. He reiterated that due to this issue, the majority of school libraries in Ghana are run by untrained staff members who are typically uninterested in the library. Only a small percentage of Ghanaian schools employ teacher librarians (Alemna, 1983).

2.3. School Libraries and the SDGs

The Sustainable Development Goals SDGs were promulgated by the United Nations in September of 2015. The SDGs replaced the Millennium Development Goals MDGs which were a forerunner formulated in the early 2000s to address challenges relating to the environment, society, and economy. The SDGs unlike the MDGs whose primary focus was the Developing Nations have a global perspective (Fukuda-Parr, 2016; Sachs, 2012). This implies that every nation regardless of their level of development must work towards collectively attaining the SDGs. According to Boeren (2019), the United Nations agenda 2030 was unanimously adopted by all member states of the UN and it serves to provide a universal “plan of action for people, planet and prosperity”. The SDGs consist of 17 goals and 169 targets and are often referred to as “Global Goals”. They aim to make the world a better place by taking care of the earth and making sure people are healthy and happy. (McDonald, 2023) argued that SDG Goal 4 is particularly of interest to libraries as it seeks to ensure inclusive and equitable education whilst promoting life-long learning opportunities. Numerous researchers have emphasized the importance of libraries in the attainment of SDG 4 (Fukuda-Parr, 2016; Omona, 2020; Pinto & Ochôa, 2017; Sachs, 2012). According to (Abata-Ebire & Adetayo, 2018), libraries are an important component of the Sustainable Development Goals (SDGs) because they serve as hubs for knowledge creation and research aimed at empowering individuals and addressing global issues. They provide insightful perspectives on relevant policies and indicators while actively promoting these objectives (Liliia, 2022). Libraries are

widely recognized as centers of research and information empowerment, and they are extremely beneficial to the general public (Cyr & Connaway, 2020; Pinto & Ochôa, 2017). (Musa et al., 2021; Omona, 2020) argues further that libraries serve users' needs and make a significant contribution to the advancement of the SDGs by performing tasks like resource selection, acquisition, processing, and preservation in a variety of formats. In a similar vein, (Chigwada et al., 2021) highlights the critical roles that libraries play in gathering, organizing, processing, storing, retrieving, and sharing information to advance the SDGs. (Ani et al., 2016) also underlined the relevance of libraries and librarians in improving information resource retrieval and service delivery through the use of information and communication technologies (ICTs) in libraries.

School libraries play an important role in working towards the SDGs by providing access to information that promotes fairness and high-quality education by assisting teachers and students in developing skills through the provision of a wide range of learning materials (Ogunbote & Odunewu, 2008). All over the world, it has been acknowledged that universal access to literacy and lifelong learning opportunities is crucial to advancing knowledge in societies.

Ntsiful et al., (2023a) conducted a study to investigate how school libraries contribute to the SDG 4 within selected schools in Ghana. The study employed the quantitative approach and the survey design. There were 275 respondents selected from a total population of 2574 using the stratified sampling method. The findings showed a significant relationship between school libraries and SDGs at Kwabenya SHS and the opposite at Benkum SHS. This disparity was attributed to the fact that at Kwabenya the library was involved in supporting teaching and learning whilst it is not the case at the Benkum SHS.

Another study conducted by Bawa et al., (2018a) in Bunkpurugu Yunyoo District in the Northern Region of Ghana sought to assess the impact of school libraries on academic performance of students. The study used descriptive survey design. The population included circuit supervisors, teachers and students within the district. Data was collected from 3 Junior High School with libraries and 3 without libraries. The schools were purposively sampled. 150 students were selected using the Krejeie and Morgan table, with 25 respondents proportionally sampled from each of the six schools. The instruments for data collection comprised interview, questionnaires and observation. The findings revealed a significant positive relationship between schools with libraries and academic performance and vice versa for schools without school libraries.

2.4. Contributions of Senior High School Libraries to SDG4

It has been noted from published cross-regional research papers that senior high school libraries contribute to the attainment of SDG4 through several measurable pathways. (Ntsiful et al. 2023). Presented the Ghanaian view. They pointed out that the senior high school libraries can link SDG4 indicators, even though this is affected differently across the schools. Their research stressed the importance of quality programs, integration of curriculum, and staffing (Baro & Eze, 2016), also revealed that students access to high school library have a strong correlation to early career exploration, and reading habits relates strong to the SDG4's quality learning and targeted skills. System level modelling in African further strengthens external validity by associating school library availability with statistically meaningful gains in learning outcomes (UNICEF innocent, 2024). Moving beyond Africa, Indonesia's senior high schools evidence shows libraries supporting assignment completion and information needs for progression to

further education but also reveals gaps in ICT/career resources, highlighting where SDG4 aligned service design can be sharpened in Brazil, large sample analyses indicate that the existence and use of school libraries/reading rooms correlate with higher proficiency scores, while Chile's CRA (Ensenanza Media) data pair board coverage with implementation shortfalls pointing to the well known difference between infrastructure and impactful practice. Taken together, these studies depict school libraries as necessary but not sufficient: their contribution to SDG4 hinges on trained personnel, pedagogical integration, and targeted collections/programs (particularly for career readiness and digital/information skills) precisely the levers your Kasena Nankana East study interrogates. This study however seek to expand the scope beyond the lines taken by the other Authors.

Table 2.1 Global Evidence of School Library - SDG4 Linkage

I D	Full citation	Country/ Region	Level / Setting	Sample & Method	SDG 4 / Outcome focus	Key empirical finding
1	Ntsiful, E. O., Ankrah, E., Gyesi, K., & Bada, N. (2023). Sustainable development goal four (SDG 4) in Ghana: Can second cycle school libraries play a role?. <i>Information Development</i> , 02666669231210259. DOI: 10.1177/02666669231210259.	Ghana	Senior High Schools (second-cycle)	Survey of n=257 students across 3 SHSs; χ^2 tests	SDG 4 (explicit): inclusive, quality education; lifelong learning	Significant library–SDG 4 linkage found in one school (Kwabanya SHS), but not the other two → impact is context-dependent ; highlights role of program quality/integration
2	Baro, E., & Eze, M. (2016). Enhancing quality learning: The impact of school library services to	Nigeria	Secondary schools	Survey of n=356 first-year university students	SDG 4-aligned: quality learning, early career	Absence/underuse of secondary-school libraries associated with weaker reading habits and

	students in Nigeria. <i>School Libraries Worldwide</i> , 22(1), 8-19. DOI: 10.29173/slw6902.			reflecting on their secondary-school library use	information	reduced capacity for career choice ; access linked to better learning behaviors. (digitalcommons.unl.edu)
3	UNICEF Innocenti (2024). <i>Using available data to optimize education investments in Africa</i> (policy brief with system-level models).	Ghana & Zambia (system-level)	Primary and secondary	Cross-country quantitative analysis (admin + assessment data)	SDG 4-aligned: learning outcomes (4.1)	Presence of a school library associated with 0.06–0.09 SD gains in learning in African settings; supports libraries as a lever for quality education. (UNICEF)
4	DESSY, H. (2019). Senior high school students' use of library resources and services. <i>Library Philosophy and Practice</i> .	Indonesia (Asia)	Senior High School (SMA)	Survey study; student usage analytics and needs	SDG 4-aligned: access to resources, transition to further education (4.1, 4.4)	Students most often use libraries for assignment support and next-stage education info ; identifies gaps in ICT/career resources and points to program improvements. (digitalcommons.unl.edu)
5	Miranda, C. C. D., Braga, D. S., & Cavalcanti, A. P. C. (2022). Do school libraries and reading rooms matter for student learning?. <i>Education and Research</i> , 48, e242158.	Brazil (Latin America)	Basic education incl. secondary	Large-scale data analysis linking schools' library/reading-room availability to proficiency exams	SDG 4-aligned: learning outcomes (4.1)	Existence and use of school library/reading rooms positively associated with performance in proficiency exams; recommends policy reinforcement. (educa.fcc.org.br)
6	Torres Méndez, C., Montecino Vergara, P., & Merino Risopatrón, C. (2024). Role of	Chile (Latin America)	CRA school libraries incl. Enseñanza Media	Regional field study; standards vs. implementation	SDG 4-aligned: equitable quality education (access,	Finds wide coverage of CRA libraries but implementation gaps relative to standards; recommends

school libraries in
a Chilean region.

ntation
evidence

implemen
tation)

strengthening
staffing/integratio
n to impact
learning and
inclusion.

(Revistas.
Universidad de
Cádiz)

- 7 **Chile, Ministerio de Educación (CRA) (2015).**
Giro en las Bibliotecas Escolares/CRA – Enseñanza Media (national survey extract).

Chile
(Latin
America)

**Upper
second
ary
(Enseñanza Media)**

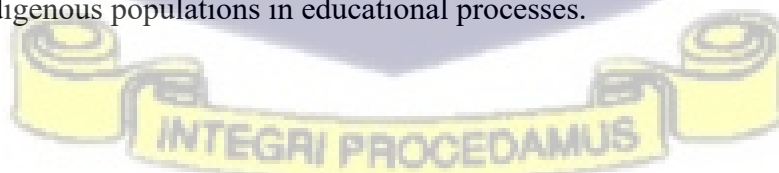
National
student
survey
(n≈2,300
valid
cases
subset)

**SDG 4-
aligned:**
perceived
contribution to
education
(access,
relevance
)

~90% of students
agree/de-agree
split indicates
materials are an
“**aporte para mi
educación**”;
documents
student-perceived
contribution of
CRA libraries to
learning.
(bibliotecadigital.
mineduc.cl)

2.5. Quality Education

Quality education entails creating an environment favorable to learning where students may apply their knowledge in real-world situations. It stresses collaboration between teachers and students to improve learning outcomes. In shedding lighter, Karatsiori (2023) clarifies that, the notion of quality education varies across cultures and historical times, needing a more thorough grasp of the underlying pedagogical principles. Schools play an important role in establishing values and creating the future, but they can also exercise control, emphasizing the significance of involving indigenous populations in educational processes.



The 2030 Agenda for Sustainable Development, ratified by all United Nations Member States, recognizes the 17 Sustainable Development Goals (SDGs), with the fourth SDG focusing on “Quality Education,” emphasizing the importance of ‘quality’ as a necessary condition for achieving fairness and goes beyond measured learning performance and results to include a

sense of fulfillment in one's life (Fukuda-Parr, 2016; Sachs, 2012). It includes the intangible parts of the learning process, such as inner motivation ignited by role models (parents, instructors, caregivers, intellectuals, leaders, legislators, and so on) or other personal characteristics that encourage people to learn continually and defend specific values. Similarly, Quality education requires creating a favorable learning environment in which students may effectively use learned knowledge in their daily lives and interact with their surroundings. Achieving outstanding education requires genuine collaboration between teachers and students toward a common objective (Bondu & Raju, 2023a).

An empirical study that was conducted elsewhere in Delhi by Batra, Pillai, & Kaim (2023) to explore the perspectives of teachers from both private and government schools on various aspects influencing educational quality as well as the importance of in-service programs and workshops in improving teaching-learning dynamics highlighted the critical role of all three education stakeholders, teachers, parents, and students in promoting the smooth operation of the educational system.

In Ghana, quality education serves as a focal point for the government, the Ministry of Education (MOE), the Ghana Education Service (GES), and corporate entities. This includes building the required frameworks to assure high-quality inputs and delivery in the educational process, to produce great educational outcomes (Boakye, 2019). Ghana's education system is focused on providing a comprehensive and quality-oriented approach to education, fostering well-rounded individuals with the necessary knowledge, skills, values, and aptitudes for self-realization and the nation's socioeconomic and political advancement (Alemna, 1983; Boakye, 2019).

To accomplish this, individuals pursuing education should undergo holistic development intellectually, psychologically, spiritually, emotionally, physically, and intuitively, allowing them to positively contribute to national development and adapt to technological advancements and innovations. As part of its educational mission, the Ghanaian government seeks to provide quality education to all by allocating enough resources and facilities at all levels of school. As a result, it is critical to create an atmosphere that encourages and sustains exceptional delivery within Ghana's educational structure (Alemna, 1983, 1998a; Boakye, 2019; Hirst, 2013).

Teaching and learning should take place in a healthy, safe, gender-sensitive atmosphere with adequate resources and facilities. Quality education delivery also includes skilled and motivated teachers who use child-centered approaches in well-managed classrooms and schools (Hirst, 2013; Joe & Osei-Poku, 2012a). Furthermore, good evaluation procedures, appropriate time management, a positive attitude toward learning, efficient supervision, and discipline, as well as the prudent use of information and communication technology as a learning aid as long indicated by Joe & Osei-Poku (2012b), all help to improve educational quality. Nonetheless, various difficulties hamper the acquisition of quality education in Ghana's existing educational landscape, necessitating concerted efforts to address them.

A study by Joe Adu-Agyem (2022) which was conducted to evaluate the Ghanaian educational system, highlighting different issues and limits that limit its quality and standards acknowledged that Ghana has undertaken numerous educational reforms from the pre-colonial period with the quest to improve the quality of education, particularly at the basic and secondary levels. Joe & Osei-Poku (2012a) concludes with his empirical findings from the various educational reforms, committees, and assessments from all levels of the educational hierarchy, including kindergarten, primary, junior and senior high, technical/vocational, and

postsecondary education that, despite the government's efforts to improve the quality of life through these improvements, the intended improvement in educational quality from reforms remains elusive.

2.5. How School Libraries Equip Students for Careers

School libraries are more than just places to store books. They equip students with the essential skills, knowledge, and resources needed to navigate the ever-changing professional landscape. Accordingly, extensive research and other library and literacy authorities/experts continuously confirm the positive impact of school libraries on student development, particularly in developing essential skills required for career and general lifelong success (Soulen, 2023; UNESCO, 2015; Ghana Library Authority, 2020; MoE, 2018). Given this, Wine (2020) clarifies that School libraries are integrated into the school's structure, to serve as part of the network of resources designed to educate students. Librarians in schools therefore work with all students and serve as a hub that connects the outside world to the classroom, various media platforms and technology, and informal and formal learning environments.

Past and recent literature from both developing and developed countries has variously established the importance of school libraries, suggesting a strong link between adequately supported libraries, students' reading habits, and increased literacy across multiple disciplines, and list among the many others, that standard school libraries help students prepare for their future careers by providing resources, guidance, and assistance (Shannon, 2008; Amaele, 2013; Batra et al., 2023b; Bondu & Raju, 2023b; Ryzhov et al., 2021; Lokhande, 2023; Pun, 2019).

Martins & Martins, (2021), add to this discussion with a wider perspective by indicating that schools today play a far different function than they did a few decades ago. With the introduction of information and communication technologies, changes in economic and social structures, and the ever-changing set of knowledge and skills expected of adolescents, schools have taken on increased responsibility for building their educational foundation. As a result, the school libraries in this era play an important role in promoting learning by collaborating with educators (Lo & Chiu, 2015; R. J. Todd, 2012). It makes it easier to establish instructional approaches based on research and problem-solving, which are necessary for growing literacies like information and reading comprehension as well as professional development. The school library is therefore essential for information acquisition since it fosters literacy skills and instills lifelong reading habits in students (Martins & Martins, 2021).

Many countries are rapidly adopting learner-centric curricula, which is pushing the construction of school library learning environments. These spaces are critical for promoting constructivist teaching and learning strategies (Ruia & Tabassum, 2023). The fundamental difficulty that school libraries face today is developing techniques to foster different literacy abilities and assisting educational institutions in tackling persistent literacy issues. As Todd (2001) long predicted, in this twenty-first century, a school library is defined by more than only its physical assets, such as collections, systems, technology, staff, or buildings. Rather, it is about the measurable influence it has on student learning. It is about the tangible and significant ways in which it promotes the production of meaning and knowledge construction among pupils.

In line with this, recent studies maintain that, modern school libraries when well-equipped can provide access to a wide range of current materials and offer expert advice on information literacy and digital skills, including assistance in developing important skills required for

academic pursuits, career interests, and personal improvement (Boelens, 2010). In addition, agrees that school libraries can also help students prepare for job interviews by teaching them how to conduct research, negotiate salaries, and take advantage of practical possibilities at career expos and alumni meetings (Sakkaravarthi & Thanuskodi, 2019; Lokhande, 2023). This demonstrates the link between school libraries and increased student literacy, emphasizing the need for skilled library staff to improve academic, vocational, and social results.

Accordingly, Pun (2019) in his qualitative study examined effective collaborations between libraries and student careers established that libraries' primary purpose is to promote student retention and achievement. Pun (2019), further found that professional and competent librarians take considerable pride in preparing students for future careers. It adds that partnerships with other school bodies and other sub-units and agencies can help provide an opportunity to develop these initiatives further. Other collaborations between academic libraries and career centers are gaining traction, however with varying approaches across schools. Strategic partnerships inside universities can bring new services and resources for students seeking career research and development help.

In terms of the role of libraries in offering career advice, Lokhande (2023) emphasizes the importance of selecting the correct field in today's dynamic and complex employment market with so many interdisciplinary employment opportunities accessible, it is critical to create awareness among students even at the basic and middle levels about the variety of paths available to them. College and school libraries, given their role in supporting the younger generation, are well positioned to provide this purpose (Lokhande, 2023c; Sakkaravarthi & Thanuskodi, 2020).

Regarding the role of libraries in career guidance, Lokhande (2023) in his recent study posits that libraries, which are typically regarded as the ‘heart of education’ in formal learning situations, have considerable potential for giving career assistance. In higher education, libraries have been observed to provide students with an environment conducive to autonomous learning. Libraries have evolved from simple book repositories to dynamic hubs of knowledge transmission, making them crucial components of educational institutions. Thus, the usefulness of career counseling in academic environments is inextricably related to the effectiveness of the library system. As a result, educational institutions must prioritize improving their library infrastructure to promote the dissemination of career-related knowledge (Aju, 2020; Iheanaetu & Umoh, 2024). Librarians, by utilizing their experience in knowledge organization and dissemination, can have a significant impact and encourage young people to attain their goals. College and school librarians, particularly in developing countries like Ghana therefore have a crucial role to play in guiding and helping young people as they seek guidance and preparation for future job opportunities (Lokhande, 2023c).

Lokhande (2023), concludes that libraries serve as natural storehouses for quite a lot of the information necessary to provide career advising services. With the introduction of new industries such as information technology and multimedia, as well as the ongoing evolution of current jobs, formerly reliable sources of knowledge must be reassessed (Gaines, 2013; Holtgrewe, 2014; Lei, 2000; Lokhande, 2023c). There is an urgent need to find more effective and timely ways for young people and their counselors to acquire insight into the reality of work and job opportunities. In today’s changing labor market, career guidance is critical in helping young people understand themselves, gain the essential tools to explore potential job opportunities, and build the skills to connect with these chances. Also, the rapid improvements in information technology, such as the World Wide Web and multimedia, have created flexible

and new opportunities for spreading knowledge and providing career assistance. Lokhande (2023c) therefore calls in support that modern libraries be well-equipped with significant information resources and provide access to information that will help and assist students at both the college and university levels (Lokhande, 2023b). Following this, it is critical to create knowledge among students, especially at the youthful age at the school level about the wide range of choices available to them, allowing them to make educated judgments. Given their focus on the younger generation, school libraries are uniquely positioned to fill this function.

An empirical study by Sakkaravarthi & Thanuskodi (2019), which examined and evaluated the role of libraries and librarians in providing career assistance, counseling, and general career development to Management College students in the Trichy and Pudukkottai regions in India, found that approximately one-fifth of the participants agreed with statements about MBA graduates' career choices, such as feeling capable of making their own career decisions, seeking parental advice, consulting librarians, placement officers, friends, seniors, alumni, and market trends. Sakkaravarthi & Thanuskodi (2019) also indicated that, approximately half of the respondents were neutral on these assertions, while the other one-third disagreed with various aspects of professional choices. Furthermore, the study discovered that 49.3% of respondents were undecided regarding the overall level of profession choice, while 30.0% disagreed and 20.7% agreed.

In Africa, literature has also shown that school libraries not only serve an important role in preparing students for professions by improving their academic performance and digital literacy but also prepare students for future academic and professional activities (Chimah & Nwokocho, 2017; Olubiyo, 2022). To adapt to the changing digital landscape, library schools in developing countries must pivot by incorporating digital library courses, redesigning

curricula, and providing well-equipped practical facilities, as these facilities are invaluable resources for African students. This, when fastidiously done, can help provide them with the skills necessary to succeed in their chosen careers.

2.6. How the School Library Boosts Skills and Lifelong Learning

Student literacy remains a global priority, with an ongoing emphasis on measurement and responsibility at both the individual and institutional levels (Ghana Library Authority, 2020; Oyetola & Adio, 2020; IFLA, 2015) and discussions about literacy progress typically dominate media headlines in recent times. Despite the convenience and speed with which internet resources may be accessed, school libraries continue to play an important role in encouraging students' learning, critical thinking, and personal development.

Shaji (2023) in his detailed study report argues that for years, school libraries have been synonymous with the world of books, and their contribution to instilling a love of reading is invaluable. Shaji (2023) contends that, despite the availability of e-books and online articles, the actual presence of books in a library environment provides a distinct and engaging experience.

Shaji (2023) also mentioned the function of fostering a passion for reading within the skill of creating reading abilities in students for continued learning. According to the author, School libraries must set up safe areas where students can be tempted by different styles and come across novel authors unkept by academic exams. The tactile nature of books offers students the liberty to explore bookcases, shift book pages and delve deeply into the creative art of narrative. Moreover, librarian's selection is crucial in making sure a range of materials are always on

hand that lure the individual interests of learners with various reading abilities (Yin, 2024). Librarians make recommendations, direct countless ways and with creative persuasion, and foster an individual love for reading (Shaji, 2023; Yin, 2024).

Furthermore, libraries often provide reading programs, own author meetings, and book groups commit to creating a reading environment that fosters a lifelong decent of literature in kids (Shaji, 2023). By interacting with books, school libraries serve as a catalyst of effective child growth and encourage a compassionate and analytical/ possibility of considering things from another person's perspective reading practice. Another is cooperating in producing space for learning; libraries provide authentic learning areas with learning opportunities for students to develop talents and requirements lifelong learning skills. According to Shaji (2023), school libraries are venues for collaboration and cooperation. Libraries offer spaces where students can gather, exchange ideas, and collaborate on genuine work. They are gathering places with a peaceful study atmosphere, meeting rooms, and resources that promote group-centered study and memorize.

School libraries also encourage social contact by connecting students with similar interests and engaging in intellectual discourse, establishing a feeling of community inside the school. Furthermore, libraries frequently have technology-rich learning environments complete with computers, audiovisual equipment, and interactive displays (Appleton, 2020; Schlak, 2018; Subramaniam et al., 2012). These areas promote creativity, collaboration, and the investigation of new technology. Students can practice multimedia projects, presentations, and digital storytelling to improve their digital literacy and communication abilities (Churchill, 2020; Yang et al., 2022). By embracing collaborative learning, school libraries prepare students for the collaborative nature of the modern workplace and cultivate essential interpersonal skills.

Aside from these potentials mentioned above, Soulen (2023) also wonders if the critical role of school libraries and their people in nurturing and increasing student literacy is frequently overlooked, despite evidence demonstrating a link between well-equipped school libraries and skilled staff and increases in student literacy. As the number of students still struggling with basic literacy abilities grows in many nations, school libraries have the potential to greatly improve academic, occupational, and social results for these students, broadening their prospects. Furthermore, given the current issues confronting young people, promoting student well-being appears as a top concern for educational institutions (Krolak, 2006; Michèle I. Ernst, 2023; Soulen, 2023c).

Generally, literature has acknowledged that the learning landscape has become extremely dynamic, altering how students at all levels absorb knowledge compared to the traditional education model. With the advancement of artificial intelligence and the rise of remote and hybrid learning, the classroom concept is experiencing substantial alteration to meet the changing needs of today's students (Maki, 2021; Soulen, 2023c; Valentín et al., 2013). As a result, many educational institutions are adopting innovative educational technologies instead of traditional resources to serve their digitally savvy students better (UNESCO International Bureau of Education (IBE), 2023).

According to (Soulen, 2023), student literacy remains a global priority, with an increased emphasis on measurement and accountability at both the individual and school levels, and discussions about literacy progress frequently dominate media coverage. Surprisingly, the function of school libraries and their staff in improving student literacy has received little

attention, despite evidence demonstrating a beneficial relationship between school libraries, trained staff, and literacy improvements. As the number of kids struggling with basic literacy abilities grows worldwide, school libraries can make a substantial contribution to improving academic, vocational, and social results, hence expanding options for these students (Maki, 2021; Soulen, 2023c). Given the contemporary issues that young people confront, school leaders must prioritize student well-being

2.7. School Libraries

The International Federation of Library Associations (IFLA) describes a school library as necessary to every long-term strategy for literacy, education, information provision, and economic, social, and cultural development. It defines a modern school library as, *“a school’s physical and digital learning space where reading, inquiry, research, thinking, imagination, and creativity are central to students’ information-to-knowledge journey and their personal, social, and cultural growth. This physical and digital place is known by several terms (e.g., school media center, center for documentation and information, library resource center, library learning commons) but school library is the term most commonly used and applied to the facility and functions”* (IFLA, 2015, p.16).

Likewise, the Ghana Library Authority (2020), defines a school library as a cultural and information resource center for the school, where reading, reference, and research services are provided, to serve the needs of pupils, teachers, the school community, as well as its entire educational objectives.

School libraries of all types, focus on the core pedagogical activities such as; literacy and reading promotion; media and information literacy, like information literacy, information

skills, information competencies, information fluency, media literacy, trans-literacy; inquiry-based learning (e.g., problem-based learning, critical thinking); technology integration; professional development for teachers; and appreciation of literature and culture (IFLA, 2015b). The Ghana Library Authority classifies the basic functions of a school library to include, but not limited to the following:

- i. To introduce school children to a wide variety of materials;
- ii. To provide resources for the development of the school child;
- iii. To help stimulate the reading thoughts of the school children and to make them effective users of reading materials;
- iv. To provide resource materials for the enhancement and the extension of the school curriculum.

It is therefore an undeniable fact that the extent to which children and young people of today will be creative, informed, and knowledgeable will be shaped by the contents of the library resources made available to them (Ghana Library Authority, 2020b). As the school Library world indicates, the effectiveness of school libraries is that; it is accessible to the total school community, they are cost-effective because one book is used by many, they provide flexible scheduling and timely access to the collection by all students, a broad range of materials, add new resources throughout the school year to keep collection dynamic, create a sense of ownership that is shared by the entire school community (Oyetola & Adio, 2020c).

Connell, Bales, & Mitchell (2020) gauge as a standard that, the implications for best practice in all modern school libraries in all circumstances include the following; qualified school library personnel should establish and maintain e-book acquisition and management policies and processes; an adequate budget is required to support diversity in e-book collection development; provision of e-books should address curriculum, student learning, and

recreational reading needs; access to e-book resources needs to align with the technology infrastructure and equipment available to the school community with an eye to future developments; e-Books relevant to student's needs and interests to connect with their adoption of technology should be provided; professional learning is required for teachers about e-reading, e-book formats, and teaching practice to support literacy education and curriculum delivery using e-books (Connell et al., 2020b; Lewis & Kennedy, 2019; O'connell & Haven, 2013).

The purpose of the school library is similar to the purpose of the public library. School libraries, also known as school library media centers, are described as centralized information and technology centers designed to support the school's curriculum and provide resources that meet the educational and recreational needs of both the faculty and the students (Akande & Bamise, 2017; Limberg & Alexandersson, 2003). As technology and information literacy have changed and increased in importance, the school library has changed to provide access to and instruction in the use of a variety of technologies and electronic media (Clabo, 2002)

2.8. School Library Standards

According to Odongo (2001), school library standards are specific and quantitative statements that act as guidelines for institutions to follow in the establishment, maintenance, and management of school libraries. Like in all jurisdictions, universal school library standards are established by the International Federation of Library Associations and Institutions, the United Nations Educational, Scientific and Cultural Organization (IFLA/UNESCO), and the various national education accrediting agencies as well as other library associations, to guide school managers (Liliia, 2022; UNESCO, 2024b). Apart from this, at all various local levels, schools,

be it private or public, are expected to develop befitting standardized national and local school library policies, to suit their respective national and parent institutional goals, in-house. Towards this vision, IFLA/UNESCO standards specify that the school library should provide information and ideas that allow individuals to function successfully in today's information and knowledge-based society; with life-long learning skills, and assist with the development of thought processes, that will enable them to live as responsible citizens (Schultz-Jones & Oberg, 2015; UNESCO, 2024). Other libraries and information networks seem to have agreed with the principles found in the UNESCO Public Library Manifesto; which recommends that school library staff promote the use of books and other information resources, and its library services be provided equally, to all members of the school community, regardless of age, race, gender, religion, nationality, language, or professional or social status. By standard, special services and materials, must also be provided for those who are unable to use mainstream library services and materials such as the blind pupils (Merga, 2020; Schultz-Jones & Oberg, 2015b; UNESCO, 2024b).

Teachers and other educational professionals are starting to understand that learning may occur outside of the classroom and that independent study that is motivated by the interests of the student contributes significantly to students' learning. The emphasis is moving away from formal, teacher-led, didactic instruction and passive learning toward more active, self-directed learning, which involves more student participation. The school library and librarian have a unique chance to play a crucial role in fostering autonomous learning opportunities that not only support students' interests and needs but also help them build reading, research, and study skills to support schools' academic and curricular needs (Dei & Asante, 2022a; Williams et al., 2002).

2.9. History of School Library in Ghana

According to Alemna (1998), the concept of school library services provision at the basic school level in Ghana, to school children started, almost as soon as that for adults, in the early 1950s. The first type of library for schools was, therefore, the mobile library system, whereby books were sent in book vans, from the capital of Ghana, and to the rural areas for use, by schoolchildren. Books were issued based on one per child but, where the enrollment was less than 100, the number would be increased (Alemna, 1998). The government of Ghana in 1967 set up a Working Committee on School Libraries, comprising representatives from the Ghana Library Board, the British Council, and the Ministry of education. Its mandate was to examine the state of libraries in the various secondary schools and teacher training colleges in the country and to make appropriate recommendations for their improvement (Oddoye, 1969).

The findings of the 1967 Working Committee on School Libraries revealed that, except for a few secondary schools, libraries in most of the secondary schools and training colleges were poorly organized (Oddoye, 1969). Most had low book stocks, poor accommodation, and untrained staff. In fact, in some of the schools, libraries were nonexistent (Alemna, 1998). This committee made various recommendations that seem to have lacked committed and official support. One recommendation that was carried out, however, was the establishment by the Ghana Library Board of a School and College Library Department in 1972 with the following duties (Alemna, 1998);

1. Visiting schools and colleges to give individual advice and help in organizing their libraries;

2. Rendering and supplying library books to all schools that will pay their grants to the Ghana Library Board;
3. cataloging and classifying all new books for schools; Producing book lists, manuals, and other publications useful for school libraries;
4. Conducting seminars and training courses for library clerks and teacher-librarians; Offering advice to architects on library requirements in new schools or when a reorganization is required;
5. Building up a standard book collection from which teachers examine books and make their selection;
6. Advising on the setting up of a central rebinding service for school libraries;
7. Encouraging the formation of a School Library Association as a special section of the Ghana Library Association.

From its inception, even to this present time, as Alemna (1998) earlier lamented, this department has been seriously understaffed, and inadequately funded, and it is in a somewhat ambiguous position, apparently because its operational status through both the Ghana Library Board and the Ministry of Education has not been clearly defined for purposes of coordination (Bawa et al., 2018b).

2.10. Modern School Libraries

Studies over the years have been objective at all angles that, school libraries when properly staffed and resourced under the auspices of technology and good policy support, can significantly impact student achievements at the various school levels where building good reading and literacy skills is not an option (Ayaz & Ali, 2017a; Bastos & Matias, 2021;

Dubazana, 2007; Lupton, 2016; Singh, 2021). It is also an undeniable fact that the extent to which children and young people of today will be creative, informed, and knowledgeable will be shaped by the contents of the library resources made available to them (Ghana Library Authority, 2020b).

Elsewhere in other jurisdictions, like in the United Kingdom, school libraries are referred to as, school library resource centers (SLRC), and also coined as, library media centers (LMC) in the USA. The major difference between the traditional school libraries and the SLRC or LMC is that the latter plays a more integrative role in learning and teaching at the school level. Unlike the traditional library systems in Africa, where the emphasis is mainly on print-based materials, the SLRCs and the LMCs are modernized facilities that facilitate both recreational as well as print and non-print-based materials (Wine, 2020b). These resource centers/school media library centers are specially designed to blend the skills of teachers, librarians, audiovisual experts, and technicians. Hence, school libraries or media centers are general terms for the different types of libraries identified by the level of education or grades, i.e. secondary (senior or junior, or high school), primary and elementary or kindergarten (Wine, 2020).

In teaching and developing reading skills which is very essential for lifelong learning skills, Kutto, (2005) long advocated the need for teachers to make use of available resources like school libraries to make lessons more focused and learner-centered. The school library can serve as the best resource to teach reading skills because it is in the library where learners can access extra information not presented by a teacher in class, finish class assignments, and read for leisure and enjoyment. However, as (Agyekum & Filson, 2012) in their study showed in Ghana, most schools' libraries do not exist and where they do, students avoid borrowing books for fear of losing them

In gauging what modern school libraries stand for and how they function, curate, and promote the information literacy provision for literacy and other lifelong learning purposes, Verma (2022) clarifies in his study about digital literacy in this era, that a modern library otherwise sometimes referred to as smart libraries, provide excellent information services and serve as a knowledge center capable of satisfying a wide range of information needs. The expansion of next-generation information systems, utilizing the most recent advances in information and communication technology, involves the creation of mobile information services accessible via portable devices such as smartphones and tablet PCs. These systems should incorporate cloud computing principles, mobile apps, annotation, and Library 2.0. Verma (2022) further added that, the library's information system should leverage collective intelligence and cloud computing capabilities. A smart library must use smart technologies to save time and efficiently meet the demands of its users. In essence, modern and smart libraries are synonymous; their services should promote user delight, usability, and automation. A smart library must follow the five laws of library science in order to effectively meet the problems provided by today's technological world and beyond Verma (2022).

2.11. Challenges of School Libraries in Ghana

Previous studies have already brought to bear, that school libraries in Ghana just like in most African countries, and other countries still face several untold teething troubles, that are still glaring, and not being resolved by the long-established School and College agencies and departments like that of Ministry of Education and the Ghana Library Authority (Odongo, 2007). Most of the School libraries' deterioration in Ghana has been partly attributed to poor government attention and low interest from administrators of the various schools from kindergarten through primary to the SHS levels.

A study by Agyekum & Filson (2012) conducted at Konongo-Odumase Senior High School, which is located in the Asante-Akim North District of the Ashanti Region, sought to evaluate the effects of educational reforms on school library services, found that there has been little change in school library service supply since Ghana's new educational reforms were implemented. The study among others identified persistent challenges such as inadequate budget, a lack of library staff training, and substandard facilities are among the issues identified. This study seems to confirm previous challenges identified by Alemna, (1996) in Rosenberg, (1998) studies conducted decades earlier in Ghana highlighting the on the overall lack of impact on libraries, despite calls and policy and committees' direction.

(Alemna, 1983) maintained that the real commitment interest in school libraries in Ghana seems to be for diplomacy and successive governments seem to act "cool and casual", instead of paying much attention to resources. This lack of commitment by the government and lack of interest by school principals and heads had been the main reason behind why standards laid down in the 1972 *Manual for School Libraries in Ghana*, nor those proposed by Alemna (1983) have still not been adopted and implemented

Although recent literature in Ghana is clear, that there are specific training requirements for school librarians in Ghana at least by 1996 (Alemna, 1983). The resulting use of unqualified staff led to poor services and libraries did not add to the quality of education offered in the schools. In 1994, Alemna (1983) lamented that no one appeared to be in a position to give any clear indication as to whether the growth of organized library services in schools have an impact on the poor reading habits of school leavers, which was the key reason for setting up SCD as far as in the early in the early 80's. Critically in context and content, it can be observed

that the same status quo remains to this day, considering, that any change in the school library development would require massive capital inputs and commitment by school boards of governors and teachers. No spectacular change in this direction has been reported lately (Alemna, 1983).

Literature seems to suggest that the introduction of the FSHS has increased enrolment by an average of 17% and 31% in 2017 and 2018 respectively (Abdul-Rahaman et al., 2018; Asante & Agbee, 2021; Kwegyiriba, 2021). However, these increases have come with their challenges. Although the program is in its early years, revisions in other places where similar policies have been implemented point out that the provision of free secondary education comes with numerous difficulties that somehow impede the quality of education in diverse ways. These challenges mainly include but are not limited to funding, and facilities among others (Tamanja & Pajibo, 2019a). Lack of funding to support the policy resulted in a delay in the release of funds. Lack of infrastructure to accommodate the growing number of students (Classroom congestion and lack of boarding facilities). Teacher shortage and increasing workload for the existing number of teachers. Poor quality meals served to students. Inconvenience relating to erratic schedules for the double-track system. For example, Free Secondary Education increases enrolment and retention in secondary schools, but retention is still threatened by many socio-economic factors that lead to the dropping of students out of school (Adan & Orodho, 2015). Also, the nature of increased student enrolment has consequently caused other problems like heavy teaching loads, movement of students in and out of schools, teacher shortages, and inadequate instructional materials. This inevitably affects already existing poor libraries at the various secondary levels.

Although studies seem to project that, free secondary education delays the age of first marriage and childbirth, however, many students, especially females, do not complete their secondary education because of teenage pregnancy, parental negligence, and early marriages (Tamanja & Pajibo, 2019); Brudevold-Newman, 2016). Amusingly, the increase in enrolment as a result of free secondary education in Ghana is a plus, yet it overstates the few expired available facilities such as classrooms, dormitories, libraries, and laboratories, which consequently reverses the gains of the policy (Tamanja & Pajibo, 2019b). Also, there was an acute shortage of teachers despite the implementation of a subsidized free day secondary education elsewhere in Kenya (Adan & Orodho, 2015).

In the case of Ghana, infrastructure has been a major setback to the FSHS program. The infrastructural problem has been aggravated by the elimination of the financial barrier, hence, those who hitherto will not have been able to go to school can now go, thereby leading to an increase in enrolment. Consequently, the government introduced the double-track system in 2018 to contain the increased enrolment (Tamanja & Pajibo, 2019b). All these libraries seems to be stacked with little or no attention at the various secondary school levels.

Similarly, other studies conducted about school libraries seem to suggest that school libraries in general mostly have some challenges, especially in the less developed and developing world such as Africa and Asia. For instance, a study conducted by Wimolsittichai (2017) brought into being, that in general small public primary school libraries lacked most basic resources and other gray areas such as collections, physical facilities, and staff. The authors revealed that, although the heads and management in their contributions seem to have recognized the importance or otherwise the necessities of an effective administration, with sufficient staff and sufficient library physical facilities as the recommended and standardized means to overcome

the limitations of the respective school level libraries, they attributed budgetary constraints and other policy weakness as the major causes of their challenges at all levels (Wimolsittichai, 2017b).

2.12. Free SHS Policy

Even though there is presently no policy document covering the Free SHS education policy in Ghana (Amponsah, 2021), the policy was created to provide the poor and vulnerable in the country with the opportunity to complete senior high school education. Many parents and guardians were unable to afford the tuition for their children to attend second-cycle institutions in Ghana before the implementation of the program. The primary goal of the FSHS policy is to increase enrolment in second-cycle institutions in Ghana by removing cost barriers. For this reason, the Ministry of Education in a more summarized content, has the Following Objectives for the FSHS Policy:

1. To remove cost barriers through the absorption of fees approved by the Ghana Education Service Council.
2. To expand physical infrastructure and facilities to accommodate the expected increase in enrolment.
3. To improve quality through the provision of core textbooks and supplementary readers, teacher rationalization, and deployment.
4. To improve quality through the implementation of 30% of places in elite schools for students from public Junior High Schools (JHS).
5. To prioritize and reform TVET institutions at the SHS level to facilitate skills acquisition (Ministry of Education, 2018).

The program mainly seeks to relieve parents, who would otherwise have borne the cost of secondary education of their wards. In other words, the program serves as a barrier broker for those who cannot afford senior high school education due to poverty (Tamanja & Pajibo, 2019b). The introduction of the FSHS has led to a substantial increase in enrolment since the main barrier (fees and other expenses) has been absorbed by the government. Available data from the Ministry of Education show an increase of 17% in 2017 and by 31% in 2018 to 472,730 (Tamanja & Pajibo, 2019b). The introduction of the FSHS has led to an increase in enrolment by about 90,000 students.

2.12.1 Policy Provisions and Funding Provisions under the FSHS Policy for School Libraries

Education is inevitable for Africa's development, as it has been established (Ayaz & Ali, 2017b) to best serve as a key factor in preparing the required human resources needed to fill high-level scientific, technical, professional, and managerial jobs in both public and private sectors. Accordingly, succeeding governments, both military and civilian regimes, seem to have in their little ways, supported senior high school education in Ghana, as part of efforts to increase access, and improve quality since the nation attained independence on 6 March 1957, although not up to expectation (Abdul-rahaman, Basit, & Rahaman, 2020).

Spending on senior high education is impressively beneficial to both the individuals and society at large. Adequate funding of SHS in Ghana is affirmed not to only boost economic growth, but also to support general development, to achieve the constitutional provision stated in the 1992 constitution (The Republic of Ghana, 1992), which states that secondary and higher education shall be provided to all, in a progressive form (Akyeampong, 2009).

2.12.2 FSHS policy Integrates School Libraries in its New Scheme

With the Free Senior High School Policy, vocational and technical schools are accessible and available to all students including non-payment of tuition fees, library books, admission, utility, science center, examination, meals, free textbooks, and free boarding facilities (MoE, 2018b). Studies over the years seem to suggest that school libraries when properly staffed and resourced, can have a significant impact on student achievement under all environments and policies. The Ghana Library Authority (2020) in its recent national policy guideline for schools in Ghana established undeniable, that the extent to which children and young people of today will be creative, informed, and knowledgeable will be shaped by the contents of the library resources made available to them (Ghana Library Authority, 2020b).

2.12.3 Conditions of School Libraries under the FSHS Policy

Generally, school libraries in Ghana are established and managed by the Ministry of Education, even under this new policy of FSHS. On paper, every secondary school be it public or private in the country is expected to have a library. However, in most of these institutions, what goes by the name of a library may sometimes not be a functional library (Alemna, 1998; Bawa et al., 2018; Gbobo & Gbobo 2020).

Where the institution has employed library assistants, the Ministry of Education pays their salaries at the public schools, and in some cases, the Ministry of Education also sponsors some short training courses, usually organized by the Ghana Library Board for School Librarians (Bawa et al., 2018a). Previously, the Ministry of Education provided funding to the Public Library Board to acquire and process materials for schools and colleges. This centralized service has now stopped, and the institutions now get their monies to purchase materials

directly from the Ministry of Education. The materials are then processed by the library assistants in the schools (Alemna, 1998; Bawa et al., 2018; Gbobo & Gbobo 2020)..

The schools have a close relationship with the public libraries. Regional public librarians are often consulted by school librarians for advice in times of difficulty. As stated above, public libraries serve as a major training ground for school librarians in Ghana. At the inception of public library service in the country, the Ghana Library Board operated a book box system whereby books were sent in boxes on loan to schools in rural areas for a time and then returned to the Library Board for reallocation to other schools. Owing to various reasons, mainly budgetary, this important service ceased during the early 1980s. There is no sharing of resources or networking among school libraries in Ghana 2; Here is a Result Presentation section for your thesis aligned with Objective 2, written clearly and professionally for a thesis. The language avoids reference to the hypothesis directly and uses appropriate academic structure and tone.

2.13. School Libraries Preparation of Students for Global Citizenship

School libraries can help students prepare for global citizenship by providing resources, fostering critical thinking, raising cultural understanding, and encouraging engagement with other viewpoints ((Martins & Martins, 2021; Nalumaga, 2016; Todd, 2001; Wine, 2020). Other studies and experts have long established that school libraries play a variety of functions in improving students' academic achievement in a complex information environment (Agyekum & Filson, 2012; Bawa et al., 2018)).

In terms of preparing students for global citizenship, information literacy is vital for schools; it must be integrated into the curriculum since school libraries become central to teaching

students how to access, assess, and use available information. Also, information literacy should be integrated into other subjects to familiarize students with the realities of information-rich environments in which they are to operate further in their careers. (Richardson, 2015) points out that, digital literacy is another field in which school libraries take a more active role due to the development of digital technologies. The author adds that digital literacy, as well as online databases and librarians' competency in this area, is necessary for effective preparation for students' future careers. For instance, they may need to hold online lectures via Skype or use digital presentations. Therefore, school libraries also aid in acquiring skills necessary for the career. According to Shaji, in today's Google-dominated society, pupils also need to be digitally literate. School libraries, in conclusion, are not just stores of physical materials; they also serve as conduits of digital resources and technologies. Librarians collaborate with educators to teach students critical skills to help them browse and use online materials effectively. As part of this collaboration, students master digital research techniques, learn how to utilize databases, and develop skills in online sharing and collaboration, from which schools prepare students for a digital-rich world. School libraries frequently offer paid access to advanced academic databases, which include sources and research materials unavailable through simple Internet research.

Librarians play an important role in guiding students through the complexities of these databases, teaching them sophisticated search tactics, optimizing search results, and accessing scientific publications. By seamlessly combining traditional and digital resources, school libraries allow students to capitalize on the internet's enormous potential while developing critical thinking skills to efficiently examine online content. According to Agyekum and Filson (2012), a dynamic school library system is a beneficial and cost-effective resource that helps

students become discerning learners capable of accessing, evaluating, and constructing knowledge from material presented in a variety of ways.

According to the (IFLA, 2021), and the (Ghana Library Authority, 2020), a well-functioning school library should have a skilled librarian, contemporary reading materials, and information technology resources to help students develop their reading and literacy abilities. (Williams, Wavell, & Morrison, 2013) assert that for kids in rural areas, school libraries are frequently their only source of reading materials. (Robinson, 2022) emphasizes the link between excellent school library services and student achievement on standardized testing.

School libraries according to (Luo, Robinson, & Park, 2014) act as equalizers, leveling the playing field for students' scholastic attainment by increasing access to reading materials and literacy support, especially for those who lack such resources at home. These libraries are especially advantageous to pupils from economically challenged households living in rural areas, where access to learning materials, knowledge, and opportunities to nurture information and literacy skills may be limited or nonexistent in the home.

2.14. Performance of SHS Students

Studies have long confirmed a clear link between the performance of school libraries led by competent and experienced librarians and excellent educational outcomes (Alemna, 1998b; Duflo, 2017; Ghana Library Authority, 2020b; Novotny, 2017; Wimolsittichai, 2017b).

(Adbul-Rahim, Adom, & Adu-Agyem, 2022) in their findings in Ghana show significant advances in education following the establishment of the Free Senior High School (FSHS) program. Tuition (84.26%) is covered by government financing, as are corresponding fees for resources

and other expenses (73.59%). Students can now pursue education at their preferred universities (60.32%). Furthermore, student enrollment has increased (87.45%), teacher adequacy has improved (84.21%), and academic achievement has risen dramatically, from 15% to 96.6%.

However, a few obstacles have been discovered, such as huge class sizes and the need for more boarding facilities to handle the rising student body. The report advises that the private sector work with the government to fund the growing demand for infrastructure in secondary education institutions across the country.

Similarly, (Ampofo & Owusu, 2015) in their academic evaluation study that looked into the elements that influence and mediate academic performance among Senior High School (SHS) students in Ghana's Ashanti Mampong Municipality. The study's findings revealed that father's education, mother's education, the student's academic drive, and the student's effort were all linked to academic achievement. Furthermore, the mother's education, the student's gender, academic ambition, and effort were revealed as the most important predictors of academic achievement. Based on these findings, educators should encourage pupils to have high academic ambitions. Furthermore, parents should ensure that their children devote a considerable percentage of their time to studying, and they should be prepared to aid their children.

(Douglas, J, Wilkinson, 2011) in their findings from their report about School libraries and their improvement plan demonstrated the significant influence of high-quality school libraries and library services on improving students' reading levels and facilitating access to knowledge. Their findings further revealed that young people reading above their projected age level are twice as common as those reading below their age level. Furthermore, (Teravainen & Clark, 2018) were optimistic in their study that solid data supports the good impact of both school and

community libraries on reading habits. Although the authors acknowledged that, many libraries are facing closure owing to financial constraints, findings support that, school libraries have an impact on students' academic performance in a variety of ways, including general academic accomplishment, reading and writing ability, and broader learning skills in areas like history, mathematics, and science. Additionally, school libraries influence adolescents' love of reading, reading habits, and attitudes about reading. Specifically, students' motivation and attitudes have been connected to their use of school library resources. The authors that using the school library has been related to several psychological and interpersonal impacts, such as increased self-esteem and feelings of achievement and accomplishment among students.

(Rodney & Hamilton-pennell, 2013) in their study conducted elsewhere in the United States about the impact of school libraries and its role in academic performance found that the reading test scores from the Michigan Educational Assessment Program (MEAP) showed a positive link with trained school librarians' involvement in the state's school library programs. This relationship between school libraries and test results is still substantial when other school or community factors at various educational levels are considered. A comparison of MEAP reading performance in Michigan schools with and without librarians shows that having a trained school librarian has a significant impact on kids' reading achievement.

When a librarian is present, schools see an increase ranging from 8% in high schools to up to 35% in elementary schools. School libraries help children grow intellectually and emotionally, build empathy, and develop critical literary analysis abilities by offering opportunities for them to interact with books.

2.15. Summary of Literature

The literature reviewed highlights the fact that school libraries are not just a supplement to a good education; they are essential components. Well-resourced modern school libraries help children thrive academically and prepare them for success in life by instilling a love of learning, imparting critical skills, and ensuring equitable access to resources. Students can be empowered to become critical thinkers, self-sufficient learners, and active participants in a constantly changing society by establishing well-equipped libraries staffed by skilled librarians.

In terms of school libraries preparing students for global citizenship, the literature reviewed also seems to suggest that well-structured and standardized school libraries can help students prepare for global citizenship by providing access to global resources, promoting intercultural understanding, developing critical thinking skills, encouraging global engagement, facilitating communication and collaboration, and raising global awareness and action. Libraries offer students the knowledge, skills, and attitudes required to succeed in an interconnected world, empowering them to become responsible and active global citizens.



METHODOLOGY

3.1. Introduction

According to (Taylor et al., 2015), methodology in the social sciences is the strategy employed to look for solutions or answers to issues. It includes the fundamental ideas and presumptions, as well as the strategies and processes used to carry out the study design or plan. Research methodology is essentially the whole strategy that a researcher uses when starting a study (Leedy & Omrod, 2005).

According to (Hjørland, 2005). A good research method should be chosen based on several factors, including the study's goals, its philosophical stance, the nature of the problem being studied, its uniqueness in research, and the time and resources that are available. In this study, the methodology is divided into subsections that comprise the research paradigm, research design, case and subject selection, data collection tools, and data presentation and analysis.

3.2. Research Paradigm

The paradigm used for the study is pragmatism. According (Kankam, 2019a), *“Conducting research into human behaviour usually requires the adoption of a research paradigm with the aim of improving the credibility and generalisability of the study...”* (p. 1). With this paradigm, better ways of looking at the real-world scenario can be achieved to enable the provision of effective explanations (Kankam, 2019a). This correlates perfectly with the goal of understanding how school libraries in Kassena Nankana Municipal in Ghana contribute to the achievement of SDG4.

Pragmatism is the most suitable research paradigm for this study, because it accommodates the complex and multifaceted nature of the research objectives. The goal of this study aligns with Sustainable Development Goal 4 (SDG 4), which emphasizes inclusive and equitable quality education and the promotion of lifelong learning opportunities for all. Evaluating the role of school libraries in achieving this goal requires a holistic understanding that incorporates both quantitative data and qualitative insights such as the perceptions of students, teachers, and administrators on the effectiveness of library services. Pragmatism bridges this duality by allowing for the integration of both quantitative and qualitative research methods, to ensure that the study addresses the practical realities and theoretical constructs comprehensively (Kankam, 2019b; Scott, 2007)

Pragmatism prioritizes action and real-world applications, making it particularly apt for this research (Kaushik & Walsh, 2019a; Shank, 2013). The study seeks not only to evaluate but also to inform policy and practice by providing relevant data for identifying actionable strategies for improving the contributions of school libraries to the achievement of SDG4. As pragmatism focuses on outcomes and practical solutions, it aligns with the study's aim to provide evidence-based recommendations for stakeholders, including school administrators, policymakers, and development partners.

Moreover, pragmatism recognizes the interplay between context and research findings. Kassena Nankana East Municipal Assembly presents unique cultural, socioeconomic, and infrastructural dynamics that influence the operation and impact of school libraries. A pragmatic approach allows the researcher to tailor methods and interpretations to this specific context (Kankam, 2019b; Kaushik & Walsh, 2019a; Shank, 2013), this ensures that the findings are both relevant and transferable.

This study adopts pragmatism to support a mixed methods problem focused inquiry into how school libraries contribute to SDG4. Pragmatism prioritizes the research question and the usefulness of evidence, permitting the integration of quantitative and qualitative strands to build warranted claims about “what works” in context (Kaushik & Walsh, 2019; Kankam, 2019). Its suitability for school based and LIS impact evaluation is reflected in recent Ghanaian education these that explicitly employ the pragmatic paradigm for explanatory or convergent mixed methods designs. In school librarianship, mixed methods work on librarians multiliteracies. Accordingly, pragmatism provides the most defensible basis for integrating survey statistics, stakeholder interviews, and documentary/operational evidence to assess libraries contribution pathways to SDG4 in this municipal context.

It is worth emphasising that, pragmatism is the best paradigm for this study because of its ability to integrate diverse methods, prioritize practical outcomes, adapt to contextual nuances, and support interdisciplinary collaboration. These attributes make it the ideal framework for addressing the complex, real-world problem of evaluating the contribution of school libraries to achieving SDG 4.

Pragmatism offers several advantages over other research paradigms, particularly for this study. These merits are evident when pragmatism is compared to positivism, interpretivism, and critical theory. Pragmatism allows the researcher to adopt a mixed-methods approach, integrating both quantitative and qualitative methods as needed. For this study, quantitative data—such as library usage statistics and student literacy outcomes—can be combined with qualitative insights from interviews and focus groups with students, teachers, and administrators. Unlike positivism, which is rooted in a strict quantitative framework, or

interpretivism, which prioritizes qualitative exploration, pragmatism provides the flexibility to use diverse methods based on the research objectives and context (Omodan, 2024; Paudel, 2024).

While interpretivism focuses on understanding subjective experiences and positivism aims for generalizable laws, pragmatism emphasizes practical solutions and real-world applications. This is particularly relevant for this study, which seeks to inform strategies to enhance the contribution of school libraries toward achieving SDG 4. Pragmatism aligns with the study's goal of generating actionable recommendations for improving educational quality and access in Kassena Nankana East Municipal Assembly (Kaushik & Walsh, 2019a; Ramanadhan et al., 2021). Moreover, it is worth stating that, Pragmatism acknowledges that knowledge is context-dependent, and this makes it suitable for evaluating the unique conditions of Kassena Nankana East. Unlike positivism, which often seeks universal laws that may overlook local realities, pragmatism allows the researcher to explore how the specific cultural, economic, and infrastructural dynamics of the region influence the role of school libraries in achieving educational goals. Similarly, while interpretivism also values context, its emphasis on subjective interpretation may limit the ability to generalize findings or propose scalable solutions (BRM, 2024; Omodan, 2024).

Pragmatism supports interdisciplinary collaboration by drawing on insights from education, school management and library science, etc. This interdisciplinary lens ensures a holistic evaluation of how school libraries contribute to SDG 4. In contrast, critical theory might focus primarily on issues of power and inequality, which, while important, may not fully capture the operational and functional aspects of library services in this study (Kaushik & Walsh, 2019a; Ramanadhan et al., 2021; Scott, 2007; Shank, 2013) In addition, pragmatism bridges the divide

between the positivist and interpretivist paradigms by rejecting the need to adhere strictly to one epistemological stance. This is particularly valuable for a study that requires both objective measurements and subjective interpretations. By focusing on "what works" to address the research problem, pragmatism avoids the rigidity of other paradigms and provides a balanced framework that accommodates the complexity of the study's goals (Creswell, 2014a). It is also important to indicate that, pragmatism is action-oriented and prioritizes knowledge that leads to practical improvements. For this study, the findings are expected to contribute to policy recommendations and interventions to improve the functionality and impact of school libraries. While critical theory might emphasize raising awareness of systemic issues, pragmatism ensures that the research produces tangible benefits for stakeholders, including students, educators, and policymakers (Creswell, 2014a; Dolan et al., 2022).

It is worth drawing the curtain on the merits of the use of pragmatism as a paradigm by indicating that, pragmatism's flexibility, focus on practical outcomes, contextual relevance, interdisciplinary nature, and ability to integrate diverse perspectives make it superior to other paradigms for this study. By balancing the strengths of other paradigms while avoiding their limitations, pragmatism provides a comprehensive and adaptable framework for evaluating the role of school libraries in achieving SDG 4 in Kassena Nankana East Municipal Assembly.

With respect to how the paradigm applies to this research, it is noted that the paradigm emphasizes on the following elements, Practical Orientation, Emphasis on Action and Experience, Pluralistic Approach, Contextualism, Problem-Solving Focus, Pragmatic Inquiry, and Reflective Thinking (Kankam, 2019a; Kaushik & Walsh, 2019b). The pragmatist paradigm can be applied in the context of this research by firstly, focusing on Real-World Outcomes. In this case, the actual impact of school libraries on achieving SDG4 (Quality

Education) within the specific context of Kassena Nankana East Municipal. In addition, it was possible to move beyond theoretical discussions to examine how school libraries function in practice and contribute to educational goals.

The second application is the adoption of mixed methods approach. Pragmatism encourages the use of multiple methods to gather well-rounded data. This research adopted the use of a type of mixed method referred to as Convergent Parallel Mixed-Methods design for the investigation. This combination provides a more comprehensive picture than relying solely on one approach.

The third application is evaluation for improvement. A pragmatist approach views research as a tool for improvement. This research is aimed not only to evaluate the current role of school libraries but also generate recommendations for how they can be better utilized to support SDG4 in the local context.

The fourth application of the paradigm of the paradigm is the Context Sensitivity. Pragmatism acknowledges that what works in one setting may not work in another. The research will consider the specific circumstances of Kassena Nankana East Municipal, such as available resources, student needs, etc., when evaluating the effectiveness of school libraries.

The fifth and last is Practical Value. The ultimate goal is to produce findings that are useful for policymakers, educators, and librarians in Kassena Nankana East Municipal. The research provides actionable recommendations to enhance the role of school libraries in achieving SDG4. By following these principles, the research plan embodies a pragmatist perspective,

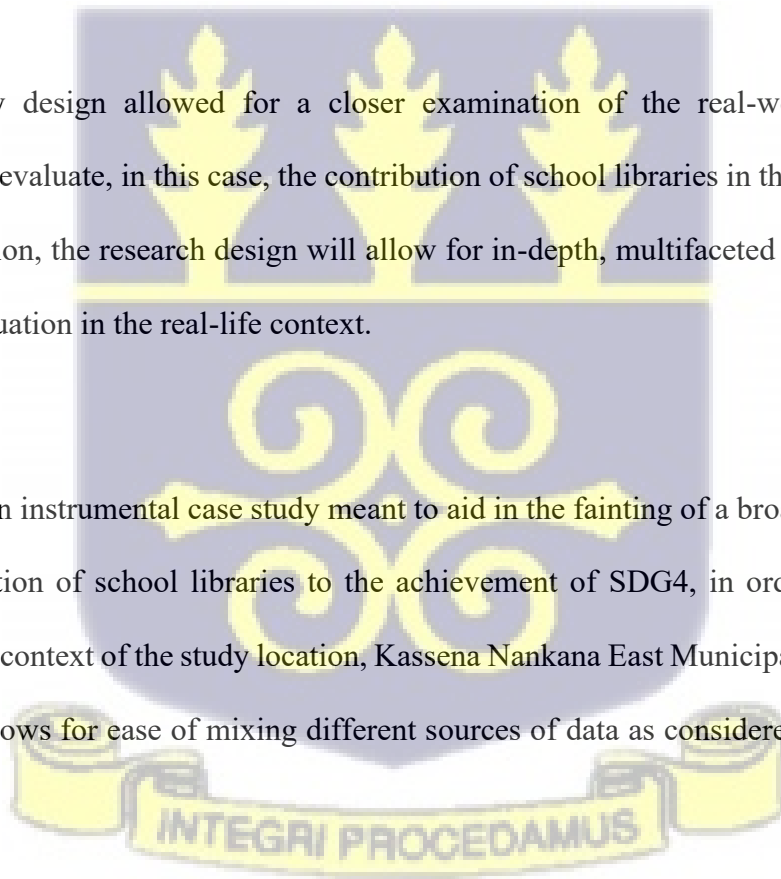
emphasizing practical application, mixed methods (Convergent Parallel Mixed-Methods), and the use of research findings to improve real-world situations.

3.3. Research Design/Strategy

A study design refers to the methodical arrangement of procedures for acquiring and interpreting data in a way that balances the study's objective with the efficiency of the process (Kothari & Garg, 2014). A good study design in a research process serves as an organized plan that allows researchers to answer questions in a legitimate, objective, accurate, and cost-effective way. In view of the foregoing, a case study design was adopted for this study.

The case study design allowed for a closer examination of the real-world situation to understand and evaluate, in this case, the contribution of school libraries in the achievement of SDG4. In addition, the research design will allow for in-depth, multifaceted understanding of the complex situation in the real-life context.

This design is an instrumental case study meant to aid in the fainting of a broader appreciation of the contribution of school libraries to the achievement of SDG4, in order to effectively explain it in the context of the study location, Kassena Nankana East Municipal Assembly. The study design allows for ease of mixing different sources of data as considered in the research approach.



3.4. Research Approach

Due to the characteristics of the research problem, Convergent Parallel Mixed-Methods design was used in this study which include quantitative and qualitative methods. This study combined data from both forms of techniques. It complemented the Contribution Analysis Model Theory selected (CAMT).

Triangulation was used to combine multiple data sources in order to enhance the validity and reliability of the findings. The research approach was used because it allows the researcher to start from the problem and develop an explanation that can account for the data. Its goal is to generate a plausible explanation for the prevailing situation and place it in the right perspective.

3.5. Study Setting/Research Environment

Originally a single district, Kassena-Nankana was divided in 2008, with the western portion becoming Kassena Nankana West District. The remaining eastern territory was initially Kassena-Nankana East District but was elevated to municipal status in 2012. In addition, the region was historically part of what is called Upper Region (Upper East and Upper West) carved out of Northern Region 1st July 1960. The then Upper Region was divided into Upper East and Upper West during (PNDC).

Located in Ghana's Upper East Region, the Kassena Nankana East Municipal Assembly (KNEMA) falls within the Guinea Savannah woodlands ecoregion. The municipality encompasses an area of approximately 865 square kilometers. Due to limited rainfall, irrigation plays a vital role in agriculture. The Kassena Nankana East Municipal Assembly (KNEMA) is predominantly rural and has a population of roughly 130,000 (2021 census). Agriculture is a

primary economic activity. Agriculture as the primary economic activity. Given its location in the Upper East Region, irrigation plays a crucial role in supplementing rain-fed agriculture.

3.6. Selection of Case(s)

There are about 38 Senior High Schools (SHS) in Upper East Region. Out of these, six (6) are in Kassena Nankana East Municipal Assembly. Four schools in the area of study were used for the study. Two out of the four schools were technical schools and one is a minor seminary. One of the schools is for only boys, another for only girls, and the rest are mixed gender schools.

Table 3.1: Senior High Schools in the Study Area

S/No	Senior High School	Gender Status	Type	Location
1	Our Lady of Lourdes Girls' Senior High School	Girls		Navrongo
2	Notre Dame Seminary Senior High School	Boys	Minor Seminary	Navrongo
3	St John's Integrated Senior High Technical School	Mixed	Technical	Navrongo
4	Awe Senior High Technical School	Mixed	Technical	Navrongo

Source: *Field data, 2024*

The four schools selected for this study were chosen using a maximum variation sampling strategy to capture the structural and functional diversity among the Senior High Schools in the Kassena Nankana East Municipal Assembly. Although six SHSs are located in the

municipality, the selected schools include a girls school, a boys minor seminary and two mixed technical schools representing differences in gender composition religious orientation, and curricular emphasis. This variation was intentional to ensure that the findings reflect a broad spectrum of schooling environments through which school libraries support learning. The goal was not statistical representativeness, but analytic transferability that is generating insights that are meaningful for similar rural and peri-urban SHS settings in Ghana with comparable diversity in school types and mandates. This aligns with the instrumental case study orientation of the research, which seeks to illuminate how the phenomenon manifests across different institutional context rather than within a single homogeneous school category.

3.7. Selection of Subjects

Subject selection is a critical component of any research process, because it determines the individuals, groups, or entities from which data will be collected. It is the process of identifying and selecting participants who are most appropriate for answering the research questions and achieving the study's objectives (Creswell, 2014a; Taherdoost, 2021). The relevance of subject selection lies in its ability to enhance the reliability, validity, and applicability of research findings. In this section, the subject selection process for this study involving school administrators, Heads of Department (HOD), library staff, and students in the context of evaluating the role of school libraries in achieving SDG4 is described.

In the context of the research, school administrators, HODs, library staff, and students were chosen as subjects to ensure a comprehensive understanding of the role and impact of school libraries in achieving SDG4. Each of these groups provides unique insights into the operation and utilization of library resources. School administrators, as decision-makers and managers,

provided information about the policies, funding, and support available to the libraries. HODs, representing different academic departments, can share their perspectives on how libraries contribute to specific subjects and overall academic achievement. Library staff, particularly seasoned employees, offer operational and functional insights, while students, as end-users of the libraries, provide feedback on accessibility, relevance, and impact on their learning.

The selection of HODs and seasoned library staff employed in remote school libraries was carried out using a combination of purposive and simple random sampling. Purposive sampling is a non-probability sampling technique where participants are selected based on their knowledge, experience, or role relevant to the research objectives (Stratton, 2024a). This approach ensures that the chosen participants are directly involved in or knowledgeable about the functioning of school libraries, which is crucial for generating meaningful insights. For instance, seasoned library staff were chosen because of their experience and understanding of library operations.

Simple random sampling, on the other hand, introduces an element of randomness to the selection process, ensuring that every individual within the defined population has an equal chance of being chosen. This approach enhances the representativeness of the sample and reduces selection bias, which is essential for the generalizability of the research findings (Creswell, 2014a). By combining purposeful and simple random sampling, the study balances the depth of information provided by targeted participants with the breadth of perspectives necessary for robust analysis.

The relevance of subject selection in this study cannot be overstated. First, it ensures that the research captures diverse perspectives from stakeholders who interact with school libraries in different capacities. This diversity enhances the validity of the findings, as it allows the researcher to triangulate data from multiple sources. Second, it ensures the study's findings are contextually relevant. By including participants from the schools, the research acknowledges the unique challenges and opportunities these various school settings present, this contributes to the potential to make more targeted and actionable recommendations. Third, proper subject selection improves the study's credibility. When participants are chosen systematically and appropriately, the findings are more likely to be accepted and utilized by stakeholders, including policymakers and educators (Creswell, 2014a; Dahal et al., 2024).

In conclusion, subject selection is a foundational aspect of the research process that directly impacts the quality and applicability of the findings. For this study, the inclusion of school administrators, HODs, library staff, and students ensures a comprehensive evaluation of school libraries' contributions to achieving SDG4. The use of purposive and simple random sampling further strengthens the reliability and representativeness of the study. By carefully selecting participants, the research achieves a balance between depth and breadth, this ultimately contributes to a nuanced understanding of the research problem and generating insights that are both credible and actionable.

3.7.1. Population

Research population refers to the entire group of individuals, objects, or entities that possess specific characteristics relevant to a particular study. The research population serves as the foundation for selecting participants or subjects who provide the data required to address the research questions and objectives. A well-defined research population is crucial for ensuring

the reliability and generalizability of research findings. It allows the researcher to delineate the scope of the study, identify the most relevant stakeholders, and develop effective sampling strategies (Creswell, 2014a).

For this study the research population includes key stakeholders who interact with school libraries in different capacities. These stakeholders are School Administrators, Library Staff, Students, and Heads of Departments (HODs). Each group plays a unique role in the library ecosystem and provides distinct insights into the contribution of school libraries to achieving Sustainable Development Goal 4 (SDG 4), which focuses on ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all.

School administrators, specifically the Assistant Headmaster Academic and the School Bursar, were included in the research population due to their critical roles in school management and resource allocation. The Assistant Headmaster Academic oversees academic activities and ensures that resources in the libraries are effectively integrated into the teaching and learning process. Their insights are essential for understanding how school libraries contribute to academic success and curriculum support. The School Bursar, on the other hand, manages the financial resources of the school, including budgetary allocations for library development and maintenance. Their perspectives provide valuable information on the funding challenges and priorities associated with school libraries.

Library staff form the operational backbone of school libraries. They are responsible for managing library resources, assisting users, and maintaining the functionality of the library. In this study, seasoned library staff were included to capture their experiences and perspectives

on the challenges and opportunities of running school libraries, particularly in resource-constrained environments like Kassena Nankana East. Their input is critical for understanding how library services are delivered, the extent of their utilization, and their perceived impact on students' academic performance and lifelong learning.

Students represent the primary beneficiaries of school libraries and are therefore a crucial component of the research population. They utilize library resources for academic purposes, extracurricular activities, and personal development. Students in the study area provides first-hand insights into the accessibility, relevance, and impact of library services on their learning experiences. Their feedback is instrumental in evaluating whether school libraries are meeting their educational needs and contributing to achieving SDG 4.

HODs from various academic departments are key stakeholders in the research population. They are responsible for guiding curriculum implementation and often rely on library resources to support their departmental goals. Their inclusion allows the study to assess how library services align with subject-specific needs and contribute to the overall academic development of the school.

The importance of clearly defining the research population lies in its ability to ensure that the study captures a comprehensive and representative range of perspectives (Creswell, 2014a; Willie, 2023). By including school administrators, library staff, students, and HODs, the research captures the multifaceted role of school libraries in advancing educational outcomes. This holistic approach strengthens the validity and applicability of the findings, providing a

robust basis for formulating recommendations for policymakers, educators, and other stakeholders.

In conclusion, the research population for this study was deliberately chosen to include key stakeholders who interact with school libraries in diverse and meaningful ways. By focusing on these groups, the study ensures a nuanced understanding of the contribution of school libraries to achieving SDG 4 within the Kassena Nankana East Municipal Assembly. A well-defined population not only enhances the credibility of the research but also ensures that the findings address the needs and expectations of all relevant stakeholders.

3.7.2. Sample Size Determination

Sample size determination is necessary for every research with large population. The process of determining a sample size requires the use of sampling tools selected based on the sampling technique chosen for the study. The function of sample size in research includes greater precision and generalizability. Here the importance of sample size and its determination is to ensure accuracy of the findings and to make the generalization of the findings easy.

Consequently, based on the size and characteristics of the population under study, purposive and simple random sampling techniques were used. The sample size determination method used is the one developed by Krejcie and Morgan (Kharuddin et al., 2020a). They prepared a table of sample size determination based on the formula below.

$$n = \frac{x^2 N p (1-p)}{e^2 (N-1) + x^2 p (1-p)} \dots\dots\dots (1)$$

where n = sample size.

N = population.

e = acceptable sampling error (0.05).

χ^2 = chi-square (3.841) of degree of freedom 1, and confidence level of 95%.

p = proportion of population (if unknown, 0.5).

The formula took into consideration, the precision, population size, and level of confidence.

These parameters suggest that the sample size estimation method is applicable for a known population size (Kharuddin et al., 2020a).

The sample size determination table of Krejcie and Morgan (Table below 3.2) has two alternating columns, population size (N) and sample size (S).

Table 3.2: Krejcie and Morgan 1970 Sample Size Estimation

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	373

65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	225	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Based on the various categories of subjects identified, the estimated sample size for this study was **352** as shown in Table 3.2.

Table 3.3: Population and Sample size Estimates

S/No	Category of population	Population
1	Head of Department	26
2	Administrators	7
3	Library staff	5
4	Students (SHS 3 only)	207
	Total	245

Source: *Field data, 2024*

3.7.3 Sampling Technique

Sampling techniques refer to the methods used to select a subset of individuals or entities from a larger population to participate in a study. This process is essential for ensuring that the selected sample is representative of the broader population, enabling the researcher to draw meaningful conclusions while managing constraints such as time, cost, and accessibility (Creswell, 2014a). Sampling is particularly relevant in research with heterogeneous populations, as it helps ensure that diverse perspectives and characteristics within the population are adequately represented.

In this study a combination of purposive and simple random sampling techniques was employed to ensure fair representation and address the inherent heterogeneity of the population. Thus, to achieve a comprehensive coverage, schools across the entire study area were included in the research. Purposive sampling was used to select library staff, school administrators, and Heads of Departments (HODs). This method was chosen because it allows the researcher to target individuals with specific roles, expertise, or experiences that are directly relevant to the research objectives (Patton, 2015). Library staff and administrators were purposely selected because their roles provided critical insights into library management, resource allocation, and policy implementation. Similarly, HODs were included to capture subject-specific perspectives on the use and impact of library resources.

Simple random sampling was employed to select Senior High School Form 3 students (SHS 3) only from the respective schools. This approach ensured that each SHS 3 student had an equal chance of being chosen, reducing selection bias and increasing the representativeness of the sample. The use of simple random sampling is particularly important when dealing with large and diverse student populations, as it ensures that the findings reflect the experiences and opinions of the broader student body (Creswell, 2014a)

The choice of sampling techniques was guided by several considerations: 1) The population for this study was heterogeneous, comprising various stakeholder groups with distinct roles and experiences; 2) Sampling needed to ensure fair representation from within the population, addressing the diversity of perspectives across different schools and stakeholders; 3) Separate samples had to be drawn from different population strata, such as administrators, library staff, HODs, and students, to ensure that each group's unique insights were captured; 4) The

combination of purposeful and simple random sampling allowed for both targeted and unbiased selection of participants.

The sample size for each category of participants was determined based on Krejcie and Morgan's (1970) table, which provides guidelines for selecting sample sizes from populations of various sizes. This ensured that the sample size was adequate for statistical reliability while accommodating the constraints of the study.

In the case of HODs, simple random sampling was applied within four Senior High Schools, with reference to their departments or areas of specialization. Due to variations in the number of HODs in each school, stratified sampling was employed to ensure proportional representation, addressing the inherent differences across departments.

Consequently, the combination of purposeful and simple random sampling techniques ensured that the study captured a diverse and representative sample of stakeholders. Purposive sampling allowed for the inclusion of key informants with relevant expertise, while simple random sampling ensured unbiased representation of larger groups like students. By employing these techniques, the study achieved a balance between depth and breadth, enabling robust and reliable findings that reflect the contributions of school libraries to achieving Sustainable Development Goal 4.

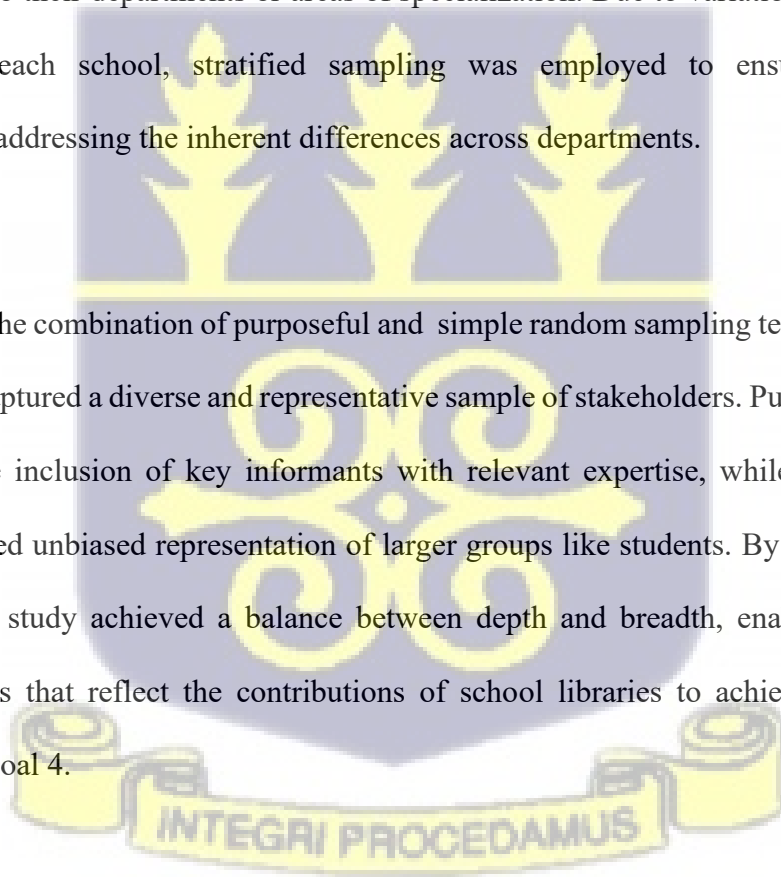


Table 3.4: Sample Size Estimate for HODs*

School	Number of HODs	Estimated Sample Size	fair sample #	Sample Size Percentage (%)	Number of Respondents from the Field
Awe SHS	6	6	5.27	14.63	8
OLL	6	6	5.27	14.63	5
St John SHS	10	10	8.78	24.39	9
Navasco	7	7	6.15	17.07	NA
Notre Dame	6	6	5.27	14.63	4
St Benedict	6	6	5.27	14.63	NA
Total Population	41	41	36.00	100.00	26
Total Sample size estimated		36			

Source: Field data, 2024

NB: * Sample size estimate for the entire population of HODs (41) is 36 using the Krejcie and Morgn sample size estimation table (Table 3.2). *NA* = Not Applicable because the one of the schools had exams and so did not permit data collection at the time and the students from the other school (St Benedict) had completed their NVTI exams and had gone home, as a result, sampling was not carried out in the school.

All the HODs from four Senior High Schools were sampled randomly with reference to their departments (Table 3.4). and the students were drawn by the use of simple random sampling techniques. However, each sample was drawn proportionately from the schools.

Table 3.5: Sample Size Estimate for SHS 3 Students*

School	Population of Students	Proportionate sample	Sample Size Percentage (%)	Number of Respondents from the Field
Awe SHS	454	53.22	15.61	60
OLL	287	33.64	9.87	40
St John SHS	737	86.39	25.34	87
NAVASCO	631	73.97	21.69	NA

Notre Dame	160	18.76	5.50	20
St Benedict	640	75.02	22.00	NA
Total Population	2909	341.00	100.00	207
Total Sample size estimated	341			

Source: *Field data, 2024*

NB: * NA = Not Applicable, Not Applicable, because the one of the schools (NAVASCO) had exams and so did not permit data collection at the time and the students from the other school (St Benedict) had completed their NVTI exams and had gone home, as a result, sampling was not carried out in the school; Sample size estimate for the entire population of students (2909) is 341.

From the field work, the number of student respondents were 207. Based on the principle Krejcie and Morgan sample size estimation all the library (5) and administration (7) staff of the four schools were data collection was possible for the study.

3.8. Instrumentation

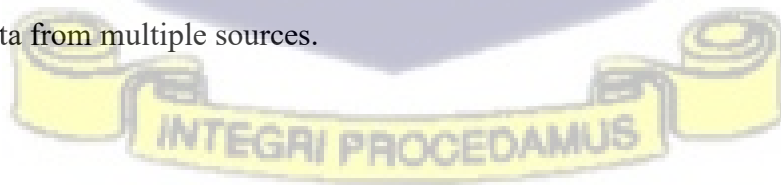
A research instrument is the tool or method used to collect data that addresses the objectives of a study. The choice of an appropriate instrument is crucial for ensuring the reliability and validity of the data collected, as it forms the foundation for meaningful analysis and conclusions (Creswell, 2014).

For this study a combination of survey questionnaires and semi-structured interviews was used to gather both quantitative and qualitative data. These instruments were selected to ensure a comprehensive evaluation of the research problem by capturing diverse perspectives from key stakeholders. The survey questionnaires were employed as the primary tool for collecting quantitative data. These were distributed to Heads of Department (HODs), and students. The questionnaires were designed to collect information on a variety of topics, including career resources, lifelong learning, teaching and learning resources, frequency of library usage, and

the state of library facilities. The questionnaires allowed for the efficient collection of data from a large number of participants. Open-ended and close-ended questions were used to ensure that the data was quantifiable and could be analysed statistically to identify trends, and general patterns. All quantitative data was gathered by use of the questionnaire and analysed with SPSS Software.

To complement the survey data, semi-structured interviews were conducted with administrators and library staff. This qualitative instrument enabled the researcher to delve deeper into the experiences and insights of participants who play critical roles in the management and use of school libraries. The semi-structured format provided flexibility, allowing the interviewer to ask follow-up questions and explore emerging themes. These interviews provided valuable qualitative insights into the challenges faced by school libraries, their role in supporting curriculum delivery, and their perceived contribution to achieving Sustainable Development Goal 4 (SDG 4).

The combination of these two instruments ensured a balanced approach to data collection. The survey questionnaires provided the breadth needed to cover a large and diverse population, while the semi-structured interviews added depth, offering nuanced perspectives from key stakeholders. This dual approach enhanced the validity and reliability of the findings by triangulating data from multiple sources.



In conclusion, the research instruments selected for this study—survey questionnaires and semi-structured interviews—ensured comprehensive data collection to address the study's objectives. By integrating both quantitative and qualitative methods, the study captured a

holistic view of the role of school libraries in the Kassena Nankana East Municipal Assembly and their contribution to achieving SDG 4.

3.9. Validity and Reliability

Validity and reliability are essential pillars of high-quality research, as they ensure that the findings are accurate, consistent, and credible. Validity refers to the degree to which a research instrument measures what it is intended to measure, and it ensures that the results accurately reflect the phenomena under investigation (Creswell, 2014a). Reliability, on the other hand, pertains to the consistency and dependability of the findings, meaning the results can be replicated under similar conditions (Patton, 2015). For this study various strategies were employed to ensure the validity and reliability of the data collected using interviews and questionnaires.

To ensure validity, the study employed several measures. First, the content validity of the instruments was established by aligning the interview guides and questionnaires with the research objectives. These tools were designed to address key topics such as educational levels, position held, perceptions of the impact of school libraries, and the state of library facilities. Experts in education, library sciences, and research methodology reviewed the instruments to ensure they comprehensively captured the relevant variables and to evaluate item clarity, relevance, and alignment with the study objectives and SDG4 targets. Their comments resulted in rephrasing of selected items and improved wording precisions. Construct validity was supported by aligning questionnaire indicators with constructs identified in SDG4 educational outcomes literature and school library impact research.

Triangulation was also utilized to enhance the validity of the study. By collecting data from multiple sources, including school administrators, library staff, Heads of Department (HODs), and students, and employing multiple methods, such as interviews and questionnaires, the study ensured the cross-validation of findings. This approach strengthened the construct validity of the research. Furthermore, purposive sampling was used to select administrators and library staff with relevant knowledge and experience, to ensure the inclusion of participants who could provide valuable insights. Simple random sampling was employed to select students, in order to ensure a fair and unbiased representation of the population, which enhanced the external validity of the findings.

Reliability was ensured through the implementation of standardized procedures during data collection. A consistent protocol was followed, with the same set of questions used for all interviews and questionnaires to ensure uniformity across participants. The data collectors were trained teachers with research experience who administered the instruments consistently and accurately, this was to minimize errors and discrepancies. The internal consistency of the questionnaire items was tested using reliability measures, such as Cronbach's alpha, to ensure that the items within each section measured the same underlying construct. This approach is appropriate for multi-item scale when the primary concern is ensuring that items in each construct measure the same underlying concept (Tavakol & Dennick 2011; Creswell & Plano Clark, 2018). The Cronbach's alpha value for the major constructs were all >0.70 which indicates acceptable reliability for educational and social research (Nunnally, 1978).

The clarity of the instruments also contributed to reliability. The interview guides and questionnaires were carefully reviewed to eliminate ambiguous or vague wording, ensuring that participants could understand and respond accurately. In addition, interviews were

recorded with participants' consent and transcribed verbatim, enabling accurate capture and analysis of qualitative data.

Ensuring validity and reliability is vital for producing trustworthy and actionable findings. Validity ensures that the results are accurate and meaningful, this directly address the research questions, while reliability ensures that the findings are consistent and reproducible. Together, these qualities enhance the credibility of the research and its utility for stakeholders, including policymakers, educators, and library managers.

In conclusion, the study adopted a rigorous approach to ensure validity and reliability by employing carefully designed instruments, applying triangulation, and using standardized procedures and appropriate sampling strategies. These measures strengthened the credibility of the findings, enabling a robust evaluation of the contribution of school libraries in Ghana to achieving Sustainable Development Goal 4.

3.10. Data Collection Procedure

The process of data collection in this study adhered to comprehensive guidelines, which emphasizes defining the research parameters, utilizing structured or semi-structured tools such as questionnaires and interviews, and developing rigorous documentation and data management systems (Creswell, 2014a). Following this approach, the researcher established a data collection framework designed to enhance both the credibility and ethical soundness of the research. It has been noted that building rapport is essential in qualitative inquiries, as it enhances the accuracy and depth of responses while ensuring that interviewees feel respected and secure throughout the process (Riley, 2010).

At the outset, the research objectives and the target population were clearly defined. The study sought to examine the contribution of school libraries in Ghana, particularly in the Kassena Nankana East Municipal Assembly, toward the realization of Sustainable Development Goal 4 (SDG4). The target population included students, Heads of Department (HODs), school administrators (Assistant Headmaster Academic and School Accountant/Bursar), and library staff across four selected senior high schools. To ensure representativeness, the population was stratified into homogeneous subgroups based on their roles and institutional affiliations.

In determining the sample size, the study relied on Krejcie and Morgan's 1970 sample size determination table, which facilitated proportional allocation across the identified strata (Kharuddin et al., 2020b). For instance, out of a total student population of 2,909, a sample of 341 was initially targeted, though 207 participated due to access limitations. Similarly, 26 out of a projected 36 HODs were sampled across the four schools that allowed data collection, using stratified random techniques. All five-library staff and seven administrators were purposively selected for their expert knowledge and involvement in school library operations.

The instruments developed for data collection were aligned with the research objectives and comprised both quantitative and qualitative tools. A structured questionnaire was designed to collect data from students and HODs on library usage patterns, accessibility, frequency, and educational impact. Semi-structured interview guides were developed for library staff and administrators to explore deeper insights into the state of library facilities, resource availability, policy implementation, and contributions toward achieving SDG4.

Sampling within each stratum involved different techniques to balance depth and breadth. Simple random sampling was employed to select students, ensuring every individual had an equal chance of being chosen. HODs were selected proportionately based on departmental representation, and purposive sampling was used to recruit administrators and library personnel who had direct experience in managing or interacting with school libraries (Creswell, 2014a; Stratton, 2024b). This combination ensured the data were rich, representative, and contextually grounded.

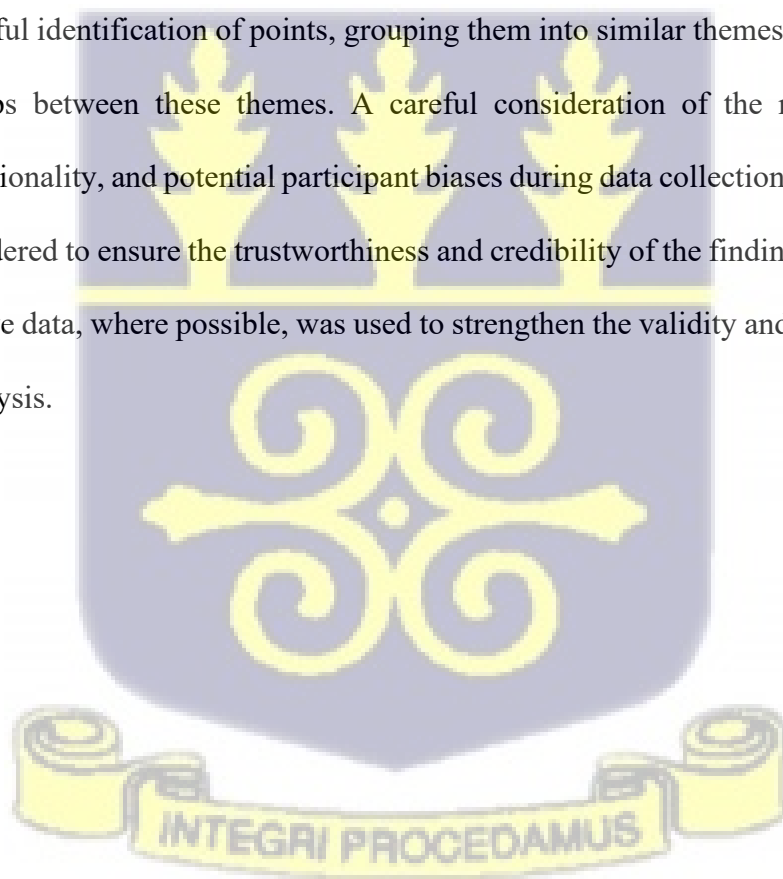
Once participants were selected, the data collection process commenced by the full administration of the instruments. Questionnaires were distributed to students and HODs during scheduled visits, and interviews were conducted face-to-face with school administrators and library staff. Ethical considerations were strictly observed throughout, including obtaining informed consent, maintaining confidentiality, and allowing participants to withdraw at any point.

Data management involved careful organization and cleaning of all collected data. Quantitative data was entered into SPSS for statistical analysis, using descriptive and inferential statistics such as chi-square tests to determine relationships between variables. Qualitative data from interviews were transcribed verbatim and analyzed using thematic analysis to identify recurring patterns and insights. The integration of both data types through triangulation strengthened the validity and reliability of the findings (Creswell, 2014).

Finally, the findings were compiled into a comprehensive research report, which highlights the contributions, challenges, and potential of school libraries in advancing inclusive and equitable education in Ghana.

3.11. Presentation of Data and Analysis

To investigate the connections between school library resources, practices, and student learning outcomes, quantitative data were subjected to descriptive and inferential statistics. In addition, a nuanced and multifaceted approach was adopted for the qualitative analysis. Thematic analysis was utilized to identify and explore recurring patterns and meanings within the data collected through interviews, focus groups, or open-ended survey responses. This process involved a careful identification of points, grouping them into similar themes, and interpreting the relationships between these themes. A careful consideration of the research context, researcher positionality, and potential participant biases during data collection and analysis was carefully considered to ensure the trustworthiness and credibility of the findings. Triangulation with quantitative data, where possible, was used to strengthen the validity and reliability of the qualitative analysis.



The data analysis actions are summarized below

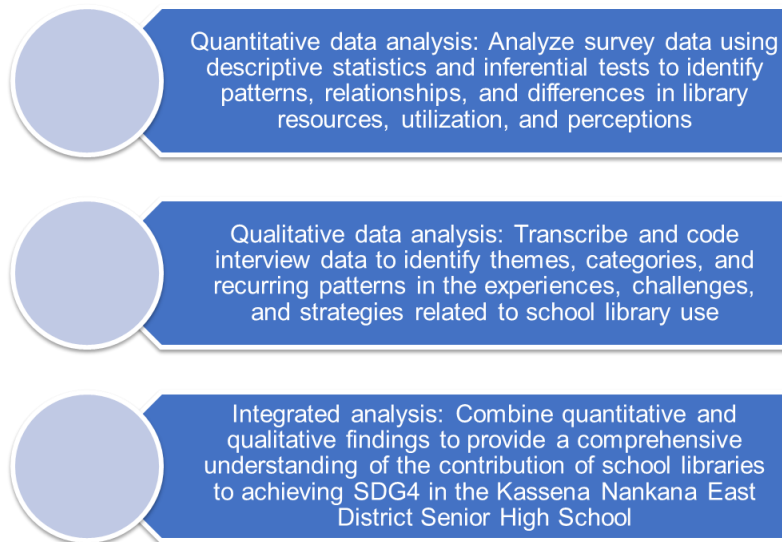


Figure 3.1: Summary of Data Analysis activities

3.12. Ethical Considerations

In the pursuit of knowledge and the advancement of education, researchers play a crucial role in exploring and understanding the impact of various factors on student learning and academic achievement. School libraries, as essential components of the educational landscape, have garnered significant attention for their potential to contribute to Sustainable Development Goal 4 (SDG4), which emphasizes inclusive and equitable quality education for all. However, conducting research in Kassena Nankana Municipal in Ghana, where access to quality education is often limited, necessitates careful consideration of ethical principles to ensure the well-being and respect of participants.

This essay investigates the ethical factors that must be considered while evaluating the function of school libraries in Ghana in achieving SDG4. Following ethical norms is critical for

protecting participants' rights, privacy, and dignity, as well as establishing trust and collaboration among the communities under research.

Conducting research in Kassena Nankana Municipal in Ghana has unique problems that require ethical considerations to protect vulnerable groups and adhere to cultural norms. While researchers strive to collect useful data and contribute to SDG4, they must consider participants' well-being and rights. This balance ensures that the study process is carried out professionally and ethically.

All participants, including school librarians, instructors, and students, will be provided with clear and straightforward information about the research project, such as its goal, procedures, potential risks and benefits, and the possibility to withdraw. Before any data collection will begin, participants or their guardians shall be made to sign informed permission forms.

Also, participants' personal information, such as names, contact information, and responses, must be kept confidential. Data storage and processing procedures must follow ethical criteria as well as data security protocols.

Participants shall be given maximum respect and attention for their time and desire to participate in the study. The researcher shall be considerate of participants' schedules and avoid overloading them with data collection requests.

The researcher will be very sensitive to the cultural environment of Ghana and ensure that research techniques are consistent with local norms and values. Respectful interactions, cultural sensitivity training, and community involvement can all help to build trust and collaboration.

The researcher will again identify and reduce potential hazards to participants, such as emotional distress, discomfort, or breaches of confidentiality. The well-being and safety of participants would be prioritized in the research.

Also, when dealing with delicate themes like literacy levels or academic achievement, researchers must approach participants with delicacy and understanding. Procedures for informed consent should clearly explain the issues to be discussed and give participants the choice to bypass difficult questions. Apart from these, the researchers would engage with the local community, including school administration, parents, and community leaders, to seek their input and collaboration. This ensures that study is relevant to the needs and goals of the community.

The researchers shall disseminate the study findings to key stakeholders such as school librarians, instructors, students, and parents, in a clear and accessible manner. The findings should be used to help shape legislation, improve school library resources, and increase student learning. To ensure adherence to ethical principles and the protection of participants' rights, the researcher shall ensure that the research and its necessary protocols are approved by an authorized Institutional Review Board (IRB).

Also, the researchers would be open about the research methodology, findings, and conclusions, pledges to be accountable for all actions and willing to address any concerns or questions raised by participants or the community. Ethical considerations are not merely an afterthought in research; they are fundamental principles that guide responsible and respectful research practices. By adhering to these ethical guidelines, researchers can meaningfully

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contribute to the understanding of school libraries' role in achieving SDG4 in Ghana while safeguarding the well-being and rights of participants. Through ethical research practices, researchers can foster trust, promote collaboration, and ensure that their work positively impacts the communities they study.



DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter presents analysis of the results of data collected from four senior high schools: Notre Dame Seminary Senior High School Navrongo, Our Lady of Lourdes Girls Senior High School, St. John's Integrated Senior High and Technical School, and Awe Senior High School. The chapter is divided into six sections based on the research objectives. Each section is presented based on the data obtained from students, Head of Departments, Library Staff, and administrative staff viz., Assistant Headmaster (Academic) and School Bursar. The data in each section primarily focuses on the demographics, educational background and professional qualification, knowledge of respondents on SDG4 as well as its implementation plans, the role of the school library in achieving SDG4, challenges and resources of the library, the frequency of use of library, library resources, and suggestions for improving library service delivery.

4.2 Demographic Characteristics

4.2.1 Population Characteristics

A total of 245 participants responded to the interview and questionnaire, out of these 84% representing 207 were students, 11% representing 26 were HODs, 2.04% representing 5 were Library staff, 1.25% representing 3 were school accountants (Bursar) and 2% representing 4 were Assistant Headmasters (figure 4.1).

The data revealed that there were more female students (54.59% students) than male students (42.03%), and 3.38% of the students did not indicate their gender (fig 4:3). It was also noted that out of the total number of respondents who were staff (38) of the schools only two were

females (5%). Hence all the library staff and school accountants were male (fig 4.3). It is also worthy of note that most of the staff who participated in the study were married (97.37% of staff) only one representing (2.63%) was single (fig. 4.2)

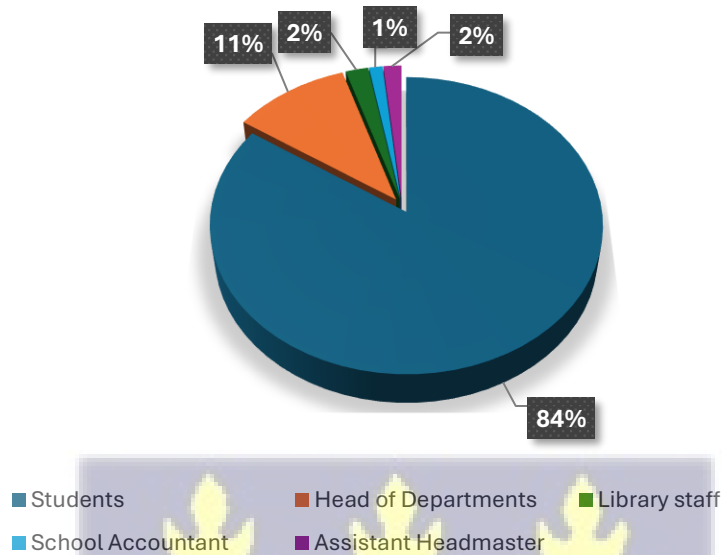


Figure 4.1 Population Distribution

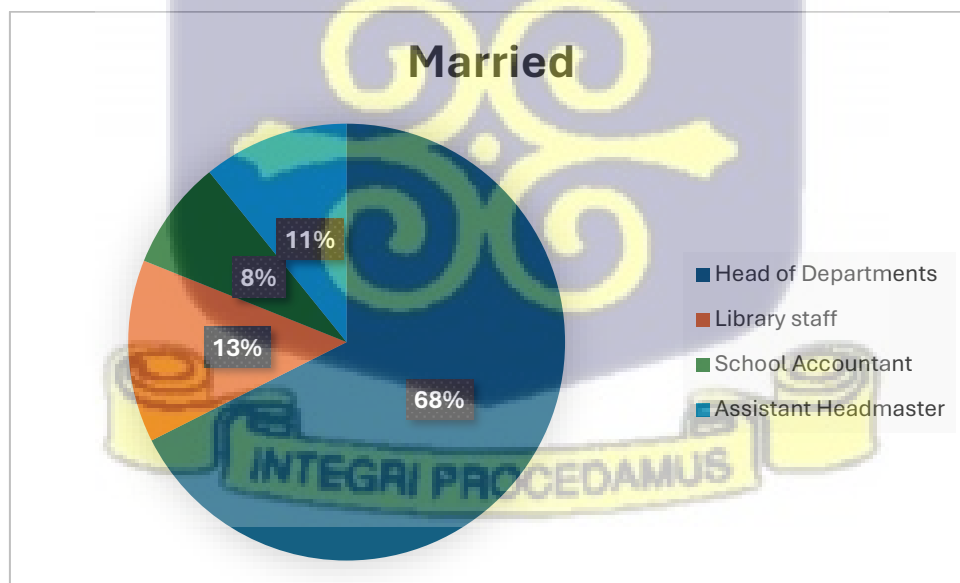


Figure 4.2 Marital Status of Respondents

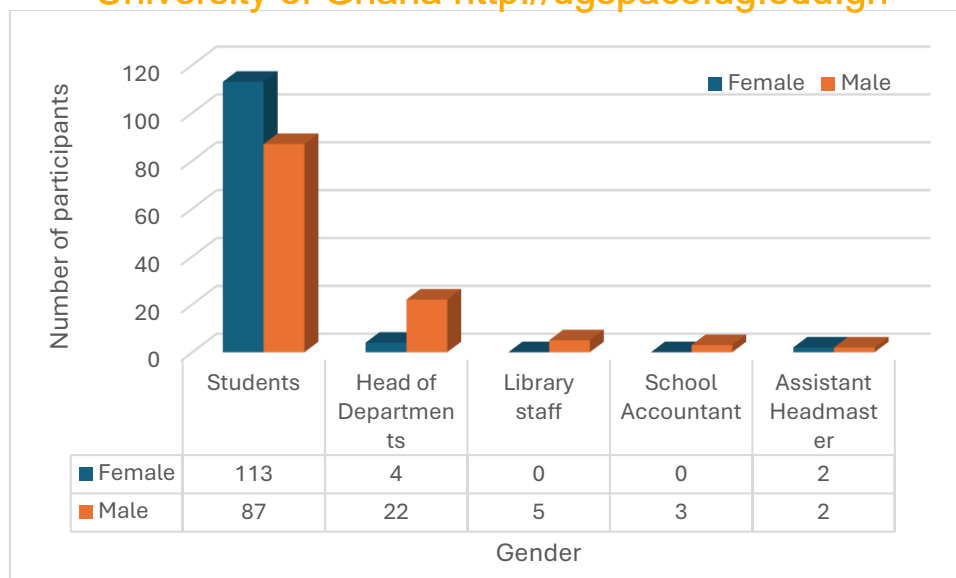


Figure 4.3 Gender Distribution of the Population

4.2.2. Results from Student Respondents

This section presents the results of the analysis of data obtained from students across four different senior high schools: Notre Dame Seminary Senior High School Navrongo, Our Lady of Lourdes Girls Senior High School, St. John's Integrated Senior High and Technical School, and Awe Senior High School. The analysis was carried out based on various demographic and academic characteristics such as gender, age, subject area, status (boarding or day), and sponsorship. It also includes the frequency of library visits, types of resources used, and student perceptions about the role of the library in enhancing their academic and career preparedness. The research findings were presented in cross-tabulations and frequency tables, supported by percentages for clearer interpretation and understanding.

A total of 207 respondents took part in the study. It was observed from the data (Table 4.1) that the highest percentage of respondents (42.0%) came from St. John's Integrated Senior High and Technical School, followed by Awe Senior High School (29.0%), Our Lady of Lourdes

Girls Senior High School (19.3%), and Notre Dame Seminary Senior High School Navrongo (9.7%).

Table 4.1 Student (SHS 3) Distribution by Senior High School

Name of Institution	Count(n)	% of Total
Notre Dame Seminary Senior High School Navrongo	20	9.7%
Our Lady of Lourdes Girls Senior High School	40	19.3%
St. John's Integrated Senior High and Technical School	87	42.0%
Awe Senior High School	60	29.0%
Total	207	100.0%

Source: Field Data, 2024

Table 4.1 illustrates the cross-tabulation of the respondents' gender across the four schools. It was also noted that most of the students were female, comprising 57% representing 114 of the total student population, while males made were up 43% representing 86 (Table 4.2). St. John's Integrated Senior High and Technical School and Awe Senior High School had relatively more balanced gender representation, while Our Lady of Lourdes Girls Senior High School had only females.



Table 4.2 Gender of Respondents (SHS 3) by Senior High School

Name of the School	Male	Female	% of Total
Notre Dame Seminary Senior High School Navrongo	20	0	9.7%
Our Lady of Lourdes Girls Senior High School	0	40	19.3%
St. John's Integrated Senior High and Technical School	39	42	42.0%
Awe Senior High School	27	32	29.0%
Total	86	114	100.0%

Source: Field Data, 2024

Table 4.3 revealed that 87.4% of the students fell within the 15-19 age range. A smaller percentage of the students were aged between 20-24 (7.7%), while only 4.4% were aged 10-14. St. John's Integrated Senior High and Technical School had the largest proportion of students aged 15-19, this contributes to 35.3% of the total number of students who participated in the study, while Notre Dame Seminary Senior High School Navrongo and Awe Senior High School also had significant proportions (Table 4.3) in this age range.

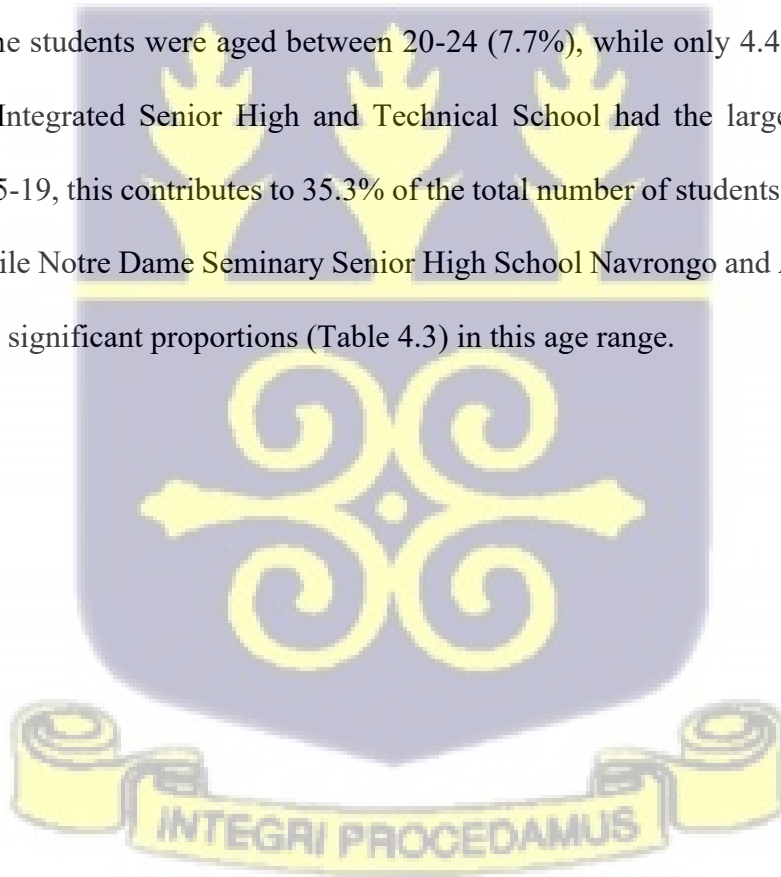


Table 4.3 Age of Respondents (SHS 3) by Senior High School

Name of the School	10-14	15-19	20-24	Total	Percent
				Count	of Total
Notre Dame Seminary Senior High School	0	19	1	20	9.7%
Navrongo					
Our Lady of Lourdes Girls Senior High School	3	37	0	40	19.3%
St. John's Integrated Senior High and Technical School	5	73	9	87	42.0%
Awe Senior High School	1	52	7	60	29.0%
Total	9	181	17	207	100.0%

Source: Field Data, 2024

The subject areas of the students enrolled in were analyzed. Table 4.4 shows that 38.6% of the total respondents are General Arts Department students. The next highest representation is from the Visual Arts Department, with 16.4% enrolled students followed by the Agricultural Science, Business, and Science departments.

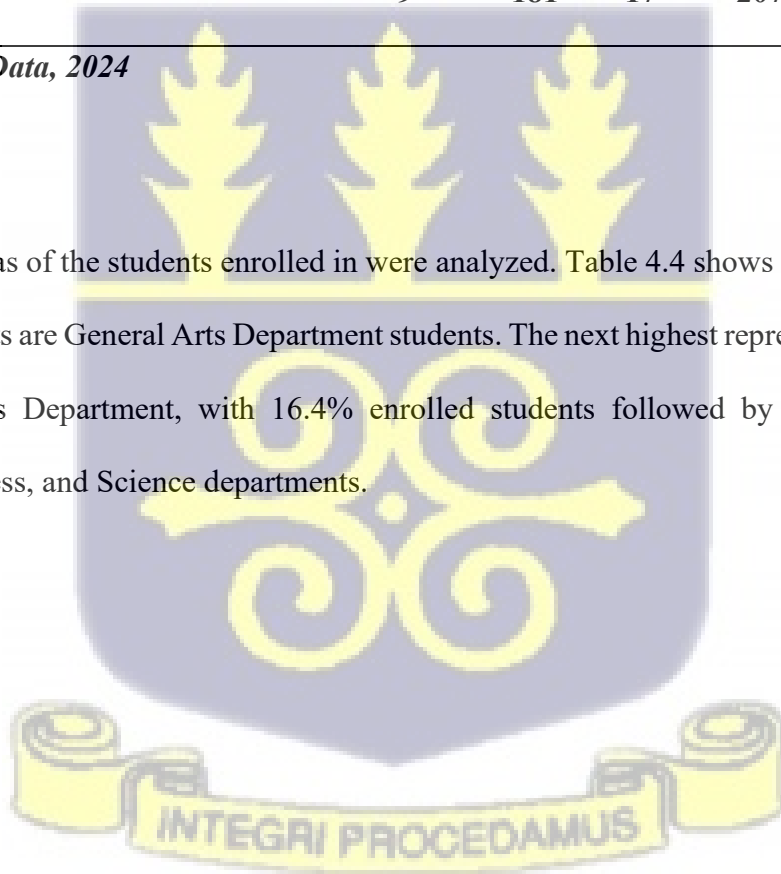
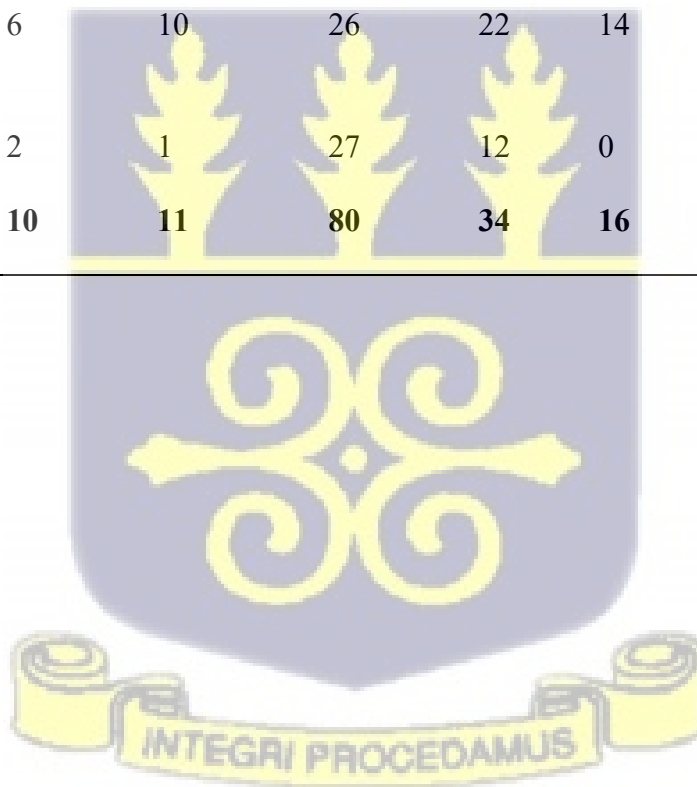


Table 4.4 Subject Area Distribution by Senior High School

Name of the School	Science	Business	Technical	General Arts	Visual Arts	Agricultural Science	Home Economics	Total Count	Total
Notre Dame Seminary Senior High School Navrongo	12	0	0	8	0	0	0	20	9.7%
Our Lady of Lourdes Girls Senior High School	7	2	0	19	0	2	10	40	19.3%
St. John's Integrated Senior High and Technical School	1	6	10	26	22	14	7	87	42.0%
Awe Senior High School	15	2	1	27	12	0	3	60	29.0%
Total	35	10	11	80	34	16	20	207	100.0%

Source: Field Data, 2024



The students' status were either boarding or day. The significant number of students drawn from the data (Table 4.5) indicated that 91.3% were boarders, while only 6.3% were day students. St. John's Integrated Senior High and Technical School and Awe Senior High School both had small proportions of day students 4.35% and 1.93% student respectively compared to boarders.

Table 4.5 Boarding/Day Status Distribution by Senior High School

Name of the School	Number of Students (SHS 3)			Proportion of All Students
	Boarding	Day	Total	
Notre Dame Seminary Senior High School	20	0	20	9.7%
Navrongo				
Our Lady of Lourdes Girls Senior High School	40	0	40	19.3%
St. John's Integrated Senior High and Technical School	73	10	87	42.0%
Awe Senior High School	56	8	60	29.0%
Total	189	18	207	100.0%

Source: Field Data, 2024

Table 4.6 presents the sponsorship status of the students. A significant number of the students (70.5%) were sponsored by the government, while others received private or self-sponsorship.

Table 4.6 Sponsorship Distribution by Senior High School

Name of the School	Self	Private	Government	Total Count (n)	Total
Notre Dame Seminary Senior High School Navrongo	0	2	17	20	9.7%
Our Lady of Lourdes Girls Senior High School	0	11	29	40	19.3%
St. John's Integrated Senior High and Technical School	0	17	70	87	42.0%
Awe Senior High School	2	26	30	60	29.0%
Total	2	56	146	207	100.0%

Source: Field Data, 2024

The age distribution of the respondents across the four Senior High Schools reveals that, for the age group 10–14, there were only 5 respondents, with 60% coming from Our Lady of Lourdes Girls Senior High School. St. John's Integrated Senior High and Technical School and Awe Senior High School each contributed 20%, and Notre Dame Seminary Senior High School had no respondents in this age group. The age group 15–19 constitutes the significant number of respondents, with 181 individuals, representing 89.6% of all responses from this category. St. John's Integrated Senior High and Technical School had the highest proportion, accounting for 40.3% of respondents, followed by Awe Senior High School at 28.7%. Our Lady of Lourdes Girls Senior High School contributes 20.4%, and Notre Dame Seminary Senior High School made up 10.5%. In the 20–24 age range, only 16 respondents were recorded. St. John's Integrated Senior High and Technical School leads with 50% of the respondents in this group,

while Awe Senior High School follows closely at 43.8%. Notre Dame Seminary Senior High School contributes 6.3%, and Our Lady of Lourdes had no respondents in this age group.

There was a significant variation in gender distribution across the schools. The male respondents were 87 in total, with St. John's Integrated Senior High and Technical School representing the largest group (44.8%), followed by Awe Senior High School (31.0%), and Notre Dame Seminary Senior High School (23.0%). Our Lady of Lourdes Girls Senior High School has only 1 male respondent (1.1%).

The female respondents were 113 in total, with Our Lady of Lourdes Girls Senior High School contributing the largest share (34.5%), followed by St. John's Integrated Senior High and Technical School with 37.2%, and Awe Senior High School with 28.3%. Notre Dame Seminary Senior High School had no female respondents, as it is an all-boys school.

Most of the respondents from all the institutions were boarding students. Out of 207 respondents, 189 were boarders. St. John's Integrated Senior High and Technical School had the highest proportion of boarders (38.6%), followed by Awe Senior High School (29.6%), Our Lady of Lourdes Girls Senior High School (21.2%), and Notre Dame Seminary Senior High School (10.6%). There were only 18 day-students, most of the students (69.2%) come from St. John's Integrated Senior High and Technical School, while Awe Senior High School accounts for the remaining 30.8%. Neither Notre Dame Seminary Senior High School nor Our Lady of Lourdes Girls Senior High School had day students.

The data reflects that a significant number of the respondents fell within the 15–19 age range, most of them were from St. John's Integrated Senior High and Technical School and Awe Senior High School. Gender distribution aligns with the institutional gender norms, with Notre Dame being all-male and Our Lady of Lourdes being predominantly female. Most respondents were boarding students, with a small minority of day students concentrated in St. John's and Awe Senior High Schools.

The data analysis presented detailed insights into the subject area distributions across the four Senior High Schools selected for the study: Notre Dame Seminary Senior High School Navrongo, Our Lady of Lourdes Girls Senior High School, St. John's Integrated Senior High and Technical School, and Awe Senior High School. The data were based on a total of 207 cases, with 206 valid cases (99.5%) and only 1 missing case (0.5%), ensuring the analysis reflects nearly all available data. The subject areas considered in this analysis were Science, General Arts, Visual Arts, Agricultural Science, Home Economics, Business, and Technical departments. The distribution of each subject area within the respective institutions reveals some interesting patterns.

A total of 34 students were enrolled in the Science department across the four Senior High Schools. Awe Senior High School had the largest representation, contributing 44.1% of the students in this area, while Notre Dame Seminary Senior High School accounts for 35.3%, and Our Lady of Lourdes Girls Senior High School makes up 20.6%. Notably, St. John's Integrated Senior High and Technical School had no students enrolled in science.

The General Arts department was the largest subject area, with 80 students in total. St. John's Integrated Senior High and Technical School leads with 32.5% of the students in this department, followed closely by Awe Senior High School with 33.8%. Our Lady of Lourdes Girls Senior High School contributes 23.8%, and Notre Dame Seminary Senior High School had the smallest share, with 10.0% of students enrolled in General Arts.

A total of 34 students were enrolled in Visual Arts, with the vast most students coming from St. John's Integrated Senior High and Technical School (64.7%). Awe Senior High School follows with 35.3%, while neither Notre Dame Seminary Senior High School nor Our Lady of Lourdes Girls Senior High School had any students in their department.

Sixteen students were enrolled in the Agricultural Science department. The significant number of students, 87.5%, were from St. John's Integrated Senior High and Technical School, while 12.5% were from Our Lady of Lourdes Girls Senior High School. Neither Notre Dame Seminary Senior High School nor Awe Senior High School had students in this subject area.

There were 20 students enrolled in Home Economics. Our Lady of Lourdes Girls Senior High School has half of the students (50.0%) enrolled in this department. St. John's Integrated Senior High and Technical School accounts for 35.0%, while Awe Senior High School and Notre Dame Seminary Senior High School contribute 15.0% and 0%, respectively.

The Business department had a total of 10 students. St. John's Integrated Senior High and Technical School once again leads, with 60.0% of students, while Our Lady of Lourdes Girls

Senior High School and Awe Senior High School each contribute 20.0%. Notre Dame Seminary Senior High School had no students in this department.

The Technical department has 12 students, with St. John's Integrated Senior High and Technical School dominating this field, representing 91.7% of the students, while Awe Senior High School contributes the remaining 8.3%. Neither Notre Dame Seminary Senior High School nor Our Lady of Lourdes Girls Senior High School had students in the Technical department.

School Representation across all subject areas were determined and the data showed that, St. John's Integrated Senior High and Technical School accounted for 41.7% of the total student distribution, making it the largest contributor across the subject areas, especially in Visual Arts, Agricultural Science, and Technical departments; Awe Senior High School followed with 29.1%, showing a strong presence in General Arts and Science; Our Lady of Lourdes Girls Senior High School contributes 19.4%, with significant representation in the Home Economics and General Arts departments; Notre Dame Seminary Senior High School had the smallest overall representation, with 9.7%, showing strength in the Science and General Arts departments but absent from several key areas such as Technical, Business, and Visual Arts.

The analysis reveals the distinct focus areas of the four Senior High Schools. St. John's Integrated Senior High and Technical School stands out for its diversity across departments, while Notre Dame Seminary Senior High School and Our Lady of Lourdes Girls Senior High School had more specialized focuses, particularly in Science, General Arts, and Home

Economics (fig 4.4). Awe Senior High School also demonstrated strong representation in several key areas, notably Science and General Arts.

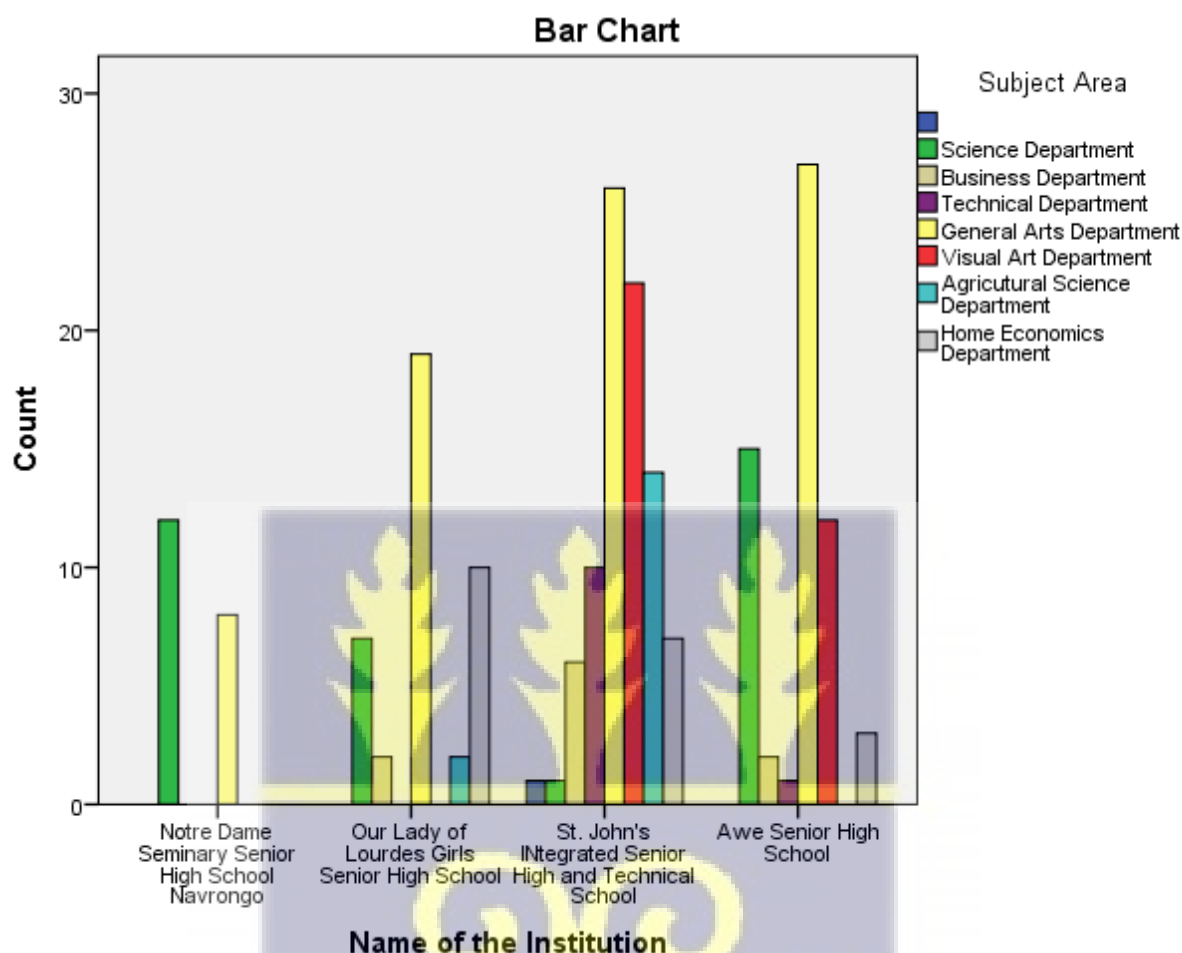


Figure 4.4 Bar Chart of Name of the School and Subject Area

The crosstabulation data provides a detailed breakdown of sponsorship categories across four Senior High Schools: Notre Dame Seminary Senior High School Navrongo, Our Lady of Lourdes Girls Senior High School, St. John's Integrated Senior High and Technical School, and Awe Senior High School. This analysis was based on 205 valid cases (99.0% of the total), with only 2 missing cases (1.0%). The sponsorship is divided into three categories: *Self*, *Private*, and *Government*.

The percentage of students falling under each sponsorship category reveals notable differences across the Senior High Schools. For Self-Sponsored Students, a total of 56 students across all schools were self-sponsored. Awe Senior High School had the highest proportion of self-sponsored students, accounting for 46.4% of this group. St. John's Integrated Senior High and Technical School followed with 30.4%, while Our Lady of Lourdes Girls Senior High School contributes 19.6%. Notre Dame Seminary Senior High School had the smallest share of self-sponsored students, representing only 3.6% of the total self-sponsored group.

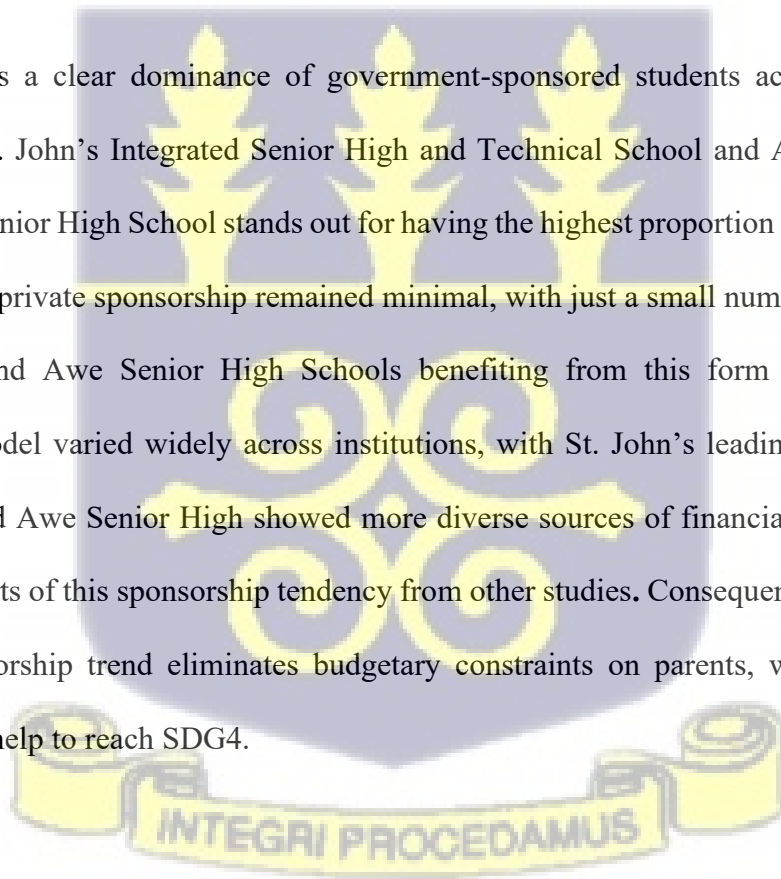
For Privately-Sponsored Students, there were only 3 students who receive private sponsorship, making these the smallest sponsorship category. Awe Senior High School had the Highest accounted for the remaining 33.3%. Neither Our Lady of Lourdes Girls Senior High School nor St. John's Integrated Senior High and Technical School had any students under private sponsorship.

The Government-Sponsored Students were noted to be the most prevalent form of support, with 146 students falling under this category. St. John's Integrated Senior High and Technical School had the largest number (47.9%) of government-sponsored students. Our Lady of Lourdes Girls Senior High School followed with 19.9%, Awe Senior High School contributed 20.5%, and Notre Dame Seminary Senior High School accounted for 11.6%.

Considering the school representation for the sponsorship types, when the total student body at each school were evaluated, the analysis pointed out that, St. John's Integrated Senior High and

Technical School had the largest overall share of students, with 42.4% of the total count across all sponsorship categories. This school was especially prominent in government sponsorship. In addition, Awe Senior High School follows with 28.3%, demonstrating a strong presence in both self and government sponsorship categories. Awe also had the largest proportion of self-sponsored students. It was also noted that, Our Lady of Lourdes Girls Senior High School accounted for 19.5% of the total number of students, with a notable number of government-sponsored students and a relatively high proportion of self-sponsored students. And finally, Notre Dame Seminary Senior High School had the smallest representation at 9.8%, with many students receiving government sponsorship.

The data shows a clear dominance of government-sponsored students across all schools, especially at St. John's Integrated Senior High and Technical School and Awe Senior High School. Awe Senior High School stands out for having the highest proportion of self-sponsored students, while private sponsorship remained minimal, with just a small number of students at Notre Dame and Awe Senior High Schools benefiting from this form of support. The sponsorship model varied widely across institutions, with St. John's leading in government sponsorship and Awe Senior High showed more diverse sources of financial support. There have been reports of this sponsorship tendency from other studies. Consequently, it is believed that this sponsorship trend eliminates budgetary constraints on parents, which may boost enrolment and help to reach SDG4.



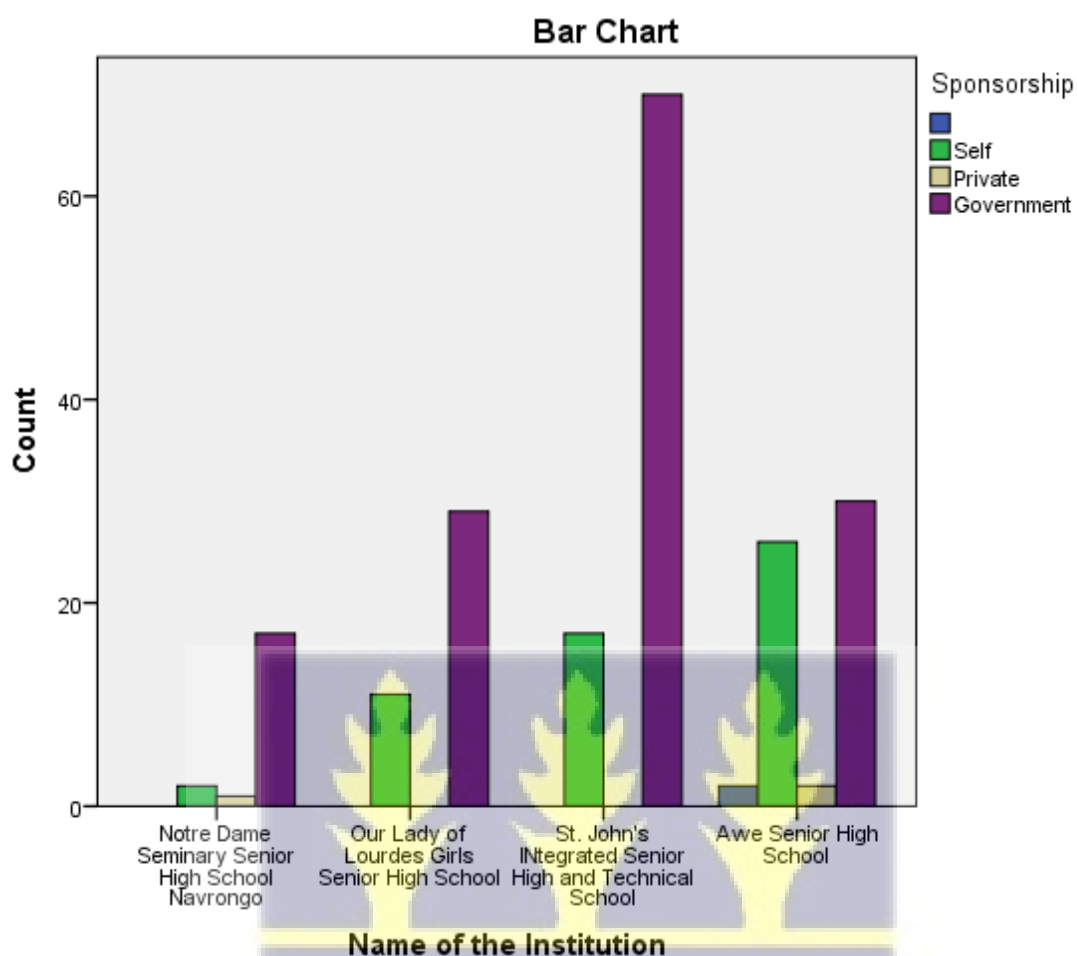


Figure 4.5 Bar Chart of Category Distribution

4.2.3 Results from Head of Departments (HODs)

These sections present the demographic and professional characteristics of all the Heads of Departments (HODs), including their views on the role of school library on the attainment of SDG4 targets presented based on the data collected. The frequencies and percentages for each variable were also presented.

Most of the HODs (46.2%) were from the General Art Department, followed by science Department, which accounted for 23.1% of the HODs. The number of HODs (Table 4.7) from the Languages Department was 11.5% of the HODs, while Visual Art had the lowest representation with only 3.8% (Table 4.7). Home Economics and Technical departments each represented 7.7% of the HODs. This distribution indicated a strong representation from the General Art department, while other departments had fewer HODs.

All the HODs (100%) indicated that their profession was teaching, an indication of homogeneity in this category. This was in tandem with the expectation that all respondents were HODs in various departments at the Senior High Schools selected for the study. Most of the respondents (57.7%) were in the age group 41-45 years, followed by 19.2% who were aged 36-40 years (Table 4.8). Moreover, 3.8% of HODs were in the youngest age bracket of 31-35 years, while the 46-50 and 51-55 age groups accounted for 15.4% and 3.8% respectively (Table 4.8). This implies that most HODs were in their early to mid-40s.

Table 4.7 Distribution of HODs According to Departments

Department	Frequency	Percent
Science	6	23.1%
General Art	12	46.2%
Visual Art	1	3.8%
Languages	3	11.5%
Home Economics	2	7.7%
Technical	2	7.7%
Total	26	100.0%

Source: Field data, 2024

Table 4.8 Age Distribution of HODs

Age Group	Frequency	Percent
31-35	1	3.8%
36-40	5	19.3%
41-45	15	57.7%
46-50	4	15.4%
51-55	1	3.8%
Total	26	100.0%

Source: Field data, 2024

A significant number of the respondents (84.6%) were male, while 15.4% were females (table 4.9). This revealed a significant gender imbalance in the positions of HODs, with males predominating.

Table 4.9 Gender of HODs

Gender	Frequency	Percent
Male	22	84.6%
Female	4	15.4%
Total	26	100.0%

Source: Field data, 2024

Most (96.2%) of the HODs were married, while only one respondent (3.8%) was single (table 4.10). This means that most HODs are likely to be in stable family situations.

Table 4.30 Marital Status of HODs

Marital Status	Frequency	Percent
Married	25	96.2%
Single	1	3.8%
Total	26	100.0%

Source: Field data, 2024

All the respondents (100%) were involved in teaching, emphasizing the professional background relevant to the study. The educational qualifications of the respondents were split between two categories: 57.7% of respondents held a bachelor's degree, while 42.3% had a master's degree (table 4.11). This indicates that a significant number of HODs possess at least a first degree, with an appreciable number also holding postgraduate qualifications.

Table 4.11 Educational Qualification of HODs

Educational Qualification	Frequency	Percent
Degree	15	57.7%
Masters	11	42.3%
Total	26	100.0%

Source: Field data, 2024

The data obtained from the Head of Departments (HODs) across four Senior High Schools (Notre Dame Senior High School, Our Lady of Lourdes Girls Senior High School, St. John's Integrated Senior High Technical School, and Awe Senior High Technical School) provided valuable insights into the age distribution, gender representation, and educational qualifications of school leaders.

Most of the HODs fell within the age group of 41–45 years, representing 57.7% of the total respondents. This age group had the largest representation across all schools: Notre Dame Senior High School has 2 HODs in this group (7.7% of the total); Our Lady of Lourdes Girls Senior High School also had 2 (7.7%); St. John's Integrated Senior High Technical School led with 6 (23.1%) HODs, and Awe Senior High Technical School followed with 5 (19.2%).

The age group 46–50 accounted for 15.4% of the respondents, this indicates a smaller but experienced group of HODs. Younger respondents (aged 31–35 and 36–40) represented only 3.8% and 19.2% respectively, suggesting that a majority of the HODs were in their mid-to-late careers. In the older age group (51–55), the majority of HODs were found at St. John's (34.6%) and Awe Senior High Technical School (30.8%).

Gender representation among HODs was notably skewed, with males making up 84.6% of the respondents, while females account for only 15.4%. This imbalance was seen across all Senior High Schools: Notre Dame Senior High School had only male HODs (15.4% of the total); Our Lady of Lourdes Girls Senior High School also had exclusively male HODs (19.2%); St. John's Integrated Senior High Technical School had the largest group of male HODs (30.8%) but also

one female (3.8%); Awe Senior High Technical School had the highest representation of female HODs, with 3 females (11.5%) alongside 5 males (19.2%).

This gender disparity reflects a broader trend with leadership roles in schools, particularly in technical and Senior High Schools, where positions were predominantly occupied by male staff. Increasing female participation in these roles could contribute to greater inclusivity and align with the objectives of Sustainable Development Goal 4 (SDG4), which focuses on quality education and gender equality.

The research data showed that 96.2% of the respondents were married, indicating that there is a sense of social stability among the HODs. This could influence their perspectives on school operations and decision-making, particularly in terms of how the school library and other resources support both students and staff in achieving educational goals.

The data on the experience levels of HODs reveal that 46.2% have been in their current roles for 1–5 years, while 38.5% have held their positions for 6–10 years. This distribution suggests that many of the HODs were relatively new to their roles, which could impact the overall effectiveness of school operations, including the development and management of school libraries. More experienced leadership may be needed to fully leverage educational resources to support the achievement of SDG4.

In terms of educational qualifications, the data showed that 57.7% of the HODs hold a degree, while 42.3% have attained a master's degree. This high level of qualification is encouraging,

as it indicates that the majority of HODs were well-equipped to provide effective leadership and support within their schools.

Notre Dame Senior High School had one (1) HOD with a degree (3.8%) and 3 with a master's degree (11.5%); Our Lady of Lourdes Girls Senior High School had 3 HODs with degrees (11.5%) and 2 with master's degrees (7.7%); St. John's Integrated Senior High Technical School stands out with 7 HODs holding degrees (26.9%) and 2 with master's degrees (7.7%); and Awe Senior High Technical School had an equal split, with 4 HODs holding degrees (15.4%) and 4 holding master's degrees (15.4%). This distribution of qualifications suggests that the HODs across the schools were generally well-prepared to contribute to the academic and operational success of their schools, particularly in supporting initiatives like the improvement of school libraries, which are essential for promoting quality education.

The data on HODs across these schools highlights several key trends: the majority were mid-career professionals, with a strong bias toward male leadership, and most have significant educational qualifications. There is room for improving gender diversity in leadership roles, and while many HODs were new to their positions, their educational backgrounds provide a solid foundation for supporting institutional goals, including the promotion of SDG4.

4.2.4 Library Staff

The study aimed at gathering insights from Senior High School library staff in Kasina Nakana East Municipal Assembly regarding their demographics, profession, and qualifications. It includes their response on questions relating to the role of the school library in achieving the SDG4. The data collected is presented and elaborated below in frequency tables for lucidity.

Three of the respondents (60%) were between the ages of 41-45. Two respondents were in the age ranges of 25-30 (20%) and 31-35 (20%) respectively (Table 4.12). The data indicated that all (100%) the library staff fell within these three age groups.

Table 4.12 Age Distribution of Library Staff

Age Group	Frequency	Percent
25-30	1	20.0%
31-35	1	20.0%
41-45	3	60.0%
Total	5	100.0%

Source: Field data, 2024

Regarding the profession of the library staff, 80% were categorized as paraprofessionals, while 20% were professional library staff (Table 4.13).

Table 4.13 Professional Status of Library Staff

Profession	Frequency	Percent
Professional	1	20.0%
Para-Professional	4	80.0%
Total	5	100.0%

Source: Field data, 2024

All the five-library staff (100%) were male, an indication that no gender diversity was observed among the Library Staff and the data also revealed that all the respondents (100%) were married. When asked about their current positions, 80% of the respondents identified as library masters, while 20% held the position of head of the library (Table 4.14).

Table 4.14 Current Position of Library Staff

Current Position	Frequency	Percent
Library Master	4	80.0%
Head of Library	1	20.0%
Total	5	100.0%

Source: Field data, 2024

With respect to their occupation, 80% of the respondents were categorized as working in other occupations other than librarianship, while 20% (1) was identified as a librarian (Table 4.15).

Table 4.15 Occupation of Library Staff

Occupation	Frequency	Percent
Librarian	1	20.0%
Other	4	80.0%
Total	5	100.0%

Source: Field data, 2024

In terms of educational qualifications, it was noted that 60% of respondents held a diploma, 20% held a degree, and another 20% held a master's degree (Table 4.16).

Table 4.16 Educational Qualification of Library Staff

Educational Qualification	Frequency	Percent
Diploma	3	60.0%
Degree	1	20.0%
Masters	1	20.0%
Total	5	100.0%

Source: Field data, 2024

When the library staff were asked about their job description, 80% of respondents indicated they were involved in all aspects of library work (shelving, lending, borrowing books, patron advisor, requisition and classification), while 20% were involved only in shelving, lending, and borrowing (Table 4.17).

Table 4.17 Job Description of Library Staff

Job Description	Frequency	Percent
Shelving, Lending & Borrowing	1	20.0%
All of the Above	4	80.0%
Total	5	100.0%

Source: Field data, 2024

The survey results indicate that 80% (4) of the respondents did not possess academic qualifications in information studies or librarianship, while 20% (1) did (Table 4.16). In terms of the workshops attended, 60% of the respondents participated in librarianship workshops, while 40% reported not attending any workshops. Most 80% (4) of the library staffs indicated that they received training on one occasion, while one (20%) received training twice.

4.2.5 Results from Assistant Headmasters and School Bursars

This section presents the results based on the responses from four (57.1%) Assistant Headmasters (Academic) and three (42.9) School Bursars. A frequency table was used to summarize the data on profession, age, gender, marital status, educational qualifications, job description, area of specialization, and training. These results also provide insight into their views on the roles of the school library in achieving SDG4 as well as their training in relation to school curriculum and library science. The gender distribution revealed that 71.4% (5) of the respondents were male, while 28.6% (2) were female, this indicates a male-dominated sample of Senior High School administrative staff. And all (100%) the respondents were married.

Table 4.18 Age distribution of Assistant Headmasters and School Bursars

Age Range	Frequency	Percent
31-40	3	42.9
41-50	2	28.6
50 and Above	2	28.6
Total	7	100.0

Source: Field data, 2024

The respondents' ages were distributed across three categories: 42.9% fall between 31-40 years, and 28.6% were in each of the 41-50 and 50+ age groups (Table 4.18). This showed a relatively even distribution across the different age ranges.

Table 4.19 Educational Qualification of Assistant Headmasters and School Bursars

Qualification	Frequency	Percent
Diploma	2	28.6
Degree	3	42.9
Masters	2	28.6
Total	7	100.0

Source: Field data, 2024

Regarding educational qualifications, 42.9% of respondents hold a degree, while 28.6% each hold a diploma or a master's degree (Table 4.19). This highlights a diverse academic background among the staff. The results indicate that 57.1% (4) of the respondents were teachers, while 42.9% (3) were accountants (Table 4.20). This shows that the Assistant Headmasters were professional teachers, while the Bursars were professionals in financial management. Therefore, they may be considered qualified for their jobs and positions as professionals.

Table 4.20 Job Description of Assistant Headmasters and School Bursars

Job Description	Frequency	Percent
Academic Affairs	4	57.1
Financial Management	3	42.9
Total	7	100.0

Source: Field data, 2024

The job responsibilities of the respondents (Table 4.20) were split between Academic Affairs (57.1%) and Financial Management (42.9%).

Table 4.21 Area of Specialization of Assistant Headmasters and School Bursars

Specialization	Frequency	Percent
Accounting	3	42.9
French	1	14.3
Leadership	2	28.6
Agriculture	1	14.3
Total	7	100.0

Source: Field data, 2024

It was noted that the respondents have specialized in diverse areas (Table 4.21). The data showed that 42.9% specialized in accounting, 28.6% in Leadership, and 14.3% each in French and Agriculture.

Table 4.22 Training Related to School Curriculum

Training in School Curriculum	Frequency	Percent
Yes	5	71.4
No	2	28.6
Total	7	100.0

Source: Field data, 2024

In addition, five of the respondents (71.4%) had received training related to the school curriculum, while 28.6% (2) had not (Table 4.22). Moreover, only one (14.3%) of the school administrators had received formal training in library science and management, while 85.7% (6) have not had any training, this indicates a gap in skill and knowledge relating library and information science.

The data on Assistant Headmasters and School Bursars from senior high schools studied provided insights into key demographic and educational characteristics of these administrative roles. The data covers age, gender, marital status, and educational qualifications.

The age distribution of the Assistant Headmasters and School Bursars are spread across three categories: 31-40, 41-50 and 50 and above. For the 31-40 years category, there were three individuals representing 42.9% of the total. These individuals were equally distributed across Notre Dame Senior High School, St. John's Integrated Senior High Technical School, and Awe Senior High Technical School, each accounting for 33.3% within this age category. In the 41-50 years category, two respondents fell into the age group, representing 28.6% of the total. These individuals were from St. John's Integrated Senior High Technical School and Awe

Senior High Technical School, with each school contributing 50% to this age range. Moreover, 50 and above category had two respondents, and represented 28.6% of the total. One respondent each was from Notre Dame Senior High School and Our Lady of Lourdes Girls Senior High School, making up 50% of the age group within their respective schools.

Gender distribution among Assistant Headmasters and School Bursars revealed a strong male presence, with some representation from females. Five out of the seven respondents were male, representing 71.4% of the total. Notre Dame Senior High School and St. John's Integrated Senior High Technical School each account for 40.0% of the male respondents, while Awe Senior High Technical School contributes 20.0%. Two respondents were female, representing 28.6% of the total. One female was from Our Lady of Lourdes Girls Senior High School, and the other from Awe Senior High Technical School. Both females make up 50% of the gender representation within their respective schools. This indicates a significant gender imbalance in administrative roles, with males dominating the positions of Assistant Headmaster and School Bursar.

It was revealed that all the respondents in this data set are married, representing 100% of the total across all schools. The marital status distribution is evenly spread. Each school (Notre Dame Senior High School, Our Lady of Lourdes Girls Senior High School, St. John's Integrated Senior High Technical School, and Awe Senior High Technical School) had two married individuals, accounting for 28.6% of the total per school. This uniformity reflects a trend of marital stability among individuals in these leadership positions.

Educational qualifications of the respondents showed a mix of diploma, degree, and master's level education. Two respondents hold a diploma, representing 28.6% of the total. One individual each from St. John's Integrated Senior High Technical School and Awe Senior High Technical School held a diploma, with each institution contributing 50% to this qualification category. Three respondents held a degree, accounting for 42.9% of the total. Notre Dame Senior High School had two, degree holders (66.7%), while St. John's Integrated Senior High Technical School had one (33.3%). Two respondents held a master's degree, representing 28.6% of the total. One master's degree holder was from Our Lady of Lourdes Girls Senior High School, and the other was from Awe Senior High Technical School. Each institution accounts for 50% of this qualification group.

The demographic and educational profile of Assistant Headmasters and School Bursars across the four schools revealed several trends: Most of the respondents were in the younger age categories (31-50 years), this is an indication that these leadership positions were filled by individuals in the early to mid-stages of their careers; There was a notable gender imbalance, with men making up the majority of respondents; All respondents were married, suggesting a trend of social stability in these roles; Educational qualifications vary, with a significant number holding degrees, while some possess diplomas or master's degrees. This variety reflects a range of academic preparedness for these leadership roles.



4.26 Relationship between Demographic Variables and the Research Themes

The observed patterns from the demographic analysis among the research subjects relates with the research themes and aim of the research. Because most of the SHS students are within the age bracket, 15-19 years, who have appreciable exposure to the school library activities and

services, and are actively preparing for their final school national West African Senior School Certificate Examination (WASCE) to transition to higher institutions are more likely to be impacted by the library support system. Moreover, the wide representation across subjects in various departments, and with majority of them in Science, General Arts, Visual Arts, and Agricultural Science students demonstrate varied academic needs and approach to learning which must be served by the school library. Moreso, the overwhelming majority of the SHS 3 students points to the fact that the library is the most consistent academic support environment outside their classroom, this therefore strengthens the libraries' potential role to contribute to quality and equitable learning experience of the students. Some of the observed differences observed across the schools in terms of sponsorship and institutional orientation, also project contextual variations in resource accessibility and academic culture which shape the SHS 3 students' opportunity to benefit from the resources of the school library. A combination of these demographic characteristics provides important context for the interpretation of the usage patterns of the school library, and perceived support of the library is related to the broader contribution of the school library to the inclusion of equitable and quality education as projected by the SDG4 targets.

4.3 The State of the School Library

This section projects the basis upon which subsequent analysis in relation to CAMT evidence gathering phase. The research information obtained in this study on library collection infrastructure, patron access and staffing, present a fundamental evidence required for appreciating the current potential of the school library's position them to contribute to SDG4 and quality education. Relating the empirical data will enable the identification of supporting

and limiting factors which define the performance story of the senior high school libraries in the Kassena Nankana East Municipal Assembly.

The state of the school library, as perceived by students, provided valuable insights into its current effectiveness and areas of improvement. These insights include the library's ability to meet students' needs, the helpfulness of the staff, and the resources students feel requires enhancement. An appreciable proportion of the students (52.2%) felt that the school library adequately meets their needs. However, 29.0% of the students believed that the library does not meet their needs, while 18.8% remained unsure. This observation implies that while the school library is functioning well for appreciable number of students, there is still a considerable number of the student body who felt underserved by its services. The reasons behind this could be related to resource availability, infrastructure, or engagement with library activities as indicated by the students.

Table 4.23 Desired Needs by Students in the Senior High School Library

Students Needs	Frequency	Percent
Library meets their needs	108	52.2%
Library does not meets their needs	60	29.0%
Unsure	39	18.8%
Total	207	100.0%

Source: Field Data, 2024

The staff in the school libraries were generally perceived as helpful, as indicated by 82.6% of the students who found them approachable and supportive. However, 8.7% of the students

believed that the library staff were not helpful, and another 8.7% were unsure. These responses implied that, overall, most students in the schools felt supported by the library staff, but there remains a small group who were not fully benefiting from staff interactions. This may be explained by the fact that all the library staff (100%) indicated that they worked with library prefects or “student-librarian” who are more often in contact with the students. Thus, improving communication and accessibility was a variable with a strong potential to further enhance student satisfaction. The research data also revealed that the students have pointed out several areas where the library could improve its services, they include computer resources (44.9%), Enhanced learning materials (44.4%), and better infrastructure (9.3%). Only 1.5% of the students mentioned furniture as an area needing improvement. All the library staff, HODs and Administrative staff (Bursar and Assistant Headmaster) also lamented on the need for infrastructure. It was also observed during the research that all the schools had their libraries in small rooms with limited space for 75% of the schools visited, and 30 student’s capacity for 25%. The space for resources were also notably very limited.

Table 4.24 **Desired Improvements by Students in the Senior High School Library**

Improvement	Frequency	Percent
Computer	92	44.4%
Resources	91	44.0%
Furniture	3	1.4%
Infrastructure	19	9.2%
Total	205	99.0%
Missing	2	1.0%
Total	207	100.0%

Source: Field Data, 2024

The obvious emphasis on technology and learning materials indicated that the students were seeking a more modern and resourceful library environment. The library staff also alluded to the complete absence of IT facilities in the library. The relatively low concern for infrastructure and furniture suggested that these were not major barriers to the library's effectiveness but that upgrading technological resources would have a significant impact. From the discussion, it is evident that while the school library is perceived positively by most the students, especially regarding staff support, there were some critical areas that needed attention to promote effective service delivery. Improvement in these areas will help the library to better serve its role better as a central educational resource, this will ensure that it continues to contribute to the academic success and personal growth of all students as anticipated and promoted by the SDG4.

4.4 To Assess how School Libraries in the Study Area Support Quality Education

The findings details the proposed direction that relates the presence and effective usage of school libraries to the achievement of the outcome of quality education. The theory premise that a well- resourced, and properly managed school library's promote students engagement enhanced literacy and academic performance and strengthen the support mechanisms for teachers. The results tests this premise by evaluating the way school library's service and learning resources impact effective pedagogy and class room achievement as indicated by SDG4.1 which emphasis inclusive and equitable education for all learners.

This section presents the findings to Objective 2 of the study, which sought to assess how school libraries in the Kassena Nankana East Municipal Assembly contribute to the attainment of quality

education. The analysis was conducted to examine whether specific library-related factors were statistically associated with support for quality education as defined by key indicators, such as accessibility, relevance of materials, support services, and usage by students and staff.

Using chi-square analysis, the responses from participants were evaluated to identify associations between individual indicators and the role of school libraries in promoting quality education. The intention of this analysis was to determine whether library services and conditions significantly relate to educational outcomes and student support structures within the schools studied.

The results of the statistical analysis revealed that there was a statistically significant association between all tested items and the perceived contribution of school libraries to quality education in the study area—with the exception of one factor. Specifically, the items analyzed showed p-values ranging from 0.000 to 0.075, which were all below the significance level of $\alpha = 0.10$. This indicates that these factors—including access to learning resources, availability of relevant and current books, support for independent study, library orientation programs, and integration of library use into the academic curriculum—are meaningfully associated with the support of quality education in senior high schools across the municipality.

However, the only exception observed in the analysis was the item measuring whether *school library staff were helpful and approachable*, which returned a p-value above 0.10. This suggests that, based on the available data, this specific factor did not demonstrate a statistically significant association with the overall perception of the library's contribution to quality education. While the interpersonal qualities of library staff may enhance the user experience, this result suggests that it may not be a primary determinant of how the library is perceived in relation to educational outcomes within the study schools.

The overall finding indicates that school libraries in the Kassena Nankana East Municipal Assembly play a substantial role in supporting quality education through the resources and services they provide. These findings align with earlier studies which underscore the importance of access to well-resourced libraries in improving academic performance and fostering educational equity (Lonsdale, 2003; Merga & Mason, 2021).

Senior High School library services in Ghana, Kasena Nankana East Municipal specifically, provide lending, borrowing, training and guidance/support. The array of material resources and their activities have limited potential to promote the achievement of SDG4 targets at the Senior High School level. These targets include quality education, equip skills to support career, lifelong learning and Global citizenship. The inferential statistics discussed below sheds more light on the reality on the ground at the study area.

The data from the survey in Table 4.25 indicated that the school libraries play a crucial role in supporting students' educational pursuits. The high proportion (95.2%) of students who believe that school library services were essential for quality education highlighted the direct connection between library resources and educational outcomes. The frequency of library visits, with 63.8% of students visiting daily, further emphasized the importance of the school library in their academic routine.



Table 4.25 Necessity of Library Services for Quality Education

Response	Frequency	Percent
Yes	197	95.2%
No	8	3.9%
Total	205	99.0%
Missing	2	1.0%
Total	207	100.0%

Source: Field Data, 2024

The significant number of students who visited the school library daily (63.8%) were 132, and about a quarter (26.1%) reported weekly visitation, while a small fraction visited the school library monthly or rarely. This indicated a high level of engagement with library services among the students (Table 4.26).

Table 4.26 Frequency of Library Visits (SHS 3)

Frequency	Frequency	Percent
Daily	132	63.8%
Weekly	54	26.1%
Monthly	10	4.8%
Rarely	6	2.9%
Never	5	2.4%
Total	207	100.0%

Source: Field Data, 2024

Books were the primary resource used by 70% of students. However, the minimal use of digital resources such as computers (2.9%) and online materials (1.0%) indicated a gap in the digital offerings of the library (Table 4.27).

Table 4.27 Resources Used by Students in the School Library (SHS 3)

Resource	Frequency	Percent
Books	145	70.0%
Computers	6	2.9%
Online	2	1.0%
Newspapers	6	2.9%
Two or more sources	48	23.2%
Total	207	100.0%

Source: Field Data, 2024

A significant number of the students (44.4%) indicated a need for more computers and improved resources. This aligns with the need for modernizing school libraries to support diverse learning styles, particularly digital literacy, which is essential for quality education in the 21st century.

Chi-square tests data analysis was carried out to determine whether specific factors reported by students, academic staff, and Heads of Departments (HODs) are significantly associated with the role of school libraries in promoting quality education in senior high schools across the Kassena Nankana East Municipal Assembly. The purpose of the analysis was to evaluate

whether perceptions and practices regarding library services correspond to measurable contributions toward quality education.

The responses from the Senior High School students were subjected to chi-square analysis to assess the relationship between various aspects of library use and their influence on educational quality, revealed that all the items analysed showed statistically significant associations, with p-values ranging from 0.000 to 0.075, which are below the standard significance level of $\alpha = 0.10$. This indicates that students' perceptions of the library's services (such as the availability of relevant resources, conducive reading environments, academic support, orientation sessions, and integration with classroom instruction) are meaningfully associated to their understanding of quality education.

However, an exception was observed, the item measuring whether *school library staff were helpful and approachable* did not show a statistically significant association with support for quality education. This implies that while the students may value library staff interpersonal skills, this factor is not perceived as central to the educational outcomes directly supported by the library.

The data suggests that school libraries were recognized for their potential in promoting quality education, as reflected in the positive trends over time (seen in the line chart on staff agreement regarding library support for quality education). From 2019 to 2023, the proportion of staff agreeing that libraries support quality education increased from 40% to 53.8%, while disagreement dropped from 35% to 19.2%.

This upward trend points out a growing recognition of the library's importance in supporting academic outcomes, possibly through increased access to resources or better alignment with curriculum needs. However, with 19.2% still disagreeing and 7.7% neutral, there is room for improvement, particularly in ensuring that all academic staff see the library as an essential tool in achieving SDG 4.

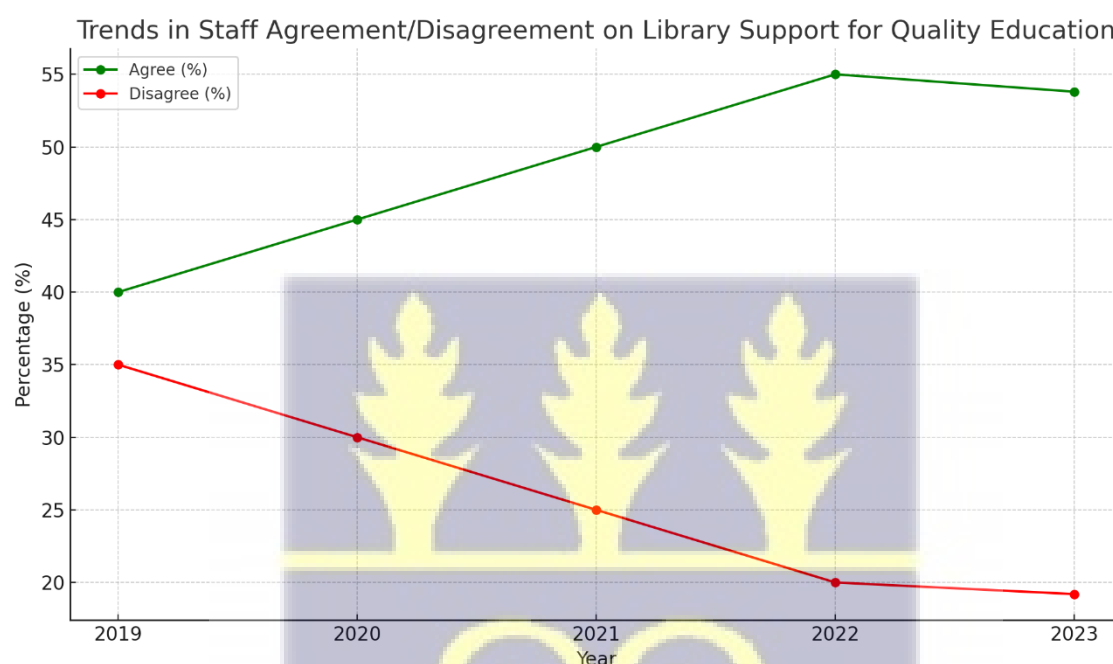


Figure 4.6 Staff Agreement/Disagreement on Library Support for Quality Education

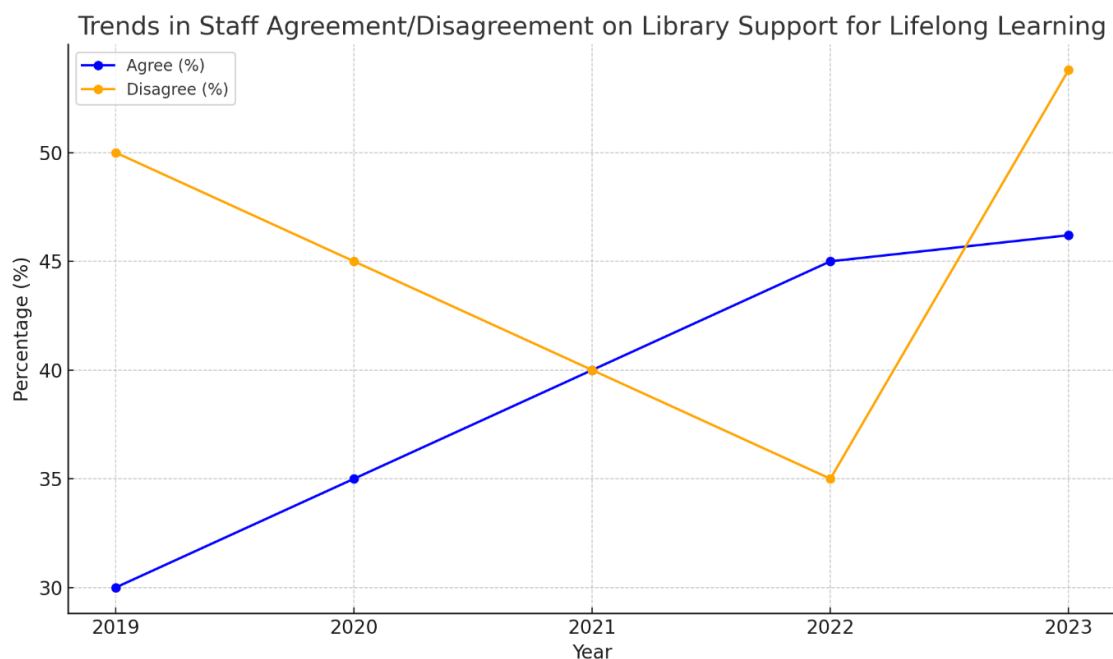


Figure 4.7 Trends in Staff Agreement/Disagreement on Library Support for Lifelong

In contrast to the student results, the analysis of responses from the administrators did not divulge any statistically significant associations. The p-values for the staff responses ranged from 0.137 to 0.830, all above the 0.10 threshold. The outcome implies that the observed levels of agreement or disagreement among administrators regarding the library's contribution to quality education are not statistically distinguishable from random variation. Consequently, from the perspective of the administrators, no individual factor tested was found to have a significant relationship with how the school library supports quality education.

Sadly, this outcome reflects the differences in their expectations or a less direct engagement of the administrators with library services compared to the students. It also presupposes that while the students actively experience the services of the school library in their learning process, administrators may not be as involved in evaluating or utilizing these services to promote instructional delivery.

The research data provides key understandings into the role of school libraries in achieving SDG 4. It was observed that 76.9% of academic staff either agree or strongly agree that they have knowledge of SDG4, this indicates a broad awareness (though 15.4% disagree). This observation has also been made by another researcher (Ntsiful et al., 2023b). However, only 34.6% of academic staff agreed that their schools have formally educated them on SDG4, with a significant 26.9% expressing neutrality and 38.4% disagreeing with this statement. This suggests that there is a gap between awareness and formal education or training on the topic. It was also noted that, 38.5% of respondents believed that their schools had SDG4 implementation plans, while 30.8% remain neutral, and the rest (30.7%) disagree. The split in opinion here underscores inconsistencies in planning and execution across different schools. This explains why other researchers reported that school libraries lack internal policy for the SDG4 (Dei & Asante, 2022c).

Table 4.28 Awareness and Knowledge of SDG4 by HODs

Response	Frequency	Percent
Strongly Agree	4	15.4%
Agree	16	61.5%
Neutral	2	7.7%
Disagree	4	15.4%

Source: Field data, 2024

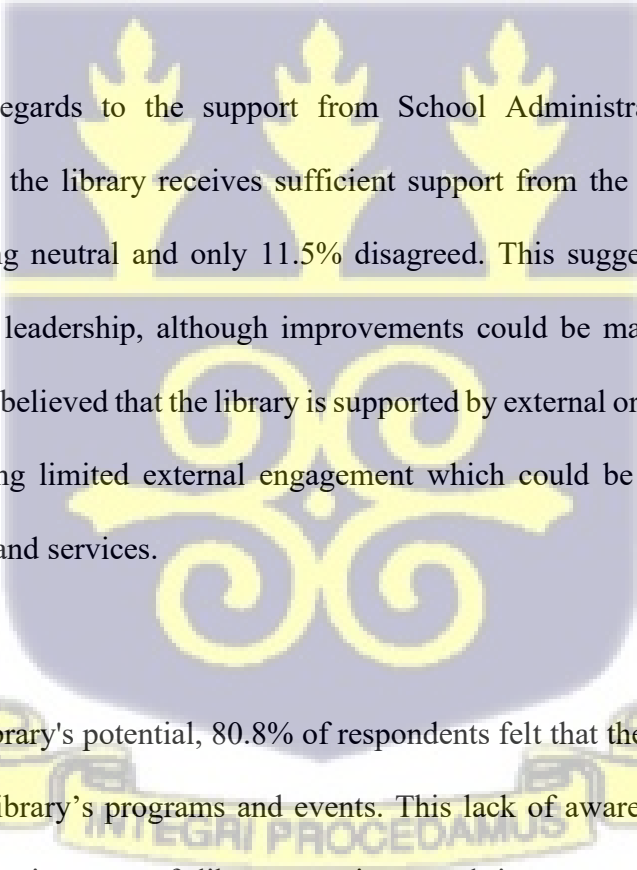
The results from the HODs provided additional insight, particularly regarding the alignment of the school library with SDG4-related educational practices. Several key items showed statistically significant associations with the support for quality education, with p-values

ranging from 0.022 to 0.096 (The items included Academic staff having knowledge of SDG4, The presence of SDG4 implementation plans in the school, The organization of learning activities (e.g., reading clubs, seminars, workshops) by school libraries, External support received by the school library from individuals or organizations, Availability of educational resources on career guidance). The significant association of these items divulged that where HODs observe practical initiatives, such as SDG4-aligned planning or external support, they are more likely to view the school library as a key contributor to quality education.

However, several other items which were tested in the analysis did not indicate statistically significant associations. These observations portray a mixed pattern where certain observable practices and institutional commitments align with the perceived educational value of libraries, while others remain disconnected in the view of HODs

The school library's role in quality education is recognized, with 53.8% of respondents strongly agreeing and another 38.5% agreeing that it is a necessary tool for achieving this goal. However, the actual services provided seem to fall short. This is because, 57.7% disagree that the school library organized learning activities, indicating a lack of direct engagement with students, and only 46.2% believed that the school library was adequately patronized, while 19.2% disagreed, showing mixed views on its utility among students. This indicates that, the HODs are not aware that less than half of the students (42.43%) visit the library, and just 30% attend library programs. Moreover, even though 53.8% think that the school library has adequate resources, 57.7% of respondents disagreed that it had sufficient resources to achieve its mission.

The availability of qualified staff for the school library is another concern raised by the HODs. While 34.6% agree that the library has qualified staff, 30.7% disagree, and 23.1% remain neutral. This suggests that staffing was not universally seen as adequate or effective. In addition, the adequacy of staff strength is also questioned, with 57.7% disagreeing that there were enough staff members, and only 3.8% strongly agreeing. This illustrates the school library's shortcomings, which explains why every student (100%) mentioned personnel challenges, and 75% mentioned infrastructure issues and 50% mentioned resource needs for the library. This is a critical issue that may hinder the school library's capacity to support educational goals.



Interestingly, with regards to the support from School Administration, only 57.7% of respondents believed the library receives sufficient support from the school administration, with 26.9% remaining neutral and only 11.5% disagreed. This suggests a general sense of support from school leadership, although improvements could be made. It is good to note however, that, 46.2% believed that the library is supported by external organizations, but 53.8% disagreed, highlighting limited external engagement which could be leveraged to improve resource availability and services.

Despite the school library's potential, 80.8% of respondents felt that they were not adequately informed about the library's programs and events. This lack of awareness was a significant barrier to more effective use of library services, and it suggests the need for better communication strategies. The data on how often staff and students utilize the library also showed that there is room for improvement. Only 7.7% of respondents visited the library daily,

while 30.8% rarely visited it. This pattern points to underutilization of the library as a learning resource.

Among the resources provided by the library, 61.5% of the respondents found textbooks as the most useful, with only 3.8% mentioning ICT resources. This reflects a traditional, rather than a more modern or diverse library resources, offering of educational materials. It was also revealed that, because of a the shortage of office space, academic staff utilize the library as locations to rest and read.

The role of the school library in supporting lifelong learning appears limited, with only 46.2% of the respondents stating that they utilized the library for this purpose. Similar observations have been made by other researchers (Hands & Candela, 2024; Omar et al., 2024). Most of them (88.5%) disagreed that the library organizes lifelong learning activities. The results also showed that there is a substantial need for improvement in career preparation resources since 84.6% of respondents believed that guest speakers have not been invited for career talks, and 84.6% were of the believe that the library does not offer career guidance resources. Moreover, 65.4% believed that more career workshops and internship resources were needed, which underscores the need for the school library to expand its career-related services to better equip students for the workforce.

It is important to note that the statistical analysis of the responses from the HODs points out both the potential and the challenges faced by school libraries in contributing to SDG 4. While there was a recognition of their importance, there are clear areas for growth (Hands & Candela,

2024; Omar et al., 2024), particularly in resource provision, staff engagement, and the promotion of lifelong learning and career preparation initiatives.

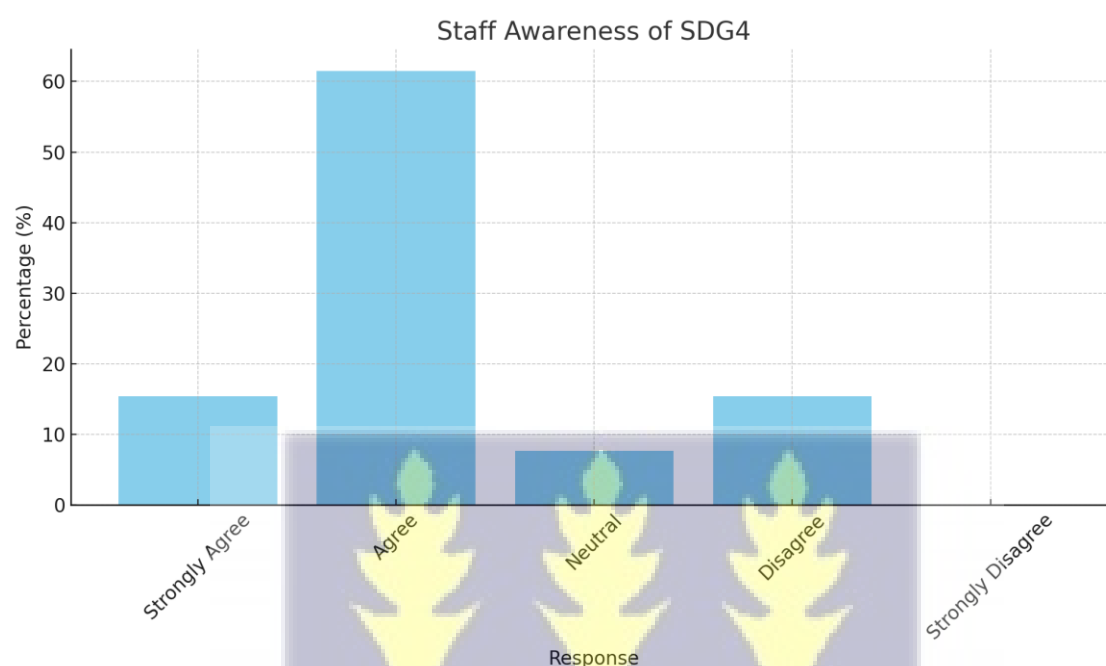


Figure 4.8 Staff Awareness of SDG4



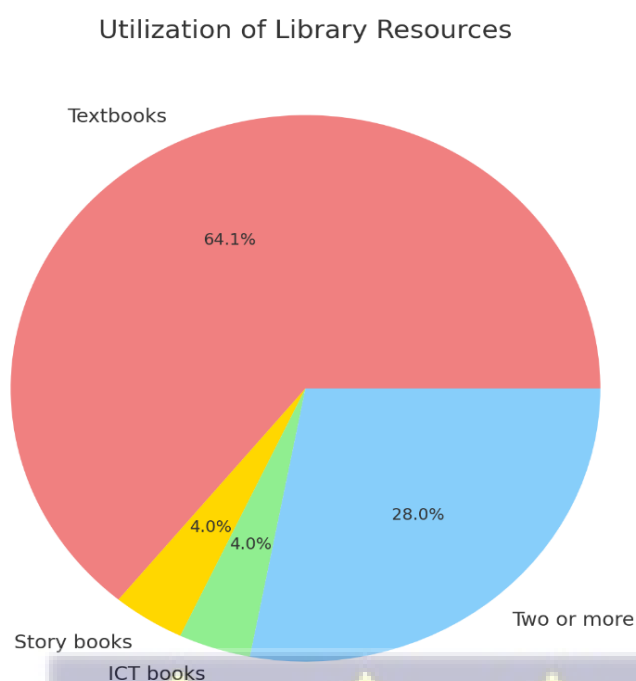


Figure 4.9 Utilization of Library Resource

The analysed interview responses were carried out in terms of the key terms in objectives. The result analysed in terms of the support for learning activities and quality education showed that, 40% of the school libraries organize learning activities for students, while 60% do not. This indicates a significant gap in using libraries as active learning hubs. Despite this, report from all the schools (100%) indicate significant student patronage, but the lack of adequate resources in all the libraries hinders the effectiveness of the library staff.

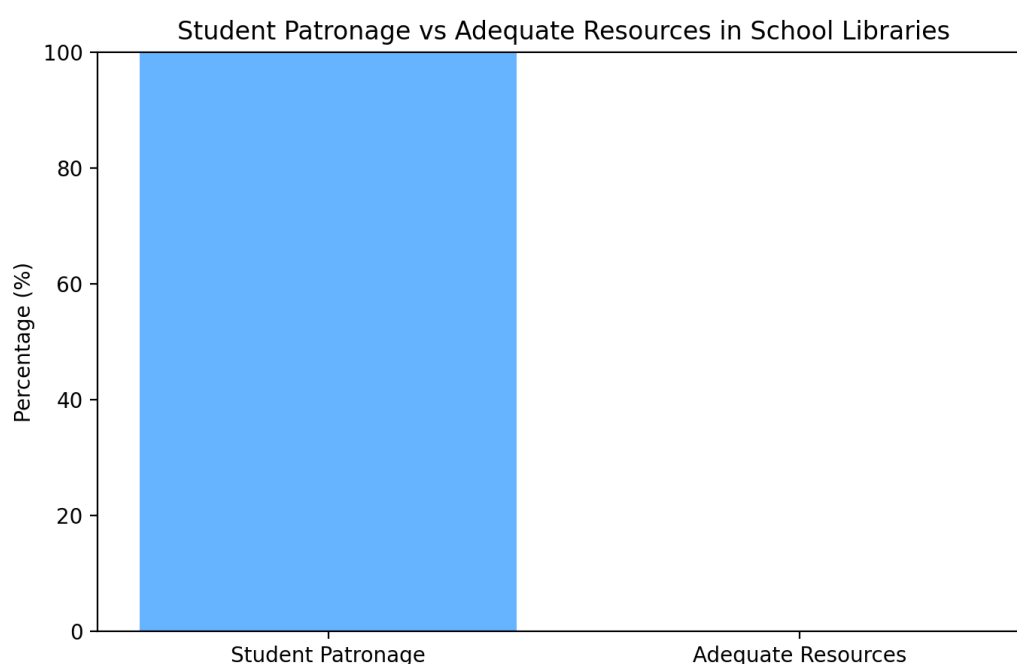


Figure 4.10 Student Patronage Vs Adequate Resources in School Libraries

This bar chart (fig 4.10) points out that while libraries were well-patronized, they lacked sufficient resources, and this affected their role in supporting quality education under SDG4.

The responses from both the Assistant Headmaster and the School Bursar offered valuable insights into how the school libraries in the study area support quality education. The data reveals key trends in the utilization of library resources and their impact on teaching and student learning outcomes.

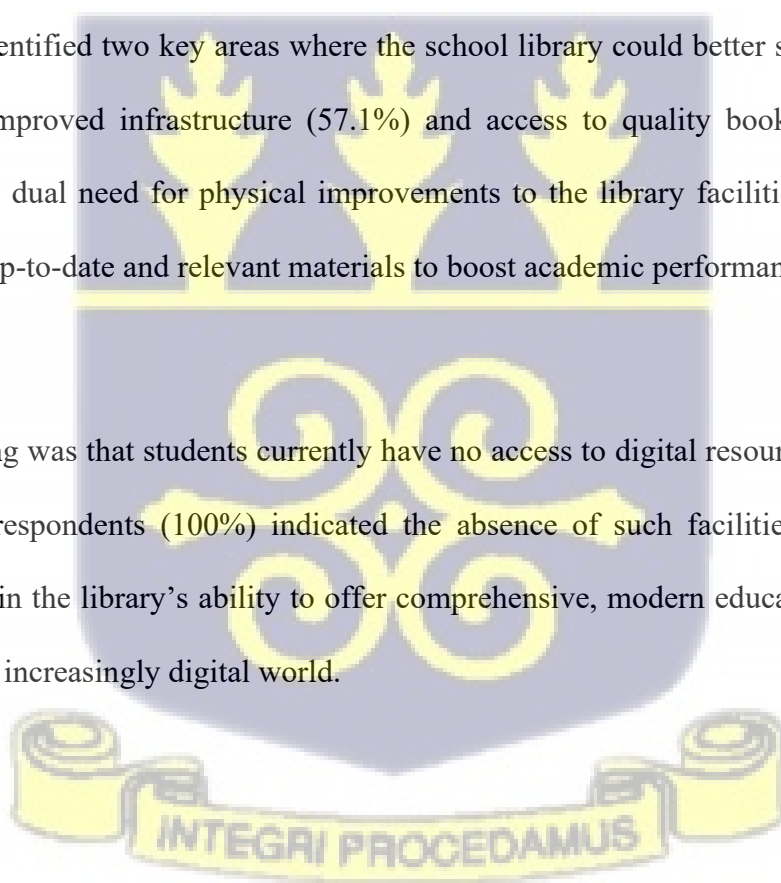
An appreciable number of teachers (42.9%) frequently use the library's resources when preparing their lesson plans, while the remaining 57.1% were divided between those who use the library resources sometimes (28.6%) and those who rarely (28.6%) utilize them. This

suggests a moderately high level of reliance on the library for lesson preparation, though there is room for improvement in encouraging more consistent use among all teachers.

When it comes to programs that effectively support student learning, most respondents (57.1%) highlighted the effectiveness of STEM workshops. Additionally, other initiatives such as reading clubs (14.3%) and general workshops (14.3%) were noted as valuable but less prominent. This reflects the growing importance of STEM-related activities in enhancing student engagement and learning outcomes.

Respondents identified two key areas where the school library could better support academic achievement: improved infrastructure (57.1%) and access to quality books (42.9%). This underscores the dual need for physical improvements to the library facilities as well as the availability of up-to-date and relevant materials to boost academic performance.

A critical finding was that students currently have no access to digital resources in the school library, as all respondents (100%) indicated the absence of such facilities. This shows a significant gap in the library's ability to offer comprehensive, modern educational resources, especially in an increasingly digital world.



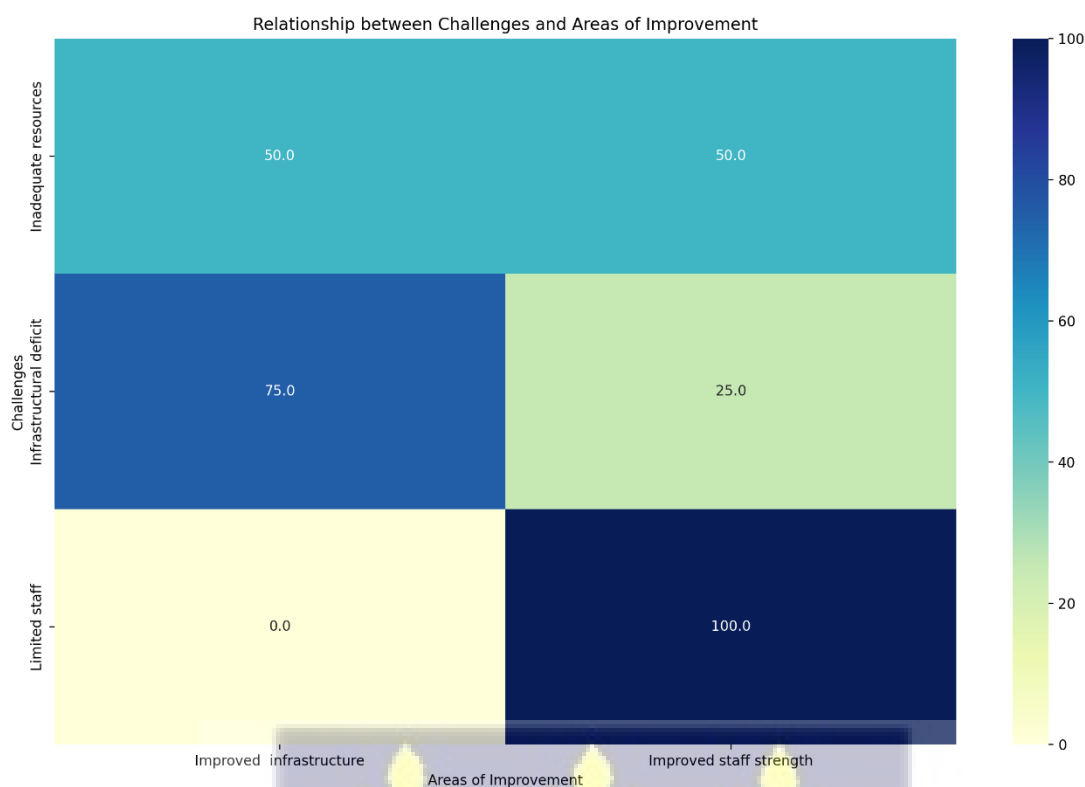


Figure 4.11 Relationship between Challenges and Areas of Improvement

Several challenges were noted in promoting library usage among students. The most prominent issue was an infrastructural deficit (57.1%), followed by inadequate resources (28.6%) and limited staff (14.3%). These challenges point to the need for both physical and human resource investments to foster better library engagement among students.

A significant number of students (57.1%) indicated that there were no designated library periods in the school schedule, suggesting a missed opportunity for structured library time to be incorporated into students' regular learning routine.

The impact of lifelong learning initiatives on student outcomes was assessed primarily through academic performance tracking (42.9%), with some schools also utilizing student feedback surveys (28.6%) and participation rates analysis (28.6%). These metrics suggest that schools were actively monitoring the benefits of these initiatives, though there may be opportunities to expand evaluation methods.

Encouragingly, most respondents (85.7%) indicated that they collaborate with the school librarian to integrate library resources into the curriculum. This demonstrates a strong commitment to ensuring that the library was a central resource in supporting the school's academic goals.

Library orientation sessions (42.9%) were identified as the most successful initiative in increasing student engagement with the library, followed by other activities like reading challenges (14.3%) and book fairs (14.3%). This indicates that structured introduction and promotion of the library play a key role in enhancing its usage.

Respondents expressed a strong desire for improved infrastructure (57.1%) and increased staff strength (42.9%) as key areas for enhancing the library's functionality. These improvements would likely alleviate some of the challenges related to library usage and resource accessibility. In terms of budget allocation, a significant number (57.1%) indicated that there was no specific budget set aside for library resources and programs. This lack of financial support may explain some of the infrastructural and resource deficits outlined earlier.

Finally, 57.1% of respondents reported that there were no professional development opportunities for teachers on how to effectively utilize library resources. This suggests an area for growth in helping teachers to maximize the potential of the library in their teaching practices.

In conclusion, while there were clear areas where library staff support quality education—particularly through STEM initiatives and collaboration with library staffs—there remain significant challenges in infrastructure, resource availability, and budget allocation that need to be addressed. Providing digital resources, professional development for teachers, and improved library periods could further enhance the role of school libraries in supporting both teachers and students.

4.5 To Determine how School Libraries in the Study Area Equip Student for Careers

This section differentiates the specific contribution of the school library interventions (career guidance resources, exposure to information resources and academic counselling) in line with CAMT's focus on attribution problem. The analysis of the results revealed that some school library activities relates strong to the vocational readiness of the students. It was noted that this is a consequence of the curriculum and the administrative support. This disintegration made clear the extent to which the improvements observed in career awareness is credibly attributed to this library services.

School libraries play a significant role in preparing Senior High School students for their future careers. Nearly all the student respondents (98%) expressed a desire for additional skills and knowledge, while 57.1% of students use skill-building resources daily. The frequency of library usage for skill-building purposes indicates that the library is a crucial tool for career readiness.

Concerning workshops one-third (33.3%) of students had attended career planning workshops at the library. The most helpful workshops focused on career exploration (30.6%), resume building (12.6%), and interview skills (18.9%), as shown in the table below. The workshops contribute to equipping students with practical skills needed for employment, aligning with SDG4's goal of providing relevant skills for decent work.

The Chi-square analysis determined whether various library-related practices and perceptions are meaningfully associated with students' career readiness, as reported by both students and Heads of Departments (HODs). In addition, the analysis evaluated whether relationships exist between students' exposure to specific library services and their perceptions of being equipped for career opportunities.

The Chi-square analysis for the student data showed that each item evaluated had a p-value between 0.000 and 0.099, this fell below the standard significance threshold of $\alpha = 0.10$. These results revealed that Senior High School Students are collectively of the view that a meaningful relationship exist between various library functions and their preparation for the job market.

The main observations made is that there is a significant association with career readiness included the availability of career-related materials, participation in career-related programs or clubs organized by the library, and access to information on further education or job applications. The students reported that the limited library resources on career enhanced their exposure to real-world opportunities and helped them to prepare for life after school.

That notwithstanding, an exception emerged from the data analysis: there was no statistically significant relationship between students being more confident about their career prospects and their use of the library's resources. The results seem to imply that while the libraries may provide career information, but this alone may not necessarily translate into students' confidence about their future careers. It is considered in this study that there are other external factors, such as personal experiences, mentorship, or family support, which may influence the confidence levels of the students more strongly than library usage alone.

The pie chart showing library resource utilization indicates that textbooks were overwhelmingly the most utilized resource (61.5%), followed by a combination of other resources (26.9%). However, low utilization of ICT books and other career-oriented materials suggests a missed opportunity for the library to support career readiness.

Despite this, there is a high demand for career preparation services, with 65.4% of respondents suggesting improvements in areas like more career workshops resources and internships. The data shows that only 15.4% of staff believe the library currently provides effective career guidance, which is a critical gap in achieving SDG 4's targets related to equipping students for

the workforce. The library could enhance its role in career readiness by offering more resources tailored to industries and career paths, as well as by organizing guest speakers and career talks, as suggested by the respondents.

In contrast to the student data, most responses from Heads of Departments (HODs) did not show statistically significant associations with the school libraries' roles in preparing students for careers. The p-values for nearly all items analysed ranged from 0.154 to 0.930, which indicated no statistically meaningful relationship exist between the tested factors and the perception of career support from the school library.

The observed lack of significant association implies that many HODs do not consider the school library as an active contributor to student career preparation. For instance, items such as the library's provision of career guidance, its role in inviting guest speakers, or its use of digital tools for career planning were not viewed as impactful by HODs, possibly due to either limited implementation or the lack of visibility of such efforts.

However, there was one clear exception: a significant relationship was found between the use of planning tools by school libraries and the perception that these tools equip students for careers. This finding suggests that when libraries implement specific tools (such as career pathway charts, job search guides, or planning templates) there is a high probability of being recognized by the HODs as contributing to career readiness.

The consistency of negative or indifferent responses to other items also suggests a broader issue. Most HODs may not be aware of, or engaged with, career-related services provided by the library. This disconnect between student use and staff perception suggests that career guidance efforts from the library may exist informally or are underpublicized among teaching staff.

The analysis for the objective 3, career preparation and guidance show that 60% of libraries focus on providing more targeted resources for career preparation, while 40% collaborate with career service providers (fig 4.12). It was also noted that Insufficient funding (40%) is the most significant barrier, followed by a lack of administrative and external support (20% each), and stringent regulations regarding outsourcing (20%) (figure 4.13).

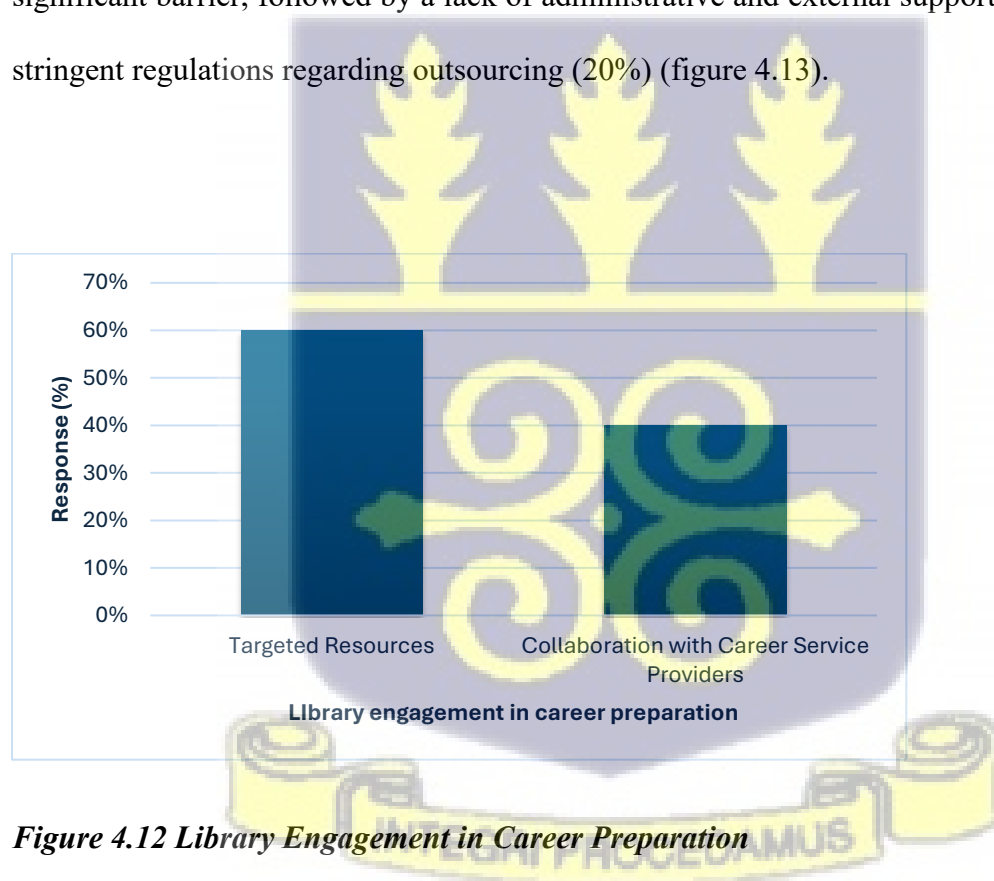


Figure 4.12 Library Engagement in Career Preparation

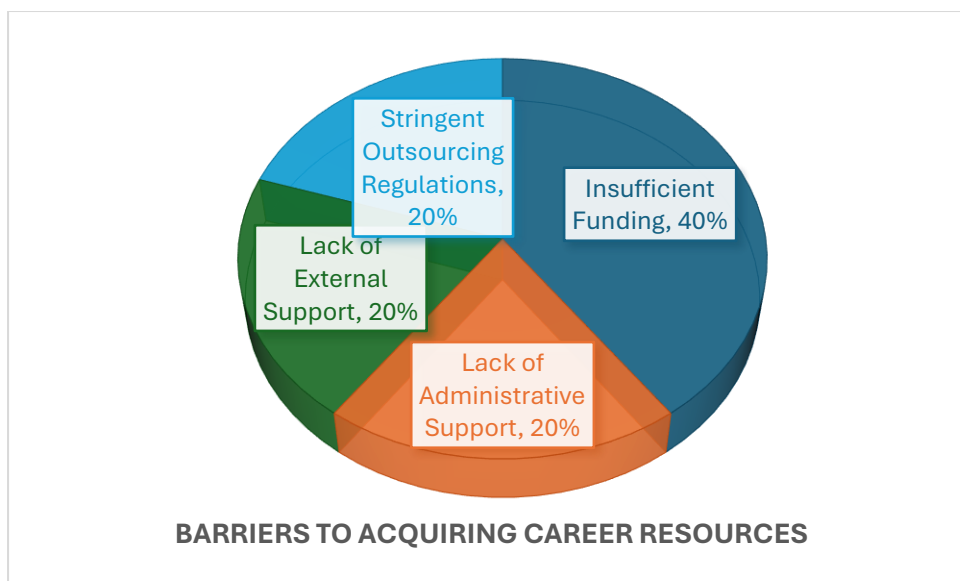


Figure 4.13 Barriers to Acquiring Career Resources

Figure 4.13 show the strong focus on targeted resources but highlights the challenges Senior High Schools face, such as funding and support.

The responses from the Assistant Headmaster and the School Bursar regarding the third objective (to assess how school libraries in the study area support career readiness) provide valuable insights into the effectiveness of these initiatives and the challenges they face. A significant number of the respondents (85.7%) rated the school's library career preparation initiative as moderately effective, indicating that the library plays a significant role in supporting students' career development. Only 14.3% considered the initiative slightly effective, which suggests that, while the program has a positive impact, there might be areas for improvement to ensure it is fully effective for all students.

Guest speakers were an integral part of the library's career preparation efforts. Appreciable number of the respondents (71.4%) did not identify a specific guest speaker, but 28.6% mentioned that Bishop Fred Ageta had made the biggest impact on student career readiness. This suggests that the choice of guest speakers may vary, with some having a notable effect on students' career aspirations.

One of the challenges identified is the infrequent encouragement for students to attend career-related workshops. More than half of the respondents (57.1%) reported that students were never encouraged to attend such workshops, while 14.3% stated that students were rarely encouraged. Only 28.6% indicated that the students were often encouraged to participate in career-related workshops, which shows an area where the school could increase engagement efforts.

When it comes to the most popular type of career-related workshops among students, seminars were favoured by a significant number of students (57.1%), followed by skill training workshops (28.6%) and resource display sessions (14.3%). This preference for seminars may indicate that students were more interested in gaining knowledge and insights from professionals in a structured setting, though there is also interest in hands-on skill-building activities.

In terms of how the school library can better support students in their career exploration and preparation, all the respondents (100%) pointed to the need for better access to information. This unanimous feedback suggests that providing students with more comprehensive and easily accessible career-related resources, such as job market information, college preparation guides, and career planning tools, could greatly enhance the library's role in preparing students for their future careers.

While the school library's career preparation initiatives were largely considered moderately effective, there was room for improvement in areas such as increasing student participation in workshops and expanding access to relevant career information. By focusing on these areas, the school library can play a more pivotal role in preparing students for their professional futures.

4.6 To determine how School Libraries in the Study Area Boost Skills and Lifelong

Learning for all

With the aid of the CAMT assessment process using evidence, this section presents how the library activities promotes lifelong learning beyond the formal classroom instruction with the aid of the data on workshops seminars etc. the analysis is in line with CAMT's iterative approach to finding out where empirical support is significant, where limitations are, and how more data may reinforce the contribution story.

Lifelong learning is a core component of SDG4, and the school libraries in the study area are key facilitators of this objective. A large majority of students (96.6%) believe in the need for continuous skills acquisition and 57.1% utilize the library's skill resources daily. The library's ability to provide skill-based learning is evident in the workshops offered, including financial literacy, where 23.6% of students participated. However, a gap remains, as 62.1% have not engaged with such workshops.

The data suggests that expanding skill-building programs, particularly those related to financial literacy and digital competencies, could greatly enhance the lifelong learning potential of students.

The chi-square statistical tests to assess whether student and staff responses showed meaningful associations between specific library practices and the broader goal of lifelong learning.

Analysis of the student responses showed strong evidence of an association between the services offered by school libraries and their perceived contribution to boosting skills and lifelong learning. The statistical tests showed that all the items analysed revealed significant results, with p-values ranging from 0.000 to 0.007, which are well below the significance level of $\alpha = 0.10$. These implied that the students clearly recognize the role of school libraries in developing a range of practical and cognitive skills necessary for continued learning beyond formal schooling.

Notable factors associated with the promotion of lifelong learning through libraries included the opportunities for independent reading, access to informational resources beyond textbooks, exposure to personal development programs, and participation in reading clubs and workshops. These items were perceived to have enhanced students' ability to learn independently, think critically, and acquire skills useful both in school and in later life.

However, there are two items in the analysis which did not show significant associations. They are, 1) *Getting additional skills and knowledge which will help the student in life*, and 2)

Knowing about one's rights and people from different cultures around the world. The statistical test did not demonstrate a meaningful association between the two items with the students' use of the school library. This implies that while school libraries may effectively support the academic-related skills, their contribution to the broader life skills and global citizenship education may currently be limited or not strongly perceived by students.

The trends in lifelong learning support, shown in the line chart, reflect mixed results. While agreement increased to 46.2% by 2023, disagreement also rose to 53.8%, indicating that the library's contribution to lifelong learning is perceived positively by some but critically lacking by others.

This polarization suggests that some libraries may have implemented effective programs to foster lifelong learning, but there is inconsistent implementation across schools. Additionally, a large proportion of respondents (88.5%) disagreed that the library organizes lifelong learning activities. To address this, libraries could introduce structured programs such as reading clubs, workshops, and lifelong skills training to better support continuous learning.

The responses from Heads of Departments (HODs) also revealed that several statistically significant relationships between library services and lifelong learning development. Many specific items demonstrated p-values below the 0.10 threshold, which indicated clear associations. These included: The use of the school library to promote lifelong learning skills ($p = 0.058$), Frequency with which HODs utilize the library's skill-related resources for student development ($p = 0.077$), The presence of specific reading programs in the school to encourage

lifelong learning ($p = 0.046$), Whether HODs organize lectures or sessions on lifelong learning for students ($p = 0.047$), and Whether the department has clearly defined lifelong learning goals for students ($p = 0.009$).

These results implies that HODs who are actively involved in the educational programming and library resource planning are more likely to consider the library as a tool for skill development and long-term learning. The observation aligns with the idea that strategic integration of the school library into departmental goals and activities promotes its effectiveness in achieving Sustainable Development Goal 4, which emphasizes inclusive and lifelong learning opportunities for all.

This result is significant, suggesting that there is a notable association between the organization of lifelong learning activities and the use of library resources. The low p-value (less than 0.10) indicates that differences in staff opinions about lifelong learning support were not random and likely reflect real differences in perceptions or experiences. In other research it has also been noted that the relevance of lifelong learning is appreciated but the implementation is sadly affected by resource, staffing and funding constraints (Ajuwon, 2012; Hands & Candela, 2024; Omar et al., 2024).

Analysis of the responses for objective 4 revealed that 60% of libraries believe increased resources are necessary for improving support for lifelong learning (fig 4.14). However, only 40% report significant efforts in financial literacy education, with the remaining 60% split between slight and somewhat significant efforts.

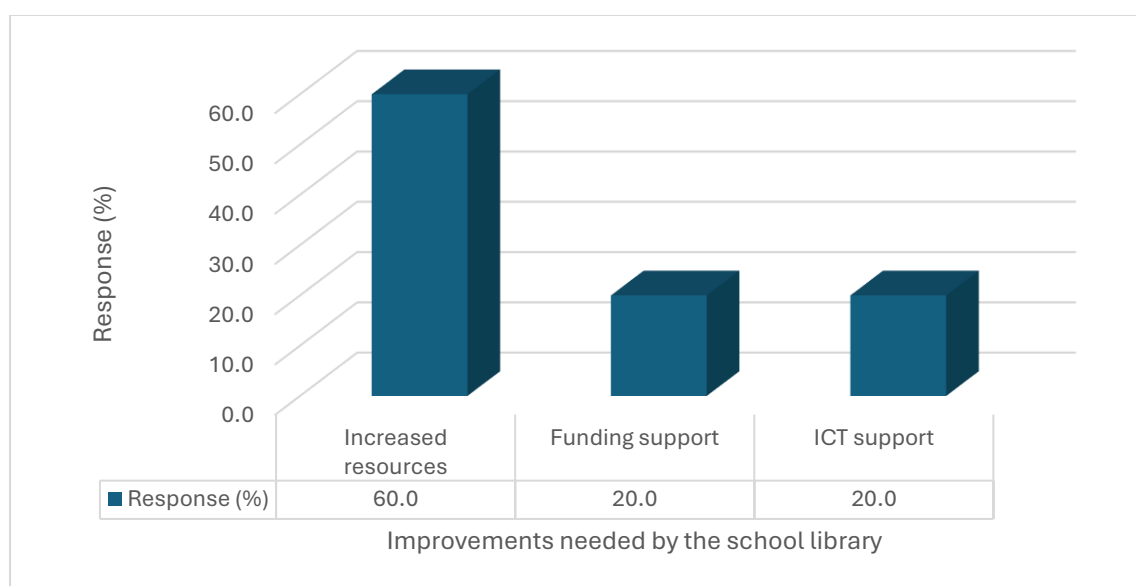


Figure 4.14 Lifelong Learning Improvements and Financial Literacy Support

These plots (figure 4.14) depict a strong demand for more resources in supporting lifelong learning and show that while some progress has been made in financial literacy, the efforts are inconsistent across schools.

The interview responses from the Assistant Headmaster Academic and the School Bursar regarding Objective 4 (assessing how school libraries in the study area boost skills and lifelong learning) focused on both strengths and areas for growth in the role of libraries in supporting ongoing education. When asked how the school library could better equip students for lifelong learning, most respondents (71.4%) indicated that access to career resources was the most crucial factor. This suggests that career development materials, such as information on job opportunities, skill-building activities, and further education pathways, were highly valued in fostering a culture of lifelong learning. Meanwhile, 28.6% of respondents pointed to access to

general information as a key aspect, emphasizing the broader need for readily available learning resources.

Satisfaction levels with the range of lifelong learning resources and programs offered by the school library were generally positive, with 57.1% of respondents expressing satisfaction and 14.3% reporting they were very satisfied. However, a small portion (14.3%) were dissatisfied, and another 14.3% were neutral, indicating that while the library is generally meeting expectations in this area, there is potential to enhance the variety and quality of lifelong learning resources offered.

Their responses were more divided when it came to whether the school library can effectively promote lifelong learning among students. While 42.9% of respondents felt confident that the library could promote lifelong learning, a slightly larger number (57.1%) expressed doubt. This division suggests that, while the library has some programs and resources in place, there may be limitations in its current approach to effectively inspire and sustain a culture of lifelong learning among students.

In conclusion, while the school library was seen as a valuable resource for lifelong learning, particularly through its provision of career-related materials, there is room for improvement in how it engages students and promotes a lifelong learning mindset. Expanding access to a broader range of learning resources and ensuring the library is more actively involved in lifelong learning initiatives may help address some of the concerns raised.

4.7 To Assess how School Libraries in the Study Area Prepare Students for Global Citizenship

In this section the findings are presented in line with the CAMTs contribution story stage, on how global awareness which responsibility, and intercultural understanding are cultivated with the help of the school library. The school library interventions such as National and International events etc. form point of the performance story which connects global citizenship education. This linkage provides the fundamental evidence to SDG4 target 4.7 which stresses on global engagement and sustainable development education.

Global citizenship is a crucial aspect of the SDG4 agenda, and the school library is evidently a platform where students are being prepared for global issues. A large proportion (84.7%) of the students felt prepared to engage with global issues after utilizing the library's resources (figure 5.10). The most valuable aspects of global citizenship training include cultural awareness (36.5%) and environmental sustainability (17.0%), aligning with global educational trends that emphasize the importance of understanding diversity, sustainability, and human rights.

The intention of the chi-square analysis was to determine whether there are meaningful associations between specific library-related practices and students' development of global awareness, intercultural understanding, and responsible civic behaviour in line with Sustainable Development Goal 4 (SDG4).

The responses from students indicated a strong perceived apparent relationship between the role of school libraries and the promotion of global citizenship. The chi-square tests revealed that all items examined were significantly associated with this role. The estimated p-values ranged from 0.000 to 0.053, which are below the standard threshold of $\alpha = 0.10$. The results suggests that the students experience the school library as a supportive space for engaging with global issues, understanding diverse cultures, and learning about social responsibility.

Specifically, students associated the use of the school library to enhanced awareness of global current affairs, the development of empathy through multicultural literature, participation in international-themed school events, and the exposure to civic responsibilities and human rights education. The observed associations mean that the school libraries studied, are not only resource centres but also platforms that foster broader understanding of global interdependence and cross-cultural learning.

The obtained results support the view that libraries, when equipped with the right resources and programs, can significantly contribute to the students' preparedness for participation in a globalized society. The availability of reading materials from different cultures, access to current events and international news, and extracurricular activities such as cultural exhibitions or international awareness days could all contribute to this outcome.

However, there is no significant relationship between whether a student knows about his/her rights and people from different cultures around the world (p-value of 0.255), and whether a student feels more prepared to engage in global issues after utilizing the school library's resources (p-value of 0.255) to prepare students for global citizenship.

Furthermore, with respect to preparing students for global citizenship, most respondents believe that the library's resources are not effectively supporting students in this area. The data revealed that 76.9% of staff do not use the library's cultural resources, and only 23.1% were of the view that the library organizes workshops on global citizenship. However, 65.4% believed that topics such as sustainability, diversity, and social justice should be covered in these workshops, pointing to the demand for more engagement in global education.

Libraries could play a stronger role by integrating global citizenship resources, such as international education materials and cultural exchange programs, to help students develop a better understanding of global issues and responsibilities.

In contrast to the responses from the students, the responses from Heads of Departments (HODs) did not show statistically significant associations between the school libraries and their role in preparing students for global citizenship. The estimated p-values for all items assessed ranged from 0.159 to 0.708, which are all above the 0.10 significance level. This implies that HODs generally do not consider that there is a direct or meaningful relationship between current library activities and students' development of global citizenship competencies.

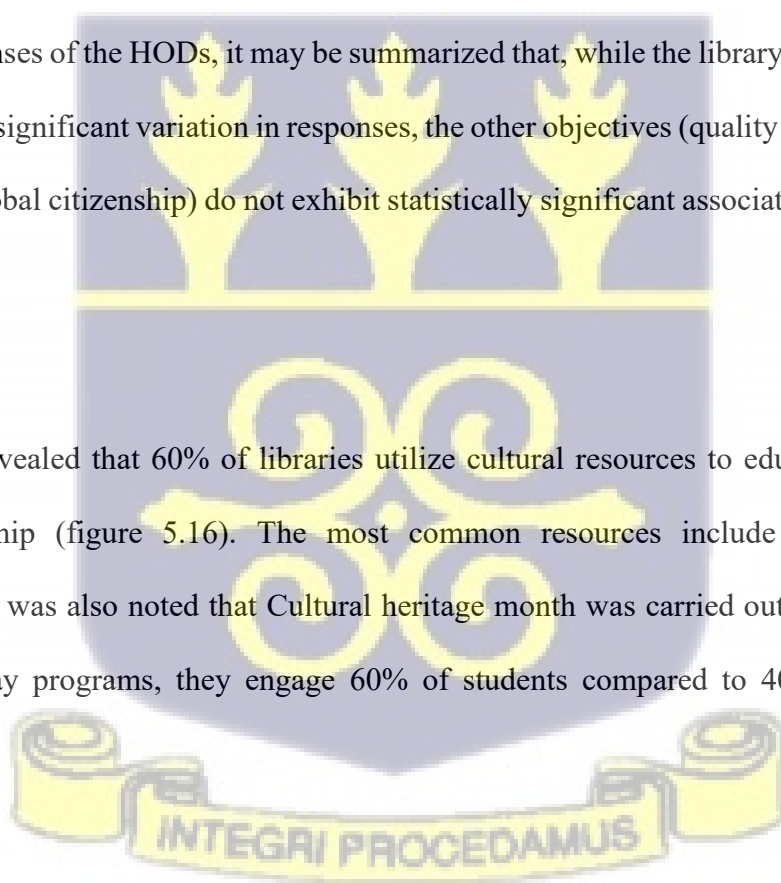
One area of disconnection identified was the perceived use of the cultural resources within the curriculum. The responses of the HODs implies that there was no statistically significant association between the inclusion of such resources and the school library's contribution to promoting global citizenship. This could indicate that the school library activities in this area

are not fully integrated into academic planning or that such initiatives are informal and most likely underrecognized by academic leadership.

The absence of significant associations from the perspective HODs may also reflect limited visibility of global citizenship programming within the library or a gap in collaborative efforts between the academic departments and library staff. While the Senior High School Students may engage in such activities directly, HODs may not be actively involved or informed about them.

From the responses of the HODs, it may be summarized that, while the library's role in lifelong learning shows significant variation in responses, the other objectives (quality education, career support, and global citizenship) do not exhibit statistically significant associations based on the data provided.

The analysis revealed that 60% of libraries utilize cultural resources to educate students on global citizenship (figure 5.16). The most common resources include workshops and constitutions. It was also noted that Cultural heritage month was carried out more often than international day programs, they engage 60% of students compared to 40% (figure 5.16) respectively.



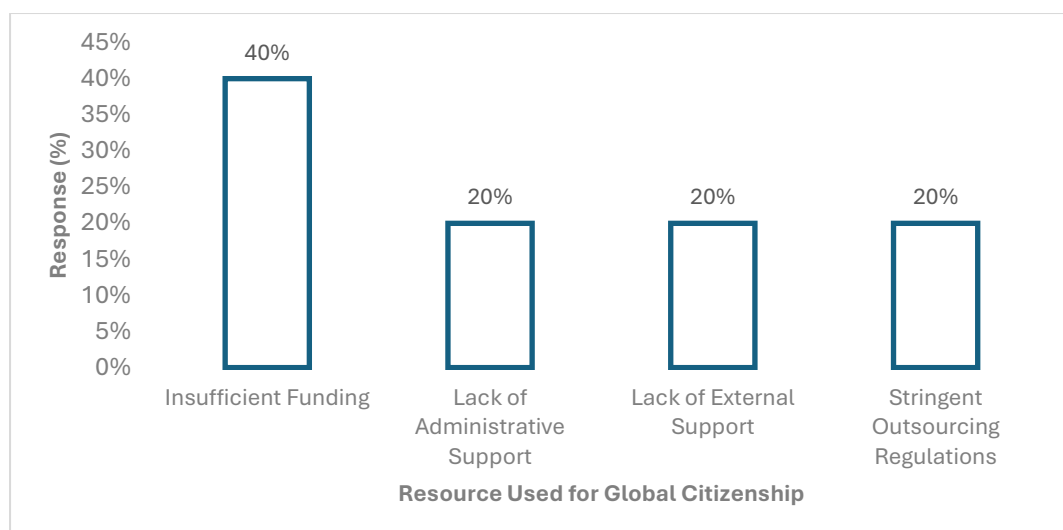


Figure 5.15 Resource Used for Global Citizenship



Figure 5.16 Pie Chart Cultural Events Promoting Global Citizenship

The objectives of the study assess various aspects of how school libraries support education, career development, skill-building, lifelong learning, and global citizenship.

The responses from the Assistant Headmaster and School Bursar concerning the fifth objective (assessing how school libraries in the study area prepare students for global citizenship) reveal how the schools integrate global awareness into their curriculum and activities, as well as the areas where improvements could be made.

Global citizenship education was incorporated into the school curriculum through both teaching (57.1%) and counselling (42.9%). This balanced approach suggests that the schools are not only teaching the concepts of global citizenship directly through lessons but are also offering guidance and support to students to help them understand their roles in a global context.

A notable 85.7% of respondents indicated that their schools organize cultural exchange programs for students, which are essential for fostering cross-cultural understanding and preparing students for a more interconnected world. However, 14.3% of schools do not engage in such programs, indicating a potential area for development.

In terms of cultural education, most schools (85.7%) focused primarily on local traditions, while only 14.3% emphasized on national traditions. This focus on local heritage is important for grounding students in their own cultural identity, though incorporating a broader national or even international perspective may enhance students' global awareness.

To ensure students understand the importance of respecting different cultures, schools employ several strategies. School policies (42.9%) were the most common method, followed by

cultural displays (28.6%) and school regulations (28.6%). These approaches demonstrate a commitment to instilling respect for cultural diversity, though there may be opportunities to increase interactive, student-led initiatives.

A significant number of the Senior High Schools (57.1%) do not provide workshops on global issues, this suggest the existence of a significant gap in opportunities for students to engage with pressing global challenges. The Senior High Schools who provide workshops (42.9%), were already taking important steps in this area, but expanding these programs could better prepare students for active global citizenship.

Schools promote human rights primarily through guest speakers (42.9%), followed by workshops (28.6%) and online resources (28.6%). These activities show that schools were taking steps to engage students in important conversations about human rights, but a more structured, curriculum-based approach could further embed these values into the students' educational experience.

A strong number (85.7%) of the respondents confirmed that they teach students about the constitution of their country, focusing primarily on the right to education (85.7%), with a smaller focus on the right to equality (14.3%). This emphasis on constitutional rights helps students understand their legal and civic responsibilities, which is a critical component of global citizenship.

Guest speakers were invited to speak about global citizenship in 57.1% of schools, while 42.9% of schools do not take advantage of this opportunity. Of the topics covered, peace building is the most prominent (57.1%), followed by international relations, cultural diversity, and sustainable development (14.3%). These topics were crucial for fostering a mindset geared toward global cooperation and understanding.

In summary, while the schools in the study area were making commendable efforts to incorporate global citizenship into their curriculum, there are areas where they could improve. Increasing the frequency of global issue workshops, expanding the topics covered by guest speakers, and broadening the cultural perspectives taught could further enhance students' readiness for global citizenship. Additionally, encouraging more schools to adopt cultural exchange programs and human rights initiatives would help foster a more globally conscious student body.

Further analysis of the result by focusing on the specific objectives outlined in the study and the observed trends related to these objectives.

	Objective 2: Quality Education	Objective 3: Career Support	Objective 4: Lifelong Learning	Objective 5: Global Citizenship
Chi-Square	1.5398110661268556	0	5.996396396396396	1.3295454545454546
p-value	0.6731129023968544	1	0.014335129694626431	0.2488860979807957

4.8 To determine the school libraries' operation towards the attainment of Sustainable Development Goal 4 (SDG4).

Contribution Analysis Model Theory (CAMT) requires the use of feedback to refine the contribution story. This section thus reflects the operational mechanisms by which the school library's review and improve upon their services in line with SDG4. The findings this highlight how feedback helps the school library evolve and enhance its capacity for sustainable quality education.

The school libraries' operation towards the attainment of Sustainable Development Goal 4 (SDG4) is important to determine. The results reflect the extent to which school administrators, library staff, and academic leaders integrate SDG4 principles in educational planning, staff training, and library operations.

Among the Heads of Departments (HODs), 88.5% (n=23) indicated that school administrators had not introduced academic staff to SDG4, while only 11.5% (n=3) responded positively. However, 92.3% (n=24) had independently heard of SDG4, this suggests that a personal awareness exists despite limited institutional advocacy.

When asked whether academic staff have knowledge of SDG4, 61.5% (n=16) agreed and 15.4% (n=4) strongly agreed, while 15.4% (n=4) disagreed and 7.7% (n=2) were neutral. This implies that although SDG4 knowledge was fairly distributed, the gaps in training and official guidance may hinder uniform understanding across departments.

Formal education of academic staff on SDG4 responses from the investigation revealed fragmented efforts. Only 11.5% (n=3) strongly agreed and 23.1% (n=6) agreed that such education had taken place, while 26.9% (n=7) were neutral and 38.4% (n=10) disagreed or strongly disagreed.

Concerning the presence of SDG4 implementation plans, 30.8% (n=8) agreed and 7.7% (n=2) strongly agreed that such plans exist within their schools, while another 30.8% (n=8) were neutral and 30.7% (n=8) disagreed or strongly disagreed.

Encouragingly, 84.6% of HODs (n=22) confirmed that academic staff have attended programs on quality education. Specifically, 50.0% (n=13) agreed and 34.6% (n=9) strongly agreed. Only 7.6% (n=2) remained neutral, and 7.6% (n=2) disagreed.

In terms of institutional planning, 80.8% (n=21) of HODs agreed or strongly agreed that their schools have detailed plans to achieve quality education, while 7.7% (n=2) remained neutral and 11.5% (n=3) disagreed.

From the perspective of library staff, 80.0% (n=4) reported not receiving training on the introduction to SDG4. Similarly, 60.0% (n=3) stated that their schools did not have SDG4 implementation plans. However, when asked about training on quality education, 60.0% (n=3) indicated they had participated in such programs.

Three of five library staff (60.0%) also affirmed the availability of detailed quality education plans that involve the library, while two (40.0%) indicated otherwise. These results indicate that although inclusion exists in some institutions, it is far from universal.

Among assistant headmasters and school bursars, only 42.9% (n=3) acknowledged formal training for academic staff on SDG4. A significant 71.4% (n=5) indicated that there was no available SDG4 policy to work with, and all respondents (100%) confirmed that their schools lacked an SDG4 implementation plan.

On the inclusion of libraries in school planning, 57.1% (n=4) reported that their schools had detailed plans involving the library in promoting quality education, while 42.9% (n=3) said no. These findings highlight the lack of consistent frameworks for engaging libraries in strategic educational planning toward SDG4.

In summary, the quantitative results reveal a gap between general awareness of SDG4 and its operationalization in school libraries. While academic staff may have some exposure to SDG4 concepts, institutional-level implementation, structured training, and policy integration—especially regarding the role of libraries—remain inadequate and uneven across the schools surveyed.



4.9 Qualitative Results from Library Staff and School Administrators

The qualitative findings from the interviews with library staff and school administrators in Kassena Nankana East Municipal Assembly provide valuable insights into the contribution of

school libraries to the realization of Sustainable Development Goal 4 (SDG4). The responses offer significant perspectives on how libraries support quality education, career readiness, lifelong learning, and global citizenship.

4.9.1 To assess the State of the School libraries

The qualitative data obtained from library staff and school Bursars and Assistant Headmasters Academic (administrators) revealed a similar perspective on of the school library's fundamental importance, alongside pressing concerns about the school libraries operational challenges. All the respondents emphasized the library's critical role in educational development, although they highlighted serious constraints which impede the effectiveness of service delivery by the school libraries.

One of the Library staff described the school library as *"... I think is a very very important for education system"* and another Library staff affirmed that it should be *"... the most important thing to considered in the learning process in every school."* Another library staff stated that, *"Without the library, many students will have issues with research information or assignments. Hmm, we are even struggling to keep the work ooh!."* This sentiment reflects the positions of the school libraries as essential facilitators of learning.

Of particular concern is the state of the school library infrastructure. According to the assistant headmasters and school bursars, the school libraries in the study area "lack dedicated spaces" and are "confined to small rooms with insufficient seating capacity." In some cases, libraries could accommodate only a limited number of students at a time, which severely restricted usage

during peak hours. One assistant headmaster noted that, *frankly, the library spaces is limited is just a room with a few shelves and some benches, students have no conducive space to study, and the environment is not motivating ok.*” This observation is consistent line with the views of the HODs and students who stressed on the importance of functional infrastructure in enhancing library service delivery.

As noted by the students the Senior High School Library staff also complained about the absence of IT infrastructure at the library. *“We have don’t computers ooh not even one,”* said one staff member. Another library staff added that, *“In today’s world, I expected to run a school library with internet or even digital catalogues”* These shortcomings prevent students from developing information literacy and digital research skills that are fundamental to lifelong learning and future employment.

Staffing of senior high school libraries also emerged as a critical issue. A school bursar explained by stating that, *“We don’t have trained librarians. Teachers are reassigned to the library, and they do their best with the support of student prefects, but they’re not equipped for the job.”* This statement was supported by a library staff who said, *“I like helping the students, but I’ve never received any formal training hmm. We are learning on the job.”* These accounts reinforce the fact that professional development and adequate staffing are some of the urgent needs of the School Library for effective library service delivery.

These challenges, notwithstanding, the Assistant Headmasters acknowledged the positive perception of library staff among students. One of them said, *“Students trust the library staff;*

they are approachable and supportive,”. This suggests that interpersonal interactions remain a strong point, even as resource constraints limit what the library can offer.

The respondents also drew attention to a disconnect between student needs and available resources. A library staff mentioned that, *“The Students often request for career materials, textbooks, or digital content that we don’t have.”* The administrators supported this observation by emphasizing the need for diversified, up-to-date materials. As one assistant headmaster described it, *“We are still relying on textbooks from old syllabi and handouts from individual and organizations this affects student performance and morale.”*

In sum, the state of the library, as described by both library staff and administrators, reflects a facility with high potential but limited capacity. The consistent themes across interviews—lack of infrastructure, technology, staffing, and up-to-date resources—highlight a systemic issue that affects educational equity and quality. Strengthening these areas is essential if school libraries are to meet the requirements for learning and fulfil their role in achieving Sustainable Development Goal 4.

4.9.2 To assess how school libraries in the study area support quality education.

The Senior High School Library staff emphasized the indispensable role of school libraries in fostering quality education. A library staff stated that, *“The library is an important center; and students cannot get most of the reading materials they need to help them excel in their academics.”* This conviction suggests that the role of libraries as critical for deep learning and critical thinking cannot be overemphasized.

Despite this acknowledgement, several respondents pointed out that the libraries lacked the necessary infrastructure and updated materials. An assistant headmaster commented that, *“We don’t have space ooh!, and most of the books are old and irrelevant to the current curriculum we are using.”* These structural challenges could be seen in most of the schools, and this has the potential to ultimately indicate that these substandard library facilities will undermine educational quality and subsequently the attainment of SDG 4.

Additionally, the lack of qualified library personnel was cited as a limitation. One school bursar commented as indicated earlier, *“We don’t have trained librarians... affects the effectiveness of the service.”* The HODs also stressed the need for professional staffing in the school libraries.

4.9.3 To determine how school libraries in the study area equip students for careers.

The senior high school library staff showed a strong sense of purpose in preparing students for career opportunities. One respondent noted, *“once in a while we invite people to speak with students, even if it's not frequent.”* Since libraries are pivotal in bridging the gap between schooling and employment readiness, efforts to address these limitations are consequential to the provision of effective career services by the school libraries.

Nonetheless, funding constraints were a recurring theme. One of the library staff explained that, *“We don’t have budget for career materials, and we rely on kind individuals to bring in*

materials.” This challenge is not uncommon in low-resource educational settings, as observed in this study.

The Administrators acknowledged the potential role of libraries in career guidance but lamented the limitations. One of the senior high school bursars pointed out that, *“We don’t have place like career area...”* Such limitations reduces the capacity of school libraries to fully support the evolving needs of students in today’s competitive job environment.

4.9.4 To determine how school libraries in the study area boost skills and lifelong learning for all.

The contribution of school libraries to lifelong learning was also explored. Library staff expressed a clear understanding of their potential role. One stated, *“Once a while we organize workshops, very few students cines...”* This stresses the fact that, sustained student engagement requires deliberate programming and effective outreach.

The senior high school Administrators raised concerns about the absence of formal programs for lifelong learning in the schools. An assistant headmaster stated that, *“We don’t have any special program to promote skills like financial literacy or critical thinking through the library.”* The apparent lack of operational effectiveness is key to library impact in educational settings and may hinder the attainment of SDG 4.

4.9.5 To assess how school libraries in the study area prepare students for global citizenship.

The senior high school Library staff also shared their involvement in global citizenship initiatives. Some described organizing cultural days and diversity events. *“We observe International Day and Cultural Heritage Month. It’s not grand, but it teaches students to appreciate other cultures,”* said one librarian. This affirms the need for school libraries to serve as platforms for global education and intercultural dialogue, unfortunately, the absence of resources and workshops makes the service provision by the library difficult.

Notwithstanding, collaboration and resource constraints were seen as limiting factors. As one library staff put it, *“We would love to work with NGOs or other schools, but there is no formal policy or support for that.”* Similarly, an assistant headmaster noted, *“There’s a need for better infrastructure and partnerships to make global citizenship a real component of the library’s function.”* External collaborations amplify the impact of citizenship education, but the location of the school and funding constraints limit this.

The senior high school administrators and library employees’ accounts demonstrate a keen understanding of how senior high school libraries may help to achieve SDG 4. However, ongoing obstacles prevent this promise from being fully realized, including a lack of structured programming, a lack professional library staff bad infrastructure, and insufficient money. To bridge these gaps, school libraries must be elevated from passive repositories to active educational agents through consistent funding, legislative support, and strategic alliances.

4.9.6 To determine the school libraries' operation towards the attainment of SDG4.

The qualitative responses from library staff, assistant headmasters, and school bursars provided critical insights into the extent to which school libraries operate in alignment with Sustainable Development Goal 4 (SDG4). Thematic analysis of interview transcripts revealed concerns surrounding awareness, training, policy integration, and institutional planning related to SDG4 implementation.

Limited awareness and involvement in SDG4 planning across the responses, a prevailing theme was the limited formal introduction and involvement of library staff in SDG4-related matters. Several library staff noted that they had not received any formal training on the Sustainable Development Goals. One library officer remarked, *"We have not been trained on SDG4. I only heard about it from a friend, but no one has shown us how the library fits into it."* Another stated, *"There is no official policy or document that guides what we do in relation to SDG4."*

Assistant headmasters and bursars echoed similar concerns. One assistant headmaster emphasized, *"The school does not have any clear plan that includes the library in implementing SDG4. It is not something we have sat down to discuss."* A bursar added, *"Our priority is managing finances and logistics. I have not seen any SDG4 documents related to library functions in this school."* These statements underscore a systemic lack of structured policy or communication connecting SDG4 to school library roles.

Training on Quality Education but No Strategic Integration While some library staff acknowledged participating in training sessions on quality education, the knowledge gained appeared to be generic and not explicitly linked to SDG4 frameworks. One participant shared,

“Yes, I have attended workshops on improving educational outcomes, but it was not tied directly to the SDGs.” Another Assistant Head Master added, *“We are willing to help, but without proper policy, it’s difficult to know what to do beyond lending books.”*

This disconnection between broad educational goals and the specific contributions expected from school libraries was also evident in responses from assistant headmasters. One noted, *“Our school does some work on quality education, but we don’t have a mapped-out plan that connects the library to it.”*

Absence of Implementation Plans and Inclusion of Libraries Another significant theme was the absence of formal SDG4 implementation strategies in schools. According to the assistant headmasters, *“There is no SDG4 implementation plan ...that mention of the library’s role.”* A bursar added, *“The school management has not initiated any framework to show how SDG4 is being achieved.”* These observations were supported by the library staff, one of whom remarked, *“We operate the library as usual. Nothing has changed before SDG4 came.”*

Nevertheless, some participants expressed optimism about the library’s potential to support SDG4 if given the mandate and resources. One assistant headmaster suggested, *“If the school could develop an SDG4 plan with the library, it would help. The library can then be used to promote reading, gender inclusion, and even ICT literacy, but we are not.”*

Inconsistent Institutional Support and Recognition A final recurring theme was the inconsistent institutional support for libraries as strategic partners in achieving SDG4. While library staff were enthusiastic about contributing to quality education, they felt underutilized and excluded

from decision-making processes. A library staff said, *“When the school is planning programs or training for teachers they don’t call us. I think they feel the library is just for keeping books ooh!.”*

Assistant headmasters and bursars confirmed this pattern of marginalization. As one bursar stated bluntly, *“The library is but not actively involved in decision-making.”*

The qualitative data reveal that although library staff and administrators recognize the library’s potential role in advancing SDG4, current practices fall short of structured, goal-oriented implementation. There is limited training, weak policy integration, and a lack of strategic planning that includes the library as a partner in delivering inclusive and equitable quality education. Without deliberate inclusion, the full contribution of school libraries toward SDG4 will remain untapped.

4.10 Summary

The data analysis focused on the role of school libraries in the achieving Sustainable Development Goal 4 (SDG4), at the Kasena Nakana East Municipal Assembly, which places a strong emphasizes on very important targets (quality education, career, lifelong learning and global citizenship). The study's conclusions are based on input from students, school staff (including heads of departments, library staff, and assistant headmasters), and an analysis of how school libraries contribute to educational goals in four Senior High Schools within the Kasena Nankana East Municipal Assembly.

The demographics of the schools in the study area reflected a wide range of participants, with a significant number of the respondent being students. The gender breakdown revealed a slight plurality of female students compared to male students, while staff were mostly male. Most of the student respondents fall between the age 15-19 years, and a large, sizable number of them were boarding students, reflecting the demographics of the schools in the area.

With respect to the state of the School Libraries a significant number of the respondents were of the view that the school libraries were useful, in respect to that 52.2% believed that the library met their needs. On the other hand, 29% of the respondents felt the libraries lacked several essential resources, such as digital resources, infrastructure, and learning materials. The students perceived the library staff friendly, but the need for enhanced digital and technological resources was bemoaned by both students and staff.

The impact of the services of the School Library On the attainment of SDG4 were evaluated based on the SDG4 targets. For the quality education target, students respondent indicated they frequently used the library for academic purposes, and the value of the library in providing high quality education was widely acknowledged. But there was a gap in digital resource availability, which limited the library's full potential in supporting diverse learning needs.

In addition, for career readiness target, the results showed that the School libraries played a notable role in preparing students for careers, with many students attending workshops on career planning and skill-building. However, there were significant gaps in resources, particularly regarding technology and career-focused materials have prevented the library from reaching full potential in meeting a range of learning needs.

Another target was lifelong learning. The study discovered that school libraries contribute to lifelong learning by providing chances for skill development opportunities, nevertheless, more organized programs, initiative and resources are required as indicated by the respondents. Improvements in digital skills and financial literacy were identified as the areas where the School Libraries' impact may be increased.

Finally, with respect to the global citizenship School libraries were somewhat successful in fostering global citizenship through workshops and cultural resources, there was however, the need for further improvement, especially in areas related to diversity, sustainability, and global challenges.

A few issues were noted as indicated by the respondents. They include lack of adequate infrastructure, insufficient technological resources, and untapped staff potential. To assist the School Libraries to completely achieve their role in attaining SDG4, Boosting investment and creating more job and lifelong learning programs was suggested in this study.

The overall conclusion emphasizes the critical role of school libraries play in the educational ecosystem but to fully achieve the SDG4 objectives, it is necessary to make significant and deliberate improvements in resource availability, technological integration, and program development.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter presents the discussion of the results obtained for this study. The objective of this chapter is to discuss how school libraries in the study area fulfil their mission across four key targets of SDG4: supporting quality education, preparing students for careers, promoting lifelong learning, and fostering global citizenship. The chapter begins with a discussion on the state of the school library at the study area. The combined insights from Assistant Headmasters and School Bursars, Head of Departments (Department heads), library staff, and students offer a holistic view of the library's contributions and challenges.

5.2. The State of School Libraries in Kassena Nankana East Municipal Assembly

Interpreting these results through the lens of CAMT, the state of the school libraries represents the evidence base from which credible claims about their contribution to SDG4 can be made. The physical, human and informational resources constitute the inputs within the models logic chain, shaping the boundaries of what libraries can realistically achieve. In CAMT terms, this evidence helps to address the attribution question whether positive educational outcomes can be plausibly linked to the operational condition of the libraries or must instead be ascribed to external systemic factors. Thus, the baseline conditions serve both diagnostic and explanatory functions within the contribution narrative.

School libraries play a pivotal role in the academic success and intellectual development of students. However, the state of Senior High School libraries in Kassena Nankana East Municipal Assembly reflects a dire need for significant improvement. This discussion explores the challenges faced by these libraries based on observations and literature support, highlighting the urgent need for reform. One of the most pressing issues is the limited space allocated to school libraries. Most libraries in the area are confined to single, small rooms, often repurposed classrooms, which restricts the number of users and materials they can accommodate. According to Adetayo et al., (2023), inadequate physical spaces in libraries hinder effective learning and discourage library use among students. The small spaces fail to create a conducive environment for study or encourage the exploration of knowledge beyond textbooks.

Another notable issue is the absence of book classification systems. Libraries in Kassena Nankana East Municipal Assembly lack standardized cataloging and classification systems such as the Dewey Decimal Classification (DDC). Without these systems, locating and retrieving books becomes cumbersome for both students and teachers. This lack of organization undermines the very purpose of libraries as centers for easy access to information (Woko, 1990). According to Muhammad et al., (2018, p. 56), classification and cataloging are essential to making library collections accessible and user-friendly. It must be noted that, the scarcity of resources in these libraries further exacerbates the problem. The available books are predominantly textbooks for core subjects, such as Mathematics, English, and Science. There is an evident lack of materials for elective subjects, leaving students with little support for comprehensive academic exploration. Studies reveal that diversified resources in school

libraries positively influence students' academic performance and foster creativity (Cletus & Udumukwu, 2023; Suleiman et al., 2018).

In the 21st century, digital resources are indispensable to education. Unfortunately, none of the libraries in the Kassena Nankana East Municipal Assembly are equipped with digital tools or electronic resources. This absence widens the digital divide and deprives students of opportunities to engage with modern learning technologies. Researchers have indicated that the integration of digital resources in school libraries promotes quality education by enhancing information literacy and preparing students for the demands of a globalized knowledge economy (Fotima Abdurahimovna, 2020; Haleem et al., 2022). Moreover, a critical shortcoming is the absence of professionally trained librarians in any of the schools (Suleiman et al., 2018). Library management is typically left to teachers with little or no training in library science. Professional librarians are crucial for the efficient management of libraries, as they possess the skills needed to organize resources, guide students in research, and foster a reading culture. Research highlights that the presence of trained librarians significantly improves library services and usage (Shonhe, 2019).

The furniture in these libraries is neither adequate nor suitable for library use. Chairs and reading carrels do not meet ergonomic standards and are often in a state of disrepair. The absence of comfortable and functional furniture discourages students from using the library for extended periods. Research underscores the importance of appropriate furniture in creating an inviting and effective library environment (Shonhe, 2019). Additionally, the shelving in these libraries is both inadequate and poorly maintained. Books are often stacked haphazardly, leading to wear and tear. The weak and unfit shelves are not only unsuitable for preserving

books but also pose safety risks. Proper shelving is crucial for the systematic arrangement and preservation of library materials (Batchman & David, 2023; Busayo, 2011).

Another notable fact from this study's observation is the substandard condition of shelves in these libraries reflects a lack of investment in library infrastructure. Many shelves are either broken or unstable, making them unsuitable for holding books securely. This situation compromises the longevity of books and diminishes the overall aesthetic and functional quality of the library space. As a durable and well-designed shelving is essential for effective library operations (Busayo, 2011).

As a result of the forgoing, it is essential to add that the state of school libraries in Kassena Nankana East Municipal Assembly is characterized by significant challenges, including small spaces, lack of classification systems, inadequate resources, absence of digital tools, untrained staff, substandard furniture, and poor shelving. Addressing these issues requires a collaborative effort from government bodies, non-governmental organizations, and community stakeholders. Investment in infrastructure, the provision of diverse resources, the integration of technology, and the recruitment of trained professionals are critical steps toward transforming these libraries into effective learning hubs. By doing so, the libraries can fulfill their role as vital contributors to the academic and personal growth of students.

5.3. To Assess how School Libraries in the Study Area Support Quality Education.

The discussion integrates CAMTs theory of change to connect inputs (library facilities, collections professional staff, ICT tools) with output (students' engagement, academic support, and skill development) and outcome (enhance quality education, career readiness, lifelong

learning and global citizenship). With the aid of the influences chain, the results analysis (section 5.3-5.6) divulge how the preliminary assumptions of CAMT transforms into practical Ghana senior high school context. In addition, with the aid of the contribution story the results will produce a narrative that shows that the senior high school libraries will promote the achievement of SDG4 targets with the necessary mediation factors (infrastructure and policy aspirations).

The role of school libraries in supporting quality education is crucial, as revealed through responses from department heads, assistant headmasters, bursars, library staff, and students. However, the effectiveness of the library's services in this area shows a mix of positive contributions and areas requiring improvement.

Students overwhelmingly recognize the importance of the library in achieving a quality education. The students (96.1%) believe that library services are necessary for obtaining a quality education aligns with research by (Mahwasane, 2017), who emphasize that effective school libraries positively correlate with student academic achievement. (Brooks, 2011; Goss, 2022). However, the frequency of library visits varies significantly. While 63.8% of students visit the library daily, a notable 26.1% visit only weekly, and 9.6% visit monthly or less frequently. These statistics suggest that while students understand the library's importance, their actual engagement could be improved.

In addition, among the resources available in the school libraries, textbooks remain the most used, with 70% of students selecting them as their primary resource. Digital and online

resources are underutilized, with only 2.9% using computers and 1% using online sources. This shows a gap in the provision of modern resources, which could limit students' ability to access diverse learning materials and enhance their academic performance.

The dominance of printed books as the primary resource reflects a traditional reliance on physical materials, while digital and online resources remain underutilized. Researchers have shown that integrating technology into library services significantly enhances students' information literacy and engagement. In contrast, only 2.9% of student respondents reported that they use computers, and a mere 1% utilize online resources. These statistics underscore a digital divide that limits students' access to the broader spectrum of learning materials available online. Addressing this gap is critical, as technology-rich libraries have been shown to foster collaborative learning and improve academic outcomes (Garrick et al., 2013; Khine & Fisher, 2003; Lonsdale, 2003; Zainab & Abrizah, 2008). This was echoed by the students also expressed the need for better support from the library, with 44.9% calling for improvements in computer resources and 44.4% seeking enhanced learning resources. The desire for a more resourceful and modern library is echoed in students' requests for expanded services like internet access (15.2%) and access to e-resources (8.6%).

Library staff unanimously view the school library as a critical tool for achieving quality education, with all the library staff (100%) agreeing that the library is essential for this purpose. This belief is shared by other researchers. The unanimous recognition of the library's importance by library staff aligns with the literature emphasizing their role as facilitators of learning (Dickinson, 2015; Lonsdale, 2003; Merga, 2020). However, the finding that only 60% of staff organize activities such as workshops and reading clubs suggests missed opportunities

to actively engage students. It has been noted that, such programs are critical for promoting a culture of reading and learning. Furthermore, staff consensus on the inadequacy of library resources corroborates findings made by other researchers which highlight the detrimental impact of resource shortages on library effectiveness.

The department heads (HODs) provide a more critical view of the library's effectiveness. Only 19.2% of department heads strongly agreed that the library's programs enhanced the learning experience, while 65.4% agreed. However, a significant proportion (23.1%) either disagreed or strongly disagreed, this indicates that for some departments, the library does not fully meet their expectations. Furthermore, 46.2% of department heads felt that the library does not effectively collaborate with their departments. This suggests a lack of integration between the library and various academic departments, which may limit the library's ability to fully support departmental educational goals. The limited awareness of library programs is also concerning, as 80.8% of department heads reported that they were not aware of the library's events and initiatives. The limited collaboration between the library and academic departments is a significant concern, with 46.2% of department heads reporting insufficient integration. As observed by some researchers, (Kammer et al., 2021; Lindsay, 2005; Lonsdale, 2003; Pihl et al., 2017) The lack of awareness of library programs (80.8% of department heads) further exacerbates this disconnect, it implies that there is a need for improved communication strategies. Strategies such as regular departmental meetings and joint initiatives could bridge this gap, this will foster a more cohesive educational environment (Kammer et al., 2021; Lonsdale, 2003).

At Kassena Nankana East Municipal Assembly, the library lacks the necessary infrastructure and resources to support education adequately as noted by 57.1% of the Assistant Headmasters and School Bursars. They recommend significant improvements in infrastructure and the availability of qualified staff to enhance the library's role in promoting quality education.

These structural issues highlighted by assistant headmasters and bursars, are consistent with challenges documented in similar contexts as noted by other researchers. It is a well noted fact that (Barrett, 2010; Lonsdale, 2003; Nengomasha et al., 2012). Investments in physical infrastructure, digital resources, and professional development are therefore necessary to address these shortcomings of the school libraries at Kassena Nankana East Municipal Assembly.

The library is widely regarded among all categories of respondents as an essential component in supporting quality education, with strong recognition from both students and staff. However, significant gaps in resources, infrastructure, collaboration, funding, and the promotion of library activities are limiting its full potential.

5.4. To Determine how School Libraries in the Study Area Equip Students for Careers.

In assessing how school libraries equip students for their future careers, responses from department heads, assistant headmasters, bursars, library staff, and students provide a comprehensive view of the library's role and effectiveness in career preparation. It was revealed that Students' involvement in career preparation through library resources shows room for improvement. An appreciable 66.7% of the students have not attended planning tool

workshops in the library, leaving only 33.3% who have participated in these essential career-related activities. Among those who did attend, the most beneficial workshops were “career exploration” (30.4%) and “resume building” (12.6%). Despite limited workshop participation, a high percentage of students (90.3%) felt more confident about their career prospects after utilizing the library's resources.

The study reveals that only 33.3% of students had attended career-related workshops in the library, such as “career exploration” (30.4%) and “resume building” (12.6%). This low participation rate suggests a gap in the promotion and accessibility of such events. Research highlights the importance of career workshops in libraries, and it has been noted that structured programs significantly enhance students' career preparedness by building their confidence and skills (Woolls & Hamner Williams, 2019). Moreover, the finding that 90.3% of students feel more confident about their career prospects after utilizing library resources demonstrates the potential impact of these programs when effectively delivered.

The research findings revealed that library staff have a strong recognition of the importance of the library in career preparation. All the library staff (100%) believe guest speakers are crucial for career development, and they work to provide more targeted resources and collaborate with career service providers (60% and 40%, respectively). However, the library staff also face challenges in acquiring career resources due to insufficient funding (40%) and lack of administrative support (20%).

Acknowledgment of the importance of their role in career development by the library staff, with 100% supporting initiatives like inviting guest speakers and 60% collaborating with career service providers. This is consistent with the observations by other authors that librarians are uniquely positioned to support career readiness by offering targeted resources and facilitating connections with professionals (Lonsdale, 2003; Woolls & Hamner Williams, 2019). However, the study identifies funding constraints and limited administrative support as significant barriers. Such challenges are echoed in the literature, where inadequate funding is frequently cited as a limiting factor for libraries seeking to expand their services (Akande & Bamise, 2017).

Department heads reported that there is limited engagement with the library's career initiatives. The findings showed that 84.6% of department heads had not invited guest speakers to career talks, and 76.9% of departments never attended library workshops. Only 15.4% of department heads were aware of career guidance resources offered by the library, this suggest that there is a gap in communication and collaboration.

The lack of collaboration between academic departments and the library is another significant finding which indicates limited use of the library for career guidance. This disconnect reflects a broader issue of underutilization of library services (Pihl et al., 2017), thus, there is the need for stronger partnerships between librarians and educators. Fostering closer collaboration, libraries have the potential to align career programs with departmental goals and to encourage greater participation.

On the other hand, the assistant headmasters and bursars support the notion that the library could play a more active role in career preparation, but they highlight a need for infrastructure improvement. 57.1% of them called for better facilities, while 42.9% saw the need for more qualified personnel and resources.

Assistant headmasters and bursars pointed to inadequate facilities and the need for more qualified staff as critical barriers to the library's role in preparing students for career. These findings are consistent with observations made by other researchers, that well-resourced and adequately staffed libraries are essential for meeting students' evolving needs (Akande & Bamise, 2017). Without sufficient infrastructure, libraries may struggle to provide the modern tools and environments necessary for effective career guidance, as observed at Kassena Nankana East Municipal Assembly.

The findings ultimately indicate that while the school libraries at Kassena Nankana East Municipal Assembly have the potential to play a key role in equipping students for their careers, there are gaps in participation and resource availability. Thus, increased collaboration between departments and the school libraries will enhance funding, and more targeted career programs would help bridge these gaps and ensure that the library better supports students' career readiness.



5.5. To Determine how School Libraries in the Study Area Boost Skills and Lifelong Learning for all.

The ability of school libraries to boost skills and promote lifelong learning is essential in preparing students not only for academic success but also for their future personal and professional development (Lee, 2024). The research data divulged that the Students Kassena Nankana East Municipal Assembly Senior High School demonstrate a strong interest in developing lifelong learning skills, 98% of them expressed the desire to acquire additional skills and knowledge to help them in life. However, this interest does not correlate with the actual library usage rate, since only 57.1% of students used the library daily for skill development, while 27.6% visited weekly, 15.3% rarely visit the library. The observed overwhelming interest among students (98%) in acquiring additional skills and knowledge underscores the intrinsic value they place on lifelong learning. This disparity, however, reflects the challenges libraries face in translating student interest into active participation. Regular library usage has been associated with improved literacy, research skills, and academic achievement among students (Banleman, 2017), hence there is the need for strategies to increase engagement.

The findings pointed out that financial literacy workshops are underutilized resource, and the attendance to such events by students is very low (62.1% of students never having attended such events). The relevance of practical skills like financial literacy are integral to lifelong learning and should be a core component of library programs. Expanding these offerings could address a critical gap in students' skill sets, and it will help them navigate real-world challenges more effectively.

Library staff recognize their role in promoting lifelong learning, with 60% identifying the need for increased resources and 40% acknowledging the need for improved financial literacy support. However, the limited budget and funding constraints hinder the library's ability to provide comprehensive lifelong learning resources. Staff reported that only 40% of students use the library frequently for research and skill development, indicating that more could be done to attract and engage students in lifelong learning activities. The library staff also pointed to workshops and lectures as effective tools, but the frequency of these events appears to be lacking. With only 20% of students attending career-related workshops, there is an evident need for better promotion and organization of learning opportunities.

Although the Library staff recognize their role in promoting lifelong learning, they cite limited budgets and inadequate resources as major obstacles. Only 40% of them indicated that the use of the library for research and skill development by students is low. These findings are consistent with research, which highlights the detrimental effects of funding shortages on library services (Akande & Bamise, 2017; Barrett, 2010; Lonsdale, 2003). The need to improve the frequency of workshops and lectures as effective tools for lifelong learning, cannot be overemphasized.

The Department heads at Kassena Nankana East Municipal Assembly offer a more critical perspective on the library's role in lifelong learning. Only 46.2% of department heads believed that the library effectively supports lifelong learning, while the remaining 53.8% felt that the resources provided are insufficient. The findings revealed that most of the department heads (84.6%) did not engage in reading programs or initiatives to promote lifelong learning. This lack of alignment hinders the library's ability to cater for the specific needs of different

departments. It has been argued that collaboration between librarians and educators is critical for integrating library resources into the broader curriculum and fostering a culture of continuous learning (Kammer et al., 2021; Lindsay, 2005; Pihl et al., 2017). Hands-on learning opportunities created by departments and availability of relevant resources.

Assistant headmasters and bursars similarly expressed concerns about the library's capacity to support lifelong learning. 57.1% of them indicated that improvements in infrastructure are necessary to create a conducive environment for learning. Additionally, they pointed out the need for more qualified staff and better training to support students to develop critical skills. Without proper facilities and skilled personnel, libraries struggle to meet the diverse needs of their users effectively.

Although they recognize the importance of lifelong learning, the assistant headmasters and bursars also noted that there is currently no formal lifelong learning programs integrated into the school curriculum. This further limit the library's ability to play an active role in developing students' lifelong learning habits. It has been reported that, the role of school library in enhancing educational outcomes is linked to its operational effectiveness (Fatoni et al., 2024).

The analysis summarily strongly suggests that while there is clear recognition of the importance of lifelong learning, the school libraries face significant challenges in fully realizing this objective. Limited resources, underutilization of available programs, and insufficient collaboration between departments and the library all contribute to the gap between student interest and actual engagement in lifelong learning. By expanding resources, organizing more frequent workshops, and fostering closer ties with academic departments, the libraries can

better support students in developing the skills necessary for lifelong learning and success beyond the classroom.

5.6. To Assess how School Libraries in the Study Area Prepare Students for Global Citizenship.

The role of school libraries in preparing students for global citizenship is an essential objective in fostering awareness, inclusivity, and engagement with global issues. There is a strong interest among students in learning about global citizenship, 97.5% of them indicated that they would like to know more about their rights and people from different cultures. Additionally, 84.7% of students were more prepared to engage in global issues after utilizing the limited library resources . However, despite this enthusiasm, only 45.2% of the students had participated in workshops or lectures related to global citizenship. This indicates a gap between student interest and actual participation in educational programs.

The findings support the observed fact that the library is pivotal in broadening students' horizons. It has also been reported that school libraries are pivotal in fostering cultural awareness and global competence (Avery, 2014). Thus, the disconnect between students' interest and accessible opportunities is critical and calls for attention.

The study divulged that students rely on various resources, including human rights laws (28.6%) and the constitution (21.2%), to build their understanding of global citizenship. Despite this, cultural resources and workshops remain underutilized. Libraries must provide diverse resources, including cultural materials and experiential learning opportunities, to

effectively promote global citizenship (Akande & Bamise, 2017). The findings revealed the need for more structured and frequent programs to bridge the gap between resource availability and student engagement.

Library staff play a crucial role in promoting global citizenship, but they face several challenges. Most of the of the library staff (60%) reported utilizing cultural resources to educate students on global citizenship, yet they acknowledge the limitations posed by the lack of adequate resources. Library staff play an essential role in promoting global citizenship by organizing events like International Day and Cultural Heritage Month, which help students appreciate cultural diversity. However, only 40% of library staff reported that they conducted workshops on diversity, inclusion, and sustainability, and another 40% admitted that they do not collaborate with external organizations or department heads. These limitations stress the importance of partnerships and external collaboration in amplifying the impact of global citizenship initiatives (Lindsay, 2005; Merga, 2020; Pihl et al., 2017).

Department heads offer a more critical assessment of the library's role in fostering global citizenship. The findings showed that, 46.2% of department heads agreed that the library's resources are effective in fostering global citizenship, but 38.5% felt that there is room for improvement, with 23.1% disagreeing that the library adequately addresses global citizenship needs. However, an area of concern for department heads is the limited integration of global citizenship topics within the school's curriculum. It was noted that, 76.9% of department heads reported that their departments do not use the library's cultural resources to incorporate global citizenship into their teaching. Additionally, 76.9% of department heads confirmed that they do not organize workshops on global citizenship for their students, this shows a significant

disconnect between the curriculum and the library's efforts.

This lack of integration echoes the observations made by other researchers about the importance of embedding global citizenship into academic programs to ensure its accessibility and relevance (Avery, 2014). In addition, the integration of global citizenship topics within the school curricula holds immense benefits and this is acknowledged by United Nations, hence the inclusion of global citizenship as a target in the SDG4 (UN, 2015).

The assistant headmasters and bursars also express concerns about the lack of collaboration and infrastructure to support global citizenship initiatives. The data divulged that, 57.1% of them believed the library lacks sufficient resources and requisite staff to fully promote global citizenship, while 42.9% suggested that improvements in both infrastructure and program offerings are necessary to better support this objective. It is thus obvious from the findings that, funding, infrastructure, and staffing are the critical factors which influence the effectiveness of school libraries in achieving educational goals.

5.7. Contribution to Knowledge

The final stage of CAMT is to refine the contribution story in line with this the study brings together the theoretical and empirical insights into the details of how the school library contribute to the achievement of SDG4 in the Kassena Nankana East Municipal Assembly senior high school context. One by one reflection of the findings allows for improving the initial theory of change and to show that the educational success is not dependent on senior high school; library plays an important role in promoting the achievement of SDG4 targets. The refined story will enhance both academic understanding and the policy relevance

positioning of the senior high school library's as pivots in the mechanism leading to the achievement n of SDG4.

The study's numerous contributions to knowledge are multifaceted and emphasizes the role that Senior High School Libraries play in advancing Sustainable Development Goal 4 (SDG4), which targets inclusive, equitable, and quality education along with lifelong learning opportunities for all. The research advances our understanding in various important domains, as enumerated below:

5.7.1 The State of School Libraries in Kassena Nankana East Municipal Assembly

The research emphasized how crucial Senior High School Libraries are important as the central hubs for learning and knowledge sharing. It provides empirical evidence to show that while a significant number of students value the resources available in the school libraries, the current services and infrastructure fall short of fully supporting the educational needs of the Senior High School Students', especially when it comes to digital and other learning resources including the state of the libraries. This advances knowledge by underscoring the need to fund library resource acquisition in order to improve students' educational outcomes. Through the identification of significant obstacles such as poor infrastructure, limited digital resources, and insufficient staffing, the study provided significant insights into the issues faced by the Senior High School libraries in promoting SDG4. It contributes to the body of knowledge regarding the infrastructure of education in developing nations, where lack of resources poses a significant constraint to academic advancement.

5.7.2 To Assess how School Libraries in the Study Area Support Quality Education.

The study depicted how government sponsorship and public education policies improve students' access to quality education, it provided proof of their effectiveness in promoting equity and access to quality education. These observations enrich existing literature by providing practical insights into how school libraries can be effectively utilized and supported to achieve educational goals associated with the Sustainable Development Goals.

5.7.3 To Determine how School Libraries in the Study Area Equip Students for Careers.

This research makes a strong case for the clear link between student's career preparedness and library services. It revealed that libraries are integral in providing career-oriented workshops, skill development resources, and guidance services, albeit there are critical challenges, faced by the Senior High School Libraries especially when it comes to infrastructure and career resources. This finding contributes to our understanding of the role of school libraries in bridging the gap between education and employment readiness, particularly in the context of achieving SDG4.

5.7.4 To Determine how School Libraries in the Study Area Boost Skills and Lifelong Learning for all and Global Citizenship:

The study looked at how Senior High School Libraries contribute to lifelong learning and the promotion of global citizenship. It revealed that while some Senior High Schools make good use of their libraries to promote teaching and learning effectively to some extent, it promotes financial literacy, global awareness, and skill development, there is still a lot of variation in the extent to which their services are rendered. The research outcome adds to the body of knowledge by pinpointing specific areas where the libraries can expand their services, like

providing more structured programs for lifelong learning programs and incorporating instruction on global citizenship education into library operations.

The research has contributed to the conversation around gender in leadership, by pointing out the notable gender gap in leadership positions and staffing in Technical and Senior High Schools. This research revealed a significant gender imbalance in library staffing and leadership roles. This finding thus contributes to ongoing discussions about gender equity in education and leadership, which happens to align with the broader goals of SDG5 (gender equality).

In conclusion, the study has added to the body of knowledge in educational research by providing comprehensive evidence of how school libraries support or hinder progress toward achievement SDG4, and made suggestions for improving library services, and identifying areas in which additional funding and legislation are required

5.8 To determine the school libraries' operation towards the attainment of Sustainable Development Goal 4 (SDG4).

The results from both quantitative and qualitative analyses indicate that the operation of school libraries in support of Sustainable Development Goal 4 (SDG4)—which seeks to ensure inclusive, equitable, and quality education—is currently fragmented, under-resourced, and lacks strategic integration in the schools studied. While awareness of SDG4 is generally high among individual staff members, institutional frameworks and practical engagement—especially involving libraries—are significantly lacking.

Quantitatively, 92.3% of Heads of Departments (HODs) reported having heard of SDG4. However, only 11.5% affirmed that school administrators had introduced academic staff to the goal. Similarly, just 34.6% of HODs agreed or strongly agreed that formal training on SDG4 had occurred in their schools. These figures suggest a significant gap between individual awareness and organized institutional communication or training. As noted by (Buabeng & Amo-Darko, 2024), awareness alone is insufficient without systemic frameworks and actionable plans to embed sustainable education within school structures.

This disconnect is further supported by qualitative evidence. One library staff member observed, *“We have not been trained on SDG4... No one has shown us how the library fits into it.”* Assistant headmasters confirmed that *“there is no SDG4 implementation plan that includes the library.”* These findings are consistent with those suggested in literature that, the school library faces a number of challenges which include institutional alignment, staff training, lack of policy and budget etc., (Omar et al., 2024b; Stevens & Campbell, 2006).

Only 38.5% of HODs agreed or strongly agreed that SDG4 implementation plans existed in their schools. Among library staff, 60.0% reported that no such plans were available. The assistant headmasters and bursars corroborated this: 100% confirmed that their schools lacked any formal SDG4 implementation framework.

These findings point to a critical systemic issue—the absence of planning documents or operational strategies that articulate how schools will contribute to the realization of SDG4, especially through libraries. Effective SDG4 integration requires that libraries be positioned

and supported by leadership and policy alignment (Omar et al., 2024b). Without inclusion in planning documents, libraries remain sidelined and underutilized.

While some evidence of quality education training exists—84.6% of HODs confirmed that academic staff had participated in such programs—the extent to which these trainings are aligned with SDG4 goals remains uncertain. Among library staff, only 60.0% reported having attended training related to quality education, and just 20.0% had received specific SDG4-related training.

These findings reflect what describes school library staff as professionally invisible in institutional development processes (Atta-Obeng & Dadzie, 2020b; Omar et al., 2024b; R. J. Todd, 2012). Qualitative responses reinforce this, with one staff member stating, *“We are never called when the school is planning programs or training for teachers.”* This exclusion undermines the potential of library professionals to support global educational objectives.

Despite the shortcomings, the data suggest there is awareness of the potential role libraries could play in achieving SDG4. For example, 57.1% of assistant headmasters and bursars reported that their schools had detailed plans involving libraries in promoting quality education. Moreover, 60.0% of library staff indicated the existence of such plans. Yet, the implementation of these plans is inconsistent and not formally linked to SDG4 frameworks.

This disconnect highlights the need for strategic repositioning of libraries within the educational mission of schools. Other researchers explain that libraries must evolve from

passive resource centers to hubs of inquiry-based learning and inclusive education if they are to support global development goals (Porter, 2024).

The findings on Objective 6 demonstrate that while individual awareness of SDG4 is relatively strong, there is a profound lack of institutional structures and plans that integrate school libraries into SDG4 implementation. Training programs are uncoordinated, and library staff are often excluded from strategic planning processes. To optimize the role of libraries in achieving SDG4, school leadership must institutionalize inclusion, provide targeted training, and develop specific policies that recognize the library as a key driver of inclusive and equitable education.

5.8 Magnification of the Findings in Light of CAMT

Explaining the outcome of the research in light of the CAMT presents a systematic magnification of the picture of empirical data refined initial theory of change. The fundamental data collected on the state of the senior high school libraries of Kassena Nankana East Municipal Assembly confirms the first stage of CAMT which stresses on the gathering of evidence. The empirical data allows for the documentation of the services, staff strength, infrastructure budget constraints and ICT facility disparities. The theory of change in this study premised that enhanced school library capacity will lead to higher educational outcomes. This premise was partially validated. The research results confirmed this factor-dependent link and also showed that the school library operates within the scope of socioeconomic and institutional limitations. Thus, there is need for improvement of the initial made to include these contextual variables such as the implementation of policy interventions and effective school management culture

The CAMT also stresses on attribution problem. A clear distinction between specific contributions made by the senior high school library and those of the teachers (HOD) and administration (Assistant Headmaster Academic and Bursars) was used to address this attribution problem. This analytical distinction based on the quantitative and qualitative data strengthened the dependability of the contribution strong by showing that some particular outcomes such as reading culture, and self directed learning etc., were uniquely enhanced through the use of the school library. The contribution story came out as having multiple features. It was observed that the school libraries act as quality education enablers as in SDG4.1, career readiness promoters as in SDG4.4 the facilitators of lifelong learning as in SDG4.6, and nurtures of global citizenships as in SDG4.7.

It is also expedient to add that feedback and refinement is requirement of CAMT. This reflected in the may the library staff and the senior high school continuously review and innorate for relevance. Maintaining steady progress in the phase of obvious limitations are the characteristics of enduring institutions. This process identified by the school libraries validated the central tenet of CAMT. This means that contribution is cyclical but not linear. The observed academic performance analysis 42.9%, students feedback analysis 28.6% and participation rate analysis 28.6% serve as the evidence which has led to the reflection, and the senior high school made changes to improve upon their services over time.

Overall, passing the research result through the CAMT show to a greater extent that the initial theory of charge is supported. However, there is the need for broadening it contextually to take into consideration, administrative support, policy direction implementation strategies, staffing and infrastructure improvements.

Finally, the revised theory based on the empirical data obtained in this study propose that, the potential of the senior high school libraries to contribute to the achievement of SDG4 is not only a function of their internal abilities (such as staff, infrastructure etc.) but also a function of the systematic support processes which will ensure sustainable and adaptive contribution.

5.9 Summary of the Chapter

The research findings present a comprehensive evaluation of the role of Senior High School Libraries and present thorough evidence of the ways in which school libraries either promote the achievement of Sustainable Development Goal 4 (SDG4), with particular attention to inclusive and equitable quality education, career preparation, global citizenship and lifelong learning opportunities. The study collected data from students, Heads of Departments (HODs), Assistant Headmasters, school bursars, and library staff from four senior high schools. A significant number of students (65%) regularly utilize library services, 63.8% were noted to visit the library on daily bases. The primary resource used by students is books, but digital resources such as computers are significantly underutilized, (with only 2.9% of students reporting their use). There is a strong demand for more digital resources and enhanced learning materials to modernize the libraries for the provision of the needs of the student. Despite the positive engagement with libraries, 29% of students felt that the current services do not adequately meet their needs, especially when it comes to digital infrastructure, up to date learning materials, and sufficient space. The limited amount of library facilities and the dearth of computer resources were cited by staff and students as the main barriers to the utilization of the library to its fullest.

The research revealed significant challenges related to staffing and resources in school libraries. The results showed that 80% of the school library staff are paraprofessionals. This indicates that, most of the Senior High School Libraries have a limited number of staff. This shortage of qualified personnel affects the quality of library services. Additionally, all library staff reported facing infrastructural deficits and a lack of adequate resources, which hinders the libraries' ability to fully support educational objectives.

The research findings demonstrated that the senior high school libraries in the Kassena Nankana East Municipal Assembly contribution to the realization of SDG4 is significant but uneven. The results from all the objectives revealed that the senior high school library's play an important role in mediating the promotion of quality education supporting career readiness, fostering lifelong learning and nurturing global citizenship among the students. That not with standing, the extents of this contribution is influenced by differences in the capacity of staff, the availability of ICT infrastructure, policy direction, dedicated budget, and infrastructure deficit. On the other hand, systematic inadequacies constrain the potential contribution of the school libraries and these must be addressed with deliberate policy interventions and financial investment.

The research findings points out that the senior high school library not only contribute to the realization of SDG4, but it also directly catalyze and support its curriculum delivery. The results reaffirm that the integration of senior high school library services in the educational ecosystem has the potential to produce more benefits than anticipated.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter provides an overview of the major findings in this study, conclusions, and recommendations regarding the role of school libraries in achieving Sustainable Development Goal 4 (SDG4). The research was conducted in the Kasena Nakana East Municipal Assembly at the Upper East Region in Ghana in order to assess the extent to which school libraries contribute to the quality education, career development, lifelong learning and global citizenship as well as the development of students. The study examined several key areas, including the adequacy of library resources, the role of libraries in careers equipping students' preparation, lifelong learning, and the promotion of global citizenship among students.

In this chapter, the research findings are discussed with respect to the objectives of the study. The research divulged that while school libraries play a vital role in supporting quality education, there are significant challenges that limit their full potential. The conclusions drawn from the data revealed such areas for improvement at the libraries, particularly in expanding the IT infrastructure and digital resources, career services, lifelong learning opportunities, and fostering global citizenship. Based on these findings, targeted recommendations are presented to enhance the effectiveness of school libraries in supporting students' academic and personal growth, in order to enable the libraries to thus contribute more significantly to the achievement of SDG4.

6.2 Summary of the Findings

This chapter has provided a detailed sketch of the research findings, conclusions, and recommendations concerning the role of Senior High School libraries in contributing to the Sustainable Development Goal 4 (SDG4) within the Kasena Nakana East Municipal Assembly. The study pointed out several areas where Senior High School libraries are making positive contributions but also showed key challenges that limit their effectiveness.

The research findings revealed that many students heavily rely on traditional resources such as textbooks, while access to modern digital tools remains inadequate. The libraries have also been found to offer limited career preparation resources, which are under-utilized by students. While there is a strong interest in lifelong learning and skills development, there are few structured programs in place to support these needs, particularly in areas like financial literacy and personal growth. Additionally, efforts to promote global citizenship through the Senior High School library programs are inconsistent across schools, which limits the Senior High School students' engagement with global issues such as sustainability and diversity.

These limitations, notwithstanding, reveal that Senior High School libraries are central to students' academic lives, because students frequently use them for study and learning purposes. However, challenges related to inadequate staffing and resource shortages prevent the Senior High School libraries from fully achieving their potential in supporting SDG4.

In response to these findings, the chapter offers targeted recommendations aimed at improving the role of school libraries in supporting quality education, career readiness, lifelong learning, and global citizenship. By addressing the identified gaps, school libraries can play a more

significant role in helping Senior High School students succeed academically and personally, and in contributing more effectively to the achievement of SDG4.

The summary of the research findings is as enumerated in the foregoing paragraph:

6.2.1. The State of the School Library: The findings from the study on the state of the school library indicate that while the library meets the needs of a significant proportion of students (52.2%), a notable number (29.0%) feel that it does not, and 18.8% remain unsure. This suggests that although the library is functional for many, gaps exist in its ability to serve all students effectively, possibly due to resource availability, infrastructure limitations, or insufficient engagement.

Students generally find the library staff helpful (82.6%), but a small percentage (8.7%) perceive them as unhelpful or remain uncertain. The presence of student-librarians, who serve as intermediaries between staff and students, may contribute to this mixed perception. Strengthening communication and accessibility between library staff and students could enhance satisfaction.

The study also highlights key areas for improvement as identified by students, including the need for computer resources, enhanced learning materials, and better infrastructure. Only of students cited furniture as a concern. Additionally, library staff and administrative personnel expressed concerns about inadequate infrastructure. Observations showed that most school libraries are housed in small rooms with limited seating capacity, restricting access and resources.

A major challenge is the complete absence of IT facilities in the libraries, reinforcing students' call for technology integration. While infrastructure and furniture are not the most pressing issues, upgrading technological resources and expanding learning materials would significantly enhance the library's functionality.

6.2.2. To Assess how School Libraries in the Study Area Support Quality Education: The research revealed that an appreciable number of Senior High School students feel that the library lacks adequate digital resources such as computers and online learning tools. This shortage of modern ICT infrastructure hampers the library's potential to meet the diverse educational needs of students in the digital age. Another finding is that most of the Senior High School students continue to rely heavily on traditional resources like textbooks, which remain the most utilized materials in the library. Notwithstanding, the demand for more updated and diverse learning materials is growing, this points to the need for school libraries to modernize their collections in the Senior High School.

6.2.3 Interest in Lifelong Learning and Skill Development: Most of the students show an interest in lifelong learning and acquiring new skills, particularly in areas like financial literacy and personal development. However, the research found that there are few structured programs or workshops in place to support the realization of this critical observation vary these goals, limit the school library's ability to promote continuous learning

6.2.4 Limited Career Preparation Resources: Although some career preparation resources were noted to be available, they are underutilized. The students expressed a desire for more frequent and focused career-related activities, such as workshops on job search strategies,

resume building, and industry-specific guidance. The current library services in this area are insufficient to meet the growing demand for student career readiness support.

6.2.5. Global Citizenship Education: Even though some schools have made efforts to introduce global citizenship topics through cultural programs, these initiatives were observed to be inconsistent across Senior High Schools. Many students lacked access to resources and workshops that would help them understand and engage with global issues such as sustainability, diversity, and human rights. There is limited collaboration between school libraries and external organizations, NGOs, or businesses, which could provide additional resources and support. This gap represents a missed opportunity to enhance library services, particularly in the areas of career preparation and global citizenship.

These findings spell out the key areas where Senior High School libraries can improve to meet the quality education, career, and personal development needs of students more effectively. Thus, addressing these challenges will also help libraries to better align with the objectives of SDG4.

6.2.6. To determine the school libraries' operation towards the attainment of Sustainable Development Goal 4 (SDG4).

The findings of the study reveal a significant gap between awareness of Sustainable Development Goal 4 (SDG4) and its practical implementation within school environments, particularly concerning the role of school libraries. Although a majority of Heads of Departments (HODs) reported being personally aware of SDG4, most indicated that school

administrators had not formally introduced academic staff to the concept. This suggests a disconnect between individual awareness and institutional leadership in promoting SDG4.

Many academic staff members are seeming to have some knowledge of SDG4, formal education or training on the subject appears split and inconsistent. Only a small proportion of respondents confirmed that structured SDG4 training had taken place in their schools. Furthermore, the existence of school-wide SDG4 implementation plans is limited, with many respondents either unaware of such plans or confirming their absence. This inconsistency hinders the development of a unified approach to achieving quality education goals.

Encouragingly, a large percentage of academic staff have attended programs focused on quality education, and many schools seemingly have detailed plans aimed at achieving educational excellence. However, when examining the inclusion of libraries in these plans, the findings highlight significant limitations. A majority of library staff reported not receiving training on SDG4, and many stated that their schools lacked implementation plans involving the library.

Assistant headmasters and school bursars, the data indicated a general absence of SDG4 policies and implementation strategies. Although some schools have begun incorporating libraries into their broader educational strategies, this practice is far from universal, pointing to a lack of consistent planning frameworks.

Overall, the results stress a clear need for stronger institutional commitment, better training, and more inclusive planning. While there is a foundation of awareness and some engagement

with quality education principles, the integration of SDG4 into library operations and broader school strategies remains limited and uneven across the surveyed institutions.

6.3 Conclusion

The aim of the research was to determine the role Senior High School libraries play in the achievement of SDG4 in Kasena Nakana East Municipal Assembly. The study sought to find out in the objective if the SDG4 targets were being reached through the library activities and services. The analysis of the interviews and questionnaire from the students, HODs, library staff and school administrators brought out the following findings: Inadequate Digital Resources and Infrastructure, High Student Reliance on Traditional Resources, Limited Career Preparation Resources, Interest in Lifelong Learning and Skill Development, Gaps in Global Citizenship Education, High Student Engagement with Library Services, Staffing and Resource Challenges, and Collaboration with External Stakeholders

Firstly, with respect to objective 2, the study concludes that school libraries play a significant role in supporting quality education, but there are critical gaps that need addressing. Although many students rely on the library for essential learning materials, yet a lack of sufficient digital resources, outdated textbooks, and inadequate infrastructure limits the effectiveness of these services. To better fulfill their educational mission, libraries must enhance their services and create a more conducive learning environment that aligns with modern educational needs.

Secondly, for objective 3, the Senior High School Libraries are moderately effective in preparing students for their future careers, but there is room for improvement. While some career-related workshops and resources are available, they are not widely utilized, and many students expressed that they need more structured career guidance. The study stressed the importance of expanding career preparation services in the library, including offering more resources on job markets, industry-specific materials, and organizing frequent career workshops. The school libraries must be better equipped to help Senior High School students transition from education to the workforce.

Thirdly, for objective 4, the study concludes that libraries need to offer more opportunities for skill development, particularly in areas like financial literacy and personal growth. Regular and continuous access to workshops and learning materials will better prepare students to continue learning beyond their formal education.

Fourthly, for objective 5, the role of school libraries in fostering global citizenship is still underdeveloped. While some efforts have been made to introduce students to global issues through cultural programs, there is a need for a more systematic approach. Senior High School libraries should actively promote global citizenship by including relevant resources and events into their programming. Preparing students to understand and engage with global challenges will not only benefit their academic growth but also their role as responsible citizens in an interconnected world.

Although there is no deliberate effort to introduce and implement SDG4 with the library as a tool at the Senior High School level in Kasena Nakana East Municipal Assembly, it has been

observed that to a limited extent the school libraries contribute positively to the education and development of students, and there is significant potential for improvement. But there is much to be done to enable the school library to considerably contribute to the achievement of SDG4. Implementing noted challenges will also help fulfill the targets goals of the Sustainable Development Goal 4 (SDG4), thus will ensure inclusive and equitable quality education for all.

Finally, it is important to conclude based on the findings that the Senior High School libraries do play a role in achieving Sustainable Development Goal 4 (SDG4) at the Senior High Schools, although its impact is currently limited and could be significantly enhanced.

6.4 Recommendation

Based on the research findings, the following recommendations are made:

6.4.1. Objective 1: The State of the Libraries

The study recommends that schools expand the range and accessibility of learning materials in line with the approved curriculum to improve the library's role as an effective educational resource. Investments in infrastructure should be made, to include expansion of library space and improving the facilities, in order to create a more conducive learning environment. Moreover, efforts are to be made to increase staff-student interaction by improving communication between the library staff and students, in order to ensure that students feel adequately supported in their academic pursuits. By putting these recommendations into practice, school libraries will be able to enhance student learning and contribute immensely to achieving high-quality education, in alignment with SDG 4.

6.4.2. Objective 2: To Assess how School Libraries in the Study Area Support Quality Education.

It is advised that the senior high schools should give priority to modernizing the library infrastructure, with emphasis on increasing digital resources like computers and online database access, in order to improve the role of Senior High School Libraries play in providing high-quality education. Additionally, the Senior High School libraries should ensure the provision of contemporary textbooks and educational materials that are well-aligned with the current curriculum. It is also advisable for the SHS libraries to initiate and support a variety of educational activities, for example reading programs and academic training workshops to promote a more dynamic and engaging educational environment.

6.4.3. Objective 3: To Determine how School Libraries in the Study Area Equip Students for Careers.

To strengthen the role of Senior High School libraries in preparing High School Students for future careers, it is recommended that the SHS libraries should offer workshops on career and seminars covering critical topics such as resume writing, interview techniques, and career exploration. In order to boost the knowledge and interest of the students in careers it is recommended that SHS Libraries should also establish partnerships with local businesses, NGOs, and career service providers to facilitate career guidance workshops, and support access to information and industrial visits. Additionally, the school libraries should expand their resource collection on career to include industry-specific guides and materials, to support students who wish to engage in self-directed career planning and development.

6.4.4. Objective 4: To Determine how School Libraries in the Study Area Boost Skills and Lifelong Learning for all.

To support skills development and foster lifelong learning among students, it is recommended that Senior High School libraries should implement structured programs which are focused on key areas such as financial literacy, entrepreneurship, and technology skills. Regular workshops on these topics should be organized, with collaboration from local organizations to enable the provision of expert facilitators and relevant learning materials. Moreover, school libraries are to provide access to online courses and digital learning platforms so as to enable the students to acquire new skills at their own pace. Promoting self-directed learning and encouraging students to take ownership of their personal and academic growth will further strengthen the role of school libraries in advancing lifelong learning for all.

6.4.5. Objective 5: To Assess how School Libraries in the Study Area Prepare Students for Global Citizenship.

To equip the students for global citizenship, it is recommended that Senior High School libraries should integrate themes such as cultural awareness, environmental sustainability, and social justice into the library programs and resources. School libraries should organize international cultural exchange activities, celebrate global observances such as Earth Day and Human Rights Day, May Day, and provide access to materials that address global issues. In addition, workshops that promote values like diversity, inclusion, and global responsibility ought to be conducted regularly to inspire the students to engage with global challenges so as to develop into informed, active global citizens.

These targeted recommendations for each objective will help strengthen the overall role of school libraries in fostering educational, career, and personal development among students, while also supporting the achievement of SDG4.

6.4.6. Objective 6: To determine the school libraries' operation towards the attainment of Sustainable Development Goal 4 (SDG4).

There is an urgent need to develop and disseminate clear institutional or national frameworks that guide the integration of SDG4 within educational planning. These frameworks should openly recognize the role of school libraries in promoting inclusive and equitable learning opportunities. Educational authorities and school leadership should ensure these guidelines are accessible to all staff and embedded in policy and planning documents.

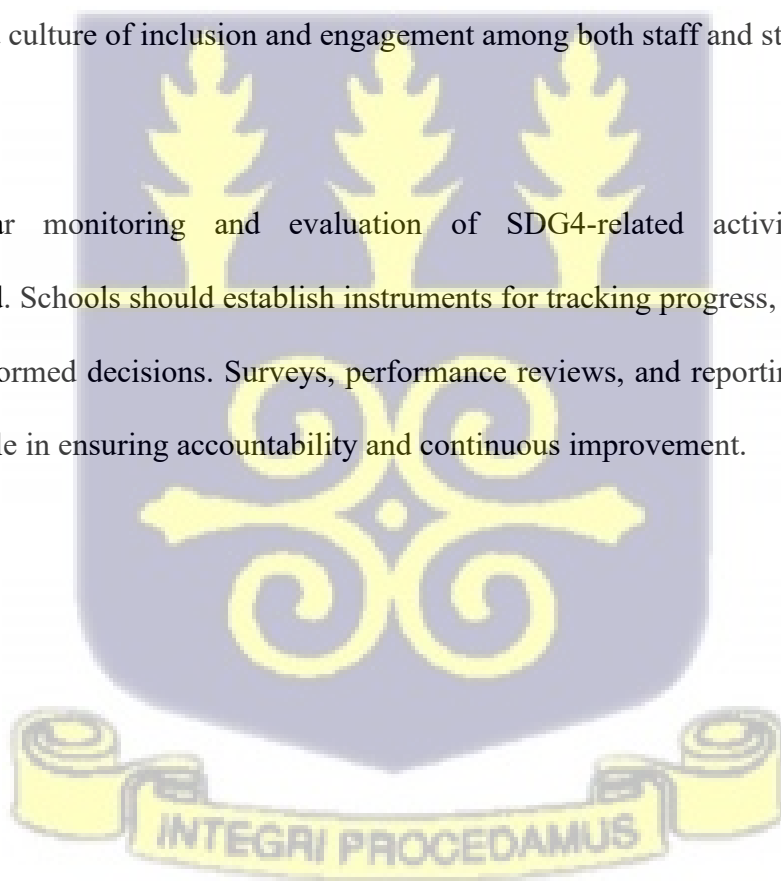
Professional development is another critical area. Structured and mandatory training programs on SDG4 should be introduced for both academic and library staff. These training should cover not only the theoretical aspects of SDG4 but also practical strategies for implementation in classrooms and libraries. Introducing this training as part of staff orientation and ongoing professional learning will help standardize knowledge and understanding across schools.

In addition, schools should establish dedicated SDG4 committees made up of administrators, department heads, library staff, and support staff. These teams would be responsible for developing, implementing, and evaluating school-specific SDG4 plans. Their work should also focus on ensuring that the school library is not an afterthought but a core component of the quality education strategy.

The integration of libraries into educational planning must be prioritized. Libraries should be seen as vital to achieving SDG4 due to their role in supporting literacy, digital education, and lifelong learning. To enable this, schools need to allocate adequate resources to libraries, including modern learning materials, digital tools, and dedicated spaces for inclusive learning programs.

Awareness campaigns within schools can further reinforce the importance of SDG4. Organizing events such as SDG4 awareness days, student-led initiatives, and poster campaigns can help build a culture of inclusion and engagement among both staff and students.

Finally, regular monitoring and evaluation of SDG4-related activities should be institutionalized. Schools should establish instruments for tracking progress, identifying gaps, and making informed decisions. Surveys, performance reviews, and reporting tools can play an important role in ensuring accountability and continuous improvement.



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APPENDIX A: Consent form


UNIVERSITY OF GHANA



10-SEP-2025
Valid Until

Official Use Only
 Protocol number
 ECH 008 24-25

OFFICE OF RESEARCH INNOVATION AND DEVELOPMENT
Ethics Committee for the Humanities (ECH)

PROTOCOL CONSENT FORM

Section A- BACKGROUND INFORMATION

Title of Study:	<i>"Evaluating The Contribution of School Libraries In Ghana to Achieving the UN Sustainable Development Goal 4: A Case Study of Kassena Nankana East Municipal Assembly".</i>
Principal Investigator:	Helina Boansi Apes (Mrs)
Certified Protocol Number	ECH-008 24-25

Section B- CONSENT TO PARTICIPATE IN RESEARCH

General Information about Research

You are being invited to participate in a research study with the topic shown above. The purpose of the research is to determine the contribution of school libraries to the achievement of the United Nation Sustainable Development Goal 4 (SDG 4). The research participation in the study requires that you complete a questionnaire or interview sessions. This will take about 15-20 minutes to complete. Your participation is voluntary and you are not required to respond to questions you are not comfortable with.

Benefits/Risks of the study

The research is anticipated to have no direct benefits or risks to participants. Your responses will be kept confidential and your data will be reported. There are no direct benefits of the study to participants. Participation in the study will not expose any participant to any form of hazard.

Revised – October 2023

Confidentiality

Your responses will be handled with utmost confidentiality. Personal or identifiable information shall not be associated to your responses in all publications that shall result from the study only the research team shall have access to the collected data.

Compensation

There are no compensation packages in cash and kind available for participants during this study. However, your contribution shall be formally acknowledged and appreciated in the research report and other publication.

Withdrawal from Study

Participation in this study is entirely voluntary. You are free to withdraw from the study at any point in time and the decision will not adversely affect you in any way. You are assured that you or your legal representative will be informed promptly if information becomes available that may be relevant to your willingness to continue participating or withdrawal from the study. It will be appreciated if you state clearly the circumstances or reasons for terminating your participation in the study.

Contact for Additional Information

If you have questions about your rights as a research participant in this study, you may use the contact details below

Name: Helina Boansi Apea

Institution: University of Ghana, Legon

E-mail: haboansi@cktutas.edu.g

Tel/Mobile: 0200557656

Section C- PARTICIPANT AGREEMENT

"I have read or have had someone read all of the above, asked questions, received answers regarding participation in this study, and am willing to give consent for me, my child/ward to participate in this study. I will not have waived any of my rights by signing this consent form. Upon signing this consent form, I will receive a copy for my personal records."

Name of Participant

Signature or mark of Participant

Date

If participant can neither read nor understand the form themselves, a witness must sign here:

I was present while the benefits, risks, and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Name of witness

Signature of witness / Mark

Date

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Name of Person who Obtained Consent

Signature of Person Who Obtained Consent

Date



APPENDIX B: Questionnaire

Student Questionnaire



UNIVERSITY OF GHANA
SCHOOL OF COMMUNICATION AND INFORMATION STUDIES
INFORMATION STUDIES DEPARTMENT

RESEARCH QUESTIONNAIRE FOR STUDENTS

Dear Sir/Madam

I am an Mphil student from the University of Ghana Legon and I am working on a research titled, *Evaluating the contribution of school libraries in Ghana to achieving the UN Sustainable Development Goal 4: A case study of Kassena Nankana East Municipal Assembly*. The outcome of the research will help promote the delivery of quality education. Please spare some time to answer the questions. This will take about 25 minutes. All responses provided will be kept confidential and used for academic purposes only. The identity of participants will remain anonymous. If you have any questions about the questionnaire, please contact the researcher with the contact details below.

The United Nations Sustainable Development Goal 4 (SDG4) aim is to guarantee that everyone receives a quality education throughout their lives. This includes ensuring all girls and boys complete free primary and secondary school, providing access to early childhood education, and promoting equal opportunities for technical, vocational, and higher education. SDG4 also emphasizes the importance of equipping people with relevant skills for work and fostering global citizenship through education for sustainable development.

Contact details of researcher: Email: hahmed1005@st.ug.edu.gh; Mobile: 0200557656

SECTION A: BIODATA

Institution _____

Subject area _____

Age	Children		Youth		Adult
	10-14	15-18	18-19	20-24	25+
	☐	☐	☐	☐	☐

Gender

Male ☐ Female ☐

Class _____

Status

Boarding ☐ Day ☐

Sponsorship

Self ☐ Private ☐ Government ☐ Other _____

INTEGRI PROCEDAMUS

11 Page

SECTION B: SCHOOL LIBRARY'S SUPPORT FOR QUALITY EDUCATION

1. Do you need library services to obtain quality education?

Select only one answer

Yes []

No []

2. How often do you visit the school library?

Select only one answer

- ☐ Daily
- ☐ Weekly
- ☐ Monthly
- ☐ Rarely
- ☐ Never

3. Which resources do you use in the school library? (Select all that apply)

Select several answers

- ☐ Books
- ☐ Computers
- ☐ Online Databases
- ☐ Magazines
- ☐ Newspapers

4. What improvements would you like to see in the school library?

5. Do you participate in library programs and events?

Select only one answer

Yes []

No []

6. Which services do you find most helpful in the school library? (Select all that apply)

Select several answers

- ☐ Research Assistance
- ☐ Study Rooms
- ☐ Printing/Copying
- ☐ Interlibrary Loan
- ☐ Workshops

7. How do you think the school library can better support your educational needs?

8. How has the school library positively impacted on your academic performance?

9. Do you think the school library adequately meets the needs of students?

Select only one answer Yes [] No [] Not sure []

10. Which programs or events have you found most beneficial in the school library? (Select all that apply)

Select several answers

- ☐ Author Visits
- ☐ Book Clubs
- ☐ Workshops/Seminars
- ☐ Reading Challenges
- ☐ Career Guidance

11. Do you think the school library staff are helpful and approachable?

Select only one answer Yes [] No [] Not sure []

12. Which study areas do you prefer in the school library? (Select all that apply)

Select several answers

- ☐ Quiet Zone
- ☐ Collaborative Space
- ☐ Individual Study Carrels
- ☐ Group Study Rooms
- ☐ Outdoor Reading Area
- Other (Indicate).....

13. Which genres of books do you enjoy reading the most? (Select all that apply)

Select several answers

- ☐ Fiction
- ☐ Non-Fiction
- ☐ Mystery/Thriller
- ☐ Science Fiction
- ☐ Biography/Autobiography

14. What role do you think the school library plays in enhancing your overall learning experience? _____

SECTION C: SCHOOL LIBRARIES EQUIPING STUDENTS FOR CAREERS

15. What career do you want to pursue in life?

16. Have you attended any planning tools workshops at the school library?

Select only one answer

Yes []

No []

17. Which planning tool workshop did you find most helpful? (Select all that apply)

Select several answers

☐ Resume Building

☐ Interview Skills

☐ Networking Strategies

☐ Career Exploration

Other (Indicate).....

18. What is one skill you have learned from a guest speaker at the school library?

19. Which feedback mechanism do you find most effective for improving your career readiness? (Select all that apply)

Select several answers

☐ Surveys

☐ One-on-one Counseling

☐ Peer Reviews

☐ Teacher's advice in-class

20. How has the school library helped you in preparing for your future career? _____

21. Have you participated in any career-related events organized by the school library?

Select only one answer

Yes []

No []

22. Which guest speaker presentation left a lasting impact on you? (Select all that apply)

Select several answers

- ☐ Industry Professional
- ☐ Alumni Success Story
- ☐ Career Coach
- ☐ Entrepreneur

23. Do you feel more confident about your career prospects after utilizing the school library's resources?

Select only one answer

Yes []

No []

24. Which aspect of the school library's career preparation services do you think needs improvement? (Select all that apply)

Select several answers

- ☐ Workshops
- ☐ Guest Speakers
- ☐ Usage Data Analysis
- ☐ Feedback Mechanisms

SECTION D: SCHOOL LIBRARIES SUPPORTING LIFELONG LEARNING FOR ALL.

25. Would you like additional skills and knowledge to help you in life?

Select only one answer

Yes []

No []

26. How often do you utilize the school library's skill resources?

Select only one answer

- ☐ Daily
- ☐ Weekly
- ☐ Monthly
- ☐ Rarely
- ☐ Never

27. Have you attended any financial literacy workshops at the school library?

Select only one answer

Yes []

No []

Not applicable []

28. Which reading programs have you participated in?

Select several answers

- ☐ Book clubs
- ☐ Reading challenges
- ☐ Author visits

Other (Indicate).....

29. Do you feel more confident in your skills after utilizing the school library's resources?

Select only one answer Yes [] No [] Somewhat []

SECTION E: SCHOOL LIBRARIES' SUPPORT FOR PREPARING STUDENTS FOR GLOBAL CITIZENSHIP

30. Would you like to know about your rights and people from different cultures around the world?

Select only one answer Yes [] No []

31. How often do you utilize the school library's cultural resources?

Select only one answer

- ☐ Daily
- ☐ Weekly
- ☐ Monthly
- ☐ Rarely
- ☐ Never

32. Which of the following resources have helped you acquire global citizenship training?
(Select all that apply)

Select several answers

- ☐ Human rights laws
- ☐ Norms and traditions
- ☐ Constitution
- ☐ Workshops
- ☐ Lectures
- ☐ Other

33. What is one key learning you have gained from utilizing the school library's resources for global citizenship training?

34. Do you feel more prepared to engage in global issues after utilizing the school library's resources?

Select only one answer

Yes []

No []

Not sure []

35. Which aspect of global citizenship training do you find most valuable? (Select all that apply)

Select several answers

- ☐ Cultural awareness
- ☐ Social justice
- ☐ Environmental sustainability
- ☐ Human rights advocacy
- ☐ Intercultural communication

36. Have you participated in any workshops or lectures related to global citizenship training?

Select only one answer

Yes []

No []

37. Which workshop or lecture left the biggest impression on you? (Select all that apply)

Select several answers

- ☐ Human rights workshop
- ☐ Cultural diversity lecture
- ☐ Sustainability workshop
- ☐ Peacebuilding seminar
- ☐ Other

38. Do you believe global citizenship training should be a mandatory part of the school curriculum?

Select only one answer

Yes []

No []

Not sure []

39. Which global issue do you feel most passionate about addressing? (Select all that apply)

Select several answers

- ☐ Poverty
- ☐ Climate change
- ☐ Human rights violations
- ☐ Gender equality

☐ Education access

40. Have you engaged in any community service projects related to global citizenship training?

Select only one answer

Yes []

No []

41. Which community service project had the most impact on you? (Select all that apply)

Select several answers

- ☐ Environmental cleanup
- ☐ Humanitarian aid distribution
- ☐ Advocacy campaign
- ☐ Cultural exchange program
- ☐ Other

42. How has your understanding of diversity and inclusion evolved through global citizenship training? _____

43. Do you feel empowered to take action on global issues after receiving global citizenship training?

Select only one answer

Yes []

No []

44. Would you recommend the school library's resources for global citizenship training to other students?

Select only one answer

Yes []

No []

Maybe []



Department Head Questionnaire

 **UNIVERSITY OF GHANA**
SCHOOL OF COMMUNICATION AND INFORMATION STUDIES
INFORMATION STUDIES DEPARTMENT
RESEARCH QUESTIONNAIRE FOR HODs

Dear Sir/Madam

I am an Mphil student from the University of Ghana Legon and I am working on a research titled, *Evaluating the contribution of school libraries in Ghana to achieving the UN Sustainable Development Goal 4: A case study of Kumbungu Nankana East Municipal Assembly*. The outcome of the research will help promote the delivery of quality education. Please spare some time to answer the questions. This will take about 25 minutes. All responses provided will be kept confidential and used for academic purposes only. The identity of participants will remain anonymous. If you have any questions about the questionnaire, please contact the researcher with the contact details below.

The United Nations Sustainable Development Goal 4 (SDG4) aim is to guarantee that everyone receives a quality education throughout their lives. This includes ensuring all girls and boys complete free primary and secondary school, providing access to early childhood education, and promoting equal opportunities for technical, vocational, and higher education. SDG4 also emphasizes the importance of equipping people with relevant skills for work and fostering global citizenship through education for sustainable development.

Contact details of researcher: Email: hahmed095@ug.edu.gh; Mobile: 0200557656

SECTION A: Biodata

1. Name of School
.....
2. Department
.....
3. Profession
.....
4. Age
25-30 [] 31-35 [] 36-40 [] 41-45 [] 46-50 [] 51-60 []
5. Current position(s)
.....
6. Gender: Male [] Female []
7. Marital status: Married [] Single [] Divorced []
8. Occupation
.....

1 | Page

9. Years in current position

10. Years of working in senior high school

11. Educational qualification

Diploma: [] Degree: [] Masters: [] Doctorate: []

12. Job description

SECTION B: SDG4 and School Library

	Sustainable Development Goal 4 (SDG4)	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Academic staff have knowledge of the SDG4					
2	The school has formally educated academic staff on the introduction of SDG4					
3	The school has SDG4 implementation plans					
4	Academic staff have attended programs on quality education					
5	The school has detailed plans to ensure the achievement of quality education					
	School Library	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
6	School library has qualified staff					
7	The staff strength of the school library is adequate					
8	The school library organizes learning activities for the students					
9	The school library works closely with the Heads of Department in the school					
10	The school library is significantly patronized by the students					
11	The school library has adequate resources					
12	The school library receives support from the school administration					
13	The school library receives support from organizations and individuals other than the school					
14	The school library is a necessary tool for achieving quality education					
15	The school library has the independence to organize learning activities for students					
16	The school library uses reading clubs, seminars, and workshops, etc., to support student learning					
17	The school library has educational resources on career					
18	The school library has educational resources for lifelong learning					
19	The school library has educational resources on Global Citizenship Education					

SECTION C: SCHOOL LIBRARY'S SUPPORT FOR QUALITY EDUCATION

1. Have you hear of the United Nations Sustainable Developments?

Select only one answer Yes [] No []

2. Has the school administrators introduce academic staff to sustainable development goal 4 (SDG4)?

Select only one answer Yes [] No []

3. How often do you visit the school library?

Select only one answer Daily [] Weekly [] Monthly [] Rarely []

4. Which resources do you find most useful in the library?

Select all that apply Text books [] Story books [] Manuals [] Career guides [] Law/Cultural/Citizenship book [] ICT books [] Computers [] Audiovisual materials []

5. Do you think the library services meet the needs of your department?

Select only one answer

- ☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree

6. Are you aware of the library's programs and events?

Select only one answer Yes [] No []

7. Which library programs have you participated in?

Select all that apply

- ☐ Book Clubs
- ☐ Workshops
- ☐ Author Visits
- ☐ Reading Challenges
- ☐ Library Tours

8. Do you think the library programs enhance the learning experience?

Select only one answer

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

9. How satisfied are you with the library's overall support for quality education?

Select only one answer

- ☐ Very Satisfied
- ☐ Satisfied
- ☐ Neutral
- ☐ Dissatisfied
- ☐ Very Dissatisfied

10. What improvements would you suggest for the library's resources?

Select several answers

- ☐ More Books
- ☐ Upgraded Technology
- ☐ Extended Hours
- ☐ Better Staff Training
- ☐ Improved Facilities

11. Do you think the library collaborates effectively with your department?

Select only one answer

- ☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree

12. How can the library improve its collaboration with your department? _____

13. Are you adequately informed about the library's resources and services?

Select only one answer Yes [] No []

14. What challenges do you face in accessing and utilizing the library's resources? _____

15. Do you think the library plays a significant role in promoting quality education?

Select only one answer

- ☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree

16. Any additional comments or feedback about the library's support for quality education? _____

SECTION D: SCHOOL LIBRARIES EQUIPING STUDENTS FOR CAREERS

What planning tools does the school library use?

Select several answers

- ☐ SWOT analysis

- ☐ Gantt charts
- ☐ Mind mapping
- ☐ Other

17. How often does your department attend library workshops? _____

18. Have guest speakers been invited to the library for career talks?

Select only one answer Yes [] No []

19. Does the library offer career guidance resources?

Select only one answer Yes [] No []

20. How does the library tailor resources to different career paths?

Select several answers

- ☐ Industry-specific books
- ☐ Career counseling sessions
- ☐ Resume workshops
- ☐ Other

21. What improvements would you suggest for the library's career preparation initiatives? _____

22. Are students actively involved in planning library events?

Select only one answer Yes [] No []

23. What types of guest speakers have visited the library for career talks?

Select several answers

- ☐ Industry professionals
- ☐ Alumni
- ☐ Career coaches
- ☐ Other

SECTION E: SCHOOL LIBRARIES SUPPORTING LIFELONG LEARNING FOR ALL

24. Do you have learning activities for lifelong skills embedded in the school curriculum?

Select only one answer Yes [] No []

25. Do you utilize the school library to promote the acquisition of lifelong learning skills?

Select only one answer Yes [] No []

26. Does the library organize lifelong learning activities?

Select only one answer Yes [] No []

27. Do you think that the school library resources can support lifelong learning?

Select only one answer Yes [] No []

28. How often do you utilize the school library's skill resources for student development?

Select only one answer

- ☐ Daily
- ☐ Weekly
- ☐ Monthly
- ☒ Rarely
- ☐ Never

29. Do you have any specific reading programs in place to promote lifelong learning?

Select only one answer Yes [] No []

30. Which financial literacy initiatives are integrated into your curriculum?

Select several answers

- ☐ Budgeting workshops
- ☐ Investment simulation games
- ☐ Personal finance courses
- ☐ Entrepreneurship programs
- ☐ None

31. Have you organized any lectures on lifelong learning skills for students?

Select only one answer Yes [] No []

32. Which resources do you find most effective in equipping students for lifelong learning?

Select several answers

- ☐ School library's skill resources
- ☐ E-literacy programs
- ☐ Financial literacy initiatives
- ☐ Reading programs
- ☐ Others

33. What challenges do you face in promoting lifelong learning among students? _____

34. Do you collaborate with external organizations to enhance student learning opportunities?

Select only one answer Yes [] No []

35. How do you assess the impact of your lifelong learning initiatives on student outcomes?

36. Are there any specific goals you have set for student lifelong learning outcomes?

Select only one answer Yes [] No []

37. How do you involve students in the design and implementation of lifelong learning programs? _____

38. Are there any specific goals you have set for student lifelong learning outcomes?

Select only one answer Yes [] No []

SECTION F: SCHOOL LIBRARIES' SUPPORT FOR PREPARING STUDENTS FOR GLOBAL CITIZENSHIP

39. Do you utilize the school library's cultural resources in your department's curriculum?

Select only one answer Yes [] No []

40. Which of the following resources do you use to teach students about human rights laws?

Select several answers

- ☐ Workshops
- ☐ Lectures
- ☐ Both
- ☐ None

41. Do you involve students in discussions about different cultural norms and traditions?

Select only one answer Yes [] No []

42. Which of the following methods do you use to educate students about the constitution?

Select several answers

- ☐ Assignments
- ☐ Debates

- ☐ Quizzes
☐ Other

43. Do you organize workshops on global citizenship for your students?

Select only one answer Yes [] No []

44. Which of the following topics are covered in your global citizenship workshops?

Select several answers

- ☐ Sustainability
☐ Diversity
☐ Social Justice
☐ All of the above

51. Do you believe that the school library's resources are effective in fostering global citizenship among students?

Select only one answer

- ☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree



APPENDIX C: Interview

Library Staff Interview



UNIVERSITY OF GHANA
SCHOOL OF COMMUNICATION AND INFORMATION STUDIES
INFORMATION STUDIES DEPARTMENT
INTERVIEW GUIDE FOR LIBRARY STAFF

Dear Sir/Madam

I am an Mphil student from the University of Ghana Legon and I am working on a research titled, *Evaluating the contribution of school libraries in Ghana to achieving the UN Sustainable Development Goal 4: A case study of Kassena Nankana East Municipal Assembly*. The outcome of the research will help promote the delivery of quality education. Please spare some time to answer the questions. This will take about 25 minutes. All responses provided will be kept confidential and used for academic purposes only. The identity of participants will remain anonymous. If you have any questions about the interview, please contact the researcher with the contact details below.

The United Nations Sustainable Development Goal 4 (SDG4) aim is to guarantee that everyone receives a quality education throughout their lives. This includes ensuring all girls and boys complete free primary and secondary school, providing access to early childhood education, and promoting equal opportunities for technical, vocational, and higher education. SDG4 also emphasizes the importance of equipping people with relevant skills for work and fostering global citizenship through education for sustainable development.

Contact details of researcher: Email: hahmed005@st.ug.edu.gh; Mobile: 0200557656

SECTION A: BIODATA

1. Name of School
2. Profession
3. Age
4. Current position(s)
5. Gender
6. Marital status
7. Occupation
8. Years in current position
9. Years of working in senior high school
10. Educational qualification

1 | Page

SECTION A: BIODATA

1. Name of School

.....
.....

2. Profession

.....
.....

3. Age

4. Current position(s)

.....
.....

5. Gender

6. Marital status

7. Occupation

8. Years in current position

9. Years of working in senior high school

10. Educational qualification

.....
.....

11. Job description at the library

.....
.....

SECTION B: PROFESSIONAL BACKGROUND

1. Do you have an academic qualification in Library or Information Studies?

.....
.....

2. Where and when did you get the training in library science?

.....
.....

3. Have you attended any workshop on library science or management?

.....
.....

4. What is your opinion about the role of the school library in senior high school education?

.....
.....

5. During your time as library staff have you registered with any library association or organization?

.....
.....

6. What association/organization are you a member of?

.....

.....

SECTION C: SUSTAINABLE DEVELOPMENT GOAL FOUR (SDG4)

7. Has the the school given a formal training on the introduction of SDG4?

.....

.....

8. Has the school got any SDG4 implementation plans?

.....

.....

9. Has the library staff attend programs on quality education?

.....

.....

10. Has the school got detailed plans to involve the library in the promotion of quality education?

.....

.....

SECTION D: THE SCHOOL LIBRARY

11. In your opinion do you think the School library has qualified staff?

.....

.....

12. Do you consier the staff strength of the school library as adequate?

.....

.....

13. Do you work works closely with the Heads of Department in the school?

.....

.....

14. What are the sources of support to the school library?

School administration:.....

Individuals:

Other organizations:.....

15. What sort of support do you receive?

.....

.....

16. When was the last time you received a support or donation to the library?

.....

.....

17. What are the major challenges faced by the school library?

.....

.....

18. What improvements would you like to see in school library to better support education?

.....

.....

19. How does the school library obtain feedback from students?

.....

.....

20. What method does the school library use to determine attendance at the library?

.....

.....

21. Has the school library got the independence to organize learning activities for students?

.....

.....

22. On a scale of 1-5 where 5 is the highest, how would you rate students' attendance to library?

.....

.....

23. How do you use the available resources to promote career, lifelong learning, and citizenship education?

.....

.....

SECTION E: SCHOOL LIBRARY'S SUPPORT FOR QUALITY EDUCATION

24. Do you as the library staff organize learning activities for the students?

.....

.....

25. From your observation, do students patronize the school library significantly?

.....

.....

26. Does the school library have adequate resources?

.....

.....

27. In your opinion do you consider the school library as a necessary tool for achieving quality education?

.....

.....

28. Do you use reading clubs, seminars, and workshops, etc., to support student learning?

.....

.....

29. Which programs have been most successful in promoting reading among students?

.....

.....

30. How do you assess the impact of library resources on student academic performance?

.....

.....

31. How often do students use the library for research purposes?

.....

.....

SECTION F: SCHOOL LIBRARIES EQUIPING STUDENTS FOR CAREERS

32. How do you think the school library can better to prepare students for careers?

- | | | |
|--|--|-------------------------------|
| ☐ More targeted resources | ☐ Collaboration with career service providers | Other (please specify): |
| | | |
| | | |

33. How does the school library engage students in career preparation activities?

.....

.....

34. What barriers do you face in providing career resources in the school library?

.....

.....

35. Do you invite guest speakers How important do you think guest speakers are in preparing students for careers?

☐ Not
important

☐ Somewhat
important

☐ Very important

36. How satisfied are you with the career preparation resources available in the school library?

☐ Very satisfied

☐ Satisfied

☐ Neutral

☐ Dissatisfied

☐ Very
dissatisfied

SECTION G: SCHOOL LIBRARIES SUPPORTING LIFELONG LEARNING FOR ALL

37. What improvements would you like to see in the school library to better support your lifelong learning?

.....

.....

38. How has the school library helped students in developing financial literacy skills?

.....

.....

39. Which types of lectures or talks at the school library have you found most engaging?

.....

.....

40. In what ways do you think the school library could better promote lifelong learning among students?

.....

.....

SECTION H: SCHOOL LIBRARIES' SUPPORT FOR PREPARING STUDENTS FOR GLOBAL CITIZENSHIP

41. Do you utilize cultural resources in the school library to educate students on global citizenship?

☐ Yes

☐ No

42. Which of the following resources do you use to promote global citizenship in students?

☐ Human
rights laws

☐ Norms
and
traditions

☐ Constitution

☐ Workshops

☐ Lectures

43. How do you incorporate cultural diversity into your library programs to foster global citizenship?

.....

.....

44. Do you conduct workshops or lectures on global citizenship for students in the library?

45. Which topics are covered in your workshops or lectures on global citizenship?

- ☐ Diversity and inclusion ☐ Human rights ☐ Sustainable development ☐ Global issues

46. Do you collaborate with other departments or organizations to promote global citizenship through the library?

- ☐ Yes ☐ No

47. Which departments or organizations do you collaborate with for promoting global citizenship?

- ☐ Social studies department ☐ Human rights organizations /NCCE ☐ Cultural institutions ☐ Non-profit organizations

48. What challenges do you face in promoting global citizenship through the school library?

.....

.....

49. Do you organize cultural events or celebrations in the library to promote global citizenship?

- ☐ Yes ☐ No

50. Which cultural events or celebrations have been successful in engaging students in global citizenship?

- ☐ International Day ☐ Cultural Heritage Month ☐ Human Rights Day ☐ World Peace Day

51. How do you involve students in planning and organizing cultural events in the library?

.....

.....

52. Do you provide training or professional development opportunities for librarians to enhance their knowledge on global citizenship?

☐ Yes

☐ No

53. What additional strategies or resources would you like to see implemented in the library to further promote global citizenship among students?

.....

.....

THANK YOU FOR PARTICIPATING



Administrators' Interview



UNIVERSITY OF GHANA
SCHOOL OF COMMUNICATION AND INFORMATION STUDIES
INFORMATION STUDIES DEPARTMENT

INTERVIEW GUIDE FOR ADMINISTRATORS

Dear Sir/Madam

I am an Mphil student from the University of Ghana Legon and I am working on a research titled, *Evaluating the contribution of school libraries in Ghana to achieving the UN Sustainable Development Goal 4: A case study of Kassena Nankana East Municipal Assembly*. The outcome of the research will help promote the delivery of quality education. Please spare some time to answer the questions. This will take about 25 minutes. All responses provided will be kept confidential and used for academic purposes only. The identity of participants will remain anonymous. If you have any questions about the interview, please contact the researcher with the contact details below.

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Contact details of researcher: Email: hahmed005@st.ug.edu.gh; Mobile: 0200557656

SECTION A: BIODATA

1. Name of School
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3. Age
4. Current position(s)
5. Gender
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7. Occupation
8. Years in current position
9. Years of working in senior high school
10. Educational qualification

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SECTION A: BIODATA

1. Name of School

.....
.....

2. Profession

.....
.....

3. Age

4. Current position(s)

.....
.....

5. Gender

6. Marital status

7. Occupation

8. Years in current position

9. Years of working in senior high school

10. Educational qualification

.....
.....

11. Job description

.....
.....

SECTION B: PROFESSIONAL BACKGROUND

54. What is your area of specialization?

.....
.....

55. Do you have training related to school curriculum?

.....
.....

56. Do you have any training on library science or management?

.....
.....

57. What is your opinion about the role of the school library in senior high school education?

.....
.....

58. During your time as Head of Department have you registered with any library association or organization?

.....
.....

59. What association/organization are you a member of?

.....

.....

SECTION C: SUSTAINABLE DEVELOPMENT GOAL FOUR (SDG4)

60. Has the the school given academic staff a formal training related to SDG4?

.....

.....

61. Are there rules or policies regarding SDG4 that you are required to work with?

.....

.....

62. Has the school got any SDG4 implementation plans?

.....

.....

63. Has the library staff attend programs on quality education?

.....

.....

64. Has the school got detailed plans to involve the library in the promotion of quality education?

.....

.....

SECTION D: THE SCHOOL LIBRARY

65. In your opinion do you think the School library has qualified staff?

.....

.....

66. Do you consier the staff strength of the school library as adequate?

.....

.....

67. How do you integrate the library the library services to the day-to-day teaching and learning?

.....

.....

68. What are the sources of support to the school library?

School

administration:.....

Individuals:

.....
Other

organizations:.....

69. What sort of support has the library received during your time in office?

.....
.....

70. When was the last time you received a support or donation to the library?

.....
.....

71. What are the major challenges faced by the school library?

.....
.....

72. What improvements would you like to see in school library to better support education?

.....
.....

73. How does the school library obtain feedback from students?

.....
.....

74. What method does the school library use to determine attendance at the library?

.....
.....

75. Has the school library got the independence to organize learning activities for students?

.....
.....

76. On a scale of 1-5 where 5 is the highest, how would you rate students' attendance to library?

.....
.....

77. On a scale of 1-5 where 5 is the highest, how would you rate the extent to which the library supports teaching and learning?

.....
.....

78. How do you use the available resources to promote career, lifelong learning, and citizenship education?

SECTION E: SCHOOL LIBRARY'S SUPPORT FOR QUALITY EDUCATION

79. How often do teachers utilize library resources for lesson planning?

☐ Rarely

☐ Sometimes

☐ Frequently

80. Are there any library programs/activities which have been most effective in supporting student learning?

☐ Reading clubs

☐ STEM workshops

☐ Author visits

☐ Workshops

☐ Other:.....
.....

81. In what ways do you think the school library could better support academic achievement?

82. Do students have access to digital resources in the school library?

☐ Yes

☐ No

83. What challenges do you face in promoting library use among students?

84. Are there designated library periods in the school schedule?

☐ Yes

☐ No

85. How do you measure the impact of library resources on student academic performance?

86. Do you collaborate with the school librarian to integrate library resources into the curriculum?

☐ Yes

☐ No

87. What initiatives have been successful in increasing library usage among students?

☐ Book
fairs

☐ Reading
challenges

☐ Library
orientation
sessions

☐ Other:.....
.....

88. What improvements would you like to see in the school library facilities?

.....
.....

89. Is there a budget allocated specifically for library resources and programs?

☐ Yes

☐ No

90. Do you provide professional development opportunities for teachers on utilizing library resources?

☐ Yes

☐ No

SECTION F: SCHOOL LIBRARIES EQUIPING STUDENTS FOR CAREERS

91. How effective is the school library's career preparation initiatives?

.....
.....

92. Which guest speakers have made the biggest impact on students' career readiness?

.....
.....

93. How often are students encouraged to attend career-related workshops at the school library?

.....

.....

94. Which types of career-related workshops are most popular among students?

.....

.....

95. In what ways can the school library better support students in their career exploration and preparation?

.....

.....

SECTION G: SCHOOL LIBRARIES SUPPORTING LIFELONG LEARNING FOR ALL

96. How do you think the school library can better equip students for lifelong learning?

.....

.....

97. How satisfied are you with the range of resources and programs offered by the school library?

.....

.....

98. Do you think the school library effectively promotes lifelong learning among students?

.....

.....

SECTION H: SCHOOL LIBRARY'S SUPPORT FOR PREPARING STUDENTS FOR GLOBAL CITIZENSHIP

99. How do you incorporate global citizenship education into your school's curriculum?

.....

.....

100. Do you organize cultural exchange programs for students?

☐ Yes

☐ No

101. Which cultural traditions do you emphasize in your school's teachings?

.....
.....

102. How do you ensure that students understand the importance of respecting different cultures?

.....
.....

103. Do you provide workshops on global issues such as global citizenship education?

.....
.....

104. How do you involve students in promoting human rights within the school community?

.....
.....

105. Do you teach students about the constitution of your country?

.....
.....

106. Which constitutional rights do you focus on in your teachings?

☐ Freedom of speech

☐ Right to education

☐ Right to equality

☐ Right to privacy

☐ Right to vote

107. Have guest speakers been invited to talk about global citizenship with students?

☐ Yes

☐ No

108. What topics did guest speakers covered in their lectures?

☐ Global economy

☐ International relations

☐ Cultural diversity

☐ Sustainable development

☐ Peacebuilding

APPENDIX D: Introductory Letters & Ethical Approval



DEPARTMENT OF INFORMATION STUDIES
SCHOOL OF INFORMATION AND
COMMUNICATION STUDIES
COLLEGE OF EDUCATION

June 12, 2024

Ref. No.: INFSA/ACI/ 6/24

The Chairman
Ethics Committee for Humanities
Office of Research, Innovation and Development (ORID)
University of Ghana
Legon

Dear Sir/Madam,

REQUEST FOR ETHICAL CLEARANCE

This is to inform you that Mrs. Helina Bonasi Apea, with student ID No. (22008625) an MPhil student of the Department of Information Studies is seeking ethical clearance from the Committee to enable her carry out a research work.

She is researching on a topic "Evaluating the contribution of School Libraries in Ghana to achieving the UN sustainable development goal 4: A case study of Kassena Nankana East Municipal Assembly".

Mrs. Apea has dully fulfilled all the proposal requirements and her proposal has been thoroughly read and approved by her supervisor.

We would be grateful if you could grant her this clearance to enable her conduct the research work.

Thank you.

Yours faithfully,


Dr. Philip K. Kankam
(Head of Department)

And

Principal Supervisor



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Email: info@ug.edu.gh | www.ug.edu.gh





UNIVERSITY OF GHANA
DEPARTMENT OF INFORMATION STUDIES
SCHOOL OF INFORMATION AND COMMUNICATION STUDIES

Ref. No.....INTS/ACB/6/24.....

June 12, 2014

The Head Master
Our Lady of Lourdes Girls'
Senior High School
Navrongo

Dear Sir/Madam,

INTRODUCTORY LETTER
HELINA BOANSI APEA (MRS.)

I write to introduce to you Mrs. Helina Boansi Apea, an MPhil student of the Department of Information Studies, University of Ghana, Legon.

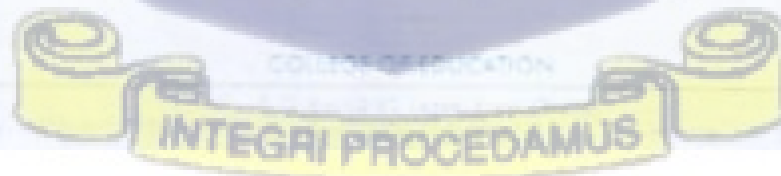
She is researching on the topic: "Evaluating the contribution of School Libraries in Ghana to achieving the UN sustainable development goal 4: A case study of Kasena Nankana East Municipal Assembly".

Please assist her with the necessary information that she will need to undertake the research.

Thank you.

Yours faithfully,


Dr. E. Kankam
(Head of Department)





UNIVERSITY OF GHANA
DEPARTMENT OF INFORMATION STUDIES
SCHOOL OF INFORMATION AND COMMUNICATION STUDIES

June 12, 2024

INFS/ACB/6/24

Ref. No.

The Head Master
St. John's Integrated
Senior High Technical School
Navrongo

Dear Sir/Madam,

INTRODUCTORY LETTER
HELINA BOANSI APPEA (MRS.)

I write to introduce to you Mrs. Helina Boansi Appea, an MPhil student of the Department of Information Studies, University of Ghana, Legon.

She is researching on the topic: "Evaluating the contribution of School Libraries in Ghana to achieving the UN sustainable development goal 4: A case study of Kassena Nankana East Municipal Assembly".

Please assist her with the necessary information that she will need to undertake the research.

Thank you.

Yours faithfully,


Dr. K. Kankam
(Head of Department)





UNIVERSITY OF GHANA
DEPARTMENT OF INFORMATION STUDIES
SCHOOL OF INFORMATION AND COMMUNICATION STUDIES

INFS/AC8/6/24

June 12, 2024

Ref. No.:

The Head Master
Awe Senior High Technical School
Navrongo

Dear Sir/Madam,

INTRODUCTORY LETTER
HELINA BOANSI APEA (MRS.)

I write to introduce to you Mrs. Helina Boansi Apea, an MPhil student of the Department of Information Studies, University of Ghana, Legon.

She is researching on the topic: "Evaluating the contribution of School Libraries in Ghana to achieving the UN sustainable development goal 4: A case study of Kassena Nankana East Municipal Assembly".

Please assist her with the necessary information that she will need to undertake the research.

Thank you.

Yours faithfully,

Philip K. Karkara
(Head of Department)



COLLEGE OF EDUCATION



UNIVERSITY OF GHANA

ETHICS COMMITTEE FOR THE HUMANITIES (ECH)

P. O. Box LG 74, Legon, Accra, Ghana

Ref. No: ECH 008/ 24-25

September 11, 2024

Helina Boansi Apea
Department of Information Studies
University of Ghana
Legon

ETHICAL CLEARANCE (ECH 008/ 24-25)

The Ethics Committee for the Humanities (ECH) conducted a full-board review and approved your protocol titled:

EVALUATING THE CONTRIBUTION OF SCHOOL LIBRARIES IN GHANA TO ACHIEVING THE UN SUSTAINABLE DEVELOPMENT GOAL 4: A CASE STUDY OF KASSENA NANKANA EAST MUNICIPAL ASSEMBLY

PRINCIPAL INVESTIGATOR: **HELINA BOANSI APEA**

Please note that the final review report must be submitted to the Committee at the completion of the study. Your research records may be audited at any time during or after the implementation. Any modification of this research project must be submitted to ECH for review and approval prior to implementation.

Please report all serious adverse events related to this study to ECH within seven (7) days verbally and in writing within fourteen (14) days.

This certificate is valid until September 10, 2025. You are required to submit annual reports for continuing review.

Please accept my congratulations.

Yours Sincerely,

Professor C. Charles Mate-Kole
ECH Chair

Cc: Dr. Philip K. Kankam, Department of Information Studies, UG
Dr. Winfred Bentil, Department of Information Studies, UG

INTEGRI PROCEDAMUS

APPENDIX E: Inferential Statistics

Chi-square test statistics Student respondents

OBJECTIVE 1

To assess how school libraries in the study area support quality education

HYPOTHESIS

H_{0i} : There is no association between each of these items and how school libraries support quality education. ($i = 1, 2, \dots, 14$)

H_{1i} : There is association between each of these item and quality education. ($i = 1, 2, \dots, 14$)

Table

Items	Chi-Square Value	Degrees freedom (df)	Asymp. Sig.(2-sided)
1. Do you need library services to obtain quality education?	11.486	6	0.074
2. How often do you visit the school library	42.438	6	0.000
3. Which resources do you use in the school library?	69.055	12	0.000
4. What improvements would you like to see in the school library?	47.877	12	0.000

5. Do you participate in library programs and events? Select only one answer	11.479	6	0.075
6. Which services do you find most helpful in the school library?	66.496	15	0.000
7. How do you think the school library can better support your educational needs?	78.601	15	0.000
8. How do you think the school library can better support your educational needs?	34.149	12	0.000
9. Do you think the school library adequately meets the needs of students? Select only one answer	33.927	6	0.000
10. Which programs or events have you found most beneficial in the school library?	58.880	18	0.000
11. Do you think the school library staff are helpful and approachable?	6.356	6	0.384

12. Which study areas do you prefer in the school library?	44.426	18	0.001
13. Which genres of books do you enjoy reading the most?	38.069	18	0.004
14. What role do you think the school library plays in enhancing your overall learning experience?	98.808	12	0.071

OBJECTIVE 2

To determine how school libraries in the study area equip students for careers.

HYPOTHESIS

H_{0i} : There is no association between each of these items and how school libraries equip students for career. ($i = 1, 2, \dots, 10$)

H_{1i} : There is association between each of these items and how school libraries equip students for career. ($i = 1, 2, \dots, 10$)

Table:

Items	Chi-Square Value	Degrees freedom (df)	Asymp. Sig.(2-sided)
1. What career do you want to pursue in life?	37.541	18	0.004
2. Have you attended any planning tools workshops at the school library?	11.360	3	0.010
3. Which planning tool workshop did you find most helpful?	30.056	12	0.003

4. What is one skill you have learned from a guest speaker at the school library?	72.767	15	0.000
5. Which feedback mechanism do you find most effective for improving your career readiness?	22.330	15	0.099
6. How has the school library helped you in preparing for your future career?	41.224	18	0.001
7. Have you participated in any career-related events organized by the school library?	11.837	6	0.066
8. Which guest speaker presentation left a lasting impact on you?	52.117	15	0.000
9. Do you feel more confident about your career prospects after utilizing the school library's resources?	6.963	6	0.324
10. Which aspect of the school library's career preparation services do you think needs improvement?	37.617	15	0.001

OBJECTIVE 3

To determine how school libraries in the study area boost skills and lifelong learning for all.

HYPOTHESIS

H_{0i} : There is no association between each of these items and how school libraries boost skills and lifelong learning for all. ($i = 1, 2, \dots, 6$)

H_{1i} : There is association between each of these items and how school libraries boost skills and lifelong learning for all. ($i = 1, 2, \dots, 6$)

Table :

Items	Chi-Square Value	Degrees freedom (df)	Asymp. Sig.(2-sided)
1. Would you like additional skills and knowledge to help you in life?	8.596	6	0.198
2. How often do you utilize the school library's skill resources?	42.079	15	0.000
3. Have you attended any financial literacy workshops at the school library?	24.797	9	0.003
4. Which reading programs have you participated in?	45.095	15	0.000
5. Do you feel more confident in your skills after utilizing the school library's resources?	22.551	9	0.007

6. Would you like to know about your rights and people from different cultures around the world?	7.776	6	0.255
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OBJECTIVE 4

To assess how school libraries in the study area prepare students for global citizenship.

HYPOTHESIS

H_{0i} : There is no association between each of these items and how school libraries prepare students for global citizenship. ($i = 1, 2, \dots, 15$)

H_{1i} : There is association between each of these items and how school libraries prepare students for global citizenship. ($i = 1, 2, \dots, 15$)

Table:

Items	Chi-Square Value	Degrees freedom (df)	Asymp. Sig.(2-sided)
1. Would you like to know about your rights and people from different cultures around the world?	7.776	6	0.255
2. How often do you utilize the school library's cultural resources?	69.262	15	0.000
3. Which of the following resources have helped you acquire global citizenship training?	43.300	18	0.001
4. What is one key learning you have gained from utilizing the school library's resources for global citizenship training?	32.069	12	0.001

5. Do you feel more prepared to engage in global issues after utilizing the school library's resources?	13.774	9	0.131
6. Which aspect of global citizenship training do you find most valuable?	38.479	18	0.003
7. Have you participated in any workshops or lectures related to global citizenship training?	21.192	9	0.000
8. Which workshop or lecture left the biggest impression on you?	51.132	18	0.000
9. Do you believe global citizenship training should be a mandatory part of the school curriculum?	20.939	9	0.013
10. Which global issue do you feel most passionate about addressing?	43.806	18	0.001
11. Have you engaged in any community service projects related to global citizenship training?	12.438	6	0.053
12. Which community service project had the most impact on you?	57.961	18	0.000
13. How has your understanding of diversity and inclusion evolved through global citizenship training?	121.520	21	0.000

14. Do you feel empowered to take action on global issues after receiving global citizenship training?	14.181	6	0.028
15. Would you recommend the school library's resources for global citizenship training to other students?	22.217	9	0.008

Chi-square test statistics of Department Head respondents

INFERENTIAL ANALYSIS FOR HOD DATA

OBJECTIVE 1

To assess how school libraries in the study area support quality education.

HYPOTHESIS

H_{0i} : There is no association between each of these items and how school libraries support quality education. ($i = 1, 2, \dots, 19$)

H_{1i} : There is association between each of these item and quality education. ($i = 1, 2, \dots, 19$)

Table:

Items	Chi-Square Value	Degrees of freedom (df)	Asymp. Sig. (2-sided)
1. Academic staff have knowledge of the SDG4	16.318	9	0.061
2. The school has formally educated	11.719	12	0.469

academic staff on the introduction of SDG4			
3. The school has SDG4 implementation plans	23.823	12	0.022
4. Academic staff have attended programs on quality education	9.414	12	0.667
5. The school has detailed plans to ensure the achievement of quality education	11.269	9	0.258
6. School library has qualified staff	12.791	12	0.384
7. The staff strength of the school library is adequate	8.548	12	0.656
8. The school library organizes learning activities for the students	18.029	9	0.035
9. The school library works closely with the Heads of Department in the school	13.614	12	0.326
10. The school library is significantly patronized by the students	7.906	9	0.544

11. The school library has adequate resources	12.749	12	0.388
12. The school library receives support from the school administration	8.767	9	0.459
13. The school library receives support from organizations and individuals other than the school	18.690	12	0.096
14. The school library is a necessary tool for achieving quality education	9.145	9	0.424
15. The school library has the independence to organize learning activities for students	6.036	12	0.914
16. The school library uses reading clubs, seminars, and workshops, etc., to support student learning	16.334	9	0.060
17. The school library has educational resources on career	17.278	9	0.045

18. The school library has educational resources for lifelong learning	17.019	12	0.149
19. The school library has educational resources on Global Citizenship Education	11.508	9	0.242

OBJECTIVE 2

To determine how school libraries in the study area equip students for careers.

HYPOTHESIS

H_{0i} : There is no association between each of these items and how school libraries equip students for career. ($i = 1, 2, \dots, 8$)

H_{1i} : There is association between each of these items and how school libraries equip students for career. ($i = 1, 2, \dots, 8$)

Table:

Items	Chi-Square Value	Degrees of freedom (df)	Asymp. Sig. (2-sided)
1. What planning tools does the school library use?	10.812	6	0.094
2. How often does your department attend library workshops?	5.550	9	0.784
3. Have guest speakers been invited to the library for career talks?	5.259	3	0.154

4. Does the library offer career guidance resources?	1.888	3	0.596
5. How does the library tailor resources to different career paths?	6.584	6	0.361
6. What improvements would you suggest for the library's career preparation initiatives?	4.494	12	0.973
7. Are students actively involved in planning library events?	5.259	3	0.154
8. What types of guest speakers have visited the library for career talks?	7.014	6	0.636

OBJECTIVE 3

- To determine how school libraries in the study area boost skills and lifelong learning for all.

HYPOTHESIS

H_{0i} : There is no association between each of these items and how school libraries boost skills and lifelong learning for all. ($i = 1, 2, \dots, 15$)

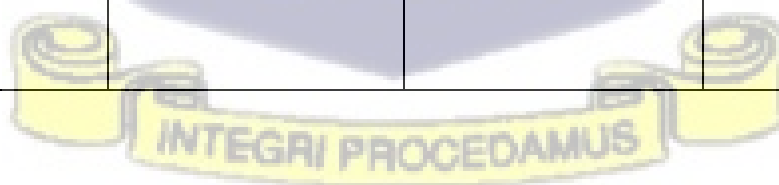
H_{1i} : There is association between each of these items and how school libraries boost skills and lifelong learning for all. ($i = 1, 2, \dots, 15$)

Table:

Items	Chi-Square Value	Degrees of freedom (df)	Asymp. Sig. (2-sided)
1. Do you have learning activities for lifelong skills embedded in the school curriculum?	4.786	3	0.188
2. Do you utilize the school library to promote the acquisition of lifelong learning skills?	7.468	3	0.058
3. Does the library organize lifelong learning activities?	2.242	3	0.524
4. Do you think that the school library resources can support lifelong learning?	1.164	3	0.762
5. How often do you utilize the school library's skill resources for	15.533	9	0.077

student development?			
6. Do you have any specific reading programs in place to promote lifelong learning?	2.570	3	0.046
7. Which financial literacy initiatives are integrated into your curriculum?	8.034	9	0.531
8. Have you organized any lectures on lifelong learning skills for students?	7.973	3	0.047
9. Which resources do you find most effective in equipping students for lifelong learning?	18.411	12	0.104
10. What challenges do you face in promoting lifelong learning among students?	8.328	12	0.759
11. Do you collaborate with external organizations to	4.450	3	0.217

enhance student learning opportunities?			
12. How do you assess the impact of your lifelong learning initiatives on student outcomes?	4.357	6	0.628
13. Are there any specific goals you have set for student lifelong learning outcomes?	11.656	3	0.009
14. How do you involve students in the design and implementation of lifelong learning programs?	12.984	15	0.604
15. Are there any specific goals you have set for student lifelong learning outcomes?	3.908	3	0.272



OBJECTIVE 4

- To assess how school libraries in the study area prepare students for global citizenship.

HYPOTHESIS

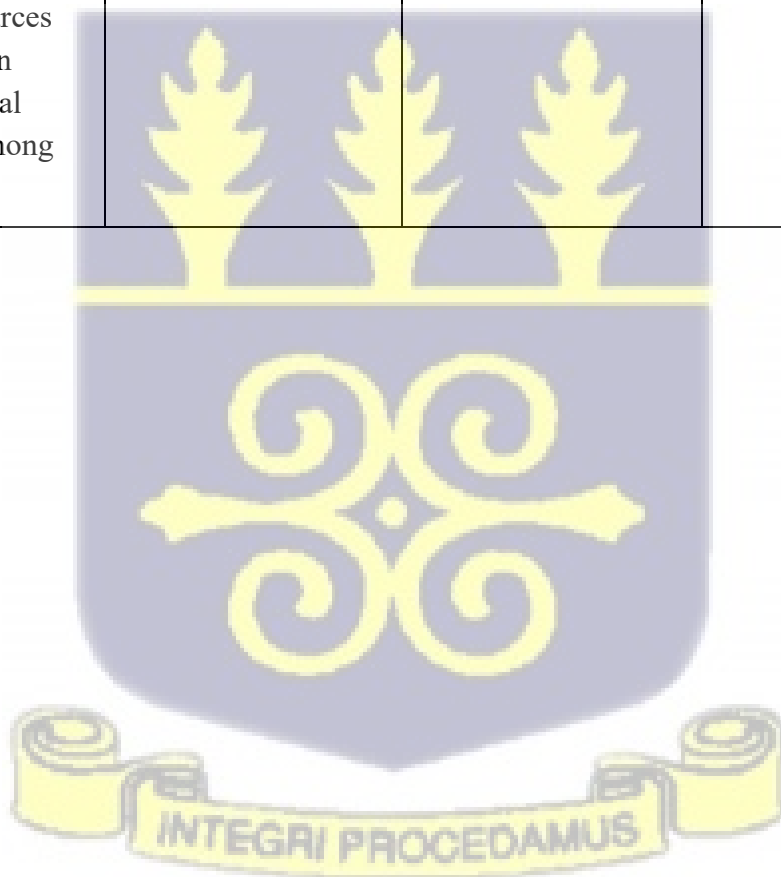
H_{0i} : There is no association between each of these items and how school libraries prepare students for global citizenship. ($i = 1, 2, \dots, 7$)

H_{1i} : There is association between each of these items and how school libraries prepare students for global citizenship. ($i = 1, 2, \dots, 7$)

Table:

Item	Chi-square Value	Degrees of freedom (df)	Asymp. Sig. (2-sided)
1. Do you utilize the school library's cultural resources in your department's curriculum?	1.558	3	0.669
2. Which of the following resources do you use to teach students about human rights laws?	8.443	9	0.490
3. Do you involve students in discussions about different cultural norms and traditions?	3.311	3	0.346
4. Which of the following methods do you use to educate students about the constitution?	9.112	9	0.427

5. Do you organize workshops on global citizenship for your students?	2.058	3	0.560
6. Which of the following topics are covered in your global citizenship workshops?	6.312	9	0.708
7. Do you believe that the school library's resources are effective in fostering global citizenship among students?	16.756	12	0.159



APPENDIX F: Descriptive Statistics

Analysis of data from students

Table 1: Crosstabulation of Name of the Institution * Age of Respondents

Crosstab

			Age of Respondents		
				10-14	15-19
Name of the Institution	Notre Dame Seminary Senior	Count	0	0	19
	High School Navrongo	% of Total	0.0%	0.0%	9.2%
	Our Lady of Lourdes Girls	Count	0	3	37
	Senior High School	% of Total	0.0%	1.4%	17.9%
	St. John's INtegrated Senior	Count	5	1	73
	High and Technical School	% of Total	2.4%	0.5%	35.3%
	Awe Senior High School	Count	0	1	52
		% of Total	0.0%	0.5%	25.1%
	Total	Count	5	5	181
		% of Total	2.4%	2.4%	87.4%



Crosstab

			Age of Respondents	Total
			20-24	
Name of the Institution	Notre Dame Seminary Senior High School Navrongo	Count	1	20
		% of Total	0.5%	9.7%
	Our Lady of Lourdes Girls Senior High School	Count	0	40
		% of Total	0.0%	19.3%
	St. John's INtegrated Senior High and Technical School	Count	8	87
		% of Total	3.9%	42.0%
	Awe Senior High School	Count	7	60
		% of Total	3.4%	29.0%
Total		Count	16	207
		% of Total	7.7%	100.0%

Name of the Institution * Gender of Respondents

Table 2: Crosstabulation of Name of the Institution * Gender of Respondents

Crosstab

			Gender of Respondents		
				Male	Female
Name of the Institution	Notre Dame Seminary Senior High School Navrongo	Count	0	20	0
		% of Total	0.0%	9.7%	0.0%
	Our Lady of Lourdes Girls Senior High School	Count	0	1	39
		% of Total	0.0%	0.5%	18.8%
		Count	6	39	42
		% of Total			

Total	St. John's INtegrated Senior High and Technical School	% of Total	2.9%	18.8%	20.3%
		Count	1	27	32
	Awe Senior High School	% of Total	0.5%	13.0%	15.5%
		Count	7	87	113
		% of Total	3.4%	42.0%	54.6%

Crosstab

			Total
Name of the Institution	Notre Dame Seminary Senior High School Navrongo	Count	20
		% of Total	9.7%
	Our Lady of Lourdes Girls Senior High School	Count	40
		% of Total	19.3%
	St. John's INtegrated Senior High and Technical School	Count	87
		% of Total	42.0%
	Awe Senior High School	Count	60
		% of Total	29.0%
		Count	207
		% of Total	100.0%



Name of the Institution * Subject Area

Table 3: Crosstabulation of Name of the Institution * Subject Area

Crosstab

			Subject Area	
				Science Department
Name of the Institution	Notre Dame Seminary Senior	Count	0	12
	High School Navrongo	% of Total	0.0%	5.8%
	Our Lady of Lourdes Girls	Count	0	7
	Senior High School	% of Total	0.0%	3.4%
	St. John's INtegrated Senior	Count	1	1
	High and Technical School	% of Total	0.5%	0.5%
	Awe Senior High School	Count	0	15
		% of Total	0.0%	7.2%
	Total	Count	1	35
		% of Total	0.5%	16.9%

Crosstab

			Subject Area	
			Business Department	Technical Department
Name of the Institution	Notre Dame Seminary Senior	Count	0	0
	High School Navrongo	% of Total	0.0%	0.0%
	Our Lady of Lourdes Girls	Count	2	0
	Senior High School	% of Total	1.0%	0.0%
	St. John's INtegrated Senior	Count	6	10
	High and Technical School	% of Total	2.9%	4.8%
	Awe Senior High School	Count	2	1

Total	% of Total	1.0%	0.5%
	Count	10	11
	% of Total	4.8%	5.3%

Crosstab

			Subject Area	
			General Arts Department	Visual Art Department
Name of the Institution	Notre Dame Seminary Senior High School Navrongo	Count	8	0
		% of Total	3.9%	0.0%
	Our Lady of Lourdes Girls Senior High School	Count	19	0
		% of Total	9.2%	0.0%
	St. John's INtegrated Senior High and Technical School	Count	26	22
		% of Total	12.6%	10.6%
	Awe Senior High School	Count	27	12
		% of Total	13.0%	5.8%
Total		Count	80	34
		% of Total	38.6%	16.4%

Crosstab

			Subject Area	
			Agricultural Science Department	Home Economics Department
Name of the Institution	Notre Dame Seminary Senior High School Navrongo	Count	0	0
		% of Total	0.0%	0.0%
	Our Lady of Lourdes Girls Senior High School	Count	2	10
		% of Total	1.0%	4.8%

Total	St. John's INtegrated Senior	Count	14	7
	High and Technical School	% of Total	6.8%	3.4%
	Awe Senior High School	Count	0	3
		% of Total	0.0%	1.4%
		Count	16	20
		% of Total	7.7%	9.7%

Crosstab

			Total
Name of the Institution	Notre Dame Seminary Senior High	Count	20
	School Navrongo	% of Total	9.7%
	Our Lady of Lourdes Girls Senior High	Count	40
	School	% of Total	19.3%
	St. John's Integrated Senior High and	Count	87
	Technical School	% of Total	42.0%
	Awe Senior High School	Count	60
		% of Total	29.0%
	Total	Count	207
		% of Total	100.0%



Name of the Institution * Status

Table 4: Crosstabulation of Name of the Institution * Status

Crosstab

			Status		
				Boarding	Day
Name of the Institution	Notre Dame Seminary Senior	Count	0	20	0
	High School Navrongo	% of Total	0.0%	9.7%	0.0%
	Our Lady of Lourdes Girls	Count	0	40	0
	Senior High School	% of Total	0.0%	19.3%	0.0%
	St. John's Integrated Senior	Count	5	73	9
	High and Technical School	% of Total	2.4%	35.3%	4.3%
	Awe Senior High School	Count	0	56	4
		% of Total	0.0%	27.1%	1.9%
	Total	Count	5	189	13
		% of Total	2.4%	91.3%	6.3%

Crosstab

			Total
Name of the Institution	Notre Dame Seminary Senior High	Count	20
	School Navrongo	% of Total	9.7%
	Our Lady of Lourdes Girls Senior High	Count	40
	School	% of Total	19.3%
	St. John's Integrated Senior High and	Count	87
	Technical School	% of Total	42.0%
	Awe Senior High School	Count	60

Total	% of Total	29.0%
	Count	207
	% of Total	100.0%

Name of the Institution * Sponsorship

Table 5: Crosstabulation of Name of the Institution * Sponsorship

Crosstab

			Sponsorship		
				Self	Private
Name of the Institution	Notre Dame Seminary Senior	Count	0	2	1
	High School Navrongo	% of Total	0.0%	1.0%	0.5%
	Our Lady of Lourdes Girls	Count	0	11	0
	Senior High School	% of Total	0.0%	5.3%	0.0%
	St. John's INTEGRATED Senior	Count	0	17	0
	High and Technical School	% of Total	0.0%	8.2%	0.0%
	Awe Senior High School	Count	2	26	2
		% of Total	1.0%	12.6%	1.0%
Total		Count	2	56	3
		% of Total	1.0%	27.1%	1.4%

Crosstab

			Sponsorship	Total
			Government	
Name of the Institution	Notre Dame Seminary Senior	Count	17	20
	High School Navrongo	% of Total	8.2%	9.7%
	Our Lady of Lourdes Girls Senior	Count	29	40
	High School	% of Total	14.0%	19.3%

Total	St. John's INtegrated Senior High and Technical School	Count	70	87
		% of Total	33.8%	42.0%
	Awe Senior High School	Count	30	60
		% of Total	14.5%	29.0%
		Count	146	207
		% of Total	70.5%	100.0%

Analysis of data from HODs

Name of School * Age of Respondents

Crosstab

			Age of Respondents			
			31-35	36-40	41-45	46-50
Name of School	Notre Dame Seniour High School	Count	0	1	2	1
		% of Total	0.0%	3.8%	7.7%	3.8%
	Our Lady of Lourdes Girls Seniour High School	Count	1	1	2	1
		% of Total	3.8%	3.8%	7.7%	3.8%
	St Johns Integrated Senior High Technical School	Count	0	2	6	0
		% of Total	0.0%	7.7%	23.1%	0.0%
	Awe Senior High Technical School	Count	0	1	5	2
		% of Total	0.0%	3.8%	19.2%	7.7%
	Total	Count	1	5	15	4
		% of Total	3.8%	19.2%	57.7%	15.4%

Crosstab

	Age of Respondents	Total
	51-55	

Name of School	Notre Dame Seniouir High School	Count	0	4
		% of Total	0.0%	15.4%
	Our Lady of Lourdes Girls Seniouir High School	Count	0	5
		% of Total	0.0%	19.2%
	St Johns Integrated Senior High Technical School	Count	1	9
		% of Total	3.8%	34.6%
Total	Awe Senior High Technical School	Count	0	8
		% of Total	0.0%	30.8%
		Count	1	26
		% of Total	3.8%	100.0%

Name of School * Gender

Crosstab

			Gender		Total
			Male	Female	
Name of School	Notre Dame Seniouir High School	Count	4	0	4
		% of Total	15.4%	0.0%	15.4%
	Our Lady of Lourdes Girls Seniouir High School	Count	5	0	5
		% of Total	19.2%	0.0%	19.2%
	St Johns Integrated Senior High Technical School	Count	8	1	9
		% of Total	30.8%	3.8%	34.6%
		Count	5	3	8

Total	Awe Senior High Technical School	% of Total	19.2%	11.5%	30.8%
		Count	22	4	26
		% of Total	84.6%	15.4%	100.0%

Name of School * Marital status

Crosstab

			Marital status		Total
			Married	Single	
Name of School	Notre Dame Seniouir High School	Count	4	0	4
		% of Total	15.4%	0.0%	15.4%
	Our Lady of Lourdes Girls Seniouir High School	Count	4	1	5
		% of Total	15.4%	3.8%	19.2%
	St Johns Integrated Senior High Technical School	Count	9	0	9
		% of Total	34.6%	0.0%	34.6%
	Awe Senior High Technical School	Count	8	0	8
		% of Total	30.8%	0.0%	30.8%
	Total	Count	25	1	26
		% of Total	96.2%	3.8%	100.0%

Name of School * Years in current position

Crosstab

		Years in current position		
		1-5 Years	6-10 Years	11-15 Years
Name of School	Count	1	3	0

Total	Notre Dame Seniouir High School	% of Total	3.8%	11.5%	0.0%
	Our Lady of Lourdes Girls Seniouir High School	Count	3	1	0
		% of Total	11.5%	3.8%	0.0%
	St Johns Integrated Senior High Technical School	Count	5	3	1
		% of Total	19.2%	11.5%	3.8%
	Awe Senior High Technical School	Count	3	3	1
		% of Total	11.5%	11.5%	3.8%
		Count	12	10	2
		% of Total	46.2%	38.5%	7.7%

Crosstab				
		Years in current position	Total	
		16-20 Years		
Name of School	Notre Dame Seniouir High School	Count	0	4
		% of Total	0.0%	15.4%
	Our Lady of Lourdes Girls Seniouir High School	Count	1	5
		% of Total	3.8%	19.2%
	St Johns Integrated Senior High Technical School	Count	0	9
		% of Total	0.0%	34.6%
	Awe Senior High Technical School	Count	1	8
		% of Total	3.8%	30.8%
	Total	Count	2	26
		% of Total	7.7%	100.0%

Name of School * Years of working in senior high school

Crosstab

			Years of working in senior high school		Total
			1-10 Years	11-20 Years	
Name of School	Notre Dame Seniouir High School	Count	1	3	4
		% of Total	3.8%	11.5%	15.4%
	Our Lady of Lourdes Girls Seniouir High School	Count	2	3	5
		% of Total	7.7%	11.5%	19.2%
	St Johns Integrated Senior High Technical School	Count	2	7	9
		% of Total	7.7%	26.9%	34.6%
	Awe Senior High Technical School	Count	2	6	8
		% of Total	7.7%	23.1%	30.8%
	Total	Count	7	19	26
		% of Total	26.9%	73.1%	100.0%

Name of School * Educational qualification

Crosstab

			Educational qualification		Total
			Degree	Masters	
Name of School	Notre Dame Seniouir High School	Count	1	3	4
		% of Total	3.8%	11.5%	15.4%

Our Lady of Lourdes Girls Seniour High School	Count	3	2	5
	% of Total	11.5%	7.7%	19.2%
St Johns Integrated Senior High Technical School	Count	7	2	9
	% of Total	26.9%	7.7%	34.6%
Awe Senior High Technical School	Count	4	4	8
	% of Total	15.4%	15.4%	30.8%
Total	Count	15	11	26
	% of Total	57.7%	42.3%	100.0%

Name of School * Job description

Crosstab

		Job description			
		Teaching	Counseling	All of the above	
Name of School	Notre Dame Seniour High School	Count	0	0	4
		% of Total	0.0%	0.0%	15.4%
	Our Lady of Lourdes Girls Seniour High School	Count	1	0	4
		% of Total	3.8%	0.0%	15.4%
	St Johns Integrated Senior High Technical School	Count	2	2	5
		% of Total	7.7%	7.7%	19.2%
	Awe Senior High Technical School	Count	3	0	5
		% of Total	11.5%	0.0%	19.2%
	Total	Count	6	2	18
		% of Total	23.1%	7.7%	69.2%

Crosstab

	Total
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Name of School	Notre Dame Seniour High School	Count
		4
		% of Total
		15.4%
	Our Lady of Lourdes Girls Seniour High School	Count
		5
Total		% of Total
		19.2%
	St Johns Integrated Senior High Technical School	Count
		9
		% of Total
		34.6%
Total	Awe Senior High Technical School	Count
		8
		% of Total
		30.8%
		Count
		26
Total		% of Total
		100.0%

