Harnessing Cultural Artefacts to Enhance the Learner-centred Pedagogies for Design Education

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ABSTRACT: This study examines how a culturally inspired instructional guide influences teachers' implementation of a learner-centred pedagogy in Junior High School design education in Ghana. A purposive sample of seven (7) teachers from five (5) basic schools formed the sample for the study. Using a qualitative descriptive design, data was collected through interviews, focus group discussions, and observations. Findings revealed that the full implementation was hampered by teacher-centred methods that limited engagement in practical activities, a lack of relevant instructional resources and inadequate technical skill proficiency. An instructional guide inspired by cultural artefacts of the Akan, Ewe, and Mole Dagbani ethnic societies was developed to enhance teachers' application of the learner-centred method of the design component of the creative arts and design curriculum. Structured with the sequential steps of the ASSURE instructional model and guided by the constructivist principles of Vygotsky and Dewey, this guide enhanced teachers' application of learner-centred methods and strategies, leading to higher learner engagement and internalisation of cultural values.

Keywords: cultural artefacts, design education, learner-centred methods and strategies.

ABSTRAK: *Studi ini mengkaji bagaimana panduan pembelajaran yang terinspirasi budaya memengaruhi penerapan pedagogi berpusat pada peserta didik oleh guru dalam pendidikan desain di Sekolah Menengah Pertama di Ghana. Sampel purposif terdiri dari tujuh (7) guru dari lima (5) sekolah dasar yang menjadi responden dalam penelitian ini. Menggunakan desain deskriptif kualitatif, data dikumpulkan melalui wawancara, diskusi kelompok terfokus, dan observasi. Temuan menunjukkan bahwa penerapan secara menyeluruh terhambat oleh metode yang berpusat pada guru yang membatasi keterlibatan dalam aktivitas praktis, kurangnya sumber daya pembelajaran yang relevan, dan keterampilan teknis guru yang belum memadai. Sebuah panduan pembelajaran yang terinspirasi dari artefak budaya masyarakat etnis Akan, Ewe, dan Mole Dagbani dikembangkan untuk meningkatkan penerapan metode pembelajaran yang berpusat pada peserta didik dalam komponen desain pada kurikulum seni kreatif dan desain. Panduan ini disusun dengan langkah-langkah berurutan dari model pembelajaran ASSURE dan dipandu oleh prinsip konstruktivisme dari Vygotsky dan Dewey. Panduan tersebut meningkatkan penerapan metode dan strategi pembelajaran yang berpusat pada peserta didik oleh para guru, yang mengarah pada peningkatan keterlibatan peserta didik dan internalisasi nilai-nilai budaya.*

Kata kunci: *artefak budaya, metode dan strategi berpusat pada peserta didik, pendidikan desain.*

INTRODUCTION

Design a component of the new learning area, Creative Arts and Design (CAD), in the standards-based Common Core Programme (CCP) curriculum, emphasises participatory teaching and learning, with a special focus on the cognitive, affective, and psychomotor domains, through the learner-centred methods such as project-based learning, exploration, inquiry-based learning, procedural learning, and experiential learning oriented toward student collaboration, communication, and interaction (Goodwin, 2024; Yoder et al., 2021). The objective is to equip learners with practical skills and learning experiences that integrate culture to facilitate the development of foundational and functional skills essential for lifelong learning (Abubakari & Abudu, 2025; Addai-Mununkum & Setordzi, 2023; Ministry of Education, 2020). The implication is that integrating cultural artefacts in formal education leads to culturally relevant instruction (Amponsah, 2023; Ezedike, 2019), which promotes sustainability at various levels in education (Mbah et al., 2021), hands-on activities and child-centred learning (Dzamesi & van Heerden, 2020). Concomitantly, they provide a foundation for learning grounded in everyday life and societal situations, which frame theoretical concepts to enable students appreciate the significance of subjects taught (Sjöström & Eilks, 2018) and help develop values necessary for the socialising process to become good citizens (Prempeh, 2022). Despite the curriculum's emphasis on the learner-centred method and the need for lessons to incorporate the manifestations of culture, teachers in the selected Junior High Schools are unable to implement the design component effectively due to a lack of understanding of the learner-centred method and the challenge of the selection of appropriate resources to deliver culturally relevant instruction that align with the design component of the CAD curriculum. To address the critical knowledge gap, this research is framed by two research questions: 1) What are teachers' understandings and applications of learner-centred methods and strategies? 2) How can cultural artefacts be harnessed to promote learner-centred methods and strategies?

The design component

The design component of the CAD curriculum is subdivided into three learning domains or sub-strands. The first sub-strand, Design in Nature and Man-made Environments, focuses on the demonstration and understanding of design as a concept, the elements and principles of design (Ferrara & Lecce, 2019) and their significance as a facilitator and catalyst for creative expression (Sá & Viana, 2023). Sub-strand 2: Drawing, Shading, Colouring and Modeling for Design emphasises the exploration and experimentation with manual and digital tools and materials and the expression of abstract concepts through essential technical skills such as freehand drawing, outline drawing, shading, colouring, and modelling essential for design work (Novica et al., 2023) in two and three-dimensional formats. The third Sub-strand (3): Creativity, Innovation and the Design Process emphasises the ability to discover and provide unique solutions to identified

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societal problems and the practical implementation of creativity and innovation through the design process (Dahlin & Sumsion, 2023).

The learner-centred pedagogy

The suggested pedagogical strategies for implementing learner-centred methods are meant to meet the needs of individual learners by offering options that make skills, concepts, and experiences relevant across various learning contexts and real-world scenarios (NaCCA, 2020). It is envisaged that through project-based learning, learners will be equipped with critical thinking and problem-solving skills (Maros et al., 2023), facilitated by learner autonomy and communication in real-life contexts. With Inquiry-based learning, the active participation of learners is ensured through open-ended questions that require the exploration and discovery of knowledge, either in groups or independently (Kofi Pye et al., 2024), and encourages experimentation (Kousloglou et al., 2023). Active participation, a hallmark of experiential learning, is guaranteed as students engage in problem-solving through the development of projects (Motta & Galina, 2023). In the design component, active experimentation will create concrete experiences that serve as the foundation for reflective observation. Consequently, learners' understandings transform both externally and intentionally, with comprehension rooted in cycles of action, reflection, revision, and application (Chee & Hooi, 2023).

The learning areas or sub-strands of design advocate that learners develop skills (Creating, Presenting, Producing, Responding, and Connecting). Therefore, an emphasis on procedural learning will enable effective skill acquisition for learners, allowing them to work with various materials, link previous knowledge to current tasks, which leads to better comprehension of lessons and enhances memory skills while working in real-life contexts (Garcia-Ros et al., 2024). Procedural learning promotes the improvement of perceptual and motor skills through practice (Simor et al., 2019). Exploratory learning as a strategy in the design component ensures that learners develop problem-solving and critical thinking skills, engage in hands-on learning, and reflect as they experiment with new materials to generate creative expressions of design ideas. The design component is structured to facilitate a constructivist approach to knowledge acquisition (Nurhasnah et al., 2024; Almulla, 2023).

RESEARCH METHOD

This study is built from a broader investigation into teachers' content knowledge for design education in basic schools within the Kumasi Metropolis, Ghana, and the iconography of selected cultural artefacts in formal educational curricula in Ghana. It employed a qualitative descriptive design to gain a firsthand and thorough understanding of teachers' experiences and perceptions (Villamin et al., 2025) and enable the researchers understand events in real-world settings (Doyle et al., 2020). Seven homogeneous, purposively sampled design teachers from five selected Junior High Schools across three municipalities were selected for the study. Their selection and participation were based on their professional

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knowledge, experience in the pedagogy of design (Akyildiz & Ahmed, 2021). A four-item semi-structured interview guide and observation checklist, structured on teachers' instructional resource use, instructional methods, strategies, engagement in practical activities, and technical skill proficiency, facilitated the collection of data. Two rounds of piloting were conducted with three creative arts and design teachers from a private school and two public schools in a different district, to examine the items for clarity, cohesiveness, and suitability for collecting relevant data for the final study (Malmqvist et al., 2019). Following this, a mock interview was administered by the same panel to provide constructive feedback. Interview questions were rephrased for clarity and brevity. Probes were included after each main question to enhance the fluidity of the interviews. The validation of data was ensured through the triangulation of qualitative techniques to ensure that the findings are robust and well-supported. Member checking ensured that the researchers' interpretations and conclusions adequately and accurately reflected participants' perspectives and experiences. Interviews and focus group discussions varied in length, spanning from 30 to 45 minutes. Focus group discussions aimed to elicit teachers' unhindered and candid perceptions of the use of the intervention. Data collection took place in accordance with the teachers' schedule and their indicated availability. Non-participant observations were conducted to validate interview data, augment data collected from interviews and provide a real picture of teachers' classroom practices. Observation lasted the entire duration of lessons, which varied between 30 and 50 minutes.

A background in art and design education combined with prior teaching experience at the Junior High level predisposed the researchers to consider both insider and outsider perspectives. Researcher perspectives were managed by documenting reactions, insights, and participants' views in reflective journals and thick descriptions of negative data. Data analysis employed reflexive thematic analysis (Braun & Clarke, 2019) to facilitate an in-depth and nuanced development of emergent themes, allowing for a deep interpretation of the gathered data. Data analysis of the cultural artefact was conducted through Panofsky's iconographic analysis. It revealed that the artefacts embody the concept of design, as a product, process and problem-solving ability that aligns with the three learning domains of the Design component of the CAD curriculum. This study, framed within a constructivist paradigm, relies on the participants' perceptions of the situation being studied to interpret the meanings that they attach to the world around them (Kumatongo & Muzata, 2021). Grounded in the theory of social constructivism, which posits that through social interactions with others (Sarmiento-Campos et al., 2022; Marginson & Dang, 2017), facilitated by mediator tools (Quaye et al., 2023), learners become active meaning-makers, building on their current knowledge. Pragmatism, as a philosophical paradigm, provided the researcher with the leverage to select research techniques and procedures that met the study's needs and purposes (Kaushik & Walsh, 2019), ultimately leading to the development of a guide inspired by cultural artefacts. The constructivist paradigm frames the study by focusing on how participants construct meaning through social interaction and mediated experiences. This is complemented by the

pragmatist paradigm, which enables the researcher to select flexible, context-appropriate methods to explore those constructions. Constructivism and pragmatism value learning as an active, context-dependent process, where meaning is constructed through interaction and methods selected based on their practical utility and effectiveness. The principles of ethics in research (Creswell & Creswell, 2018) ensured the confidentiality and anonymity of the participants. Informed consent was obtained from all seven participants and their school heads. Pseudonyms were generated for the seven (7) teachers and the five (5) schools.

RESULTS

Demographic data gathered on the participating teachers included their preferred pedagogical methods and strategies, engagement in practical activities and technical skill proficiency. Observations were conducted in basic 7 and 8 classrooms pre- and post-intervention.

Teachers' Preferred Pedagogical Methods

Teachers' methods and strategies are essential for achieving learning outcomes. Therefore, they must be tailored to the specific subject matter being taught (Ezeddine et al., 2023).

Interviews revealed that all seven teachers preferred the lecture method. The statements that reflect some of the teachers' reasons are as follows:

I use the lecture method only because it is easy to teach with this method. I have been using it for a long time (J2, Sch A).

I prefer the lecture method because that is the way to explain concepts to the learners (J1, Sch B).

Teachers (K1, D1, P1, C1, Sch A, C, B, D) provided similar responses, alluding to the ease of using the lecture method, which indicated familiarity and ease of conveying concepts to learners.

Teachers' Pedagogical Strategies

Teachers' pedagogical strategies are used in tandem with the adopted methods to foster effective lesson delivery. Teachers' responses to the strategies they adopted are as follows:

Teachers in K1 and P1 in Schools A and B used the discussion method primarily because of its effectiveness. Teachers J1 and C1 of Schools B and E reported using discussions and brainstorming to increase learner participation. Teachers J2, D1, and S1 of Schools A, C, and D preferred alternative pedagogical strategies.

I use inquiry-based learning and brainstorming as teaching strategies to teach design. (J2, Sch A)

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I use group work, project work and discussions (S1, D1, Sch D and C)

This raised questions about the teachers' perspectives on practical activities, given the emphasis the design component placed on teacher and learner engagement.

Teachers' Engagement in Practical Activities

Design is to be taught as a practical subject to align with learner-centred strategies and support diverse learning styles (NaCCa, 2020). Teachers reported infrequent engagement in practical activities. Excerpts of teachers' opinions are as follows:

Some school authorities do not like practical work; they are book-minded. (D1, Sch C.)

I do not do it all the time due to a lack of materials and learner motivation. (C1, Sch E).

The school does not provide materials for practical lessons. Not all learners bring materials for practicals, so only a few benefits (P1, J1, Sch B and J2 and K1, Sch A)

Lack of learner motivation and parental apathy toward the subject prevents engagement in practical activities (J2, C1 and S1 Sch A, D and E).

Teachers' Technical Skill Proficiency

The teachers' responses indicated a deficiency in technical skill competence. The exception was teacher D1, whose skill and experience as an artist enabled him to demonstrate a higher level of technical proficiency. Examples of how the teachers expressed their views are the following:

I learned it from the textbook, but I cannot achieve tones properly when it comes to shading for the modeling, not at all. (J2, Sch A)

Teacher P1 and Teacher J1 lacked the necessary skills and sought help from learners who had exceptional proficiency in practical skills.

I am not all that good; I use my good learners. I have two of such in basic 8 and 1 in basic 7 (S1, J2 Sch D, and E)

I tend to shy away from drawing, though I have been exposed to drawing, I'm not good at it. (C1, Sch E)

The interviews indicated that the teacher's insufficient technical skill proficiency could hinder the effective implementation of learner-centred

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strategies, which require skill demonstration and proficiency of skills to guide and evaluate learner outcomes. Direct observation of design lessons in Basic 7 and 8 (JHS 1 and 2) was conducted pre- and post-intervention to gain insights into teachers' understanding and application of the learner-centred method and strategy on the three learning domains of Design: (1) Design in nature and manmade environments, (2) Drawing, shading, colouring, and modeling for design, and (3) Creativity, innovation, and the design process.

DISCUSSION

The interview responses revealed a prevailing pattern that teachers mainly preferred the lecture method, which often bred passive listeners (Muganga & Ssenkusu, 2020). They lacked adequate technical skills, which could be attributed to a lack of subject matter expertise (Kusi et al., 2025). Although teacher-learner interactions were minimal, some teachers managed to achieve a higher level of learner engagement. In schools D and A, to explain and emphasise the importance of sequencing in processes in strand 3, the teacher engaged learners in the process of frying an egg. In School A, to explain the differences between tools and materials for Strand 2, the teacher used a familiar example of local food preparation to connect abstract concepts with actual experiences, making the learning relevant to learners' local contexts (Shih, 2022).

> *What are the things I need to prepare fufu? Let's separate them into raw materials and equipment. So, what are the raw materials? pepper, cassava, plantain, onion, etc. They are the consumable goods that enter our body, so what are the things that help us to get the fufu? the mortar, pestle, fire, ladle, blender, etc? They are the equipment.*

The teaching strategy adopted by the teachers was in the form of 'discussion'. The teacher's understanding of discussions and brainstorming consisted of question-and-answer sessions, in which a few learners participated in the typical manner seen in many Ghanaian classrooms, where teacher-centred strategies are preferred (Owusu-Addo, 2022; Hokor & Sedofia, 2021). The teachers' infrequent engagement in practical activities was attributed to a lack of adequate and relevant instructional resources. It was noted that the main instructional resource was the textbook, which limited learner-centred strategies and engagement (Panday-Shukla, 2024; Charles et al., 2024). Following the analysis of interviews and observations, five cultural artefacts that aligned with the three learning domains of the design component were selected to develop a guide.

The development of the instructional guide

The guide, inspired by cultural artefacts, was informed by the design features of the Ahenemma Mpaboa (royal sandals) of the Akan ethnic society, the Fiakuku and Dzonu (crowns and beads) of the Ewe society, and the Mugri and Saba (boots and necklaces) of the Mole Dagbani ethnic society. Their selection was

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based on their expression of design as a process, product, and problem-solving activity, their alignment with the three learning domains of the design component, and the ethnic diversity of the selected schools. The guide, grounded in the principles of Vygotsky's constructivism, Dewey's pragmatic principles (Bui & Pham, 2021; Newton et al., 2020), and the framework for lesson planning by Iqbal et al. (2021), incorporates the sequential steps of the ASSURE instructional design model (Lei, 2023), a student-centred model that aims to optimise learning outcomes by incorporating instructional media and technology to facilitate effective and efficient teaching and learning (Adedapo & Opoola, 2021). Figure 1 presents the framework of the guide. Table 1 (see appendix) displays a sample of the guide.
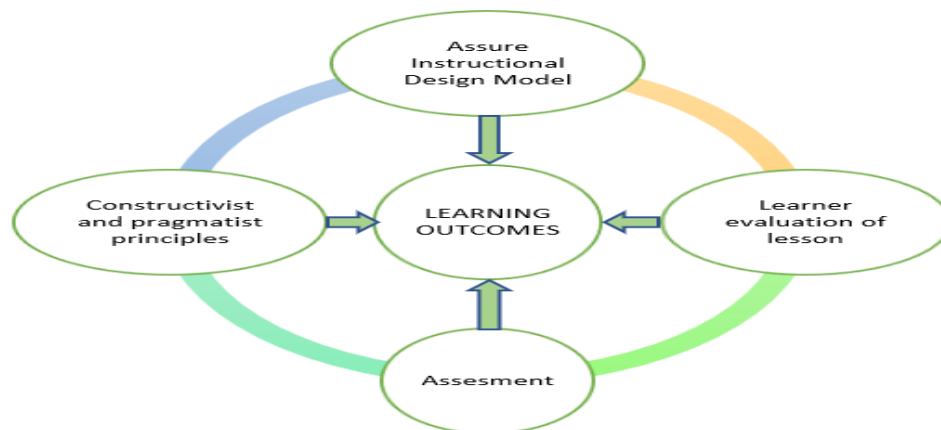

Figure 1. The framework of the ASSURE in CAIG Source: Researchers' construct

Regarding the *learner-centred method and strategies* observed post-intervention, teachers J2, P1, D1 and S1 demonstrated an improved understanding of the teaching method and pedagogical strategies associated with the Design component. The main instructional approach was learner-centred, with some teachers adopting a mix of direct instructional methods and learner-centred methods, as seen in Basic 7, School A, under strand 1, Design in nature and man-made environment. It is argued that traditional instruction can play a role in learner-centred course design; however, this integration depends on educational context, learning objectives and learner characteristics (Akrofi Baafi, 2020). In School D, Basic 8, the open-ended nature of the teachers' interpretation of learner-centred pedagogy created a culture of ambiguity in the classroom. It was observed that learners struggled to come up with creative expressions inspired by the cultural artefacts. Suggesting that teachers examine learning styles to select a particular learner-centred strategy (Wahyudin & Wahyuni, 2022; Kassem, 2018).

Excerpts of the teachers' perceptions of the implementation of the learner-centred methods are stated as follows:

It is new but exciting, it makes teaching easy, and the learners find things out for themselves (J2 Sch A)

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I like the fact that I can sit back and guide them. With the collaboration and teamwork, the more able learners explained things to the less able. It showed us how to do learner-centred teaching (S1, Sch D)

Teachers' perception of their *engagement in practical activities* was expressed in the following statements

Group activities make the learners bring out their ideas and work together; it doesn't have to be only on drawing and shading (C1, Sch E).

I was able to work with the learners during their lessons (K1, Sch A)

I realised that practical activities are not only using tools and materials, but even going out to explore and coming back to the classroom to discuss can be part of practical activities (J2, Sch A)

Teachers K1, J1, P1, D1, and C1 from Schools A, B, and E expressed some reservations about the implementation of learner-centred strategies. Concerns raised included laborious planning and preparation of lessons, unease with the method and students' predisposition to disengage from class activities

With the learner-centred pedagogies, the teacher has no control; the learners are left to learn the way they want, to introduce different materials and ways into the lesson. It is different from what I am used to (K1, Sch A)

It takes a lot of time to plan, and it is time-consuming, looking at our workload (JI, P1, D1, Sch B, C)

Ehhhm, in a place like this, I would have to be more strict, else the class will be turned into a market. I would have to combine the old one and the new one (C1, Sch E)

Experiential learning through active experimentation, inquiry-based learning, and exploration was documented. In School B, for example, the learner-centred strategy of experiential learning facilitated through brainstorming was implemented as learners engaged with each other to deepen their understanding of design. In School C, Basic 8 lessons on Strand 2 involved experiential learning through exploring and experimenting with alternative tools and materials, supported by discussions about the equipment used to create the cultural artefacts. This approach broadened learners' perception of technology beyond just digital technology and emphasised the role of indigenous technology as a traditional form of problem-solving, adaptation, and reworking to meet community needs (Axell, 2020). Teacher S1 of School D, Basic 8, used inquiry-based learning to collaboratively define biomimicry and biophilia with learners through group activities.

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Regarding *strategies*, Small group discussions, brainstorming, and teamwork facilitated collaboration, communication, and interaction (Goodwin, 2024; Yoder et al., 2021). The teacher of School E adopted brainstorming, which enabled students to collaborate, communicate and develop inventive problem-solving skills as they applied previous knowledge to approach design challenges (Madikizela-Madiya & Motlhabane, 2022). The teacher's adoption of the student-centred method affirmed the Constructivist principles that underpin participatory learning approaches, converting passive learning to active learning based on shared knowledge (Dinata et al., 2023), prompted by the shift from teacher-centred to student-centred teaching.

The technical skills of the observed teachers were limited due to the subject specialisation of the selected teachers. This clearly supports Kusi's (2025) and Hwang & Kisida's (2021) assertion that a teacher's mastery of subject matter enables teachers to present information with greater clarity and to implement instructional strategies.

The use of *cultural artefacts* varied across different schools. It was observed that some teachers were unable to make connections between the topics of the learning domains and the artefacts. This aligns with Lashley (2019), who suggests that a teacher's unfamiliarity and a lack of knowledge in aligning instructional materials with learning objectives undermine curriculum delivery. However, in schools where application was smooth, the cultural artefacts enhanced the interpretation of abstract concepts and increased learner participation, as posited by Prempeh (2022) and Dzamesi and van Heerden (2020). They prompted group discussions and explorations of their origin, thereby delivering culturally relevant instruction (Amponsah, 2023). The characterisation of design, as a process, a product, and a problem-solving approach, was facilitated through the artefacts. During a lesson under strand 1, the teacher's interpretation is expressed as follows:

> *We say that design is a process, a product and a way to solve a problem. In your various groups, observe the artefacts and try to imagine and discuss among yourselves who made the artefacts, how the artefacts were made, and the reasons why you think they were made and for what purpose.* Teacher J2 School A.

Increased levels of learner engagement were observed in the schools. Learner perceptions recorded as anecdotal notes requested additional instructional resources for modeling by the learners of SCH B, videos by SCH A, C, and E, and extended time slots in the school timetable to better accommodate such activities and more frequent practical sessions at SCH D. It was noted that although these artefacts were chosen based on the multi-ethnicity of the learners, most were only vaguely familiar with the cultural artefacts, emphasising the need for the curriculum to align with Africanist scholars' concept of decolonisation of formal educational systems (Ndlovu, 2024; Milford et al., 2021) to increase awareness of indigenous traditions (Ogbo & Ndubisi, 2017). Critical thinking,

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problem-solving, communication, and collaboration, espoused by constructivist and pragmatic principles (Jarrah et al., 2020; Kaushik & Walsh, 2019), were exhibited as learners engaged in and actively participated in learning to find solutions to design problems. The findings of this study indicate that while some teachers successfully implemented learner-centred methods and strategies, their efforts highlighted a broader need for sustained and targeted professional development in student-centred instructional methods. A key challenge was the difficulty some teachers faced in linking the cultural artefacts to specific learning domains, and teachers' inadequate technical skill proficiency.

CONCLUSION

Based on the results of this study, the introduction of a cultural artefact-inspired instructional guide provided procedural guidance that significantly addressed teachers' challenges related to the understanding and implementation of the mandated learner-centred method, strategies, and challenges related to the use of culturally relevant instructional resources in the design component of the CAD curriculum. Learners demonstrated increased participation and engagement, improved creative abilities (Wang, 2021), and a deeper appreciation for the relevance and interoperability of cultural artefacts within the subject matter of design. Furthermore, this approach supported the internalisation of Ghanaian values and critical consciousness explicated through the artefacts. This study has important implications for teacher professional development, curriculum design, and the promotion of culturally responsive pedagogy within Ghana's basic education system. Teachers of design require continuous professional development focused on enhancing their technical skills and strengthening their instructional methods. To ensure the scalability of this intervention, the National Teacher Council (NTC) should incorporate this innovation into pre-service teacher training modules in the Colleges of Education, to equip future teachers with both content knowledge and pedagogical skills required for design education. Curriculum developers at the National Council for Curriculum Assessment (NaCCA) should incorporate this approach into the curriculum guide and lesson exemplars for the design component of the CAD curriculum to provide instruction that is contextually meaningful. Furthermore, the Ministry of Education should collaborate with the Cultural Education Unit of the Ghana Education Service, the Ghana Museums and Monuments Board, and the custodians of cultural heritage to facilitate access to relevant artefacts, oral histories, and digital content to ensure the sustainability of the intervention.

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STRAND 1: DESIGN
SUB-STRAND 1.1.DESIGN IN NATURE AND MANMADE ENVIRONMENT
TERM 1 LESSON 1

Date:	Period:		Subject: Design	
Time:			**Strand: Design**	
Class: Basic 7			SUB-STRAND 1.1.DESIGN IN NATURE AND MANMADE ENVIRONMENT	
	Content standard: B7/JHS1 1.1.1 Demonstrate understanding of design as a concept and how it is related to the elements (dots, lines, and shapes) and principles (balance, rhythm, repetition) of design as a method to show how nature and manmade environment use design	**Indicator: B7/JHS11.1.1.1** Demonstrate understanding of design as a concept and its importance and role as a method to show how nature and manmade environment.		**Lesson**
Dzonu Ewe ethnic society. Bead with flowers. Purpose: to show authority, decoration, identity, and wealth.	Fiakuku: Ewe ethnic society. King's crown with guns, bullets, and a symbol for process. Purpose: to show authority and identity as the chief.	Ahenemma Mpaboa Akan ethnic society. Local sandal Purpose: to advise or warn people to show gratitude.		Saba: Mole Dagbani ethnic society. A necklace with a tortoise symbolising patience Purpose: protection and fertility.
		Core competencies: Communication and Collaboration (CC), Critical Thinking and Problem Solving (CP), Creativity and Innovation (CI)		
Phase duration	Learner activities		Resources	Theory mapping A.S.S.U.R.E Instructional design model
Phase1: Starter Preparing the brain for learning 5 minutes	Engage learners in discussion on cultural artefacts.		Reflective journals, Cultural artefacts, the World Wide Web, sketch	Analysing your learners' background

		pads, pen, pencil, dictionary	
Learner objectives	Provide a clear understanding and explanation of design as a concept. Design as a ● process (steps you go through to create a product). ● product (object). Fiakuku, Dzonu, Ahenemma Mpaboa, Mugri and Saba. ● problem-solving (solve a particular need) protection, authority, fertility		State objectives.
Resources	Reflective journals, Mugri, Saba, Ahenemma Mpaboa, Dzonu, Fiakuku, sketch pads, pen, pencil, dictionary.		Select media and materials.

Phase 2: Main new learning including assessment 40 minutes	● Learners discuss design as a concept.
	  Process: the steps taken to make the artefact are the process.
	  Product: The bead, Mugri, or Ahenemma Mpaboa is the product.
	  The artefacts were made to solve problems such as protection, identification, beautification, honour, and wealth.
	● Learners closely examine the cultural artefacts.
	● Discuss the history of the cultural artefacts. Why was it made? Who made it? Which materials were used to make them? (discussion)
	● Explain to learners that design is a way in which we solve problems by going through a process.
	● Allow learners to mention personal items and relate them to the process, product, and design problem-solving. (Discussion).
	● Learners brainstorm and talk about the importance and role of design in the making of these artifacts (Discussion).
			Utilize media and materials.
			
			Require learner participation

Phase 3: Plenary/ Reflections	Assessment of learning What do you think today's lesson was about? What part was easy? What part		Evaluate.

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(Learner and teacher) 5 minutes	was difficult? What changes would you suggest the teacher make? Reflection facilitator: what did learners learn, success/failure of tasks, was the lesson completed on time yes/no, changes to teaching yes/no, and why		

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