

Instructional Resources and Academic Performance in General Knowledge in Art: A Case Study of Sekyere Kumawu Senior High Schools, Ghana

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Abstract

The purpose of the study was to examine the instructional resources usage in general knowledge in art and how it affects students' academic performance. This study employed a descriptive survey design complemented by a case study approach. The descriptive survey design was chosen because it allows for the collection of data from a relatively large sample, thereby providing a broad picture of the availability, adequacy, and utilization of instructional resources and their effect on students' academic performance. Both qualitative and quantitative approaches were used to gain a comprehensive understanding of the issue. A total of 150 respondents were selected using purposive, convenient, and simple random sampling techniques to ensure representation from different school settings. The study revealed that the instructional resources were largely inadequate and that teachers were compelled to improvise, borrow, or even purchase materials themselves to support teaching and learning. The lack of adequate resources discouraged students, leading to some losing interest in Visual Arts and shifting to other courses. The study further revealed that sufficient instructional resources enhanced teaching effectiveness and improved students' understanding of the GKA syllabus. It was therefore recommended that, as a matter of urgency, the government should ensure adequate provision of instructional resources in schools in Sekyere Kumawu District to enhance teaching and learning. Since students are shifting from Visual Arts to other courses due to insufficient resources, urgent measures should be taken to provide adequate instructional materials to rekindle students' interest in the sub-

ject.

Keywords

Instructional Resources, General Knowledge in Art (GKA), Academic Performance, Visual Arts Education, Teaching and Learning

1. Introduction

The use of instructional resources is a critical factor in improving students' academic performance, as their effectiveness in teaching and learning depends largely on both their quality and availability (FEMSA, 2015). These resources help teachers clarify abstract concepts and enable students to learn more effectively, thereby enhancing classroom performance (Smith, 2020). Studies show that schools where teachers actively integrate instructional resources tend to outperform those where such resources are underutilized (Adeogun, 2001; Young, 2023). Conversely, inadequate or ineffective use often forces teachers to adopt abstract methods of instruction, which limits students' understanding (Lawrence, 2016).

Instructional resources encompass both tangible and intangible materials, such as textbooks, pictures, projectors, newspapers, videos, and laboratory or studio equipment (Nantwi & Nkyi Asamoah, 2025). They are widely recognized for enhancing teacher performance, supporting discovery learning, providing feedback, and fostering critical thinking and problem-solving skills (Lawrence, 2016). Recent scholarship underscores their role in making lessons more engaging, concrete, and understandable, thereby strengthening the quality of teaching and learning. Consequently, what and how teachers teach is strongly linked to the availability and effective use of resources alongside teacher competence (Shafique, 2016). Policymakers are thus encouraged to prioritize the provision of instructional resources to improve teaching and learning outcomes (Okori & Omenka, 2017).

Scholars further highlight that instructional resources not only facilitate knowledge transfer but also stimulate active student engagement. Tuimur & Chemwei (2015) noted that resources enliven classroom learning, but they cannot replace teachers; rather, they complement them in achieving instructional goals. In the Ghanaian context, particularly in General Knowledge in Art (GKA), essential resources include art studios, drawing tables, chairs, colours, pencils, and other materials required for practical engagement. The absence of such resources often leads to over-reliance on theoretical instruction, which undermines creativity and performance (Azure, 2015).

Poor student performance in some schools has been attributed to a lack of instructional resources (Bello, 2009). These materials provide mental images that aid comprehension and retention. Their absence in GKA instruction prevents stu-

dents from actively constructing and reconstructing knowledge, resulting in poorer outcomes compared to peers with access to adequate resources (Idiaghe, 2004). Studies consistently demonstrate that students who engage with practical resources develop a deeper understanding of Art concepts, which ultimately improves performance in both classroom activities and external examinations (Borich, 2007).

Despite their importance, empirical studies across Africa highlight persistent challenges in resource provision and utilization. For instance, Bernard (2015) reported that Kenyan teachers were reluctant to improvise or create missing teaching aids. In Ghana, Opoku-Asare (2016) observed that instructional resources were largely unavailable or in poor condition, constraining teachers' ability to diversify instructional methods. Such challenges reduce classroom interactivity and limit learning outcomes.

Within GKA—a core subject for Visual Arts and an elective for Home Economics students in Ghana's Senior High Schools—effective teaching requires creativity and improvisation with available materials (Yeboah, 2014). Since the subject combines both theory and practice, adequate preparation and effective use of instructional resources are essential for student success in class assessments and in the West African Senior School Certificate Examination (WASSCE) (Koko, 2016).

However, in the Sekyere Kumawu District of the Ashanti Region, a troubling trend has emerged: students are abandoning Visual Arts for other programmes, citing poor academic performance, lack of creativity in teaching, and difficulty in understanding GKA concepts. Interventions such as closer supervision, regular attendance, and increased assignments have not resolved the problem. This persistent challenge underscores a research gap in the role of instructional resources in shaping student performance in GKA.

Against this background, the present study investigates the availability and utilization of instructional resources in the teaching of GKA and their impact on students' academic performance in three selected Senior High Schools in the Sekyere Kumawu District, Ashanti Region, Ghana.

1.1. Problem Statement

Despite the recognized importance of instructional resources in enhancing teaching effectiveness and student achievement, the teaching of General Knowledge in Art (GKA) in many Ghanaian Senior High Schools, particularly in the Sekyere Kumawu District, continues to suffer from inadequate provision and utilization of these resources. Teachers are often compelled to improvise or rely on theoretical instruction due to shortages of essential tools such as studios, drawing tables, and practical art materials, which undermines creativity, limits student engagement, and contributes to poor academic performance. This has resulted in a worrying trend where students lose interest in Visual Arts and shift to other programmes. Although previous studies have highlighted the general challenges of resource provision in Ghanaian schools, limited empirical research has examined

how these inadequacies specifically affect GKA instruction and performance in the Sekyere Kumawu context. This gap necessitates an investigation into the availability, adequacy, and use of instructional resources in GKA, the challenges teachers face in employing them, and the strategies adopted to overcome such challenges in order to improve teaching and learning outcomes.

1.2. Objectives

- 1) To find out the types of instructional resources used by the teachers in teaching GKA in the three selected schools in the Sekyere Kumawu district.
- 2) To identify the challenges that the teachers in the three selected schools experience in accessing and using the instructional resources they need to teach their lessons.
- 3) To assess the strategies that teachers deploy to overcome the challenges they encounter and the results they attain in using instructional resources in the three selected schools in the Sekyere Kumawu district.

1.3. Research Questions

The following were the research questions that guided the study:

- 1) What instructional resources are used by the teachers in the three schools?
- 2) What challenges do teachers in the three schools face in accessing and using the instructional resources they need to teach their GKA lessons?
- 3) What are the strategies that teachers use to minimize the challenges of attaining and using instructional resources for GKA in schools?

2. Literature Review

2.1. Theoretical Review of Literature

- *Instructional Resources*

Instructional resources are considered the modern vehicle that can send every student to his or her destination because the resources facilitate modern teaching and learning pedagogies, which determine learners' academic performance in the end-of-term assessment and yield quality education for all (Evermeld and Andela, 2023). Instructional resources are widely recognized as central to effective teaching and learning, serving as mediating tools between the teacher, the learner, and the subject matter. They range from physical objects such as models and charts to digital technologies like projectors, computers, and interactive media. Their fundamental purpose is to facilitate comprehension, enhance learner engagement, and strengthen retention of knowledge (Aramide & Bolarinwa, 2010; Kapur, 2018). Beyond this functional view, scholars emphasize that instructional resources should be regarded not as supplementary aids but as integral components of pedagogy that shape how learners experience knowledge (Isola, 2010).

Definitions of instructional resources are diverse but consistent in stressing their role in organizing and communicating content. Lawrence (2016) defines them as tangible or abstract aids that support knowledge transfer, while Fan and

Chen (2011) cited in (Bukoye, 2019) categorize them into print and non-print materials that influence learners' experiences. This diversity of definitions reflects a broad consensus: instructional resources are not just optional enhancements but fundamental inputs that enable curriculum delivery.

Critically, however, literature reveals a persistent gap between the theoretical recognition of their importance and the practical realities of provision and use. In many African contexts, schools are either under-resourced or fail to utilize existing resources effectively (Sengai & Matseliso, 2021; Opoku-Asare, 2016). This raises a crucial point for investigation: whether the challenge lies primarily in material scarcity, teacher capacity, or systemic neglect.

2.2. Classification of Instructional Resources

Instructional resources may be classified according to sensory engagement (visual, auditory, and audio-visual), technological sophistication, or mode of delivery. Visual resources include textbooks, charts, and maps, which aid comprehension by concretizing abstract content. Auditory resources such as radio programmes or recorded lectures develop listening and comprehension skills. Audio-visual tools, such as films and television, integrate both senses to create dynamic learning experiences (Bušljeta, 2013).

Borich (2007) proposes a more expansive typology that includes print media, graphic and photographic media, audio and video media, computer-based technologies, and simulations. This classification highlights how resources evolve with technology, broadening the scope of instructional delivery. Yet, the critical challenge is not the existence of multiple categories but rather how effectively teachers integrate them into their lessons. Evidence suggests that many teachers remain overly dependent on traditional textbooks, neglecting opportunities provided by digital and interactive tools (Eya & Ureme, 2011).

This underutilization cannot be explained solely by a lack of resources; it is also a function of teacher preparedness, attitudes, and training. For instance, Sengai and Matseliso (2021) observed that even when resources were available, teachers often lacked the pedagogical skills to integrate them effectively. This underscores the need to view instructional resources not only as material artefacts but also as part of a larger system involving teacher competence and institutional support.

2.3. Importance of Instructional Resources in Teaching and Learning

The importance of instructional resources has been consistently established in educational research. They make abstract concepts concrete, sustain learner motivation, and promote active participation (Aina, 2013). By appealing to multiple senses, they improve retention and reduce forgetfulness (Koko, 2016). They also provide learners with shared experiences that transcend the classroom, exposing them to real-world contexts through simulations, photographs, or models (Nantwi & Nkyi Asamoah, 2025). Critically, however, the literature also shows that the

benefits of instructional resources are not automatic. Their effectiveness depends on alignment with lesson objectives, appropriateness for learners' developmental stages, and teacher competence in using them (Agufuna, Too, & Mukwa, 2018). Poorly chosen or mechanically used resources can distract rather than support learners. This is particularly significant in contexts like Ghana and Nigeria, where teachers often rely on rote methods and dictation, reducing instructional resources to mere decorative tools (Oppong, 2009). Learning materials have significant impact on student academic performance in schools (Okenyi, 2022).

Furthermore, while resources enhance equity by making knowledge accessible, disparities in provision often reinforce inequality. Urban schools are more likely to have well-equipped classrooms and studios, while rural schools face severe shortages (Siaw, Nortey, & Bodjawah, 2013). Thus, instructional resources simultaneously hold the potential to narrow or widen educational disparities, depending on how they are distributed and utilized.

2.4. Instructional Material Theories

Several theoretical perspectives illuminate the role of instructional resources. The theories provide a rich foundation for understanding how resources shape learning, going beyond their surface-level use as teaching aids to reveal their deeper pedagogical and developmental significance. Gagné's Conditions of Learning emphasizes the structured role of instructional resources in guiding learners through the stages of learning. According to Gagné (1985), resources are vital in sequencing instruction, stimulating learner performance, and ensuring appropriate feedback. In this sense, instructional materials function as scaffolds, progressively supporting learners as they move from simple to complex tasks and fostering the mastery of both cognitive and problem-solving skills.

Vygotsky's (1978) Sociocultural Theory extends the conversation by shifting attention to the social and cultural dimensions of learning. Here, instructional materials are not neutral tools but cultural artifacts that mediate interaction between learners and their environment. They create bridges between prior knowledge and new experiences, enabling collaboration and co-construction of meaning. By shaping thought processes and promoting social engagement, resources play an active role in expanding learners' cognitive horizons and supporting growth within their zones of proximal development.

Bloom's (1982) Taxonomy adds another dimension by framing instructional resources within the three domains of learning: cognitive, affective, and psychomotor. Resources enrich these domains by enabling not only the acquisition of knowledge but also the development of values, attitudes, and practical skills. Without appropriate instructional materials, learning risks becoming narrow and mechanical, reducing opportunities for holistic development and restricting learners to memorization rather than critical thinking or applied performance.

Taken together, these theoretical perspectives suggest that instructional resources are most effective when thoughtfully integrated into teaching strategies that account for learners' developmental stages, social contexts, and diverse intel-

ligences, as Gardner (1999) and Armstrong (2009) propose. Instructional materials thus serve as both cognitive scaffolds and cultural mediators, essential for promoting meaningful, well-rounded, and contextually relevant learning experiences.

2.5. Academic Performance and Influencing Factors

Academic performance is a process of achieving educational and learning goals set by the institution, teachers, and students (Oduro, 2019). Academic performance is typically measured through examinations, assignments, and other standardized assessments. It reflects both individual mastery and institutional quality (Babatunde & Olanrewaju, 2014). Performance is influenced by a constellation of factors, including teacher competence, learning environment, class size, and socio-economic background (Doyle, 2006). Instructional resources feature prominently among these determinants because they directly affect comprehension and indirectly shape motivation and participation (Ekpo, 2014).

Critically, however, research also reveals disparities in how resources influence performance. In some cases, improvised materials were found to be less effective than standard ones, raising questions about quality and appropriateness (Oladejo, Olosunde, Olebisi, & Isola, 2011). Moreover, while availability correlates positively with achievement, underutilization often negates this effect (Eya & Ureme, 2011). This indicates that resource impact is mediated by teacher competence, rather than guaranteed by their mere presence.

2.6. Visual Arts Education and General Knowledge in Art (GKA)

Visual arts education encompasses drawing, painting, sculpture, ceramics, textiles, and design. It develops learners' creativity, psychomotor skills, and cultural awareness, contributing to holistic education (Amenuke et al., 1999; Kassah & Kemevor, 2016). Within Ghana's Senior High Schools (SHS), General Knowledge in Art (GKA) is a compulsory foundation subject, integrating art history, theory, and practice (CRDD, 2010).

Despite its centrality, GKA instruction faces systemic challenges. Many teachers are trained in elective arts rather than GKA specifically, leading to inconsistencies in syllabus coverage (Evans-Solomon & Opoku-Asare, 2011). Instruction is often overly theoretical, with minimal practical engagement due to a lack of studios, tools, and materials (Opoku-Asare, 2016). Consequently, students frequently perceive GKA as less engaging compared to electives, undermining performance and interest. The situation is exacerbated by reliance on a single government-approved textbook, limiting exposure to diverse perspectives and practical exercises (Osei-Mensah, 2012). This mismatch between curriculum intent (holistic training) and classroom practice (theoretical instruction) highlights the need for improved resource provision and teacher development.

2.7. Empirical Review

Empirical studies consistently show that instructional resources enhance student

performance when available and effectively used. Empirical studies collectively underscore that the availability, selection, and effective use of instructional resources play a decisive role in shaping student performance. Research across diverse contexts demonstrates that when resources are present and meaningfully integrated into lessons, they significantly enhance learner engagement and achievement. However, availability remains a critical challenge, especially in under-resourced settings. [Abdi \(2011\)](#) reports that Somali secondary schools depend heavily on basic tools such as chalkboards, maps, and textbooks, with minimal access to modern resources. Similar shortages have been observed in Ghana and Nigeria, where limited provision undermines teaching effectiveness and restricts students' exposure to varied learning experiences ([Sengai & Matseliso, 2021](#); [Oppong, 2009](#)).

Beyond mere availability, the criteria used in selecting instructional materials strongly influence their relevance and impact. Teachers generally align resources with lesson objectives, student age, and syllabus demands ([Agufuna, Too, & Mukwa, 2018](#)). Yet, in contexts of economic hardship, choices are constrained by cost and compounded by inadequate training, leaving many educators ill-equipped to identify or adapt appropriate materials. This gap highlights that resource provision alone does not guarantee effective use; teacher competence and professional development are equally vital.

Timing and usage further determine the pedagogical value of instructional materials. Studies reveal that resources yield the greatest benefit when actively integrated during lesson implementation rather than being treated as supplementary add-ons. However, [Eya and Ureme \(2011\)](#) note that even when materials are available, underutilization remains widespread, especially in public schools. By contrast, private schools tend to demonstrate more effective deployment of resources, as [Bukoye \(2019\)](#) observes, suggesting that systemic and institutional factors shape patterns of use as much as individual teacher effort.

The situation in Ghanaian schools, particularly within the General Knowledge in Art (GKA) subject, illustrates these dynamics vividly. [Opoku-Asare et al. \(2014\)](#) identify a range of challenges, including limited opportunities for practical work, insufficient teacher preparation, and poor alignment of teaching materials with student interests. These shortcomings weaken learner motivation, stifle creativity, and ultimately diminish academic outcomes. The evidence, therefore, points to an urgent need for pedagogical reform that goes beyond resource provision to include improved teacher training, better alignment of materials with curricular goals, and greater investment in diverse instructional tools. Addressing these issues holistically could significantly enhance both student engagement and performance across educational systems.

2.8. Conceptual Framework

The conceptual framework for this study establishes the theoretical and practical linkages among instructional resources, mediating teaching factors, and students'

academic performance in General Knowledge in Art (GKA). The framework (see **Figure 1**) is grounded in Bloom's (1982) Taxonomy of Educational Objectives, Gagné's (1985) Conditions of Learning, and Vygotsky's (1978) Sociocultural Theory, which together emphasize that learning effectiveness depends on both the availability of educational materials and the quality of their use in context. The conceptual framework is shown in **Figure 1**.

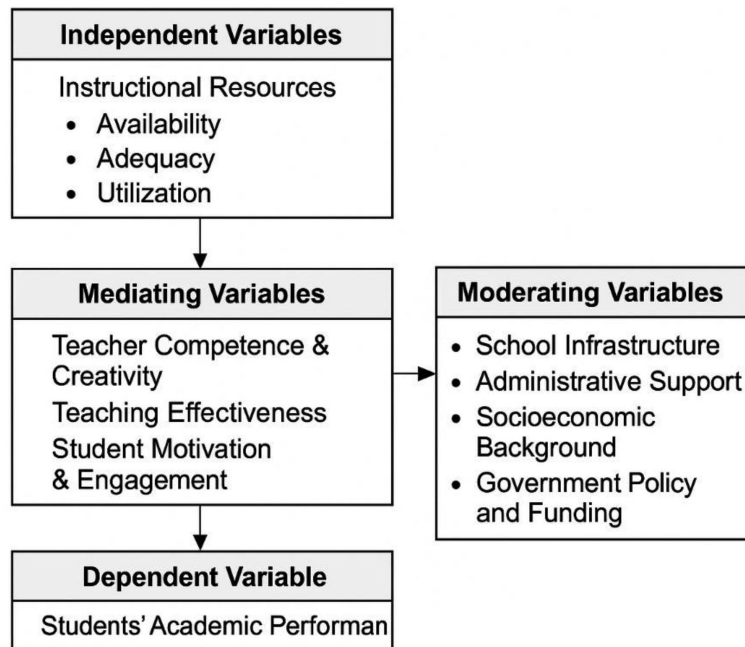


Figure 1. Conceptual framework.

The framework posits that instructional resources—in terms of their availability, adequacy, and utilization—serve as the independent variables influencing students' academic performance. The model suggests that the mere presence of instructional materials is not sufficient; rather, their impact depends on how creatively and competently teachers employ them to foster active and meaningful learning experiences.

Teacher competence, creativity, teaching effectiveness, and student motivation serve as mediating variables, representing the mechanisms through which instructional resources influence learning outcomes. These mediators align with Gagné's notion that instructional design must involve sequenced learning tasks supported by appropriate materials. When teachers are resourceful and innovative, even limited resources can yield significant learning gains. Conversely, when teachers lack the skills or motivation to integrate instructional resources effectively, students' engagement and understanding decline, resulting in poor performance.

Furthermore, the framework recognizes the role of moderating variables such as school infrastructure, administrative support, socioeconomic background, and government policy. These factors shape the extent to which instructional resources can be accessed and utilized. For instance, schools with better infrastruc-

ture and administrative commitment tend to facilitate resource-based teaching more effectively than those in deprived settings. This reinforces Vygotsky's argument that the social and environmental context profoundly influences learning outcomes.

Finally, academic performance emerges as the dependent variable, reflecting the cumulative effect of these interrelated factors. When instructional resources are adequate and effectively utilized within supportive environments, students demonstrate higher comprehension, creativity, and achievement in GKA. However, as the study findings reveal, inadequate provision, limited teacher support, and poor infrastructure undermine these positive relationships, resulting in diminished academic outcomes.

In essence, the framework underscores that improving academic performance in General Knowledge in Art requires a systemic approach—one that simultaneously addresses resource provision, teacher professional development, and institutional support mechanisms. This holistic perspective aligns with Bloom's taxonomy, which calls for an integrated focus on cognitive, affective, and psychomotor domains in educational practice.

3. Methodology

The study adopted a descriptive survey design complemented by a case study approach to examine the availability, adequacy, and use of instructional resources and their effect on student performance. The target population comprised teachers, students, and administrators from three Senior High Schools in the Sekyere Kumawu District. A multi-sampling strategy was employed: twelve General Knowledge in Art (GKA) teachers were purposively selected for their subject expertise; 126 students (42 per school) were selected through simple random sampling to ensure representativeness; and three headmasters along with two assistant headmasters, were conveniently sampled due to their accessibility (Creswell, 2015). In total, 150 respondents participated in the study, consistent with Krejcie and Morgan's (1970) sample size determination guidelines. Data sources included both primary and secondary materials. Primary data came from questionnaires, semi-structured interviews, and classroom observations, while secondary data were obtained from books, journals, theses, and policy documents for triangulation. Three instruments were employed. The questionnaire featured Likert-scale and multiple-choice items assessing GKA performance before and after exposure to resources (Graham & Harris, 2003). Interviews with heads and teachers provided qualitative insights (Creswell, 2015), and observations documented teaching practices and resource use.

Validity was ensured through expert review, pilot testing in a non-sampled school, and triangulation (Creswell & Plano Clark, 2018). Reliability was confirmed via a pilot test of 50 questionnaires, yielding a Cronbach's alpha of 0.82 (Nunnally & Bernstein, 1994), and test-retest stability checks (Heale & Twycross, 2015). Data were analyzed using SPSS, applying descriptive statistics (frequencies,

percentages, means) for quantitative data, and thematic analysis for qualitative responses. This mixed approach allowed interpretation of statistical trends alongside contextual insights. Academic performance was measured through students' GKA assessment and exam scores, plus questionnaire responses on perceived improvement after exposure to resources. Results showed generally low achievement, with about 70% of students struggling to grasp GKA concepts due to inadequate resources, confirming the link between resource shortages and poor outcomes.

For this study, instructional resources included all tangible and intangible materials supporting GKA learning—such as textbooks, art tools (colours, brushes, papers, instruments), furniture, computers, and studio facilities. During observations, adequacy was assessed using four criteria: 1) quantity, 2) condition, 3) frequency and appropriateness of teacher use, and 4) alignment with syllabus objectives. These criteria structured the evaluation of how resources influenced teaching and learning outcomes. The combination of purposive, convenience, and random sampling provided both expert insights and representative student data. To limit bias from non-probability methods, standardized instruments and uniform procedures were used across schools, ensuring comparability.

4. Presentation of Results and Discussion

This chapter presents the data analysis and the discussion of the results. The chapter is divided into two sections. Section “A” deals with the background information of the respondents whilst the second section “B” focuses on the treatment of the research question.

4.1. Section A

Summary and Discussion of Respondent Demographics

The demographic profile of teachers, management staff, and students in the selected Senior High Schools provides important context for interpreting the study's findings. Among the 24 management and teacher respondents, males dominated (66.7%), reflecting the gender imbalance commonly observed in Ghanaian schools. As [Emma and Ajayi \(2004\)](#) suggest, such male-dominated environments may influence how instructional resources are managed and shared, particularly in supporting female colleagues' use of materials.

In terms of age, most teachers and management staff were relatively young, with 41.7% between 21 - 30 years and 33.3% between 31 - 40 years, while only 16.7% were above 40 years. Age is a proxy for maturity and professional experience, and as [Paccagnella \(2016\)](#) notes, these factors shape the reliability of responses and the quality of instruction. Academic qualifications further revealed that over half (54.2%) of respondents held degrees in education, while 25% had master's degrees in education. This strong professional base underscores their capacity to deliver subject content effectively, aligning with [Rice's \(2010\)](#) argument that teacher credentials are critical to student achievement.

Teaching experience in General Knowledge in Art (GKA) varied, though most teachers (41.6%) had taught for 8 - 13 years, with a smaller proportion (16.7%) teaching beyond 13 years. Okey (2012) emphasizes that such sustained experience enhances lesson planning, classroom management, and student inquiry. The implication is that if adequate instructional resources were provided, these experienced teachers could significantly improve GKA performance.

Management staff also brought considerable professional stability, with half serving between 2 - 4 years in their positions and some beyond 7 years. As Udofot (2010) observes, longevity in leadership roles strengthens organizational efficiency, which is vital for resource management. Most administrators (58.3%) were married, suggesting a level of personal stability and responsibility likely to be reflected positively in their professional duties.

Student demographics revealed a strong male presence, with 74.6% of respondents being male and only 25.4% female. This suggests that boys dominate Visual Arts enrollment, a trend that could influence the gender balance of future graduates in the field (Nimmo, 2019). Age distribution showed that the majority (77.8%) of students were between 15 - 17 years, with only 1.6% above 18. Their youthful energy positions them to benefit fully from well-planned instructional practices and the effective use of learning resources.

Overall, the demographic analysis highlights a teaching and management workforce that is relatively young, experienced, and academically qualified, alongside a student body dominated by adolescent males. These characteristics suggest strong potential for effective teaching and learning outcomes in GKA, provided that resource challenges are addressed and pedagogical practices are strengthened.

4.2. Section B

This section concerns the analysis of the respondents' views on the instructional resources' usage in general knowledge in art and how it affects students' academic performance.

- **Research Question One**

What instructional resources are used by the teachers in the three schools?

This research question sought to determine the type of instructional resources being used by the teachers in the three selected schools.

Table 1 shows the availability of instructional resources in the selected schools. The study revealed that all three schools did not have enough textbooks for the subject. Again, it was revealed that tables, chairs, markers' boards, and instruments for practicals were not available, and that students were sometimes sent to other schools for practical work. Out of 150 participants, almost all of them disagreed that the size of the classroom is big enough to accommodate all the students offering GKA. The findings of this study do not agree with the study by (Kapur, 2018), who concluded that today's students have access to a wide range of instructional resources, including teaching aids, games, activities, and media. It can be deduced from the above findings that the instructional resources available in the

three selected schools are not enough. Though school B and school C claimed they had enough classrooms to accommodate all the GKA students. When the researcher asked about the instructional resources in the school, this is what one of the teachers said.

Table 1. Instructional resources used by the teachers in the three schools.

Statement	School A		School B		School C		Total (%)
	Agree	Disagree	Agree	Disagree	Agree	Disagree	
There are enough instructional resources such as textbooks, chalkboard colours, etc. in my school	12 (8%)	38 (25.3%)	6 (4%)	44 (29.3%)	21 (14%)	29 (19.3%)	150 (100%)
The size of the classroom is big enough to accommodate all the students offering GKA	14 (9.3%)	36 (24%)	40 (26.7%)	10 (6.7%)	50 (33.3%)	0 (0%)	150 (100%)
My school has computers that can help us to develop skills in GKA	3 (2%)	47 (31.3%)	4 (2.7%)	46 (30.7%)	3 (2%)	47 (31.3%)	150 (100%)
Tables, chairs, marker boards, and instruments for practical work are available	6(4%)	44 (29.3%)	3 (2%)	47 (31.3%)	20 (13.3%)	30 (20%)	150 (100%)

Source: Researchers’ fieldwork, 2024.

“We use them, but government supplies them. The computers and the textbooks needed are not available because the government does not bring them.”

Another respondent also commented that:

“Instruments for practical works are not there because the government does not bring them, and parents also do not buy the needed textbook for their children”.

The researcher asked again what they used to teach when there were not enough instructional resources. This is what one teacher said:

“The teachers buy the textbooks by themselves. Government does not pay us or even allowances for books. It is a worrying situation but what can we do? That is the work we say, we will do”.

This shows that some teachers buy their own textbooks and other instructional resources. Tlili et al. (2023) disclosed that effective teaching can exist without the needed instructional resources to facilitate teaching and learning in schools.

• **Research Question Two:**

What challenges do teachers in the three selected schools face in accessing and using the instructional resources they need to teach their GKA lessons?

This question sought to identify the challenges teachers and management face in accessing the instructional resources needed to teach General Knowledge in Art lessons. The analysis has been conducted according to data obtained from each school. Table 2 and Figure 2 show the descriptive analysis of the responses of school management, teachers, and students from the three selected schools in Sekyere Kumawu District.

Table 2. Challenge's school "A" staff and students go through in accessing instructional resources.

Statement	Frequency No. of Respondents	Percentages %
Teachers and students sometimes buy their own markers, textbooks, and some instruments needed for teaching and learning.	10	20
No art studio for practical work in the school.	30	60
Students and teachers are forced to use the limited resources available.	7	14
Students are moving from Visual Art to other courses because of limited instructional resources.	3	6
Total	50	100

Source: Researchers' fieldwork, 2024.

Concerning the challenges School "A" staff and students face in accessing instructional resources, the following were the results: out of 50 (100%) respondents, the majority of them, 30 (60%), stated that the school had no art studio for practical work in the school, and only 3 (6%) claimed that some of the students who were enrolled in Art in the school are moving into other programmes like General Arts and Business for the reason that the lack of the needed instructional resources makes it difficult for them to understand the concept, and for that matter, they had to leave to pursue a different course. From the above analysis, it seems clear that "A" has no Art studio. This means that practical work in the school will be difficult for both teachers and students. Again, it was also revealed that teachers in "A" buy their own instructional resources to teach the students. One student said:

"Our teachers are doing well. Sometimes they buy their own marker and textbooks. They say their salaries are not good, but it is the same money used to buy these instructional resources. The resources available in the school are too small".

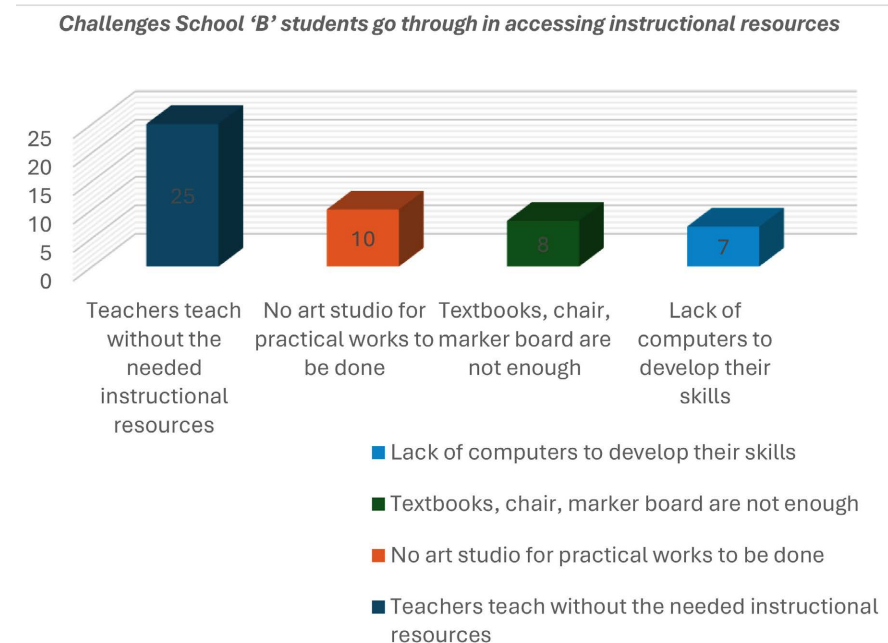
It can be inferred from their statement that students are aware of the problems their teachers are experiencing. For these reasons, most of the General Knowledge in Art students, after spending an entire semester, move to another field such as Agriculture and General Arts. One teacher commented:

"You cannot stop a student if he or she wants to move. They are moving to their field not because we do not teach them but because they find it difficult to understand the concept. We are doing our best".

This result is comparable to that of [Abdu-Raheem's \(2014\)](#) study, who stated that the inadequacy of instructional resources contributes to the inefficiency of the educational system and poor performance. The findings are also similar to [Abdi \(2011\)](#), who investigated the availability of instructional materials for history teaching and learning. He found that instructional materials were inadequate. The findings of Abdi corroborate those of [Oppong \(2009\)](#), [Sengai and Matseliso \(2021\)](#), and [Okobia \(2011\)](#) on the grounds that there are available instructional materials in the teaching of history, even though they are inadequate.

The study also examined the challenges School B faces in accessing instructional resources. From [Figure 2](#), it is clear that School B faces many challenges when

accessing instructional resources. Some of the challenges include the absence of an Art studio for practical work and teachers instructing without the necessary instructional resources. It can be inferred from their responses that the school is experiencing significant challenges, which make teaching and learning very difficult for both teachers and students, as well as the school management. The study also revealed that teachers instruct without necessary instructional resources such as marker boards, pens, computers, and tables. This is serious since it could have a negative effect on academic performance and their level of education.



Source: Researchers' fieldwork, 2024.

Figure 2. Challenges school "B" students go through in accessing instructional resources.

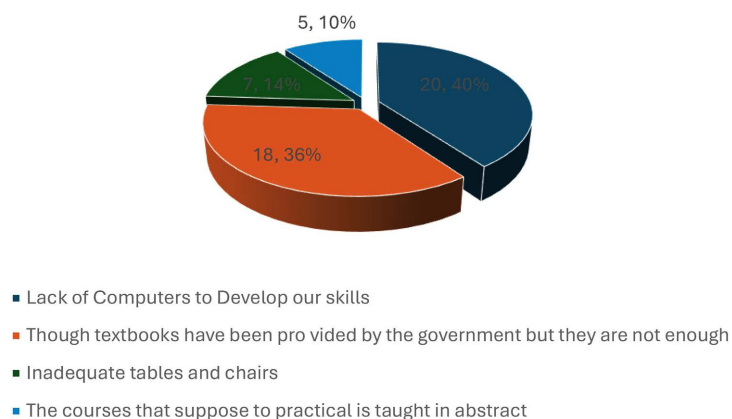
The researcher asked about the effort the school had made to obtain the instructional resources needed that could help the teachers and students understand the concept of General Knowledge in Art. This is what one assistant headmaster said:

"We have made every effort, but as of now, the government has not listened to us. Last year, we received chairs and a table, but they were inadequate."

This shows that the school needs more resources, such as computers and textbooks. The results of this study are similar to the study by Barry (2023), which revealed the non-availability of instructional resources in the community secondary schools in the Rombo district in Tanzania. Moreover, the situation in School A and School B was almost the same. The only difference is that School B has enough classrooms to accommodate all the students, but School A faced classroom challenges.

From Figure 3, it can be seen clearly that the majority of the School C staff, 20 (40%), said the school lacked the needed computers to develop skills in teaching

General Knowledge in Art, as well as skills in drawing, and only 5 (10%) said that a course that was supposed to be a practical-based course is now abstract.



Source: Researchers' fieldwork, 2024.

Figure 3. Challenges school “C” respondents experience in accessing instructional resources.

The findings mean that some teachers teach without instructional resources, and when the researcher asked the student respondents whether they understood what their teachers taught them, one student said:

“Though we do not understand, my teachers are saying that we should wait for the government to bring textbooks”.

Bukoye (2019) found that teachers did not employ instructional resources in teaching in an effective manner. The study ascertained that instructional materials such as textbooks, marker boards, and audiovisual materials were not available.

• **Research Question three (3)**

What are the strategies that teachers use to minimize the challenges of attaining and using quality instructional resources?

This research question sought to find out the strategies used by teachers to minimize the challenges they face in attaining quality instructional resources.

Table 3. Strategies the schools use to minimize the challenges in attaining and using instructional resources in the three selected schools.

Statement	Frequency No. of Respondents	Percentage %
Borrowing books from the nearby schools	24	16
Buying their books.	60	40
Take it from students who have a copy of the book.	21	14
Use body language and gestures to foster understanding among the students.	25	16.7
Teachers sometimes send the students to well-resourced schools in Kumasi to use their resources.	20	13.3
Total	150	100

Source: Researchers' fieldwork, 2024.

This research question was answered only by the teachers' respondents. As shown in **Table 3**, most of them, 60 (40%), said they minimized the challenges by buying their textbooks from the market, and one of the teachers also claimed:

“The instructional resources are not there, and we cannot allow the student to fail. Sometimes we talk to our colleagues who have the logistics for practicals to be done in their schools. The government does not share the resources equally, as the saying goes, those who have more receive more, and those who have received less.”

The results of this research revealed that teachers borrow books from nearby schools, purchase their own textbooks, and use body language to facilitate students' understanding. While this finding aligns with the study by **Udosen (2011)**, it contrasts with the conclusions of **Akowuah et al. (2018)**, who reported that the Government of Ghana had provided all the necessary instructional resources to enhance student performance in senior high schools. The study further showed that teachers sometimes borrow books from students due to the unavailability of textbooks, meaning that some teachers teach without the prescribed materials. This situation could contribute to the high incidence of examination malpractices among students.

General Knowledge in Art is a practical subject and cannot be taught effectively without the necessary instructional resources. The absence of these resources negatively affects both teaching and learning. Observation and informal discussions revealed that some teachers produce their own textbooks or secretly obtain materials such as colours, brushes, and drawing papers from the market for students to use. These materials are then sold to students quietly, and the teachers return the money to the suppliers later. The secrecy arises because under the Free Senior High School (Free SHS) policy, teachers are not permitted to sell any items to students, even when resources are unavailable. According to one teacher, if the Ghana Education Service discovered that he was selling books to students, he would lose his job. This situation indicates that teachers adopt various strategies to minimize the challenges caused by the lack of instructional resources.

This finding is similar to the study by **Lawrence (2016)**, whose study in an open university in Tanzania revealed that teachers borrowed and developed their own books for the students to minimize the challenges teachers in Tanzania faced concerning inadequate instructional resources.

5. Findings of the Study

The study revealed that instructional resources in the selected Senior High Schools of the Sekyere Kumawu District were generally inadequate. Schools lacked essential materials such as textbooks, chalkboards, art tools, long tables, chairs, marker boards, and instruments for practical work. This shortage significantly limited students' interest in General Knowledge in Art (GKA) and restricted their ability to develop creative and design skills effectively. In addition to inadequate materials, the schools faced serious infrastructural challenges. Most classrooms were too

small to accommodate all GKA students, while some school buildings remained uncompleted due to limited support from the district assembly and local communities. These conditions created an uncondusive environment for effective teaching and learning. The study also revealed limited access to Information and Communication Technology (ICT) facilities. The few computers available were either outdated or in poor condition, and many students had never used a computer in a classroom context. This deprived them of opportunities to develop essential digital and design-related competencies required in Visual Arts education.

In response to these limitations, teachers demonstrated considerable improvisation and resourcefulness. Many purchased materials from their own funds, borrowed from colleagues, or relied on students who possessed the required textbooks. Some teachers also produced photocopies of scarce learning materials to support wider classroom use. Despite these efforts, the lack of institutional support meant that instructional delivery often remained constrained. Consequently, many lessons were taught in an abstract manner without adequate demonstration materials. Students frequently pretended to understand, which led to superficial comprehension and poor examination performance. The overall learning experience became theoretical rather than practical, weakening students' mastery of key artistic concepts.

The persistent lack of resources also contributed to a decline in student interest. Several students abandoned Visual Arts for other programmes, citing difficulty understanding lessons and the absence of practical engagement. Interest declined further when practical work had to be carried out outside their own schools, often in better-resourced institutions.

Indeed, the study found that teachers sometimes transported students to other schools with art studios or better facilities to conduct practical sessions. While this strategy allowed some hands-on experience, it also created additional financial and logistical burdens for both teachers and learners. Collectively, these findings paint a picture of under-resourced learning environments where both staff and students strive to maintain academic standards despite structural and material limitations.

6. Conclusions of the Study

The study concludes that most schools in the Sekyere Kumawu District suffer from acute shortages of instructional resources, even though teachers recognize their crucial role in enhancing students' academic performance. The lack of materials, coupled with poor infrastructure and insufficient ICT facilities, continues to undermine the quality of Visual Arts education in the district.

Although many teachers displayed commendable dedication by improvising and purchasing resources from their own income, such efforts were insufficient to compensate for systemic inadequacies. Some educators appeared reluctant to advocate strongly for resource improvement, reflecting both limited institutional empowerment and weak accountability mechanisms.

Teachers were often compelled to work with scarce or improvised materials, which curtailed the effectiveness of their instructional delivery. This situation highlights a broader issue of inadequate government and stakeholder support for Visual Arts education. As a result, insufficient instructional resources and weak advocacy for their provision have significantly constrained teaching and learning processes, ultimately lowering student achievement and diminishing interest in Visual Arts as a field of study.

7. Recommendations of the Study

- 1) The government should ensure adequate provision of instructional resources to schools in the Sekyere Kumawu District.
- 2) School boards must collaborate with GES and the government to construct and expand classrooms that can accommodate all students.
- 3) Parents should work together with the government to provide each student with a personal computer to support practical ICT lessons.
- 4) The District Assembly should ensure that all schools are well-resourced with the necessary teaching and learning materials.
- 5) Urgent measures should be taken to provide adequate instructional materials to rekindle students' interest in Visual Arts.
- 6) The Director-General of GES should ensure teachers are adequately resourced, rather than being compelled to rely on improvised materials.
- 7) The government should provide timely instructional resources directly to teachers to uphold teacher professionalism.
- 8) The government and the District Assembly should adequately resource underprivileged schools so that practical lessons can be conducted on site.
- 9) Parents' Associations and Old Students' Associations should support schools with sufficient instructional resources to enable students to acquire the required skills and competencies.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article. All authors have reviewed and approved the final manuscript and confirm that there are no financial, personal, or institutional relationships that could have influenced the outcomes or interpretation of this study.

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