



Development and evaluation of an instructional guide for teaching content on Indigenous Ghanaian Sculpture in tertiary institutions in Ghana

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ABSTRACT

This study developed and evaluated an instructional guide for teaching indigenous Ghanaian sculpture in tertiary institutions, with particular focus on Bimoba sculptural traditions. It responded to the limited representation of minority ethnic sculptural forms in Visual Arts education and the absence of structured teaching resources in Colleges of Education. Grounded in Indigenous Knowledge Systems Theory and Constructivist Learning Theory, the study adopted a qualitative approach. The ASSURE instructional design model guided the development of the guide, which integrated theoretical content, practical activities, reflective tasks, and assessment strategies. The guide covered chicherii, tingbana, pataa, gingana, and yerii, highlighting their cultural, aesthetic, spiritual, and educational values. Through data saturation, convenience, and purposive sampling, 20 respondents comprising five sculpture experts, three lecturers, and twelve student-teachers in selected tertiary institutions evaluated the guide. Findings revealed that the guide was culturally authentic, pedagogically sound, content-relevant, and practically useful. The study concludes that integrating Bimoba sculpture into teacher education can strengthen curriculum relevance, cultural preservation, and decolonised art education.

Keywords: Development, evaluation, instructional guide, teaching content, indigenous Ghanaian sculpture

INTRODUCTION

Research on indigenous Ghanaian sculpture has largely focused on the sculptural traditions of the country's major ethnic groups, with comparatively limited scholarly attention given to the artistic practices of minority communities.¹ This imbalance has implications for Visual Arts education, particularly in Colleges of Education, where student-teachers require culturally responsive knowledge and pedagogical competencies to effectively teach indigenous art forms. Consequently, many trainee

¹ Alex Kwasi Azaglo et al., “‘My Sculpture, My Life’: An Iconographic Study of the Contemporary Ghanaian Sculptor, Isaac Opoku-Mensah,” *Journal of African History, Culture and Arts* 2, no. 1 (2022): 1–14; M Awuni, A Mensah, and D Baffour-Awuah, “Traditional Wood Carving and Contemporary Wood Sculpture: A Study of Ahwiaa and KNUST,” *Journal of Art and Culture Studies* 15, no. 2 (2023): 45–62; Emmanuel Kofi Attah et al., “Documentation of the Socio-Cultural Significance of Artefacts in Sefwi Bekwai Palace in Ghana,” *E-Journal of Humanities, Arts and Social Sciences* 5 (2024): 611–28.

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teachers graduate with limited exposure to the sculptural traditions of minority ethnic groups, despite the cultural, historical, aesthetic, and educational significance of these artistic practices.

The limited integration of indigenous knowledge into higher education is part of a broader challenge within African educational systems, where curricula may not adequately reflect local knowledge, cultural practices, and developmental realities. Incorporating indigenous knowledge systems into higher education can make teaching and learning more contextually relevant while promoting cultural identity, community values, and sustainable approaches to development.

Such integration also provides opportunities for local knowledge holders to participate in the preservation and transmission of cultural heritage.² Perroni similarly emphasises the importance of incorporating indigenous knowledge into education, research, and policy-making as a means of contributing to Africa's transformation. In this context, the inclusion of indigenous artistic traditions in teacher education is important for ensuring that future teachers are equipped to recognise, value, and transmit the cultural knowledge embedded in local art forms.³

Instructional design models provide systematic procedures for developing effective learning materials. The ASSURE instructional guide is learner-centred, logical and straightforward.⁴ Sirui adds that it supports media and technology integration, curriculum delivery and assessment, making it useful for organising indigenous content into teachable lessons.⁵

Despite the cultural and educational value of indigenous Ghanaian sculpture, instructional resources for teaching minority sculptural traditions remain limited in Colleges of Education. In particular, Bimoba sculptural traditions have received limited attention in formal Visual Arts education and have not been systematically integrated into the art curriculum of Ghana's Colleges of Education. This represents a gap not only in instructional resources but also in the preservation and educational transmission of Bimoba cultural heritage.

It is against this background that the present study was undertaken to develop and evaluate an instructional guide for teaching indigenous Ghanaian sculpture in Colleges of Education, using Bimoba sculptural traditions as the cultural content and the ASSURE instructional design model as the pedagogical framework. The study seeks to bridge the gap between indigenous cultural knowledge and formal Visual Arts education by providing a structured, culturally responsive, and pedagogically appropriate resource for student-teachers. Ultimately, the study contributes to the promotion of indigenous knowledge in teacher education and to the preservation, appreciation, and continued transmission of Ghana's diverse sculptural heritage.

LITERATURE REVIEW

Indigenous Ghanaian sculptures

Attah et al. studied indigenous artefacts at Sefwi Bekwai Palace, Ghana, including lion statues and ceremonial swords. They argue that reliance on oral narratives has weakened their historical significance, making documentation crucial for preserving history, aesthetics, religious beliefs and cultural growth.⁶ The works of indigenous Ghanaian woodcarvers, including Adu-Boahen Kwabena and others, highlight diverse crafts such as drums and human figures. The study emphasises the under-documentation of their knowledge and the need to conserve their skills for future generations.⁷ Asante traditional therapists use indigenous arts such as shrines, stools, swords and dolls as therapeutic tools for care and restoration. Priest-consecrated Akuaba figures, for example, support conception rituals and

² Hassan O Kaya and Yonah N Seleti, "African Indigenous Knowledge Systems and Relevance of Higher Education in South Africa," *International Education Journal: Comparative Perspectives* 12, no. 1 (2013).

³ E. Perroni, *How Africa Can Use Its Traditional Knowledge* (Food Tank, 2023), <https://foodtank.com/news/2017/11/traditional-african-agriculture/>.

⁴ Laura Trif-Boia, "The ASSURE Model in Instructional Design," 2022; Lauren Hays, "ASSURE: Instructional Design Model for Use by Librarians," *Lucidea*, 2021, <https://lucidea.com/blog/assure-instructional-design-model-for-us-by-librarians/>; Serhart Kurt, "ASSURE: Instructional Design Model," *Educational Technology*, 2015.

⁵ Wang Sirui, *The Instructional Design Models That Best Fit: ASSURE Model* (Learning by Click, 2018).

⁶ Attah et al., "Documentation of the Socio-Cultural Significance of Artefacts in Sefwi Bekwai Palace in Ghana."

⁷ Nicholas K. Wege, "Documentation of the Lives and Works of Four Traditional Woodwork Artists in Ghana: A Resource for Teaching and Learning in the Senior High School" (Kwame Nkrumah University of Science and Technology, Kumasi, 2011).

healing relationships among spiritual forces, therapists and clients.⁸ Asante stool carvings are a renowned woodcarving tradition in Ghana, serving functional and cultural purposes. Carved from hardwood with tools such as adzes and knives, they carry patterns, symbols and motifs that represent Asante culture and history.⁹ Asante traditional wood carving also produces ceremonial masks representing ancestral spirits or deities. Carvers use durable woods such as mahogany, ebony and teak to ensure structural strength and aesthetic value. Each mask reflects cultural and spiritual heritage.¹⁰

Indigenous Bimoba Sculptures

The Bimoba people created various sculptures for significant functions, including tingbana (earth shrines), pataa (family gods), chicherii (abstract figures), yerii (fifes), gingana (drums), sanpana (flooring tools), toa (mortars), and togbianii (pestles). These creations remain undocumented due to the lack of formal education among the Bimoba. Different African societies honour ancestors in different ways. The Bimoba create shrines after funerals, use traditional cures for marital problems and employ charms for brides. In the *Kochaak* ritual, a soothsayer sacrifices birds to create a protective deity for the bride until marriage.¹¹



Figure 1: Griba Kombat's female shrine (tingbanpook) in Nakpanduri¹²

The female shrine serves as a fertility altar symbolising Woman or Mother Nature, while the male shrine relates to hunting and war. It includes two kola nuts and a pot of water. These shrines support healing, ritual consultation and contact with spiritual forces, especially during misfortune and drought.¹³

⁸ Simon Pyne, Mavis Osei, and Joseph Adu-Agyem, "The Use of Indigenous Arts in the Therapeutic Practices of Traditional Priests and Priestesses of Asante, Ghana," *International Journal of Innovative Research* 2, no. 11 (2013): 464–74.

⁹ Boakye-Yiadom, Mica Michael, and Kofi Opoku Donkor, "Asante Stool Carvings and Their Cultural Significance in Ghana," *Journal of African Art Education*, 2022; Azaglo et al., "'My Sculpture, My Life': An Iconographic Study of the Contemporary Ghanaian Sculptor, Isaac Opoku-Mensah."

¹⁰ S Awuni et al., "Traditional Wood Carving and Contemporary Wood Sculpture in Ghana," *J Afr Art Educ* 3, no. 2 (2023): 21–48.

¹¹ K. Kpeebe, "A Sociological Study of Kingship, Peace and Marriage among the Bimoba People," 2019.

¹² D. Phyfferoen, *An Introduction to the Traditional Idioms of Music Making among the Bimoba of Northern Ghana* (Academia, 2005).

¹³ Phyfferoen, *An Introduction to the Traditional Idioms of Music Making among the Bimoba of Northern Ghana*.

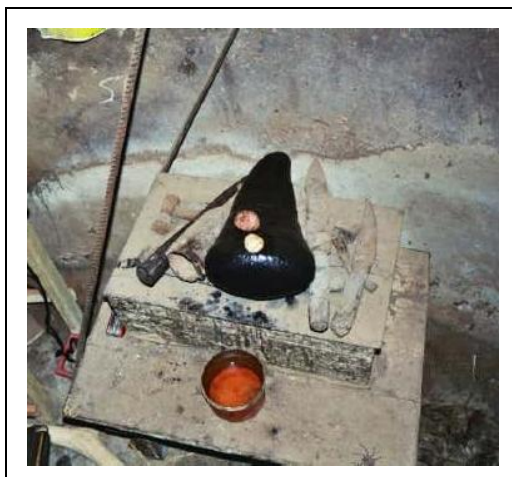


Figure 2: Griba Kombat's Male shrine (tingbanjak) in Nakpanduri¹⁴

Chicherik is a large abstract sculpture made from heavy wood and symbolises an ancestral spirit that protects villages. Moba figures, known as *chicherii*, are highly abstract, often lack facial features and show minimal sexual identity through rudimentary genitalia. Notably, the Moba have not carved these figures for the past century.¹⁵

Moba *chicherii* are abstract figures resembling the human form, significant religious objects for the Moba people representing various ancestors. They are carved upon request and come in three sizes: small Yennu *chicherii*, enhancing personal Yennu shrines; medium *bawoong chicherii*, used for family shrines; and large *chicherii sakab*, buried waist-deep by clan founders.¹⁶

Every Bimoba clan has an earth shrine, usually represented by stones or trees, and celebrates annual festivals involving feasts, sacrifices and communal gatherings. Diviners, known as *tingbandam*, diagnose spiritual problems and recommend sacrifices, while family gods such as *pataa* and mud effigies support purification and protection. *Chicherii* figures are also used during crises to strengthen personal and family shrines. These include *yennu chicherii* for personal shrines, *bawoong chicherii* for family shrines and *chicherii saakab* for ancestral clan members.¹⁷

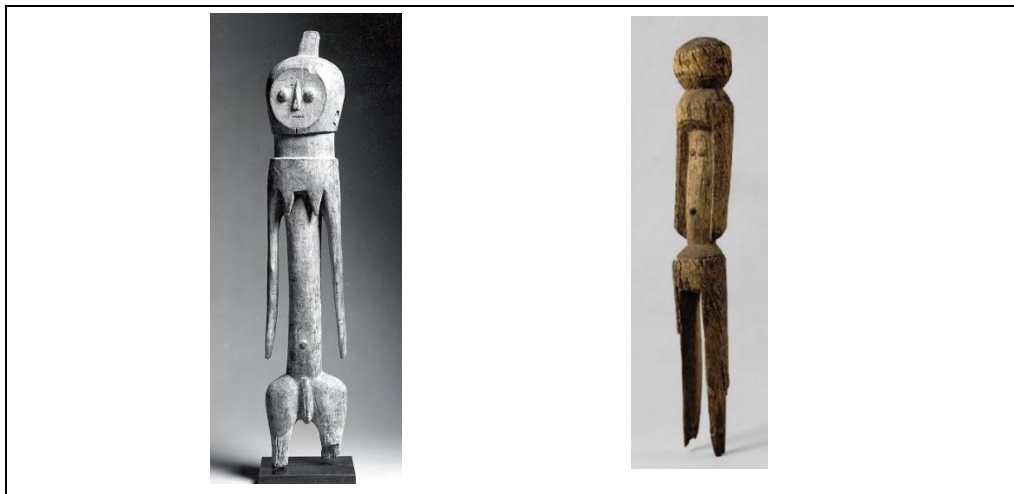


Figure 3: (a, b) Moba shrine female figures, wooden, 19th- 20th century, Togo and Ghana. Courtesy: Gift of George and Julianna Feher, 1981 and Clan shrine figure (*chicher Sakwa*), Moba, Togo, wood; H 135 cm (53 1/8 in.), 19th- 20th century, The Horsmann Collection, Zug, Switzerland.¹⁸

¹⁴ Phyfferoen, *An Introduction to the Traditional Idioms of Music Making among the Bimoba of Northern Ghana*.

¹⁵ Anon, "MOBA Shrine Figure, Togo, African" (Amazon, 2024), <https://www.amazon.com/MOBA-Shrine-Figure-Togo-African/dp/B07M966258>; Capitulum Art., "A Monumental Sculpture Tchitcheri Sakwa, Moba Togo," 2024.

¹⁶ Jerry L. Thompson, "Moba Chicherii Figures," 2016.

¹⁷ Kwekudee, *Bimoba People: Hilly Dwelling Small West African Ethnic Group* (Trip Down Memory Lane, 2013), <https://kwekudee-tripdownmemorylane.blogspot.com/2013/04/bimoba-people-hilly-dwelling-small-west.html>.

¹⁸ Kwekudee, *Bimoba People: Hilly Dwelling Small West African Ethnic Group*.

The Jabaa-waanu initiation determines one's identity as a Jabaa through fainting. A participant who is a Jabaa sees two dwarfs on a rooftop and later receives training from an older Jabaa. Women may become Jabaa if their miar permits, although they do not undergo fainting.¹⁹

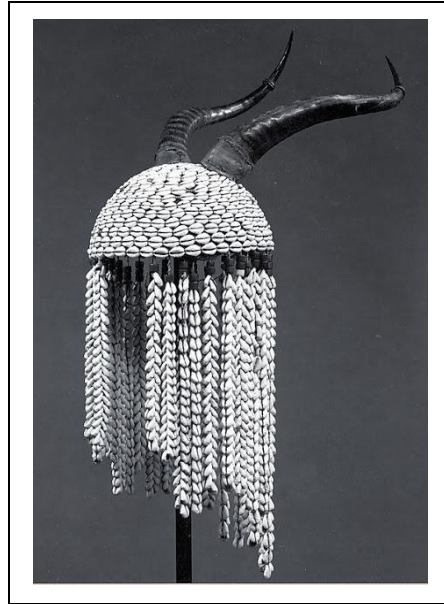


Figure 4: Bimoba headdress for spiritual initiation/shrine worship, 19th-20th century, Togo.
Courtesy: The Bryce Holcombe Collection of African Decorative Art, Gift of Bryce Holcombe, 1983.²⁰



Figure 5: Bimoba drummers (ginganfaara)²¹

¹⁹ Kwekudee, *Bimoba People: Hilly Dwelling Small West African Ethnic Group*.

²⁰ Kwekudee, *Bimoba People: Hilly Dwelling Small West African Ethnic Group*.

²¹ D. Phyfferoen, *Gingaung* (Music Africa Museum, 2006).

The Bimoba people create and play *gingana*, two-skin drums made from a single piece of wood from the *nyanpouk* or *ɲaɲ* trees. There are three types: *gingannaauɲ* (the bass drum), *ginganpanɲ*, and *ginganjak*. Drumsticks, called *gingangbianii*, are made from the flexible and strong *Lɔbuk* tree. The *yerik*, a conical-bore notched flute made from *naajiik* wood with three finger-holes, produces high notes for dance and women's songs, with sounds comparable to those of the Dagomba's *yuwa* and the Mamprusi's *wia*. The flute is held between the fingers, creating dominant tones when all holes are covered, and its parts are named after body parts.²²

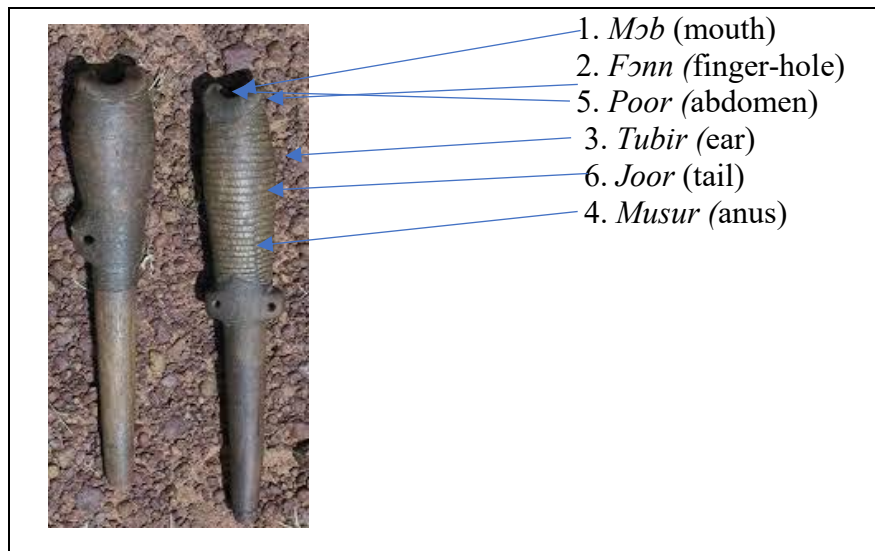


Figure 6: Parts of *yerik*²³

The *Dadauɲ* Clan of the Bimoba people was assisted by a crocodile to cross the White Volta River, leading to the creation of the 'bauɲ', a spirit-binding bench that symbolises the crocodile. This bench serves as a seat and an ancestral totemic abode at the house of the family elder of the Fuling-Kong lineage in Najong No.2. The Bimoba people have a cultural taboo against eating crocodiles.²⁴

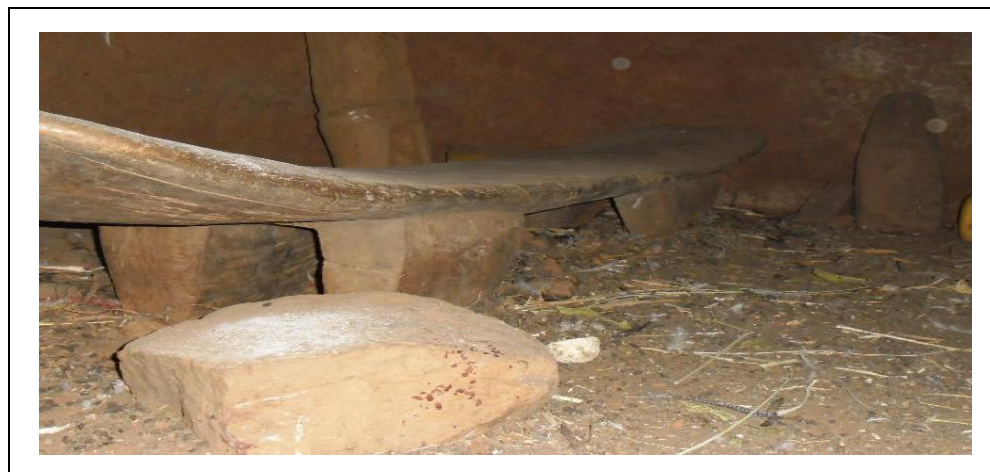


Figure 7: The *Dadauɲ* Clan Totemic bench of Bimoba people²⁵

²² Phyfferoen, *Gingaung*.

²³ Phyfferoen, *Gingaung*.

²⁴ G. N., Duut et al., "A Chronicle of Tourist Attractions in the Bunkpurugu Nakpanduri District of the Northern Region, Ghana," *The International Journal of Humanities & Social Studies* 6, no. 12 (2018): 74–88.

²⁵ Duut et al., "A Chronicle of Tourist Attractions in the Bunkpurugu Nakpanduri District of the Northern Region, Ghana."

Indigenous Knowledge Systems Theory

Indigenous Knowledge Systems Theory posits that local communities have valid, organized bodies of knowledge shaped by their interactions with various environments. This living system comprises ideas, skills, values, and technologies that guide how communities interpret life and address challenges. Slikkerveer notes that these systems arose within ethno-science to understand non-Western worldviews from indigenous perspectives, avoiding colonial biases.²⁶

A major assumption of the theory is that knowledge is culturally situated, produced within a community, and transmitted across generations. Dei et al. describe indigenous knowledge as local, community-owned, intergenerational, holistic, and largely tacit.²⁷ The theory promotes sustainable development and decolonisation by emphasising local participation, community experience, and the preservation of knowledge held by elders and cultural practitioners.²⁸

In education, the theory supports culturally responsive and context-based teaching.²⁹ In this study, it provides a foundation for examining indigenous Bimoba sculptures such as chicherii, tingbana, pataa, gingana and yerii as valid cultural and educational resources for promoting Visual Arts pedagogy, cultural identity and decolonised art education.

Constructivist Learning Theory

Constructivist Learning Theory explains how learners actively build knowledge through experience, reflection, interaction and meaning-making. The theory holds that knowledge is not simply transferred from the teacher to the learner; rather, learners construct understanding by connecting new information to their existing knowledge, cultural background, lived experiences and social environment.³⁰

Recent literature presents constructivism as a learner-centred approach that promotes active participation, problem-solving, collaboration and critical thinking. In a constructivist classroom, the teacher acts as a facilitator who creates meaningful learning conditions, guides inquiry and supports deeper understanding through engagement with content, peers and real-life contexts.³¹

Social constructivism emphasises interaction and collaboration, which is beneficial for teaching indigenous Ghanaian sculpture due to its roots in community life and oral tradition. Deeba et al. argue that this approach enhances student engagement and knowledge sharing, allowing learners to explore the forms, functions, and educational values of Bimoba sculptures.³²

Instructional Design Models

Instructional design models are frameworks that help designers create effective educational products. They are now used in government, business and higher education to impart knowledge and skills, create engaging learning experiences and improve retention through learning theories and design principles.³³

²⁶ L Jan Slikkerveer, "The Indigenous Knowledge Systems' Perspective on Sustainable Development," in *Integrated Community-Managed Development: Strategizing Indigenous Knowledge and Institutions for Poverty Reduction and Sustainable Community Development in Indonesia* (Springer, 2019), 33–66.

²⁷ De-Graft Johnson Dei et al., "Synthesizing the Characteristics and Applications of Indigenous Knowledge for Sustainable Development: A Systematic Review," *Sage Open* 15, no. 3 (2025): 21582440251383844.

²⁸ Slikkerveer, "The Indigenous Knowledge Systems' Perspective on Sustainable Development"; Tlou Maggie Masenya, "Decolonization of Indigenous Knowledge Systems in South Africa: Impact of Policy and Protocols," *International Journal of Knowledge Management (IJKM)* 18, no. 1 (2022): 1–22.

²⁹ Elliot C Ndlovu and Mishack T Gumbo, "Decolonising Technology Education: Integrating Indigenous Knowledge for Sustainable Development in Electrical and Mechanical Systems and Control," *African Journal of Research in Mathematics, Science and Technology Education* 28, no. 3 (2024): 362–72; Elyssa Cherry Shive, "Equitable Integration of Indigenous Knowledge System in STEM Education Professional Development: A Systematic Review," *Journal of Research in Science, Mathematics and Technology Education* 8, no. 2 (2025): 21–40.

³⁰ Hamzah Upu, "Constructivism versus Cognitive Load Theory: In Search for an Effective Mathematics Teaching," *ArXiv Preprint ArXiv:2108.04796*, 2021.

³¹ Sanjeef Thampinathan, "The Application of the Constructivism Learning Theory to Physician Assistant Students in Primary Care," *Education for Health* 35, no. 1 (2022): 26–30.

³² Amna Saleem, Huma Kausar, and Farah Deeba, "Social Constructivism: A New Paradigm in Teaching and Learning Environment," *Perennial Journal of History* 2, no. 2 (2021): 403–21.

³³ Daniela R Moiso, "How to Apply Instructional Design Models to Learning Design" (SessionLab. Accessed September 25, 2024. , 2024), <https://www.sessionlab.com/blog/instructional-design-models/>; Luis Lastiri, *The Major Instructional Design Models Explained and Defined* (My eLearning World, 2024), <https://myelearningworld.com/instructional-design-models/>.

The ASSURE Instructional Design Model

The ASSURE Instructional Design Model, developed by Heinrich and Molenda in 1999, integrates multimedia and technology to enhance learning environments. It emphasises clear outcomes, evaluation, revision and learner feedback. ASSURE supports lesson planning, learner achievement, organisation, collaboration, curriculum delivery and assessment.³⁴

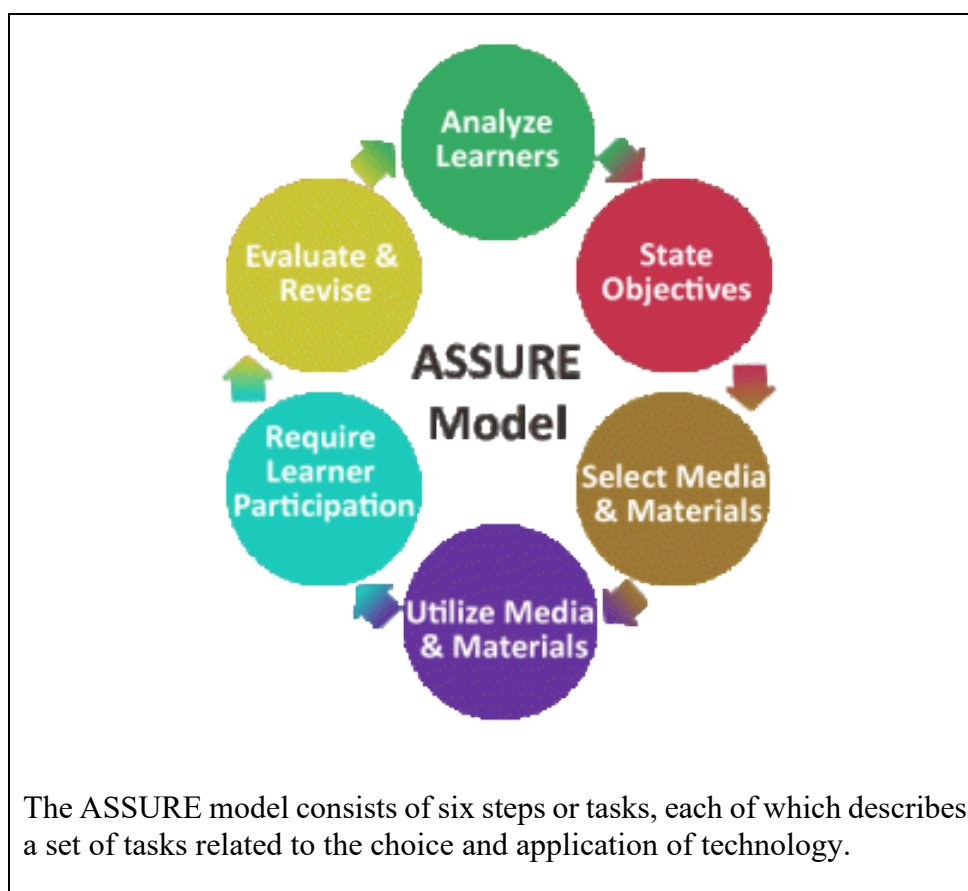


Figure 8: The ASSURE Instructional Design Model³⁵

The ASSURE instructional design model is an acronym that outlines steps aimed at enhancing learning through multimedia and technology. It emphasizes learner-centered approaches, with steps including: A - Analyse learners; S - State standards and objectives; S - Select strategies, technology, media and materials; U - Utilise these resources; R - Require learner participation; and E - Evaluate and revise. This model focuses on specific learning outcomes and incorporates feedback to better cater to learners' needs.³⁶

A– Analyse Learners entails assessing students' prior knowledge, learning styles, and motivations to customise lessons effectively, with data collected via surveys and assessments for alignment. S – State standards and objectives define clear, SMART outcomes using the ASSURE model. S – Select strategies and resources stresses choosing appropriate educational materials and diverse teaching methods, including lectures and gamification. U – Utilise technology and materials involves correctly preparing and applying these resources for better engagement. R – Require learner participation focuses on promoting active involvement through discussions and projects for deeper

³⁴ T. H. Nurdi, *The ASSURE in Teaching* (Instructional Technology, 2017), <https://pascapbi-3a.blogspot.com/2017/01/theasure-in-teaching-by-trihari-nurdi.html>; Hays, “ASSURE: Instructional Design Model for Use by Librarians”; Sirui, *The Instructional Design Models That Best Fit: ASSURE Model*; Trif-Boia, “The ASSURE Model in Instructional Design.”

³⁵ Sirui, *The Instructional Design Models That Best Fit: ASSURE Model*.

³⁶ Kurt, “ASSURE: Instructional Design Model”; Hays, “ASSURE: Instructional Design Model for Use by Librarians.”

content interaction. E – Evaluate and revise highlights the need for continuous assessment of learner success and teaching quality to inform improvements.³⁷

Tools for Effective Evaluation of Instructional Guides

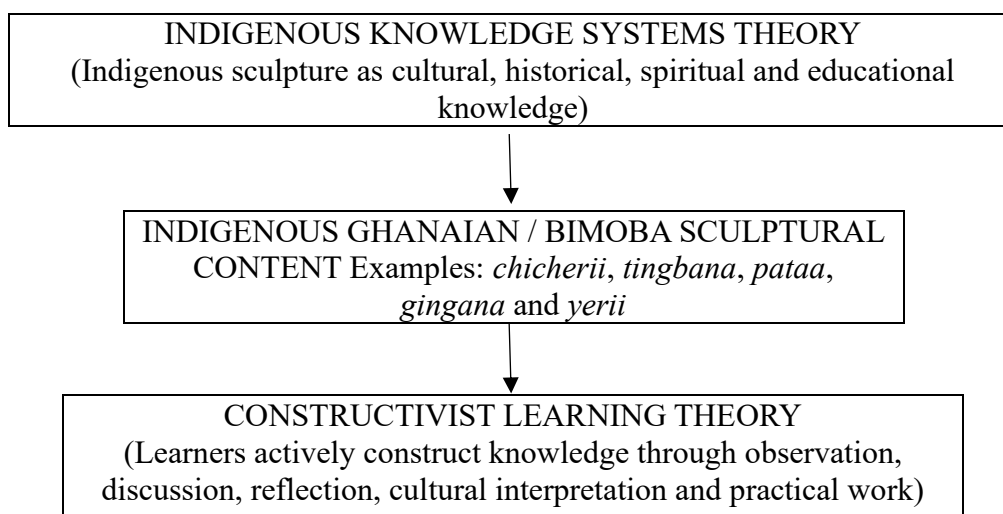
Regular assessment and improvement of instructional materials are crucial for achieving learning objectives and enhancing student experiences. Evaluation focuses on relevance, correctness, clarity and alignment with goals, while qualitative and quantitative feedback guides decisions on whether to continue, revise or adopt instructional components.³⁸

Assessment tools, including surveys, tests, interviews and observations, are essential for identifying performance and improvement areas. They provide evidence of knowledge and skills, while formative and summative assessments support instructional design and decision-making. Checklists ensure relevance, clarity, consistency and measurability.³⁹

Teaching procedures involve both formative and summative assessment techniques. Formative assessment entails continuous evaluation during learning, while summative assessment evaluates learning outcomes at the end of an instructional period. The integration of both assessment types enhances academic performance.⁴⁰

THEORETICAL FRAMEWORK

The theoretical framework guides research by drawing on established theories and concepts relevant to the study. It helps the researcher focus the investigation, understand relationships among concepts or variables, identify gaps in knowledge, and interpret findings more clearly.⁴¹ It also serves as a roadmap for the study and supports a more coherent and less biased research process.⁴²



³⁷ Sirui, *The Instructional Design Models That Best Fit: ASSURE Model*; Kurt, "ASSURE: Instructional Design Model"; Hays, "ASSURE: Instructional Design Model for Use by Librarians."

³⁸ Calhoun, Sahay, and Wilson, *Instructional Design Evaluation* (EdTech Books, 2021), https://edtechbooks.org/id/instructional_design_evaluation; S Bui, "Evaluation of Instructional Materials in 2024: 9 Key Aspects" (F. Learning Studio, 2024), <https://flearningstudio.com/a-guide-to-successful-evaluation-of-online-learning-materials/>; R. Williams, J. Thomas, and L. Miller, "Strategies to Address Teacher Bias and Promote Equity," *Educational Review* 76, no. 2 (2021): 150–70; Yuxue Zou et al., "Enhancing Teaching and Learning through Assessment Strategies: A Practical Guide," *International Journal of Academic Research in Business and Social Sciences* 14, no. 7 (2024): 1024–36.

³⁹ B. Williams, "Instructional Design Evaluation Checklist: A Practical Guide" (Insight7, 2025), <https://insight7.io/instructional-design-evaluation-checklist-a-practical-guide/>; G Rusconi, *What Is an Assessment Tool? Development Guide and 7 Examples* (Cloud Assess, 2025).

⁴⁰ Zou et al., "Enhancing Teaching and Learning through Assessment Strategies: A Practical Guide."

⁴¹ Dickson Adom, Emad Kamil Hussein, and Joe Adu Agyem, "Theoretical and Conceptual Framework: Mandatory Ingredients of a Quality Research," *International Journal of Scientific Research* 7, no. 1 (2018): 438–41; Divya Sreekumar, "What Is Research Methodology? Definition, Types, and Examples," *Paperpal Blog-Academic Writing Guides*, 2023; M. Dziak, "Theoretical Framework," EBSCO, 2024, <https://www.ebsco.com/research-starters/social-sciences-and-humanities/theoretical-framework>.

⁴² Dziak, "Theoretical Framework."

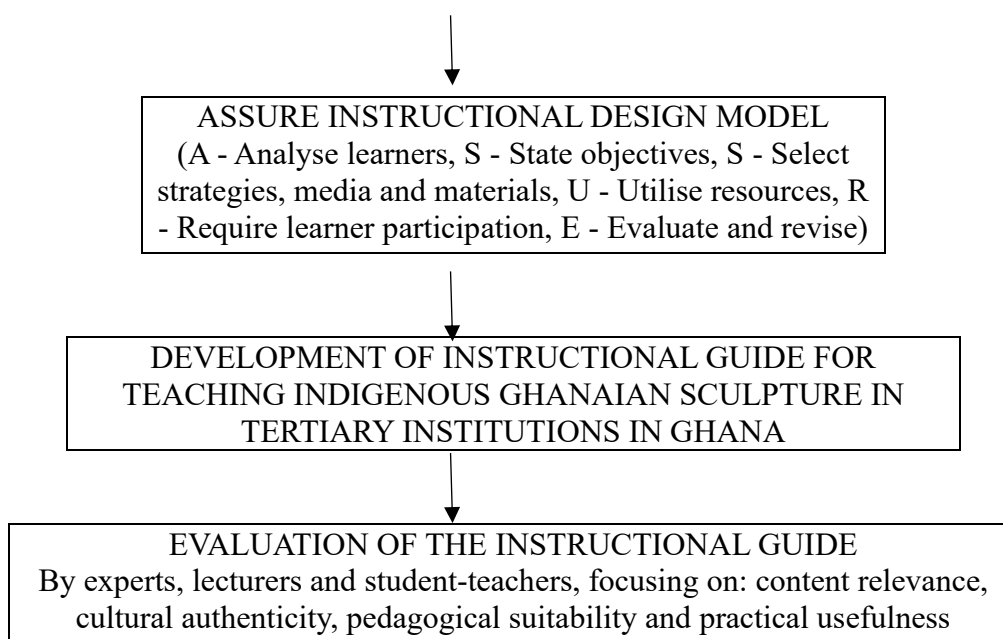


Figure 9: Theoretical Framework for the Study
Source: Researcher's construct (2025)

The Theoretical Framework shows the theoretical flow guiding the study. It begins with Indigenous Knowledge Systems Theory, which recognises indigenous Bimoba sculpture as a valid body of cultural, historical, spiritual and educational knowledge. This theory explains why sculptural forms such as *chicherii*, *tingbana*, *pataa*, *gingana* and *yerii* are important resources for Visual Arts education.

The diagram then connects this indigenous content to Constructivist Learning Theory, which explains how learners actively construct knowledge through observation, discussion, reflection, cultural interpretation and practical work. The ASSURE Instructional Design Model provides the procedure for organising the content into teachable lessons. Finally, the instructional guide is evaluated by experts, lecturers and student-teachers for content relevance, cultural authenticity, pedagogical suitability and practical usefulness.

METHODOLOGY

The methodology is grounded in the constructivist philosophical model, which focuses on participants' perspectives and views truth as subjective. Qualitative researchers gather evidence through interviews and observations before interpretation, although objective analysis remains challenging. The qualitative approach was suitable because it allowed insights into the educational and aesthetic values of indigenous Bimoba sculptures and fostered rapport with respondents.

For this study, the sample size was determined by the principle of saturation. Through the opinions of various authors on the principle of saturation and what determines a sample size in qualitative research, the researcher selected 28 respondents (sculpture experts, lecturers and students) to examine the developed instructional guide for teaching indigenous Ghanaian sculpture in the colleges of education in Ghana. The researcher employed convenience and purposive sampling techniques for the study.

The data were collected through interviews and observations. A data collection instrument is a means through which data is collected depending on the methods used. Qualitative data are collected primarily from interviews, observations, documents and artefacts.

The researcher prepared an interview guide and showed it to colleagues to ensure that it was accurate before giving it to the supervisors for further corrections and approval.⁴³ The researchers called

⁴³ Mohammad Zohrabi, "Mixed Method Research: Instruments, Validity, Reliability and Reporting Findings," *Theory and Practice in Language Studies* 3, no. 2 (2013): 254–62.

the sculpture experts and lecturers on the phone to understand and agree on the developed instructional guide; the checklists were sent through emails and WhatsApp for them to examine. After compiling, evaluating and summarising all of the information gathered from the primary and secondary sources, conclusions were made. It was presented in a descriptive style with tables.

The necessary approval letter was obtained from the Department of Educational Innovations in Science and Technology at KNUST to inform respondents about the study and data collection. Participants consented individually, were assured of anonymity and confidentiality, and were informed that the data would support publication.

PRESENTATION OF FINDINGS AND DISCUSSION

Findings for research question 1: How can an instructional guide be developed for teaching indigenous Ghanaian sculpture in the Colleges of Education in Ghana?

The research focused on using the ASSURE instructional design model to develop a guide for teaching indigenous Ghanaian sculpture in Colleges of Education. The draft guide was reviewed by colleagues, sculpture lecturers, the Visual Arts coordinator for AAMUSTED-affiliated colleges and supervisors. Their suggestions informed revisions that produced the final version.

Developed Instructional Guide for Teaching Indigenous Ghanaian Sculpture in the Colleges of Education in Ghana (Final Version)

Course Title: Introduction to Indigenous Ghanaian Sculpture

Preamble

Integration of indigenous Ghanaian sculpture in Colleges of Education curricula promotes deeper understanding of three-dimensional art forms, cultural heritage and artistic processes. This guide provides theoretical and practical insights into indigenous sculptural traditions and aligns with key Visual Arts courses such as Ghanaian Identity, Culture and Arts, History and Philosophical Foundations of Visual Arts, Introduction to 3D Arts, Introduction to Sculpture and Studio Practice in Sculpture. It examines the technical, philosophical and historical aspects of indigenous Ghanaian sculptures, equips student-teachers with practical skills, strengthens cultural awareness and promotes creativity, critical thinking and hands-on learning, while bridging traditional and contemporary techniques. The guide prepares student-teachers to teach sculpture in basic schools and supports knowledge of cultural identification, material investigation and production techniques. Therefore, its inclusion strengthens Visual Arts instruction by promoting artistic excellence and cultural preservation in Ghana's educational system. The lessons combine theory and practice and align with the National Teacher Standards (NTS) and the National Teacher Education Curriculum Framework (NTECF) to foster competent, culturally aware educators in Ghana.

Table 1. Lesson 1: Concept and History of Indigenous Ghanaian Sculpture

Learners: Visual Arts Students Class: Level 400 Duration: 3 hours

STEP 1 A– Analyse Learners	1. General characteristics: • The Visual Arts students at level 400 are in number (..... males and females) with an age range betweenand Learners come from communities where they produce indigenous Ghanaian sculptures. They are always punctual to lectures. • The learners are Visual Arts students. 2. Prerequisite skills or knowledge: • The Learners have taken Introduction to 3-D Arts, History and Philosophical Foundations of Visual Arts and Introduction to Sculpture as prerequisite courses. • They have acquired some knowledge or skills in sculpture. 3. Learning styles:
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	Most of the students respond best to visual, verbal, logical and social instruction. 4. Motivations: • Learners take this lesson to understand the concept and History of Indigenous Ghanaian Sculpture. • Learners desire to take this course for a degree.
STEP 2 S – State Standards and Objectives (Learning Outcomes and Learning Indicators)	Learning outcomes: 1. Demonstrate understanding of the concept of indigenous sculpture 2. Demonstrate knowledge and understanding of the historical significance of indigenous Ghanaian sculptures. 3. Discover the cultural contexts that influence indigenous sculpture. 4. Describe practical examples of applying indigenous Ghanaian sculptures for community development. Learning Indicators: 1. Oral response/written evidence of learner's ability to explain the concept of indigenous sculpture 2. Oral response/written evidence of learner's ability to demonstrate knowledge and understanding of the historical significance of indigenous Ghanaian sculptures 3. Oral response/written evidence of learner's ability to discover the cultural contexts that influence indigenous sculpture. 4. Oral response/written evidence of learner's ability to describe practical examples of applying indigenous Ghanaian sculptures for community development.
STEP 3 S – Select Strategies, Technology, Media, and Materials	The lesson will be presented through a PowerPoint presentation, face-to-face interactions, small group discussions and OERs or E-learning with the aid of a laptop computer, a projector, smartphones, the internet and a white smart board.
STEP 4 U – Utilise Technology, Media and Materials	• Preview the technology, media and materials (PowerPoint presentation, a laptop computer, a projector, among others) selected before the instructional session. • Connect the laptop computer to the projector to display the PowerPoint presentation and ensure each tool functions properly before finalising all the resources that will be used. • Prepare the environment: Prepare the venue or classroom properly with the necessary features such as chairs and tables for participants. • Prepare the learners: Inform the learners about what they should expect during the instructional session by discussing the learning outcomes with them. • Provide the learning experience: Present the lesson as planned.
STEP 5 R – Require Learner Participation	In the process of presenting the lesson, engage individual learners through PowerPoint presentation, face-to-face interactions, small group discussions, among others.
STEP 6 E – Evaluate and Revise	Assess the lesson through oral responses, written reports (tests, assignments, observation, among others) to determine if the learners met the stated goals and if the resources and technology used were the best

	or if different tools should be selected in future. Through the assessment, the lesson may be revised for future sessions.
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Table 2. Lesson 2: Identification and Classification of Different Types of Indigenous Sculptures Among Various Ethnic Societies in Ghana

Learners: Visual Arts Students

Class: Level 400

Duration: 2 hours

STEP 1 A– Analyse Learners	1. General characteristics: - The Visual Arts students at level 400 are... in number (... males and... females) with an age range between... and ... Learners come from communities where they produce indigenous sculptures. They are always punctual for lectures. - The learners are Visual Arts students. 2. Prerequisite skills or knowledge: - The learners have taken Introduction to 3-D Arts, History and Philosophical Foundations of Visual Arts and Introduction to Sculpture as prerequisite courses. - The learners have written appreciations of their artworks and the works of others. - Learners know the concept and functions of indigenous Ghanaian sculptures. 3. Learning styles: Most of the students respond best to visual, verbal, logical and social instruction. 4. Motivations: - Learners take this course to gain knowledge, understanding and skills in identifying and classifying different types of indigenous sculptures among various ethnic groups in Ghana such as Asante, Fante, Ewe, Ga, Dagaba, Dagomba, Bimoba, etc. - Learners desire to take this course for a degree.
STEP 2 S – State Standards and Objectives (Learning Outcomes and Learning Indicators)	Learning outcomes: - Demonstrate the ability to identify indigenous sculptures. - Describe various sculptural styles in Ghanaian ethnic groups. - Understand how regional differences influence sculptural styles. - Demonstrate skill in classifying different types of indigenous sculptures among various ethnic groups in Ghana. Learning indicators: - Oral response/written evidence of learner's ability to identify indigenous sculptures by naming/listing them. - Oral response/written evidence of learner's ability to describe various sculptural styles in Ghanaian ethnic groups. - Oral response/written evidence of learner's ability to explain how regional differences influence sculptural styles. - Oral response/written evidence of learner's ability to classify different types of indigenous sculptures among various ethnic groups in Ghana.

STEP 3 S – Select Strategies, Technology, Media and Materials	The lesson will be presented through a PowerPoint presentation, face-to-face interactions, small group discussions and the use of OERs or E-learning with the aid of a laptop computer, a projector, smartphones, the internet and a white smart board.
STEP 4 U – Utilise Technology, Media and Materials	• Preview the technology, media and materials (PowerPoint presentation, a laptop computer, a projector, among others) selected before the instructional session. • Connect the laptop computer to the projector to display the PowerPoint presentation and ensure each tool functions properly before finalising all the resources that will be used. • Prepare the environment: Prepare the venue or classroom properly with the necessary features such as chairs and tables for participants. • Prepare the learners: Inform the learners about what they should expect during the instructional session by discussing the learning outcomes with them. • Provide the learning experience: Present the lesson as planned.
STEP 5 R – Require Learner Participation	In the process of presenting the lesson, engage individual learners through PowerPoint presentation, face-to-face interactions, small-group discussions, among others.
STEP 6 E – Evaluate and Revise	Assess the lesson through oral responses and written reports (tests, assignments, observation, among others) to determine if the learners met the stated goals and if the resources and technology used were the best or if different tools should be selected in future. Through the assessment, the lesson may be revised for future sessions.

Table 3. Lesson 3: Aesthetic Principles in Indigenous Ghanaian Sculpture**Learners: Visual Arts Students****Class: Level 400****Duration: 3 hours**

STEP 1 A– Analyse Learners	1. General characteristics: • The Visual Arts students at level 400 are ... in number (...males and ... females) with an age range between ... and... Learners come from communities where they produce indigenous sculptures. They are always punctual for lectures. • The learners are Visual Arts students. 2. Prerequisite skills or knowledge: • The learners have taken Introduction to 3-D Arts and Introduction to Sculpture as prerequisite courses. • They have acquired some knowledge or skills in sculpture. 3. Learning styles: Most of the students respond best to visual, verbal, logical and social instruction. 4. Motivations: • Learners take this course to understand the aesthetic principles in indigenous Ghanaian Sculpture. • Learners desire to take this course for a degree.
STEP 2 S – State Standards and Objectives (Learning Outcomes and Learning Indicators)	Learning outcomes: 1. Explain the theories of aesthetics and criticism 2. Identify factors that determine the beauty of indigenous Ghanaian sculptures.

	3. Understand the aesthetic principles in indigenous Ghanaian sculpture. 4. Make group presentations to analyse the aesthetic values of any indigenous Ghanaian sculptures through art criticism. Learning Indicators: 1. Oral response/written evidence of learner's ability to explain the theories of aesthetics and criticism. 2. Oral response/written evidence of learner's ability to identify factors that determine the beauty of indigenous Ghanaian sculptures. 3. Oral response/written evidence of learner's ability to understand the aesthetic principles in indigenous Ghanaian sculpture. 4. Written evidence of learner's ability to analyse the aesthetic values of any indigenous Ghanaian sculptures through art criticism.
STEP 3 S – Select Strategies, Technology, Media and Materials	The lesson will be presented through a PowerPoint presentation, interactive lecture, small group discussions and OERs or E-learning with the aid of a laptop computer, a projector, smartphones, the internet and a white smart board.
STEP 4 U – Utilise Technology, Media and Materials	• Preview the technology, media and materials (PowerPoint presentation, a laptop computer, a projector, among others) selected before the instructional session. • Connect the laptop computer to the projector to display the PowerPoint presentation and ensure each tool functions properly before finalising all the resources that will be used. • Prepare the environment: Prepare the venue or classroom properly with the necessary features such as chairs and tables for participants. • Prepare the learners: Inform the learners about what they should expect during the instructional session by discussing the learning outcomes with them. • Provide the learning experience: Present the lesson as planned.
STEP 5 R – Require Learner Participation	In the process of presenting the lesson, engage individual learners through PowerPoint presentation, lecture or face-to-face, small-group discussions, among others.
STEP 6 E – Evaluate and Revise	Assess the lesson through oral responses and written reports (tests, assignments, observation, among others) to determine if the learners met the stated goals and if the resources and technology used were the best or if different tools should be selected in future. Through the assessment, the lesson may be revised for future sessions.

Table 4. Lesson 4: Tools, Equipment, Materials and Production Techniques for Indigenous Ghanaian Sculptures

Learners: Visual Arts Students

Class: Level 400

Duration: 3 hours

STEP 1 A– Analyse Learners	1. General characteristics: • The Visual Arts students at level 400 are ... in number (... males and 3 females) with an age range between ... and... Learners come from communities where they produce indigenous sculpture. They are always punctual for lectures.
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	- The learners are Visual Arts students. 2. Prerequisite skills or knowledge: - The learners have taken Introduction to 3-D Arts, History and Philosophical Foundations of Visual Arts and Introduction to Sculpture as prerequisite courses. - They have acquired some knowledge or skills in sculpture. 3. Learning styles: Most of the students respond best to visual, verbal, logical and social instruction. 4. Motivations: - Learners take this course to gain knowledge, understanding and skills in handling tools, equipment and materials for indigenous Ghanaian sculpture. - Learners desire to take this course for a degree.
STEP 2 S – State Standards and Objectives (Learning Outcomes and Learning Indicators)	Learning outcomes: - Identify/name/list tools, equipment and materials for indigenous Ghanaian sculpture. - Classify the tools, equipment and materials for indigenous Ghanaian sculpture according to their uses. - Demonstrate skills in handling and maintaining tools, equipment and materials for indigenous Ghanaian sculpture. - Learn the process of sourcing and preparing materials for indigenous sculpture. Learning indicators: - Oral response/written evidence of learner's ability to identify/name/list tools, equipment and materials for indigenous Ghanaian sculpture. - Written evidence of learner's ability to classify the tools, equipment and materials for indigenous Ghanaian sculpture according to their uses. - Practical evidence of learner's ability to demonstrate skills in handling and maintaining tools, equipment and materials for indigenous Ghanaian sculpture - Oral/written evidence of learner's ability to describe practical examples of how to source, prepare and process materials for indigenous sculptures.
STEP 3 S – Select Strategies, Technology, Media and Materials	The lesson will be presented through a PowerPoint presentation, face-to-face interactions, small group discussions and OERs or E-learning with the aid of a laptop computer, a projector, smartphones, the internet and a white smart board.
STEP 4 U – Utilise Technology, Media and Materials	- Preview the technology, media and materials (PowerPoint presentation, a laptop computer, a projector, among others) selected before the instructional session. - Connect the laptop computer to the projector to display the PowerPoint presentation and ensure each tool functions properly before finalising all the resources that will be used. - Prepare the environment: Prepare the venue or classroom properly with the necessary features such as chairs and tables for participants.

	• Prepare the learners: Inform the learners about what they should expect during the instructional session by discussing the learning outcomes with them. • Provide the learning experience: Present the lesson as planned.
STEP 5 R – Require Learner Participation	In the process of presenting the lesson, engage individual learners through the PowerPoint presentation, face-to-face interactions, small-group discussions, simulations, among others.
STEP 6 E – Evaluate and Revise	Assess the lesson through oral responses, written reports and practical demonstrations (tests, assignments, observation, among others) to determine if the learners met the stated goals and if the resources and technology used were the best or if different tools should be selected in future. Through the assessment, the lesson may be revised for future sessions.

Table 5. Lesson 5: The Functions of Sculpture in Traditional Ghanaian Society
Learners: Visual Arts Students Class: Level 400 Duration: 3 hours

STEP 1 A– Analyse Learners	1. General characteristics: • The Visual Arts students at level 400 are ... in number (... males and ... females), with an age range between ... and ... Learners come from communities where they produce indigenous sculpture. They are always punctual to lectures. • The learners are teacher trainees in Visual Arts. 2. Prerequisite skills or knowledge: • The Learners have taken Introduction to 3-D Arts, History and Philosophical Foundations of Visual Arts and Introduction to Sculpture as prerequisite courses. • They have acquired some knowledge or skills in sculpture. • The learners have never used artworks as TLMs. • Learners know the concept and functions of indigenous sculptures in Ghanaian society 3. Learning styles: Most of the students respond best to visual, verbal, logical and social instruction. 4. Motivations: • Learners take this course to gain knowledge and understanding about the functions of sculpture in traditional Ghanaian society. • Learners desire to take this course for a degree.
STEP 2 S – State Standards and Objectives (Learning Outcomes and Learning Indicators)	Learning outcomes: 1. Understand the functions of indigenous sculptures in Ghanaian communities. 2. Identify the cultural symbols in Ghanaian sculptures. 3. Explore the connection between sculpture and religious practices. 4. Analyse the functions of sculpture in social, economic, cultural and political life. Learning indicators: 1. Oral response/written evidence of learners' ability to explain the symbolic meanings of sculptures.

	2. Oral response/written evidence of learners' ability to identify how sculptures represent deities, ancestors and spirits. 3. Oral response/written evidence of learners' ability to illustrate the use of sculptures in traditional ceremonies and rituals. 4. Oral response/written evidence of learners' ability to analyse how sculpture influences cultural, political, social and economic organisations in communities.
STEP 3 S – Select Strategies, Technology, Media and Materials	The lesson will be presented through a PowerPoint presentation, interactions, small group discussions and OERs or E-learning with the aid of a laptop computer, a projector, smartphones, the internet and a white smart board.
STEP 4 U – Utilise Technology, Media and Materials	• Preview the technology, media and materials (PowerPoint presentation, a laptop computer, a projector, among others) selected before the instructional session. • Connect the laptop computer to the projector to display the PowerPoint presentation and ensure each tool functions properly before finalising all the resources that will be used. • Prepare the environment: Prepare the venue or classroom properly with the necessary features such as chairs and tables for participants. • Prepare the learners: Inform the learners about what they should expect during the instructional session by discussing the learning outcomes with them. • Provide the learning experience: Present the lesson as planned.
STEP 5 R – Require Learner Participation	In the process of presenting the lesson, engage individual learners through PowerPoint presentation, face-to-face interactions, small-group discussions, among others.
STEP 6 E – Evaluate and Revise	Assess the lesson through oral responses and written reports (tests, assignments, observation, among others) to determine if the learners met the stated goals and if the resources and technology used were the best or if different tools should be selected in future. Through the assessment, the lesson may be revised for future sessions.

Discussion of findings for research question 1: How can an instructional guide be developed for teaching indigenous Ghanaian sculpture in the Colleges of Education in Ghana?

The findings revealed the absence of a structured instructional guide for teaching indigenous Ghanaian sculpture, particularly Bimoba sculpture, within the Colleges of Education curriculum in Ghana. Although sculpture forms part of visual arts education, the sculptural traditions of minority ethnic groups remain insufficiently documented and translated for classroom use. In response, the study developed an instructional guide grounded in identified Bimoba sculptural forms, including *chicherii*, *tingbana* and *pataa*, together with their aesthetic, cultural, spiritual and educational values. This aligns with calls for integrating indigenous knowledge into formal education to make learning culturally relevant and meaningful.⁴⁴

Kaya and Seleti maintain that indigenous knowledge promotes contextualised learning by linking academic content with local histories, practices and community experiences.⁴⁵ The guide reflects this position by drawing from authentic Bimoba sculptural heritage to generate teaching content for

⁴⁴ Kaya and Seleti, "African Indigenous Knowledge Systems and Relevance of Higher Education in South Africa"; Perroni, *How Africa Can Use Its Traditional Knowledge*.

⁴⁵ Kaya and Seleti, "African Indigenous Knowledge Systems and Relevance of Higher Education in South Africa."

Colleges of Education. It presents sculpture not merely as an artistic object, but as a carrier of indigenous knowledge, identity, belief systems and communal values, supporting Perroni's argument for mainstreaming traditional knowledge in African education.⁴⁶

The findings support Attah et al. and Wege, who observe that many indigenous Ghanaian artistic traditions outside dominant ethnic groups have suffered neglect and poor documentation.⁴⁷ By centring Bimoba sculpture, the study broadens the representation of Ghanaian sculptural traditions and strengthens cultural inclusivity in visual arts education.

The guide is also consistent with African aesthetic perspectives advanced by several scholars, who emphasise function, symbolism, spirituality, ritual use and communal meaning.⁴⁸ Overall, the guide addresses a curricular gap, enriches visual arts education and supports decolonising education in Ghanaian Colleges of Education.

Finding for research question 2: How can the developed instructional guide for teaching indigenous Ghanaian sculpture in the Colleges of Education in Ghana be evaluated?

The preliminary guide was reviewed by supervisors, the Visual Arts coordinator for Colleges of Education affiliated to AAMUSTED and selected lecturers before final evaluation through unstructured interviews. After pilot teaching, 20 respondents comprising five experts, three lecturers and twelve learners examined the guide.

Evaluation of the Instructional Guide by Sculpture Experts in the Universities in Ghana

Across experts, the guide was commended for structure, cultural responsiveness and curriculum alignment, with recommendations for strengthening aesthetics content, modern pedagogy and practical assessment. Expert R-1 described the guide as well organised, logically sequenced, comprehensive and aligned with curriculum expectations, noting that it integrates Bimoba cultural heritage and promotes practical, critical and analytical thinking. He recommended adding an Introduction to African Aesthetic Theory and balancing tradition with contemporary educational demands (personal communication, June 4, 2025). Expert R-2 indicated that the guide is relevant and fosters cultural identity, appreciating the historical and philosophical grounding and hands-on strategies, but recommended integrating 21st-century instructional tools to enhance participation (personal communication, June 4, 2025).

Expert R-3 highlighted academic and technical precision, clear objectives and consistent structure, noting alignment with the ASSURE model, the National Teacher Standards (NTS) and the National Teacher Education Curriculum Framework (NTECF). He suggested a community walk or academic visit to an indigenous sculptor's workshop to support identification of sculptures, symbols and motifs (personal communication, June 10, 2025). Expert R-4 applauded the guide's innovation and its contribution to decolonising the curriculum through contextualised learning, but recommended deeper treatment of traditional production methods, clearer practical outcomes and practical assessment approaches (personal communication, June 11, 2025). Expert R-5 commended accessibility, clarity of language and supportive illustrations, noting diverse assessment strategies that promote inclusive pedagogy. He recommended adding a learning indicator on analysing and evaluating traditional sculptural works and revising learning outcomes to include interpretative and analytical skills beyond performance-based goals (personal communication, June 23, 2025).

⁴⁶ Perroni, *How Africa Can Use Its Traditional Knowledge*.

⁴⁷ Attah et al., "Documentation of the Socio-Cultural Significance of Artefacts in Sefwi Bekwai Palace in Ghana"; Wege, "Documentation of the Lives and Works of Four Traditional Woodwork Artists in Ghana: A Resource for Teaching and Learning in the Senior High School."

⁴⁸ C. Clarke, "Khan Academy," 2006, <https://www.khanacademy.org/humanities/art-africa/african-art-introduction/themes-and-issues-in-the-art-of-africa/a/aesthetics>; Soul Shava, "The African Aesthetic," in *The SAGE Encyclopedia of African Cultural Heritage in North America* (Thousand Oaks, CA: SAGE Publications, 2015); Lilian Chidinma Agogbuo and Chinyere N. Nwachukwu, "Aesthetics, an Element of the Oral Traditions: A Study of J. P. Clark's Ozidi," *African Journal of Social and Behavioural Sciences* 12, no. 2 (2022): 545–55.

Evaluation of the Instructional Guide by Lecturers

Lecturers' feedback generally affirmed relevance, curriculum fit and practical value, with minor suggestions for refinement and broader applicability. Lecturer-1 at A-College of Education reported piloting Idea Development and judged the guide excellent in relevance, alignment with Ghanaian sculptural traditions, practical application and tertiary suitability, noting improved theoretical-practical engagement and material-handling skills. She suggested minor refinements but considered the guide useful across evaluation areas (personal communication, July 5, 2025). Lecturer-2 at B-College of Education, who taught Tools and Materials, affirmed content accuracy and alignment with historical, philosophical and cultural foundations, and noted that the guide strengthened hands-on skill development and helped learners relate traditional sculpture to community issues. He recommended inclusion in Colleges of Education curricula and suggested it could be taught across levels (personal communication, July 5, 2025). Lecturer-3 at C-College of Education, who taught Concept and History of Indigenous Ghanaian Sculpture, described the guide as accurate, comprehensive, practically engaging and recommendable for curriculum integration, emphasising its role in developing production skills and linking tradition to contemporary societal issues; she reported no challenges (personal communication, July 5, 2025).

Evaluation of the Instructional Guide by Learners

Learners generally expressed satisfaction with the instructional guide and confirmed that it deepened their understanding of indigenous Ghanaian sculpture. Learner-1 at A-College of Education noted that the lesson prepared her to teach the content at the basic school level, while Learner-5 at B-College of Education stated that the lesson helped him identify and classify indigenous sculpture in his community (personal communication, July 1–2, 2025). Other learners, including Learner-11 at C-College of Education, reported that the guide encouraged critical thinking, improved appreciation of cultural meanings and strengthened practical artistic skills. However, learners identified challenges that affected full participation, including delayed or inadequate practical materials, limited time for practical lessons, difficulty pronouncing some indigenous terms, lack of teaching resources and challenges in achieving correct sculptural measurements and forms (personal communication, July 1–2, 2025). They recommended providing adequate tools and materials, allocating more time for practical work, embedding audio or video recordings for indigenous terms and creating access to indigenous sculpture through excursions, digital resources and community artist engagement.

Discussion of findings for research question 2: How can the developed instructional guide for teaching indigenous Ghanaian sculpture in the Colleges of Education in Ghana be evaluated?

The developed instructional guide was well received by expert reviewers, lecturers and learners. It was considered culturally relevant, pedagogically sound and practically applicable. Feedback indicated that it enhanced understanding and appreciation of indigenous Bimoba sculptural forms and their meanings.

These findings support literature that views instructional resources as vital for indigenising curricula and linking local knowledge to formal education. Kaya and Seleti state that indigenous knowledge enhances cultural value transmission and sustainable development.⁴⁹ The guide supports this by structuring Bimoba knowledge for higher education.⁵⁰

The guide resonates with African aesthetic principles discussed by Clarke and Newton, which emphasise art, culture, functionality and spirituality.⁵¹ It moves beyond formalistic techniques to include symbolic, ritualistic and didactic functions of Bimoba sculptures, especially chicherii, tingbana and pataa.

⁴⁹ Kaya and Seleti, "African Indigenous Knowledge Systems and Relevance of Higher Education in South Africa."

⁵⁰ Perroni, *How Africa Can Use Its Traditional Knowledge*.

⁵¹ Clarke, "Khan Academy"; C. Newton, *Aesthetics and Educational Significance of Public Sculptures at Mankessim* (Winneba: University of Education, Winneba, 2022), <http://ir.uew.edu.gh>.

RECOMMENDATIONS

Based on the findings, the Curriculum Research and Development Division and the National Teaching Council should formally integrate indigenous Ghanaian sculpture, including Bimoba sculptural traditions, into the Visual Arts curriculum of Colleges of Education in Ghana. Colleges of Education should adopt the developed instructional guide as a teaching resource for courses such as Ghanaian Identity, Culture and Arts, History and Philosophical Foundations of Visual Arts, Introduction to 3D Arts and Studio Practice in Sculpture. Visual Arts lecturers should use learner-centred models such as ASSURE to promote active participation, practical work and continuous evaluation. Departments should collaborate with indigenous sculptors, elders and cultural practitioners to ensure authenticity and intergenerational knowledge transfer. Adequate tools, materials, digital resources and field visits should also be provided. Further studies should examine sculptural traditions of other underrepresented ethnic groups in Ghana.

CONCLUSION

The study established that indigenous Ghanaian sculptures, particularly those of the Bimoba people, are valuable cultural and educational resources for enriching Visual Arts education in tertiary institutions. Bimoba forms such as chicherii, tingbana, pataa, gingana and yerii embody historical, spiritual, aesthetic, moral and social values useful for teaching and learning, yet remain largely absent from the formal curriculum. The ASSURE instructional design model offered a structured and learner-centred approach for organising this knowledge into teachable content. Evaluation by experts, lecturers and student-teachers showed that the guide was content-relevant, culturally authentic, pedagogically suitable and practically useful. The study concludes that integrating Bimoba sculpture into tertiary Visual Arts education can promote curriculum relevance, cultural continuity, educational inclusivity and respect for Ghana's diverse artistic heritage.

BIBLIOGRAPHY

- Adom, Dickson, Emad Kamil Hussein, and Joe Adu Agyem. "Theoretical and Conceptual Framework: Mandatory Ingredients of a Quality Research." *International Journal of Scientific Research* 7, no. 1 (2018): 438–41.
- Agogbuo, Lilian Chidinma, and Chinyere N. Nwachukwu. "Aesthetics, an Element of the Oral Traditions: A Study of J. P. Clark's Ozidi." *African Journal of Social and Behavioural Sciences* 12, no. 2 (2022): 545–55.
- Anon. "MOBA Shrine Figure, Togo, African." Amazon, 2024. <https://www.amazon.com/MOBA-Shrine-Figure-Togo-African/dp/B07M966258>.
- Attah, Emmanuel Kofi, Dickson Adom, Joe Adu-Agyem, Babaaradio Kombui, and Isaac Gyasi. "Documentation of the Socio-Cultural Significance of Artefacts in Sefwi Bekwai Palace in Ghana." *E-Journal of Humanities, Arts and Social Sciences* 5 (2024): 611–28.
- Awuni, M., A. Mensah, and D. Baffour-Awuah. "Traditional Wood Carving and Contemporary Wood Sculpture: A Study of Ahwiaa and KNUST." *Journal of Art and Culture Studies* 15, no. 2 (2023): 45–62.
- Awuni, S, G Bekoe, K P O Baah, D K Eyram, and K Opoku-Bonsu. "Traditional Wood Carving and Contemporary Wood Sculpture in Ghana." *J Afr Art Educ* 3, no. 2 (2023): 21–48.
- Azaglo, Alex Kwasi, Dickson Adom, Joe Adu-Agyem, and Kofi Opoku-Mensah. "'My Sculpture, My Life': An Iconographic Study of the Contemporary Ghanaian Sculptor, Isaac Opoku-Mensah." *Journal of African History, Culture and Arts* 2, no.1(2022):1–14.
- Boakye-Yiadom, Mica Michael, and Kofi Opoku Donkor. "Asante Stool Carvings and Their Cultural Significance in Ghana." *Journal of African Art Education*, 2022.
- Bui, S. "Evaluation of Instructional Materials in 2024: 9 Key Aspects." F. Learning Studio, 2024. <https://flearningstudio.com/a-guide-to-successful-evaluation-of-online-learning-materials/>.
- Calhoun, Sahay, and Wilson. *Instructional Design Evaluation*. EdTech Books, 2021. https://edtechbooks.org/id/instructional_design_evaluation.
- Capitolium Art. "A Monumental Sculpture Tchitcheri Sakwa, Moba Togo," 2024.

- Clarke, C. “Khan Academy,” 2006. <https://www.khanacademy.org/humanities/art-africa/african-art-introduction/themes-and-issues-in-the-art-of-africa/a/aesthetics>.
- Dei, De-Graft Johnson, Linda Anane-Donkor, Patience Emefa Dzandza, Theresa Peasah, and Constance Phyllis Puttick. “Synthesizing the Characteristics and Applications of Indigenous Knowledge for Sustainable Development: A Systematic Review.” *Sage Open* 15, no. 3 (2025): 21582440251383844.
- Duut, G. N., C., Oppong, P. N., Yinzie, and D. K. Sakoalia. “A Chronicle of Tourist Attractions in the Bunkpurugu Nakpanduri District of the Northern Region, Ghana.” *The International Journal of Humanities & Social Studies* 6, no. 12 (2018): 74–88.
- Dziak, M. “Theoretical Framework .” EBSCO, 2024. <https://www.ebsco.com/research-starters/social-sciences-and-humanities/theoretical-framework>.
- Hays, Lauren. “ASSURE: Instructional Design Model for Use by Librarians.” *Lucidea*, 2021. <https://lucidea.com/blog/assure-instructional-design-model-for-us-by-librarians/>.
- Kaya, Hassan O, and Yonah N Seleti. “African Indigenous Knowledge Systems and Relevance of Higher Education in South Africa.” *International Education Journal: Comparative Perspectives* 12, no. 1 (2013).
- Kpreebi, K. “A Sociological Study of Kingship, Peace and Marriage among the Bimoba People,” 2019.
- Kurt, Serhart. “ASSURE: Instructional Design Model.” *Educational Technology*, 2015.
- Kwekudee. *Bimoba People: Hilly Dwelling Small West African Ethnic Group*. Trip Down Memory Lane, 2013. <https://kwekudee-tripdownmemorylane.blogspot.com/2013/04/bimoba-people-hilly-dwelling-small-west.html>.
- Lastiri, Luis. *The Major Instructional Design Models Explained and Defined*. My eLearning World, 2024. <https://myelearningworld.com/instructional-design-models/>.
- Masenya, Tlou Maggie. “Decolonization of Indigenous Knowledge Systems in South Africa: Impact of Policy and Protocols.” *International Journal of Knowledge Management (IJKM)* 18, no. 1 (2022): 1–22.
- Moiso, Daniela R. “How to Apply Instructional Design Models to Learning Design.” SessionLab. Accessed September 25, 2024. , 2024. <https://www.sessionlab.com/blog/instructional-design-models/>.
- Ndlovu, Elliot C., and Mishack T Gumbo. “Decolonising Technology Education: Integrating Indigenous Knowledge for Sustainable Development in Electrical and Mechanical Systems and Control.” *African Journal of Research in Mathematics, Science and Technology Education* 28, no. 3 (2024): 362–72.
- Newton, C. *Aesthetics and Educational Significance of Public Sculptures at Mankessim*. Winneba: University of Education, Winneba, 2022. <http://ir.uew.edu.gh>.
- Nurdi, T. H. *The ASSURE in Teaching*. Instructional Technology, 2017. <https://pascapbi-3a.blogspot.com/2017/01/theassure-in-teaching-by-trihari-nurdi.html>.
- Perroni, E. *How Africa Can Use Its Traditional Knowledge*. Food Tank, 2023. <https://foodtank.com/news/2017/11/traditional-african-agriculture/>.
- Phyfferoen, D. *An Introduction to the Traditional Idioms of Music Making among the Bimoba of Northern Ghana*. Academia, 2005.
- Phyfferoen, D. *Gingaung*. Music Africa Museum, 2006.
- Pyne, Simon, Mavis Osei, and Joseph Adu-Agyem. “The Use of Indigenous Arts in the Therapeutic Practices of Traditional Priests and Priestesses of Asante, Ghana.” *International Journal of Innovative Research* 2, no. 11 (2013): 464–74.
- Rusconi, G. *What Is an Assessment Tool? Development Guide and 7 Examples*. Cloud Assess, 2025.
- Saleem, Amna, Huma Kausar, and Farah Deebea. “Social Constructivism: A New Paradigm in Teaching and Learning Environment.” *Perennial Journal of History* 2, no. 2 (2021): 403–21.
- Shava, Soul. “The African Aesthetic.” In *The SAGE Encyclopedia of African Cultural Heritage in North America*. Thousand Oaks, CA: SAGE Publications, 2015.
- Shive, Elyssa Cherry. “Equitable Integration of Indigenous Knowledge System in STEM Education Professional Development: A Systematic Review.” *Journal of Research in Science, Mathematics*

and *Technology Education* 8, no. 2 (2025): 21–40.

Sirui, Wang. *The Instructional Design Models That Best Fit: ASSURE Model*. Learning by Click, 2018.

Slikkerveer, L. Jan. “The Indigenous Knowledge Systems’ Perspective on Sustainable Development.” In *Integrated Community-Managed Development: Strategizing Indigenous Knowledge and Institutions for Poverty Reduction and Sustainable Community Development in Indonesia*, 33–66. Springer, 2019.

Sreekumar, Divya. “What Is Research Methodology? Definition, Types, and Examples.” *Paperpal Blog-Academic Writing Guides*, 2023.

Thampinathan, Sanjeef. “The Application of the Constructivism Learning Theory to Physician Assistant Students in Primary Care.” *Education for Health* 35, no. 1 (2022): 26–30.

Thompson, Jerry L. “Moba Chicherii Figures,” 2016.

Trif-Boia, Laura. “The ASSURE Model in Instructional Design,” 2022.

Upu, Hamzah. “Constructivism versus Cognitive Load Theory: In Search for an Effective Mathematics Teaching.” *ArXiv Preprint ArXiv:2108.04796*, 2021.

Wege, Nicholas K. “Documentation of the Lives and Works of Four Traditional Woodwork Artists in Ghana: A Resource for Teaching and Learning in the Senior High School.” Kwame Nkrumah University of Science and Technology, Kumasi, 2011.

Williams, B. “Instructional Design Evaluation Checklist: A Practical Guide.” *Insight7*, 2025. <https://insight7.io/instructional-design-evaluation-checklist-a-practical-guide/>.

Williams, R., J. Thomas, and L. Miller. “Strategies to Address Teacher Bias and Promote Equity.” *Educational Review* 76, no. 2 (2021): 150–70.

Zohrabi, Mohammad. “Mixed Method Research: Instruments, Validity, Reliability and Reporting Findings.” *Theory and Practice in Language Studies* 3, no. 2 (2013): 254–62.

Zou, Yuxue, Minhui Yuan, Lan Mo, and S S B Mustakim. “Enhancing Teaching and Learning through Assessment Strategies: A Practical Guide.” *International Journal of Academic Research in Business and Social Sciences* 14, no. 7 (2024): 1024–36.

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