

The Art Teacher As A Creative Arts And Design Enabler: Tests And Breaks

¹Hillia Fuseini Marifah, ²Isaac Djan, ³Sadik Adamu Nankpa

¹Assistant Lecturer, ²Art Teacher, ³Visual Art Teacher

¹Department of Industrial Art

¹Dr. Hilla Limann Technical University, Box 553, Wa-Upper West Region, Ghana

[¹hilliamarifah@gmail.com](mailto:hilliamarifah@gmail.com) [²ikedjan93@gmail.com](mailto:ikedjan93@gmail.com) [³nankpasadik@gmail.com](mailto:nankpasadik@gmail.com)

Abstract- The study examines the challenges and opportunities of the Creative Arts and Design (CAD) curriculum in Ghana's Wa East District, using an evaluative single-case study. Thematic analysis of triangulated data generated from 30 maximally varied samples, all of whom gave informed consent. The study reveals challenges in implementing the Creative Arts and Design Curriculum in Wa East District due to inadequate professional art educators, low teacher interest, and inadequate art tools, materials, and equipment. Although the CAD curriculum fosters self-confidence, self-employment, life-preparedness, practical skills, creativity, and cultural, and digital literacy among students, the study recommends that the District Director, SISOs, and headteachers should organise bi-termly continuous professional development training programmes for CAD teachers to enhance their pedagogical content knowledge and practical skills.

Keywords: *creative art development curriculum non-specialist facilitator pedagogies*

1. INTRODUCTION

Since 1908, Ghanaian schools have introduced Visual Arts instruction to improve hand-eye coordination and provide practical skills, and long-term employment opportunities for self-motivated students, thereby eliminating bookish educational institutions [1-5]. The new Creative Arts and Design (CAD) curriculum, implemented in Ghanaian basic schools in 2019 and 2020, aims to develop students with basic skills for the 21st century. The CAD curriculum emphasises the importance of developing learners' creative, imaginative, critical thinking, problem-solving, and collaborative skills. It encourages learners to express their emotions and sentiments, promoting cultural identity and appreciation. Also, the CAD curriculum emphasises the need for advanced learning in Senior High Schools and Colleges, promoting national culture, and encouraging critical thinking. The curriculum leverages the importance of incorporating all knowledge areas and providing opportunities for self-expression. The curriculum aims to teach students vocational education values and concepts as a catalyst for economic growth and unemployment reduction.

There are limited studies on the challenges creative art facilitators in the Wa East District of Ghana face in facilitating the creative art and design curriculum. The purpose of this study is to investigate the challenges of creative art teachers in the Wa East District of Ghana and offer proffers to mitigating them. However, a plethora of studies in art shows that the Creative Art and Design curriculum in Ghana's Wa East District faces challenges in implementation, hindering its full realisation, as shown by the works of [1,6-10]. Therefore, to better understand the phenomenon in-depth, this study examines the Creative Arts and Design curriculum in Ghana's Wa East District, focusing on challenges, creative art teachers' implementation, pedagogical understanding, and the potential of the curriculum.

2. LITERATURE SURVEY

2.1 Theoretical Model

2.1.1 Reggio Emilia's Child-Driven Approach to Learning Creative Curriculum

Reggio Emilia's Child-Driven Approach, developed by psychologist Loris Malaguzzi in the 1960s, emphasises hands-on activities and social experiences in early childhood education underpinned this study [11]. It uses "a hundred languages" to encourage active learning and artistic expression, recognising learners' capabilities. The project-based curriculum focuses on learners' symbolic languages and learning as a journey [11]. Adults document learners' work, observations, and teacher-child interaction. The Reggio method guides learners' thoughts through provocations involving parent participation, teacher talks, and community involvement.

Reggio Emilia schools prioritise classroom appearance and atmosphere, referred to as the "third teacher" [11]. Teachers plan for group tasks and intimate settings, showcasing learners' work, flora, and collections. Common spaces include dramatic play spaces and work tables. The atelier is a space for learners to explore various mediums and materials, fostering their understanding through their universal language [11].

The atelier assists in teaching learners about the arts, providing them with time, information, inspiration, and materials to express their understanding effectively [11]. Figure 1 serves as an example of this approach.

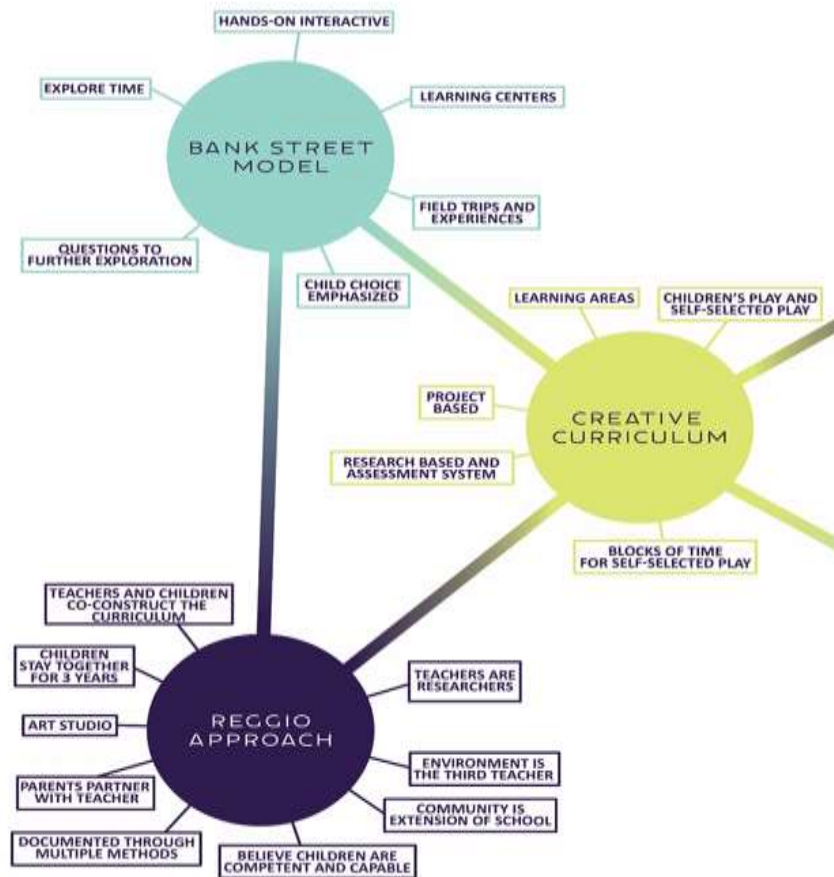


Figure 1. Child-Driven Approach to Learning Creative Curriculum

(Source: [11])

2.2 Creative Arts Curriculum in Ghana

The National Council for Curriculum and Assessment (NaCCA) introduced the Creative Art and Design Curriculum for elementary (standard-based curriculum) and Junior High schools (Common Core Programme curriculum, CCP) in Ghana in 2019 and 2020, respectively. The CCP curriculum comprises 9 subjects, including Creative Arts and Design (CAD) [12-13]. The CAD curriculum is a multidisciplinary and interdisciplinary field that encompasses a wide range of subjects. The Creative Arts and Design (CAD) programme encompasses four distinct arts disciplines: Design, Visual Arts, Music and Dance, and Drama. But all these CAD disciplines consist of two strands: Design and Creative Arts for Basics 7–10 [12]. The Design strand delves into the Concept of Design in natural and man-made environments, its impact on creativity, innovation, and various design job paths. The Creative Arts strand encompasses Visual and Performing arts. Visual arts comprise two-dimensional and three-dimensional techniques, including Drawing, Painting, Printmaking, Patternmaking, Lettering, Camera/electronic arts, Modelling, Casting, Carving, Weaving, Papercrafts, Sewing, Crocheting, Carpentry, and Assemblage, respectively. Performing arts include a wide range of artistic forms such as music, dance, and drama.

CAD introduces learners to the three Hs: Head, Hand, and Heart, fostering cultural understanding, logical competence, communication skills, critical thinking, problem-solving, growth in self-esteem, and emotional intelligence. Also, the CAD classroom environment fosters inclusive participation and respect for talents and encourages students to develop core competencies, enabling learners to acquire functional skills and lifelong learning through the 4Rs of Reading, wRiting, aRithmetic, and cReativity. Creative arts courses provide meaningful experiences, challenge worldviews, and explore learners' social and political concerns. The seven key elements of art, including line, colour, shape, form, value, space, and texture, are interconnected and often employed in various forms like Drawing, Painting, and Sculpture [12-13].

The CAD curriculum aims to foster imagination and creativity in learners through teacher-led artistic pursuits including still-life drawing, pattern making, printmaking, weaving, casting, assemblage, folding,

carving, painting, construction, music, dance, and drama. These artistic activities promote whole-child development and aim to produce literacy, problem-solving skills, creative thinkers, and responsible citizens who can fully engage in Ghanaian society [13-14]. The Creative Arts Curriculum emphasises children's play and self-selected activities, dividing the environment into learning zones with ample time for self-selected play [11,13].

2.3 Overview Creative Methods of Teaching Art

Six studies [2,3,4,5,12] identified differentiated learning as one of the creative ways of facilitating visual art lessons. Three studies stated that differentiated instruction (DI) is an instruction technique that adapts educational activities to meet individual learners' needs in the class [3,4,12]. However, in Ghanaian classrooms, teachers often struggle to create courses for the diverse learning styles and needs of their students as echoed by [2,3,4,5,12]. [3]. This emphasised inclusion and special education needs in the new curriculum to ensure no student is left out. The goal of the creative art curriculum is to develop a dream Ghanaian child with competencies in critical thinking, creativity, innovation, and problem-solving [5,12]. However, implementing this strategy, despite challenges due to its large class size, is believed to reduce its success [2,3,12]. However, none of the studies reviewed highlighted how creative art facilitators can employ differentiated instruction in teaching visual art students in Ghanaian schools.

Two studies highlighted scaffolding as an educational slant that enhances flexibility and creativity in learning, originating from Vygotsky's sociocultural theory and the zone of proximal development (ZPD) [5,12]. Scaffolding helps students develop independent, automated, and problem-solving skills [4,12] despite the hindrance of inadequate professional art educators to teach the CAD curriculum. Yet, studies on the number of art teachers using scaffolding strategies in teaching visual art students are underexplored.

Collaborative learning as a student-centred tactic promotes creativity by requiring students to work together to solve common problems was found by three studies as a contemporary teaching methodology that enhances the teaching and learning of visual art [3,5,12]. Collaborative learning enhances the critical thinking and cognitive capacity of visual art students as they think (brainstorm), pair (reason together) and share (collaborate) their creative ideas during visual art instructions [2,3]. Sociocultural factors, prior knowledge, demographic composition, and unique qualities [2,12] of students are crucial when thinking of employing this teaching methodology as a visual art instructor. Ghana's CAD curricular framework supports creativity and innovations but is restricted due to the availability of tools and materials to enable visual art students to explore and practice [3,5,12]. Nevertheless, there is still a gap in establishing how tools and materials affect the implementation of collaborative learning among visual art students in Ghana.

The motivation method of learning was argued by three studies [3,7,15] as enabling students to learn about motivation in the classroom, focusing on direct and indirect motives to enhance learning. This is a new teaching method that offers visual art students the desire to altruistically produce works of art to help change society's narratives. Direct motivation encourages creativity and personal happiness, while external motivation offers incentives but may decrease intrinsic drive and enjoyment for learners [7,15]. Both motives benefit, as they increase learner retention and academic success. Still, how motivation, as a teaching and learning method impacts visual art students' academic success, needs in-depth exploration and investigation.

Brainstorming is a crucial teaching method employed for visual art students, promoting creative thinking and problem-solving skills as reasoned by the three of the studies reviewed [3,12,15]. Brainstorming comprises group discussions or individual reflections to generate various ideas, fostering an inclusive environment for students to think deeply and reason critically [12,15]. During brainstorming, teachers guide students to participate, allowing for both practical and innovative thinking approaches to solving a desired problem. Recording ideas helps identify the most promising ones, which are analysed and assessed for post-brainstorming [3,15]. Also, brainstorming encourages critical thinking, self-reflection, and learning in students [3,15]. This teaching method improves problem-solving abilities, creativity, and confidence, making it a valuable tool for visual art students to excel artistically [3,15]. Conversely, brainstorming as a teaching pedagogy has not received the needed scholarly attention and, hence, needs further investigations by academics.

Student-teacher conferences provide a safe space for art students to express progress, discuss difficulties, strengths, and development opportunities, especially in art classes, and showcase their understanding through speaking, painting, or presenting their work [7,12,15] as suggested by three studies. Student-teacher conferences enable students and teachers to freely share ideas and think together during the teaching and learning process improving students' academic laurels [12,15]. Students become free to share their frustration, misconceptions, misunderstandings and explanations of concepts taught when using this teaching method to facilitate visual art instructions. This encourages students to own the teaching and learning

process as students become directors by managing the teaching and learning process [7,12]. Hitherto, the relationship between conference teaching and visual art academic success needs to be investigated.

Two studies identified cooperative learning strategies as the use of art projects and research assignments, promoting group reflection through talks, diary entries, and self-evaluation checklists [3,15] to enhance the teaching and learning of art in schools. However, how to use cooperative learning strategies to improve the academic success of students is still a gap that lingers in the minds of academics to explore.

Art students utilise discussion of their artwork for communication, understanding, and sharing experiences with peers and teachers, enhancing visual arts learning through discussions and the exchange of information [7,15]. The discussion method becomes efficient when students take active roles in the teaching and learning process. This can be achieved by giving students projects to work on and making presentations on their work during instruction. Nonetheless, how effective discussion as a teaching and learning strategy is in the teaching and learning of visual art still needs to be investigated.

Art exploration enhances creativity, problem-solving, and motivation in creative art students. It aids students in exploring, investigating, and organising knowledge, leading to increased involvement in art classes [3,7,12,15]. However, studies on how students' exploration enhances their creativity are under-explored.

This study technique empowers art students to explore the difference between traditional and experiential teaching methods, focusing on the use of hands-on activities including experiments or field excursions [7,12,15] as postulated by three of the studies reviewed. [7,15] believe that art students use this method to explore their roles using their understanding of the world and the benefits and drawbacks of using field excursions as a teaching approach. Still, studies on how experiential learning enables visual art students to fit into the 21st-century state-of-the-art industry are scarce and limited.

This instruction practice profits art students in planning their artwork exhibitions, their significance, types, and effectiveness in teaching art appreciation [7,12]. Art exhibitions enable art students to learn to speak aesthetically and be good communicators and problem solvers using artworks [2,7,15]. Also, this teaching method highlights the benefits and drawbacks of using exhibits for visual arts education. Students' art exhibitions motivate as they propel art students to produce first-class works to earn exhibition stands [2,7]. However, the relationship between student art exhibitions and motivation as teaching pedagogies needs investigation.

This training mode teaches art students how to work collaboratively in a group or on an art project. It communicates with art students to learn to tolerate each other's views, work in unity, share ideas, present works as a group, and coexist with other students in a class [2,3,7,12,13,15]. This group work or individual approach teaching method clarifies art students the advantages and disadvantages of working in a group versus working alone [13,15]. The dichotomy between the use of group and individual works as a teaching method has received less scholarly attention from investigators.

The project method of teaching prepares art students' minds for the project conception, methods, principles, and lecture instructions for executing artworks [2,3,12]. The project method of teaching enables students to understand the advantages and disadvantages of executing their projects to fulfil their artistic desires. This exploration by art students enables them to produce their works by showcasing their artistic talents and prowess [3,12]. However, studies on the impact of the project method of teaching on visual art teachers need further exploration and investigation.

Teachers guide students in creative art instruction using evaluation data, questioning, and vocabulary introduction. Four studies [3,7,12,15] agreed as they suggested that discovery learning promotes critical thinking and creativity while addressing subject gaps through exploration and discovery. Studies on how discovery learning promotes or enhances the creative prowess of visual art students need much attention and further investigation.

Creative art teachers utilise graphic organisers and key images to effectively educate students, aiding in understanding, organising, and comparing concepts, ensuring a comprehensive understanding of the subject matter as ensured by the [7,12,13,15]. This teaching method makes students think and reason visually. The study agrees with the methods explored by the [7,12,15] arguing and opining those contemporary instructional methods be espoused in facilitating creative art and design lessons for visual art students to provide the needed skill sets to learners. However, the impact of visual organisers in the teaching and learning of visual art students is a gap that needs attention from academics.

2.4 Challenges Facing the Creative Arts Curriculum

2.4.1 Studio Space

Most Ghanaian art schools lack permanent art studios for students to practice and create visual artwork, making them express their artistic and creative prowess [1,7,9]. Visual arts education requires specialised facilities like studios, labs, and workshops. Schools can teach art without visual arts infrastructure, but scientific programmes require conventional laboratories. Despite this challenge, there are no studies on the studio type needed to facilitate effective visual art instruction.

2.4.2 Materials, Tools, and Equipment

Art teachers often use lectures instead of demonstrations and practice due to tools, materials or equipment unavailability, limiting students' understanding and creativity in the visual arts [1,9]. Visual art departments struggle with acquiring essential teaching materials, tools, and equipment [1,9,10]. Inadequate financing, planning for supplies, and technological integration in visual arts education hinder the effective training and skill development of visual arts students in Ghana [1,7]. Computer or digital art is often not taught, and many schools view ICT as an extension of the scientific resource centre programme, denying art teachers and students access to computer art instruction centres [1,8]. There are still gaps in the kind of teaching and learning resources needed to effectively enhance the facilitation of visual art in rural areas in Ghana.

2.4.3 Large Class Size

Art teachers struggle to maintain student engagement in large class sizes, especially for mentally challenged students, due to inadequate equipment and supplies in the visual arts curriculum [1,8]. This makes art teachers reluctant to engage students in practical sessions [6,8-10]. However, none of the studies reviewed conducted studies on the impact of large classes on the practical skills acquisition of visual art students.

2.4.4 Time Allocation

In Ghanaian schools, the time allotted for the teaching and study of visual arts is grossly inadequate for efficacy [1,7]. For a practically embedded subject like creative art and design, 50 minutes or 1 hour leaves no time for the teacher to engage students in hands-on practical activity [7-8]. In most cases, this forces visual art teachers to use the lecture technique of teaching visual art [1,10]. Despite the limited time for visual art instruction, there are limited studies on the amount of time and its relationship to visual art student academic success in Ghanaian schools.

2.4.5 Qualified Art Teachers

In Ghanaian schools, inadequate availability and quality of skilled art educators hinder the introduction of the visual arts curriculum [1,10] resulting in difficult and discouraging learning experiences [6-10]. Studies on the type of qualifications needed to facilitate visual art instruction are limited and scarce.

2.4.6 Negative Perceptions Towards Visual Arts Education

Negative public attitudes towards vocational education, particularly visual arts, hinder its expansion in Ghana's senior secondary schools [6,8]. Ghanaians associate art with low educational attainment and social level, prioritising scientific and business programmes over visual arts [1,8,16]. Conversely, studies on the relationship between visual art students and general arts students' career success are limited.

2.5 Prospects of Creative Arts Education

Creative art fosters independence, emotional regulation, and decision-making skills in students through group projects, enhancing communication, and idea-sharing, and fostering boldness and receptivity to criticism [2,4,17]. The arts require students to invest significant time and effort, requiring attention to detail and solid organisational skills for successful performances in plays, exhibits, or concerts [4,18]. Steve Jobs and Curve Group highlight the growing demand for artistic students due to their quick learning abilities, good behaviour, and ability to handle feedback [1,3]. However, the contribution of visual art to the economic development of the Ghanaian economy needs exploration.

Art enhances mental, bodily, and emotional well-being by expressing challenging emotions and understanding complex topics, promoting happiness, communication, and overall societal functioning [3,4,5,12,13]. Teachers believe arts topics significantly impact students' academic abilities, particularly those struggling with conventional subjects, by helping them discover their abilities, express themselves, and relax [12-14]. However, the impact of visual art education on the performance of visual art students who performed poorly on conventional subjects and visual art subjects has received less scholarly attention.

3. METHODOLOGY

This study used an evaluative single case study in the qualitative interpretative paradigm [19-22] to examine the CAD curriculum in the Wa East District of Ghana's Upper West Region. The study utilised a maximum variation sampling approach [19, 22] to select one (1) District Director, twelve (12) CAD teachers, five (5) SISOs, and twelve (12) students from the Wa East District in Ghana's Upper West Region, focusing

on their skills and classroom experiences [22]. The study aimed to understand the participants' perspectives and appreciate the challenges and prospects of the creative art curriculum. Table 1 displays the organisation of the participants.

Table 1
Participants Groupings

Participant Circuit	CAD Teacher	Learner	SISO	DDE
Baayiri	1	1	1	0
Buffiama	1	1	0	0
Bulenga	1	1	0	0
Duccie	1	1	1	0
Funsi	1	1	1	0
Goripie	1	1	0	0
Jeyiri	1	1	0	0
Katua	1	1	1	0
Kpaglahi	1	1	1	0
Kundungu	1	1	0	0
Loggu	1	1	0	0
Yaru	1	1	0	1
Total (30)	12	12	5	1

(Source: Fieldwork, 2023)

The study entombed semi-structured interviews [22], document analysis [23], and classroom observation [24-25] to gather data from the participants in Wa East District, ensuring data arrangement, familiarisation, coding, theme generation, and presentation using thematic data analysis [22]. The study ensured participant consent, anonymity, confidentiality, privacy, and voluntary withdrawals [21-22] adhering to credibility, transferability, dependability, and relatability to maintain its integrity and authenticity [25-26].

4.0 RESULTS AND DISCUSSIONS

4.1 Wa East District Education Directorate

The study showed that the Wa East District Assembly, established in 2004, has a current population of 91,457 people [28]. The district's education directorate aims to provide quality education to all school-age children by implementing government pre-tertiary education policies, including the CAD curriculum. With two hundred and twenty-one (221) educational institutions, the district has seventy-seven (77) Kindergartens, eighty-two (82) Primary, sixty (60) Junior High, and two (2) Senior High schools [28]. The School Improvement Support Officers (SISO) oversee twelve (12) Circuits in the district, as illustrated below in Table 2.

Table 2
Educational Institutions in Wa East District

Circuit	Number of Schools	Kindergarten	Primary	JHS	SHS
Baayiri	10	3	4	3	0
Buffiama	18	6	6	6	0
Bulenga	22	7	8	7	0
Duccie	18	6	6	6	0
Funsi	18	5	6	6	1
Goripie	20	8	7	5	0
Jeyiri	21	8	9	4	0
Katua	15	5	6	4	0
Kpaglahi	18	7	7	4	0
Kundungu	17	7	6	4	0
Loggu	27	9	10	7	1
Yaru	17	6	7	4	0
TOTAL	221	77	82	60	2

(Source: Fieldwork, 2023)

Again, the study revealed the district education directorate faces challenges including remote, inaccessible settlements, poor communication networks, inadequate teaching personnel, fueling and maintenance difficulties, inadequate logistics, and inadequate teaching and learning resources [28].

4.2 Wa East Teachers Specialisations

The study revealed that of the 306 Junior High school teachers in the Wa East District, 1 (0.3%) specialised in Art Education, 280 (91.7%) majored in Basic Education, and 25 (8%) specialised in other fields, as shown in Table 3. Art-related teachers are assigned to Senior High schools, hence the low patronage in the district, as indicated by Teacher 9: *the school's sole CAD instructor, despite most teachers' reluctance to teach CAD, a subject typically taught at the College of Education and specialised at Senior High school* (Teacher 9, Personal Communication, May 20, 2023).

Table 3
Teacher Specialisation

Teacher Specialisation	Number of Teachers	Percentage (%)
Basic Education	280	91.7
Art Education	1	0.3
Other Discipline	25	8
Total	306	100

(Source: Fieldwork, 2023)

The study revealed that Wa East District requires more Visual Art teachers to teach Creative Arts and Design. Unprofessional art teachers struggle with CAD topics and visual art-related disciplines due to inadequate practical knowledge and infrequent skill development seminars, which demotivate students' interest in CAD lessons, as suggested by the works of [1,3,4,5,7,12,13].

4.3 Content of the Creative Art and Design (CAD) Curriculum

The review reveals that the Creative Art curriculum for Basic 7–10 includes four subjects: design, visual arts, music and dance, and drama. These subjects are divided into two main strands: design and the creative arts. The creative arts are further divided into Visual and Performing arts, with Visual Arts focusing on 2D and 3D arts and the Performing Arts focusing on Music, Drama, and Dance. The study reveals that teachers struggle to support all four CAD curricular disciplines due to pedagogical issues, creating gaps for students. [3,9,10] argue that in Ghanaian schools, the pedagogical abilities of visual art teachers hinder the full implementation of the Visual Art curriculum. The CAD curriculum is illustrated in Fig. 2 below.

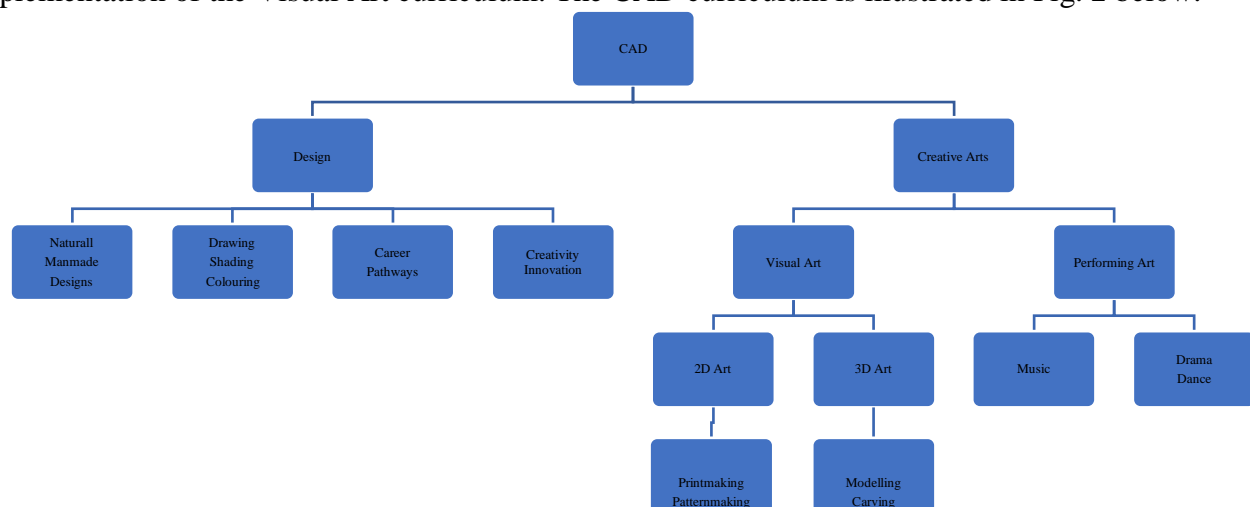


Figure 2. Organisation of CAD Curriculum

(Source: Fieldwork, 2023)

The CAD curriculum, which includes Design (50 minutes), Performing arts (50 minutes), and Visual art (100 minutes), is rated at 200 minutes per week, which needs to be improved for practical topics like CAD, as the study revealed. [1,7,8] found that one hour of teaching time for a practical-oriented subject like CAD

is insufficient to facilitate and actualise the complete implementation of the CAD curriculum in Ghanaian schools. The CAD periods are depicted in Fig. 3 below.

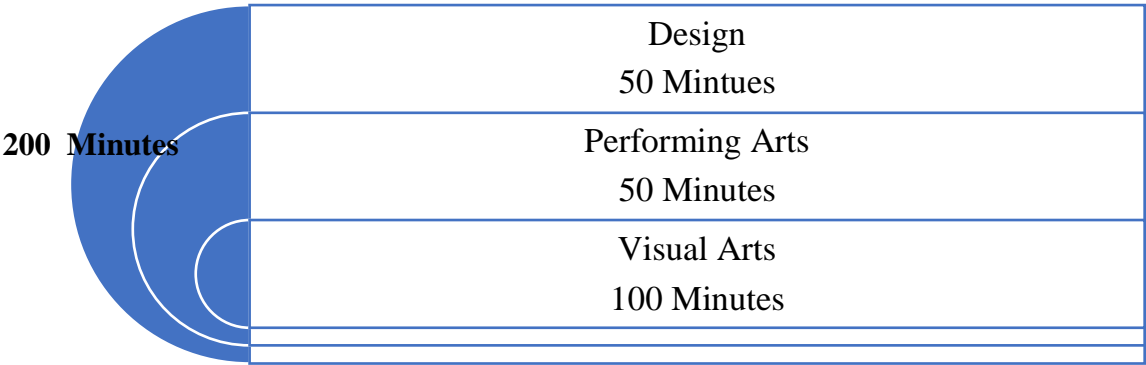


Figure 3. CAD Periods Per Week
(Source: Fieldwork, 2023)

The CAD evaluation revealed several subjects overloaded with content, including design disciplines, visual art, and music, encompassing components, principles, and creative expressions of design in nature and man-made environments. [3,9,10] assert that nonprofessional CAD teachers in Ghana are discouraged from teaching Visual Art-related subjects due to content overload and multifaceted disciplines.

The CAD curriculum is underpinned by constructivism, pragmatism, idealism, and existentialism theories, as the study revealed. Constructivism encourages active learning through visuals (inventive and observant); pragmatism focuses on teaching personal and life skills (expressive and perceptive); idealism suggests role models (reflective and persistent); and existentialism advocates for experimentation and human freedom (explorative and appreciative). The study reveals that constructivism, pragmatism, idealism, and existentialism are curricular theories that effectively support the principles of the CAD curriculum. This finding is supported by Reggio Emilia's Child-Driven Approach, promoting active learning, symbolic languages, artistic expression, and ateliers, recognising learner skills, and promoting artistic expression [11]. Table 4 illustrates how curricular theories align with the CAD curriculum philosophies.

Table 4
Curriculum Theories and Philosophies

Curriculum Theory	CAD Curriculum Philosophies
Constructivism	<ul style="list-style-type: none">• Inventive• Observant
Pragmatism	<ul style="list-style-type: none">• Expressive• Perceptive
Idealism	<ul style="list-style-type: none">• Reflective• Persistent
Existentialism	<ul style="list-style-type: none">• Appreciative• Explorative

(Source: Fieldwork, 2023)

The study discloses that the evaluation methodologies in the CAD curriculum are in line with Gardner's eight intelligence categories: musical-rhythmic, visual-spatial, verbal-linguistic, logical-mathematical, bodily-kinesthetics, interpersonal, intrapersonal, and naturalistic [29]. Also, Gardner's assessment strategies help to identify potential career paths for learners in various fields, such as Music, Art, Architecture, Photography, and Agriculture. The assessment strategies evaluate learners' introspection, self-evaluation, emotional understanding, and problem-solving abilities, as shown in the study.

The study found that facilitators lacked the necessary pedagogical expertise, materials, and equipment for teaching learning domains not included in teacher education but required to be taught to students, as indicated by Teacher 4: *Teaching a new CAD subject can be challenging due to a lack of experience and lack of ability to address students' inquiries, limiting one's in-depth knowledge and grasp of practical topics*

(Teacher 4, Personal Communication, May 11, 2023). The study shows that creative art facilitators teaching CAD curriculum are unable to teach media, voice, and movement skills in dance and theatre due to insufficient pedagogical expertise. 75% of participants suggest skipping subjects they are unfamiliar with, while 25% rely on the Internet for knowledge acquisition. This leaves students with no choice but to acquire skipped courses on their own, as supported by [1,8,10].

Teachers incorporate digital art technology into the CAD curriculum, despite limited knowledge, to stay current with trends and student and parent expectations, as expressed by Teacher 1: *Teaching CAD is challenging due to its technical nature and lack of a visual arts major, especially with the digital art part often causing headaches and nightmares* (Teacher 1, Personal Communication, May 10, 2023). [7,10] found that teachers' insufficient pedagogical and practice skills in visual arts topics hinder their ability to teach visual art-related courses in schools. This results in visual art students suffering academically, requiring assistance in developing core knowledge and abilities for senior high school visual art instruction [1,9].

2.4.4 Teaching Pedagogies Employed by CAD Teachers

The study revealed that CAD facilitators in the Wa East District struggle with creative art and design curriculum topics, often skip courses, and are hesitant to teach the subjects, as opined by Teacher 2: *I teach the theory aspect of CAD but avoid practical sessions due to weak skills and lack of resources, avoiding areas like sketching, shading, and colouring* (Teacher 2, Personal Communication, May 10, 2023). Student 2 added that: *My school CAD facilitator does not teach us practicals and often assigns excessive notes to us, leading to occasional missed CAD classes due to the excessive workload* (Student 2, Personal Communication, May 10, 2023).

Table 5
Teaching Pedagogies

CAD Curriculum Pedagogies	CAD Teachers Pedagogies Employed	Creative Pedagogies for Teaching Art
Differentiated	Lecture (50%)	Project
Scaffolding	Demonstration (20%)	Experiential
Student-Centred	Brainstorming (20%)	Focused Exploration
	Experimentation (10%)	Exhibition
		Group/Individual Approach
		Demonstration
		Graphic or Visual Organisers
		Cooperative Learning
		Conferences

(Source: Fieldwork, 2023)

To boost learners' learning of CAD, the curriculum requires the use of student-centred, scaffolding and differentiated instruction focused on problem-solving, discovery-based learning, and customised subjects. The study discovered that, despite digital literacy, creativity, and innovation being fundamental abilities, CAD deployment in Wa East District is hampered by technological restrictions as teachers struggle to apply scaffolding and differentiated learning pedagogies. The study showed that 50% of CAD teachers employ the lecture approach due to a lack of resources and equipment, 20% demonstration, 20% brainstorming, and 10% experimentation, as illustrated in Table 5 above. This is alarming, as the majority (50%) of teachers agreed as they postulated the use of the lecture panache to facilitate a practice-based subject like CAD. Again, the CAD teacher's use of teaching approaches contradicts this. [12-13] Student-centred, scaffolding, differentiated, problem-solving, discovery-based, and individualised learning results in unfulfilled hand-eye coordination curriculum goals [1,7,9,10]. Therefore, the study reveals the use of creative pedagogies in teaching art such as project, experiential, focused exploration, exhibition, group/individual approach, demonstration, graphic or visual organisers, cooperative learning, and conferences as vigorously ensured by [12-14].

2.5 Challenges Facing the CAD Curriculum

The study revealed that the creative art and design curriculum is hindered by a lack of skilled visual art teachers, studio space, tools, materials, and learning equipment, as suggested by Teacher 8: *My school struggles with limited equipment and resources, making teaching CAD complex and frustrating. Obtaining the necessary materials for drawing, shading, pattern building, and modelling is a significant challenge, sometimes preventing the provision of such classes* (Teacher 8, Personal Communication, May 20, 2023). In addition, SISO 1 indicated that: *there are no professional creative art teachers in my circuit, forcing teachers to teach CAD haphazardly due to a lack of experience. Sometimes CAD curriculum is reserved for late or newly posted teachers* (SISO 1, Personal Communication, May 25, 2023). The findings show that creative art teachers in the Wa East District struggle to integrate CAD curriculum due to a lack of studio space, tools, materials, equipment, and innovative instructors, unlike textbook-based courses. This makes teaching and learning CAD boring and defeats the purpose of [12-14] introduction of the CAD curriculum into junior high schools in Ghana [8-10].

2.6 Prospects of the Creative Art and Design Curriculum

Teacher Participants 6 and Student 9 highlight the benefits of creative art instruction, including confidence in public speaking, self-expression, and skills in drawing, painting, moulding, and printmaking. The CAD curriculum prepares students for future careers in art, architecture, and design, as well as preparing them for life, as stated by Teacher 6: *Creative art and design topics help students develop confidence in public speaking and express themselves through various techniques, preparing them for future careers in art, architecture, and design* (Teacher 6, Personal Communication, May 15, 2023). Also, *mastering the CAD curriculum can lead to career opportunities in art, architecture, and design, as well as the ability to defend and discuss art, potentially enabling self-employment* (Student 9, Personal Communication, May 20, 2023). The study suggests that creative arts and design curricula boost students' confidence, prepare them for life, and develop practical skills for a 21st-century technological environment [12,13,17]. Visual Art Education (VAE) is effective in developing creative, innovative, and digitally literate individuals while also decreasing social vices and providing after-school employment opportunities [14,18].

4.0 CONCLUSION AND RECOMMENDATIONS

The study concludes that the CAD curriculum, which customs constructivism, pragmatism, idealism, and existentialism theories coupled with Gardner's eight intelligence categories, enhances students' confidence, prepares them for life, develops practical skills, fosters creativity, and fosters digital literacy through professional Visual Art Educators. However, teachers who are at the centre of its implementation lack studio spaces, tools, and equipment. This is leading to a try-and-error application of lectures, demonstrations, brainstorming, and over-experimentation with pedagogies. The study recommends Wa East District GES hire at least a professional Visual Arts instructor for each school and organise continuous Professional Development courses for CAD teachers by headteachers and SISOs. We recommend that researchers should conduct further studies on the CAD curriculum in Ghanaian basic schools.

AUTHORS BIO NOTE

¹**Hillia Fuseini Marifah- Dr. Hilla Limann Technical University, Box 553, Wa-Upper West Region, Ghana.**

Hillia Fuseini Marifah earned his Master of Philosophy in Art Education from the University of Education in Winneba, Ghana. He is a skilled art instructor with over a decade of experience in the classroom. Curriculum Studies, Visual Arts, Culture, and Art Education are among his research interests. Marifah wishes to conduct novel studies in new areas of interest.

²**Isaac Djan- Milwaukee Public Schools, 8907 N Park Plaza, Apt #214, Milwaukee, Wisconsin, USA.**

Isaac Djan attended the University of Education and earned a Master of Philosophy degree in Art Education and a Bachelor of Arts in Art Education in 2022 and 2018 respectively. He is an International Art Educator, researcher and art enthusiast with a deep passion for artistic development and the learning of people of all ages in schools as well as public spaces. In his half-decade of Art Teaching, Isaac's experience cuts through the kindergarten to the tertiary level of education. Additionally, Isaac has a keen interest in art making, cultural art, curriculum implementation and community art.

³**Sadik Adamu Nankpa -Kanton Senior High School, Box 8, Tumu-Upper West Region, Ghana.**

Sidik Nankpa Adamu holds a Master of Philosophy in Art Education from the University of Education in Winneba, Ghana. He is a skilled and professional art instructor with a plethora of experience in research and

classrooms. He currently teaches Leatherwork and Graphic design at Kanton Senior High School, Tumu in the Upper West Region of Ghana. Nankpa is keen on exploring new areas in visual art including culture, art curriculum and African Art.

REFERENCES

- [1] J. B. K. Aidoo, "Challenges facing the visual arts programmes of Senior High schools in Ghana," *Int. J. Humanit., Soc. Sci. and Educ.*, vol. 5, no. 3, pp. 136–142, 2018, doi: 10.20431/2349-0381.0503014.
- [2] C. S. Kpodo, F. Ankyiah, G. R. Agbelengor, and S. Dah, "Exploring innovative approaches and interventions to address misconceptions and promote effective visual arts education in secondary schools in Ghana," *Am. J. Educ. Technol.*, vol. 3, no. 2, pp. 7–11, 2024, doi: 10.54536/ajet.v3i2.2524.
- [3] G. Kushiator, M. Adashie, B. Ayim, and I. Y. Klodzi, "Digital media practices: Exploring the challenges of graphic design students in senior high schools in Ghana," *J. Educ. Learn. Technol.*, vol. 4, no. 4, pp. 91–101, 2023, doi: 10.38159/jelt.202345.
- [4] F. Obeng, "Ghanaian senior high school students' perception and attitude towards visual arts and its related careers," M.S. thesis, Univ. of Eastern Finland, 2024.
- [5] A. A. Z. Osei-Tutu, A. E. Ayiglo-Kuwornu, and F. C. Awoniyi, "Teacher educators' challenges in implementing the 2018 bachelor of education curriculum for pre-service teachers," *Afr. J. Educ. Stud. Math. Sci.*, vol. 20, no. 2, pp. 273–292, 2024, doi: 10.4314/ajesms.v20i2.4.
- [6] K. K. Diabour, N. Navei, and F. H. Marifah, "Visual arts education and national development: An inquiry into the popularity of visual arts programmes in senior high schools in the upper west region of Ghana," *Int. J. Hum., Soc. Sci. and Educ.*, vol. 8, no. 12, pp. 42–55, 2022, doi: 10.20431/2349-0381.0812005.
- [7] J. K. Kassah and A. K. Kemevor, "The challenges of visual arts education in Ghana's colleges of education," *Int. J. Sci. Eng. Appl. Sci.*, vol. 2, no. 3, pp. 87–98, 2016. [Online]. Available: <https://ijseas.com/volume2/v2i3/ijseas20160313.pdf>
- [8] J. Ssegantebuka, T. Tebenkana, R. Edopu, P. Sserunjogi, and J. B. Kanuge, "Challenges facing tutors in the teaching of visual arts education in national teacher colleges in Uganda," *J. Educ. Learn.*, vol. 10, no. 4, pp. 51–62, 2021, doi: 10.5539/jel.v10n4p51.
- [9] E. Swanzy-Impraim, J. E. Morris, G. W. Lummis, and A. Jones, "Exploring creative pedagogical practices in secondary visual arts programmes in Ghana," *The Curric. J.*, vol. 0, pp. 1–20, 2023, doi: 10.1002/curj.201.
- [10] B. Quarshie, F. Duku, and H. O. Ameyaw, "The creative art teacher is an agile facilitator," *J. Educ. Pract.*, vol. 13, no. 20, pp. 64–71, 2022, doi: 10.7176/jep/13-20-07.
- [11] J. Paris, K. Beeve, and C. Springer, "Curriculum models," *Social Sci. Libre-Texts*, Sep. 24, 2023. [Online]. Available: <https://socialsci.libretexts.org/bookshelves/>
- [12] National Council for Curriculum and Assessment, "Creative arts and design curriculum for grades 7–10," Ministry of Education, Ghana, 2020.
- [13] National Council for Curriculum and Assessment, "Creative arts curriculum for primary schools (Basics 1–6)," Ministry of Education, Ghana, 2019.
- [14] J. Stewart and S. Barnes, "How the seven elements of art shape creativity," *My Modern Met*, Sep. 23, 2023. [Online]. Available: <https://mymodernmet.com/elements-of-art-visual-culture/>
- [15] Colleges of Education Ghana, "Principles and methods of teaching visual arts," [Course presentation], Third-year College of Education, Univ. of Cape Coast, Jan. 10, 2018.
- [16] M. Ismaila and E. F. Eshun, "Senior high schoolers' attitudes towards visual art education in Ghanaian secondary schools," *Int. J. Innov. Res. Dev.*, vol. 7, no. 8, pp. 119–124, 2018, doi: 10.24940/ijird/2018/v7/i8/jul18120.
- [17] M. Jones, "Celebrating the arts: 5 reasons to study creative subjects," Cambridge Assessment, Sep. 23, 2023. [Online]. Available: <https://www.cambridgeassessment.org.uk/insights/celebrating-the-arts-five-reasons-to-study-creative-subjects/>
- [18] Studocu, "Methods of teaching art and craft study," Studocu, Sep. 24, 2023. [Online]. Available: <https://www.studocu.com/row/user/9023200>
- [19] J. W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed-Methods Approaches*, 4th ed. SAGE Publications, 2014. [Online]. Available: <http://www.drbrambedkarcollege.ac.in/sites/default/files/E%20Book%20Research%20Design%20Creswell%202014.pdf>
- [20] L. Cohen, L. Manion, and K. Morrison, *Research Methods in Education*, 6th ed. Routledge Falmer, 2007. [Online]. Available: <https://gtu.ge/Agro-Lib/RESEARCH%20METHOD%20COHEN%20ok.pdf>

- [21] R. K. Yin, *Case Study Research: Design and Methods*, Sage, 2003. [Online]. Available: <https://books.google.com/gh/books?hl=en&id=FzawIAdilHkC>
- [22] J. W. Creswell and J. D. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed. Los Angeles, CA: Sage, 2018. [Online]. Available: https://spada.uns.ac.id/pluginfile.php/510378/mod_resource/content/1/creswell.pdf
- [23] G. A. Bowen, "Document analysis is a qualitative research method," *Qual. Res. J.*, vol. 9, no. 2, pp. 27–40, 2009, doi: 10.3316/QRJ0902027.
- [24] M. D. Denscombe, *The Good Research Guide for Small-Scale Research Projects*, 4th ed. Open University Press, 2010. [Online]. Available: <https://www.researchgate.net/file.postfileloader.html?Id=582a0dbf217e20276533f5a5>
- [25] G. Guest, E. Namey, and M. Mitchell, "Participant observation in collecting qualitative data," SAGE, 2013, doi: 10.4135/9781506374680.
- [26] M. D. Gall, J. P. Gall, and W. R. Borg, *Educational Research: An Introduction*, 8th ed. Pearson International, 2007. [Online]. Available: <https://psycnet.apa.org/record/1996-97171-000>
- [27] E. G. Guba and Y. S. Lincoln, "Competing paradigms in qualitative research," in *Handbook of Qualitative Research*, N. K. Denzin and Y. S. Lincoln, Eds. Sage Publications, 1994, pp. 105–117, doi: 10.3316/QRJ0902027.
- [28] Wa East Education Directorate, "Annual Report: January–December 2022," Ghana Education Service, Jan. 14, 2023.
- [29] M. Marenus, "Howard Gardner's theory of multiple intelligences," SimplyPsychology, Feb. 2, 2024. [Online]. Available: <https://www.simplypsychology.org/multiple-intelligences.html>
- [31] B. Flavin, "What is Reggio Emilia? Your guide to this child-driven approach," Rasmussen University, Sep. 24, 2023. [Online]. Available: <https://www.rasmussen.edu/degrees/education/blog/>
- [32] School Connect, "The top 10 creative arts courses you can pursue," School Connect, Sep. 22, 2023. [Online]. Available: <https://schoolconnect.com/blog/top-creative-arts-courses-you-can-pursue/>
- [33] J. Stewart and S. Barnes, "How the seven elements of art shape creativity," *My Modern Met*, Sep. 23, 2023. [Online]. Available: <https://mymodernmet.com/elements-of-art-visual-culture/>