



# African Archaeology in Support of School Learning: an Introduction

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**Abstract** Archaeology holds great potential to enrich and enhance culturally responsive school learning within and beyond Africa. Archaeology reveals hidden and forgotten history and brings long-term perspective to contemporary issues like those foregrounded by the United Nation’s Sustainable Development Goals (SDGs). Through inquiry that combines scientific methods with cultural understandings, archaeology sheds light on how people in past societies related to one another and with communities around them. It provides evidence of how people sustained well-being, interacted with resources on which they relied, and engaged with wider landscapes. It lends insight into daily practices as well as long-term perspectives on how people affected their environments and how environments shaped people’s actions. Given its wide scope and interdisciplinary foundations, archaeology holds recognized potential

to engage young learners in cross-curricular areas including social studies, literary works, language, sciences, mathematics, and the arts. Archaeology should therefore contribute substantively to Quality Education (SDG 4), particularly when archaeologists braid western knowledge with other perspectives grounded in the communities and places where archaeologists work. As a source for culturally responsive teaching, archaeology provides powerful knowledge that helps learners to understand diverse cultures and perspectives and to appreciate how the past can inform the present and set appropriate courses for the future. Realizing this potential requires that archaeologists and educators communicate and collaborate in new ways if we are to provide students with engaging and meaningful learning opportunities.

**Résumé** L’archéologie offre un grand potentiel pour enrichir et renforcer l’apprentissage scolaire sensible à la culture à l’intérieur et à l’extérieur de l’Afrique. L’archéologie révèle l’histoire cachée et oubliée et apporte une perspective à long terme aux questions contemporaines telles que celles mises en avant par les Objectifs de développement durable (ODD) des Nations Unies. Grâce à une recherche qui combine des méthodes scientifiques et des connaissances culturelles, l’archéologie met en lumière la façon dont les gens des sociétés passées étaient en relation les uns avec les autres et avec les communautés qui les entouraient. Elle fournit des preuves de la manière dont les gens assuraient leur bien-être, interagissaient avec les

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ressources dont ils dépendaient et s'engageaient dans des paysages plus vastes. Elle permet de comprendre les pratiques quotidiennes et d'avoir une perspective à long terme sur la manière dont les gens affectaient leur environnement et dont l'environnement façonnait les actions des gens. Compte tenu de sa vaste portée et de ses fondements interdisciplinaires, l'archéologie offre un potentiel reconnu pour impliquer les jeunes apprenants dans des domaines transversaux tels que les études sociales, les œuvres littéraires, les langues, les sciences, les mathématiques et les arts. L'archéologie devrait donc contribuer de manière substantielle à une éducation de qualité (ODD 4), en particulier lorsque les archéologues associent les connaissances occidentales à d'autres perspectives ancrées dans les communautés et les lieux où ils travaillent. En tant que source d'enseignement sensible à la culture, l'archéologie fournit des connaissances puissantes qui aident les apprenants à comprendre des cultures et des perspectives diverses et à apprécier la manière dont le passé peut éclairer le présent et définir des orientations appropriées pour l'avenir. La réalisation de ce potentiel exige que les archéologues et les éducateurs communiquent et collaborent d'une nouvelle manière si nous voulons offrir aux étudiants des opportunités d'apprentissage intéressantes et significatives.

**Keywords** African archaeology · Quality Education · Archaeological story telling · Sustainable Development Goals · Education for sustainable development · Interdisciplinarity

## Introduction

This open-access 40<sup>th</sup>-anniversary issue differs from what readers generally expect when they crack the cover of a newly arrived *African Archaeological Review* (AAR). Rather than archaeologists writing about their research for the benefit of other archaeologists, this collection brings together archaeologists and educators in collaboration to enrich school learning (primary and secondary levels; hereafter K-12) through African archaeology. Our editorial collective challenged a group of active researchers accustomed to writing for other researchers to take a different tack: to write in lively and engaging ways for an audience of educators about what archaeologists learn from studying material traces like

artifacts, buildings, and landscapes. Our motivation is twofold: (1) to provide teachers and educators with accessible and reliable resources that are useful for learning about Africa's diverse and rich pasts and (2) to model and create value around mobilizing knowledge in interdisciplinary ways among archaeologists and educators alike. Doing so effectively requires archaeologists and educators to work together, and we hope that this anniversary issue provides a catalyst for expanding collaborations.

In this volume introduction, we describe the impetus and aims of this issue with two audiences in mind: educators and practicing archaeologists. To both, we make a case for archaeology as a source of insights relevant to ongoing challenges like those crystallized in the African Union's *Agenda 2063: The Africa We Want* (<https://au.int/en/agenda2063/overview>) and United Nations Sustainable Development Goals (SDGs) (<https://sdgs.un.org/goals>; for a discussion, see Tikly, 2020, p. 4–25). Their overlapping goals are ones toward which many African nations have pledged to work (Molthan-Hill et al., 2020, p. 3–4; Royo et al., 2022) and to which education and archaeology can collaboratively contribute. We also discuss how African archaeology's fundamentally interdisciplinary character can enhance student learning across subject areas within and beyond the continent (Davis, 2000, p. 59–63). Within the continent, archaeology can connect youth to knowledge grounded in place and help to revalue local knowledge systems. Archaeology helps learners to understand how ancestral people responded to challenges and changing circumstances and cultivates a sensibility that solutions to today's challenges can be inspired by past know-how. Beyond the continent, knowledge from African archaeology challenges stereotyped views of Africa, enhances understanding of Africa's rich connections and contributions to wider worlds, and cultivates an appreciation of the rich diversity in Indigenous African ways of knowing and doing.

## Collaborative Inspirations and Process

Inspiration for this special issue took form through conversation among a subset (Stahl, Balabuch, Sanford) of our editorial cooperative as we collaborated on a project to develop school learning resources

based on a long-term archaeology project centered on the Banda District, Ghana (Logan, 2016; Logan & Stahl, 2017; Stahl, 2001; Stahl & Logan, 2014). Our project built on a shared sense that what we learn from archaeology has relevance to contemporary life and its challenges. Through archaeology, we learn how people of different backgrounds forged communities, provided for themselves, made and traded useful things with neighbors near and far, responded to climate change, and innovated in the face of changing circumstances. These are all things that people do today, and knowledge about how people did them in the past provides insight as we grapple with similar circumstances in the present and future (Ion & Barrett, 2016; Jopela & Fredriksen, 2015; Lane, 2011, 2015; Little & Shackel, 2014; Logan et al., 2019; Ogundiran, 2019; Ossah Mvondo, 2021; Pikirayi, 2015; Stahl, 2023).

The Banda District project built on a recognition that mobilizing knowledge requires scholars to communicate research differently and ensure that communities have access to knowledge resources. Funded by a Canadian Social Sciences and Humanities (SSHRC) Partnership Development Grant (“Improving African Futures Using Lessons from the Past,” 2018–2022), the project team worked with community, university, and museum collaborators to build digital heritage resources that could support school learning. One outcome is a *Banda Through Time* web exhibit and digital repository that contains more than 1000 resources (photos, videos, texts, and audio recordings) hosted and sustainably curated by the University of Victoria Libraries (<https://exhibits.library.uvic.ca/spotlight/iaff>). The virtual exhibit describes what we have learned through archaeological, oral historical, and documentary sources about the dynamic history of this region and its peoples over the last 1000 years. It builds on a theme arrived at through community consultation: “Our grandmothers and grandfathers were knowledgeable people. Their eyes were open. Did you know?” (in Nafaanra, *O lelele na o tolelele pre naa jawala ni. Pe yie na nyaa*). The theme crystallizes a concern among Banda area elders that rapid change associated with the recent building of a hydroelectric dam in the area has eroded local knowledge systems grounded in place and history.

With the *Banda Through Time* exhibit and repository (mostly) developed, archaeologist Ann Stahl reached out to university education colleague Kathy Sanford to recruit an education graduate student to develop learning resources based on the digital exhibit and repository. Ph.D. student and middle school teacher Allison Balabuch took up the challenge in January 2021. She brought to the project more than 25 years of classroom teaching experience and a commitment to culturally responsive and experientially rich learning (see Balabuch and Rasoarifetra, Balabuch, and Stahl, this volume).

As we collaborated to develop resources useful for junior high/middle school learning based on the Banda materials (Balabuch et al., 2023), the idea for this special issue took form. We spent considerable time talking about how difficult it is for motivated teachers to find resources that clearly explain what archaeologists know and how they know it, and how often they consider archaeological perspectives in their teaching. We discussed the barriers that exist when research sits behind paywalls and is written in academic language, couched in technical terms and assumed knowledge. And we talked about the desire and goodwill that many—especially younger—academics have with regard to doing “public archaeology” (Atalay, 2020; Henson, 2017; Moshenska, 2017), but equally the professional disincentives that divert efforts to activities that “count” in tenure and promotion processes (Kehoe, 2012, p. 543). We also recognized the value—indeed necessity—of interdisciplinary collaboration and working collaboratively with Banda area educators, students, and parents as we refined and expanded school learning resources in Banda during July 2022. These interdisciplinary collaborations are necessary for maintaining student engagement and reshaping education in ways that are helpful to solving global “wicked” problems (Kolko, 2012; Kumlien & Coughlan, 2018).

A call for ideas to celebrate AAR’s 40<sup>th</sup> anniversary during a September 2021 editorial board meeting presented an opportunity to address these challenges. We widened our conversation to include archaeologists working in different regions and time periods (Kate Grillo, Amanda Logan, Ibrahima Thiaw) as we developed a vision for this issue and expanded our circle

of able contributors. In doing so, we sought to include scholars who work in different continental regions and have varied topical expertise. We encouraged pairings of emerging and established archaeologists working in different regions to write together on issues of shared concern, and we welcomed collaborations with artists and educators. Authors participated in several virtual workshops made possible through our SSHRC Connection grant (“African Archaeology in Support of School Learning”), in which we talked about the needs of school-based educators and alternative ways to share our work with wider audiences. Our collaboration grew through our authors’ networks, drawing into our conversation the University of Witwatersrand Education lecturer, Emmanuel Mushayikwa, with his expertise in Indigenous Knowledge Systems, self-directed professional development among educators, and practical work in science.

During our workshops, educators underscored the importance of connecting archaeology with “Big Ideas.” Big Ideas are generative principles that help educators focus on particular issues and connect across disciplines. These Big Ideas help teachers create richness and deeper links for students between their learning, lives, and the greater world (Mitchell et al., 2017). For example, a “Big Idea” in history would be “Human and environmental factors shape changes in population and living standards” (<https://www2.gov.bc.ca/gov/content/education-training/k-12/teach/resources-for-teachers/curriculum>). This is different from content or factual knowledge like specific dates, people, or events for students to memorize.

To encourage thinking through Big Ideas, education colleagues asked archaeologists to reflect on several questions as they developed their pieces: Why should students/educators want to know or be excited about my topic (what is its value and relevance)? How might my topic and the story I want to tell about it help educators engage learners in new and meaningful ways? How might my topic and the story I tell be relevant to one or more of today’s challenges highlighted by the UN SDGs? And whose voice(s) will be valued and heard in the materials? The editors made clear that contributions should *not* aim to be comprehensive reviews of a topic, replete with detailed and scientific concepts and terminology that are better understood by experts. Rather, editors encouraged the archaeologists to *focus on story* as a way to engage readers in why and how archaeology matters for K-12

students’ learning. Stories are powerful. They capture learners’ attention, aid understanding, and encourage transfer between past, present, and future domains. Educators have long recognized the importance of storytelling in K-12 learning, and it can be an effective way to promote education for sustainable development by helping learners to envision futures that challenge the colonial status quo (Molthan-Hill et al., 2020; see Logan & Grillo, this volume).

We encouraged contributors to write accessibly, but educators reminded us that doing so is not the same as simplification. Accessibility and engagement are not achieved at the expense of richness and rigor. Quality Education (UN SDG 4) depends on asking questions, challenging taken-for-granted notions, and encouraging students to engage critically with the world, addressing curricular requirements of creativity, criticality, and reflection. We asked authors to build on archaeology’s authentic interdisciplinarity, encouraging teachers and students to reflect on Global North/South relations and appreciate that there are multiple ways to see the world. We also encourage archaeology colleagues to critically revisit what academic institutions value as scholarship and readers to challenge their existing beliefs and knowledge about Africa.

Calls like ours to develop materials that support school-based learning are not new, either within or outside Africa (Afigbo, 1986; Agenten et al., 2015; Esterhuysen, 1999; Franklin, 2005; Kehoe, 2012; King, 2012; Molyneaux & Stone, 1994; Smardz & Smith, 2000; Society for American Archaeology, 1990–1998, 2000–2004; Southey, 1990). In post-apartheid South Africa, archaeologists made a concerted effort to ensure that the history curriculum reflected insights from archaeology that countered the silences of white nationalist histories. These initiatives struggled in the face of changing governments and shifting educational priorities (Esterhuysen, 1999; Esterhuysen & Lane, 2013), underscoring that education and archaeology are political (Davis, 2000; Kehoe, 2012). As researchers and universities, we are granted the privilege of valuing what is accepted as worthy knowledge. This system has long attempted to preserve epistemologies of predominately white, male, Eurocentric canon (Adelle, 2019; Hall & Tandon, 2017). As the South African example makes clear, considerable work remains to be done in decolonizing the Global North’s understanding of Africa’s pasts and addressing asymmetries that privilege archaeologists’ interpretations over local and

Indigenous knowledge and perspectives (Chirikure, 2015; Haber & Shepherd, 2015; Schmidt & Pikirayi, 2016; Thiaw, 2022). In short, we need to be mindful about the processes of valuation and the lessons that we imagine archaeology can offer.

More typical than government initiatives like those in South Africa are archaeologists who have worked with local communities and schools to develop resources focused on a site or locality (e.g., Chirikure & Pwiti, 2008; CONCH [Co-Production Networks for Community Heritage in Tanzania], n.d.; Daraojimba, 2021; Forssman et al., n.d.; Haour et al., 2015; Kumah et al., 2021; Marean, 2018; Parkington, 1999; Wurz et al., 2009). Some have been involved in localized teacher education; for example, Freschi (2009) and Grant (2021) evaluated the impact of setting up resource centers in archaeology and African art at WITS University for use by educators and schools. In January 2023, we circulated a survey through the Society of Africanist Archaeologists listserv, asking colleagues to share information on initiatives they have been involved in to develop educational resources built upon African archaeology. We asked colleagues about the kinds of resources they developed, whether they worked with K-12 or community educators, and what advice they would offer to others based on their experiences.

Our small sample of respondents was divided equally between those who worked with educators and those who did not. Those working with educators produced printed booklets, digital resources, posters and school wallboards, board games, and hands-on kits for use in schools. Some have participated in professional development sessions for teachers. In addition, we heard from a TV producer who has worked with archaeologists to make documentary films. An ongoing aim of our collaboration is to establish a sustainable open-access digital network of such resources where educators can find quality materials for classroom use and curriculum resource development, and it is clear that colleagues are keen to participate. However, survey responses confirmed that these laudable efforts are often unfunded, done off the side of people's desks, and treated as "service" in professional assessment processes. As Alice Kehoe (2012, p. 542) observed, this is exacerbated by the fact that, until recently, educational "outreach" primarily fell to women who were seen as "not 'doing' archaeology."

So while it is clear that many archaeologists want to make archaeological knowledge more accessible, there are challenges to overcome, including the greater value accorded to publishing "primary research," a lack of interdisciplinary connections with educators and sites for publishing and sharing. Funding agencies stress the importance of "broader impacts" and "knowledge mobilization." However, in practice, the academy continues to assign greater value to peer-reviewed communication among academics over collaborative work with communities and educators. Processes of publishing, hiring, and tenure and promotion need to value this sort of collaborative work, and we hope that publishing this collection in African archaeology's flagship journal provides one model for doing so.

Transformative collaboration thus depends on us recalibrating our values and finding new ways of working together to enrich school-based learning in meaningful ways through African archaeology. Quality education is enhanced when it is inclusive, relevant, and supports "parity of participation" (N. Fraser, 2008, cited in Tikly & Barrett, 2013, p. 13). Archaeology holds rich potential to support these aims by connecting with educators and contributing to interdisciplinary curricula. Working collaboratively, we can leverage archaeology's relevance to enrich student learning—to stretch thinking on how to be, how to live together in communities and in relation to other species, and how to do so in ways that foster inclusion and sustain life on Earth (Tikly & Barrett, 2013, p. 19–20). In short, archaeology has a critical role in supporting education for sustainable development (ESD) (Tikly, 2020).

### Stories from the Past in Support of a Sustainable Tomorrow

In 2015, the United Nations General Council developed the 2030 Agenda for Sustainable Development, which was motivated by concerns that human development was causing a deterioration in the planet's ability to support life. The main concerns are to address gross inequalities in human development and quality of life within countries, between countries, and between continents. Scholars capture these challenges in short-hand terms like the "Anthropocene," referring to times (particularly since the so-called Industrial Revolution) when human action has affected Earth's systems and contributed to climate change (Laurance, 2019). The

“Great Acceleration” refers to the cascading effects of increased consumption and production since the mid-twentieth century (Steffen et al., 2015). A major theme that emerged from these discussions was the interconnectedness of all systems on the planet—physical, biological, and social. There was, therefore, a need to ensure that human development does not take place at the expense of the environment or the other species that share this planet with us. The Sustainable Development Goals were crafted to provide guidance in meeting the Human Development targets in a responsible and sustainable manner.

One of the main themes arising from the SDGs is that sustainable development is the responsibility of every citizen, with the implication that education has a central role to play in achieving the aims of SDGs and the African Union’s *Agenda 2063* (Tikly, 2020, p. 6–8). It is, therefore, incumbent upon us as scholars and educators to ensure that our work and programs illustrate or demonstrate our responsibility toward our living environment. If teachers can inculcate values of sustainability, for example, the systemic interdependence and commitment toward responsible use of resources, then our learners will grow up better prepared to tackle the challenges posed by the Anthropocene, such as climate change, global warming, rising sea levels, and loss of animal, plant, and cultural diversity.

The African Union and the Southern African Development Community, alongside individual countries like South Africa, have expressed the need to integrate the SDGs and, specifically, sustainable development into the education system. However, the challenge remains finding appropriate mechanisms for this integration.

The very notion of sustainable development implies longer time horizons, and archaeology brings this lens to the many and varied dimensions of life highlighted by the SDGs. The pressing issues highlighted by these global goals provide meaningful context for teachers and students, while archaeology offers learning through engaging materials, opportunities for inquiry, and rich sources for project-based learning (Davis, 2000, p. 60). In this special issue on archaeology and education, contributors model how this integration can be done, illustrating how teaching through archaeology can support education for sustainable development.

## Teaching Through Rather Than About Archaeology—Interdisciplinary Approaches

Let us be clear. Our argument is not that schools need to teach archaeology as an added subject, nor is the mission to convince young people to become archaeologists (although the discipline would benefit from that outcome). It is rather that archaeology, as a fundamentally interdisciplinary way of learning about the past, lends vital perspective to subjects already included in the K-12 curriculum. By providing a long-term perspective on human societies and their ways of creating continuity in lifeways through time and coping with change, archaeology has obvious relevance to learning. With its focus on the material record of human lifeways, archaeology cultivates an appreciation for technologies and the practical science and problem-solving they involve (Mavhunga, 2017; Bandama & Babalola, Wayessa, this volume). It provides evidence of complex knowledge systems and their deep histories in Africa’s many diverse regions. Archaeology can be a source of educational imagination that changes learners’ points of view and expands their sense of possibilities, fostering new questions and understandings of our relations with past contexts, with implications for the present and future (Toftdal et al., 2018). Archaeology helps to write missing history (Dei, 2010, p. 15), and any history taught without reference to archaeology is incomplete. Educators in both formal and informal settings can use the interdisciplinarity of archaeology to teach missing understandings of history. Drawing on knowledge and skills in disciplines such as science, mathematics, history, and the arts, examples from archaeology can be useful in discipline-specific subject areas and as a platform for educators to teach using authentic cross-curricular or interdisciplinary approaches. Therefore, we encourage archaeologists and educators to engage creatively with how we can “teach through” rather than “about” archaeology using both “hands-on” and “minds-on” learning (Bartoy, 2012, p. 554; see also Balabuch & Rasoarifetra, Balabuch & Stahl, this volume).

As already noted, stories are an effective way to leverage archaeology’s rich interdisciplinary insights concerning Big Ideas, particularly those that intersect

with education for sustainable development. So what sorts of stories can archaeology tell?

### Storying the Past

Whether we think of ourselves as such, archaeologists are storytellers. The stories often told in wider contexts about Africa are based on a deficit model of what the continent and its peoples lack or how it “lags behind” (Achebe, 1978; Dei, 2010, p. xxii–xxiii; Ebron, 2002, p. 163–216). Archaeologists have long worked to counter such stories with alternatives based on facts (Stahl, 2005, 2014). We know from archaeology that Africans invented and innovated novel technologies, developed their own forms of sustainable agriculture, lived in cities, and had distinctive civilizations long before the imposition of colonial rule. Archaeologists have used facts hard-won from the careful study of artifacts, their contexts, and surrounding landscapes to tell alternative stories about these issues, but mostly to other archaeologists. We have less often relayed these stories to people outside our academic circles. Perhaps as scholars and scientists, we feel reticent to embrace storytelling. However, the stories we tell with our facts create value and make memorable what people learn from archaeology’s evidence (Baron, 2010; Dahlstrom, 2014; Green et al., 2018).

Thomas King (2003, p. 9) reminds us that “stories are wondrous things. And they are dangerous.” The stories we tell can empower some while marginalizing others. We have seen this not only in the deficit stories told about Africa but also in the colonial placing of “storytelling” as a lesser form of writing than heavily referenced academic articles (Loveless, 2019).

Stories can elucidate and reinforce what we know and encourage us to think differently. When it comes to telling stories through archaeology’s material evidence (artifacts, buildings, and landscapes), we need to be mindful of our varied audiences. Significance is contextual (Thiaw, 2004). As archaeologists, we know how important context is for interpreting artifacts, and we need to extend that mindfulness to how context shapes the value and resonance of the stories we tell using archaeology’s evidence. As educators, we know that teaching through storytelling is a powerful tool not only to introduce content knowledge but also to help build more culturally responsive classrooms. The

stories we include can challenge systemic racism currently present in education systems worldwide (Lundy, 2020). By including stories from African archaeology in our classrooms, in the Global South and Global North, we can change the racist, deficit view of Africa by including voices previously missing from learning resources and curriculums. In short, teachers and students outside the continent benefit from hearing how archaeology challenges entrenched views of Africa as a place apart from and behind “the world.”

Teachers and students within Africa do not need to be told that they are part of the world, have deep connections to their places, or live in complex and diverse communities. But in contexts where textbooks still privilege knowledge from and about elsewhere, archaeologists can tell stories that value and reveal new things about local histories and support culturally relevant classroom science (Mpofu et al., 2014). Regardless of the context, we need to share stories that value African pasts, showing how archaeology creates a lens for understanding the world of today and considering future possibilities in light of today’s global concerns (like those highlighted by UN SDGs below). Stories grounded in archaeology can ascribe value to ancestral knowledge and know-how, a theme that threads through contributions to this issue.

Our shared intent in this volume is to tell meaningful stories grounded in African archaeology and to tell them in different ways. We challenged contributors to be creative in how they told their stories, which was a source of both anxiety and joy. Never in past editing ventures have we had colleagues express how much they enjoyed a writing process, despite early trepidation about creatively engaging their topics. The results provide some models for others wishing to do the same, but more important than modeling the products is the model of the process—one that involves dialog with educators around big ideas, meaningful content, and engaging stories.

### Contributions to this Issue

Many of the titles in this special issue use verbs ending in “ing” (present participles), which signal ongoing action: apprenticing; making; living; connecting. This deliberate choice unsettles a tendency to imagine “culture,” “technology,” or “society” as

static “things.” Highlighting ongoing action helps us to appreciate that these are dynamic knowledge systems and practices shaped by ongoing processes. They draw on the past, but they also change. Our authors show how people, through their interactions with things, landscapes, and wider communities, create both continuity and change. They show that archaeologists do more than dig up and describe objects—they study objects and their contexts to learn about culture-making practices. This shift in emphasis helps us to appreciate how people in the past built upon but were not limited by “tradition” as they innovated. By helping students to understand how things came to be, we provide them with tools for imagining how they might be changed or sustained. Learning about these processes in the past can help students see how past knowledge and know-how can be a resource for addressing present-day challenges like those highlighted by UN SDGs. Let us briefly consider how.

All of our contributors seek to address SDG 4 (*Quality Education*) by contributing new stories about Africa, with particular relevance to target 4.7 (<https://sdgs.un.org/goals/goal4>), which seeks to improve and deepen understanding of global citizenship and appreciation of cultural diversity. Archaeology makes this foundational contribution.

The African Union identifies food insecurity as among the most pressing issues on the African continent (<https://au.int/en/au/priorities/food-security>). Agricultural practice in the context of changing climate is key to addressing this, and archaeology’s long view offers important insights as communities grapple with the challenge of sustainable production.

- In “Earth, water, air and fire: Thinking about farming and farmscapes,” authors Höhn, Mushayikwa, and Schoeman draw on their expertise in West and South Africa to take us on a journey of earth, fire, water, and wind, using archaeology and African narratives and songs to share the stories of how people interacted with their environments over time across the continent. Their piece encourages us to reflect on how people created and managed landscapes and responded to changing circumstances by altering their practices, with relevance to SDGs 2, 13, and 15 (*Zero Hunger; Climate Action; Life on Land*).
- Logan and Grillo use African futurism to tell us two fictional stories based on archaeology to explore “How African pasts can inspire alternative responses to climate change.” They reimagine a future where climate change has been addressed by looking back to Indigenous knowledge systems, again with relevance to SDGs 2, 13, and 15 (*Zero Hunger; Climate Action; Life on Land*).

A pressing concern in today’s world is finding ways to foster inclusion and respond to forms of inequality that can seem given and natural rather than made and maintained. With its temporal vantage point and attention to how the biographies of goods and things make social distinctions, archaeology helps us appreciate how the circulation of things from faraway places shapes people’s lives and identities. It can also help us to appreciate the meaningful practices of making things that form community bonds and relationships. As examples:

- In “Why weaving?” Balabuch and Rasoarifetra focus attention on the social importance of cloth and weaving and its promise as a compelling way today to teach math, environmental awareness, patience, and perseverance. They draw from archaeology and the actual weaving projects they have been involved in at schools in Madagascar, Ghana, and Canada. Their piece offers practical hands-on ways to connect youth with ancestral practices and values while helping them to appreciate the relationship between things in their daily lives and how they are made, pertinent to SDGs 4 and 12, and AU *Agenda 2063* Goal 16 (*Quality Education; Responsible Consumption and Production; Cultural Identity and Heritage*).
- In “Global connections and connected communities in the African past,” authors Haour and Mofett expand our understanding of Africa’s past beyond the borders of the continent by following the path of cowrie shells as they were traded from Indian Ocean islands to West Africa and on to North America. By highlighting the interconnectivity of people and places through historical trade routes, their piece offers perspective on how people’s lives are shaped by the circulations of things with implications for questions of gender, equality, and the relationship of production and consump-



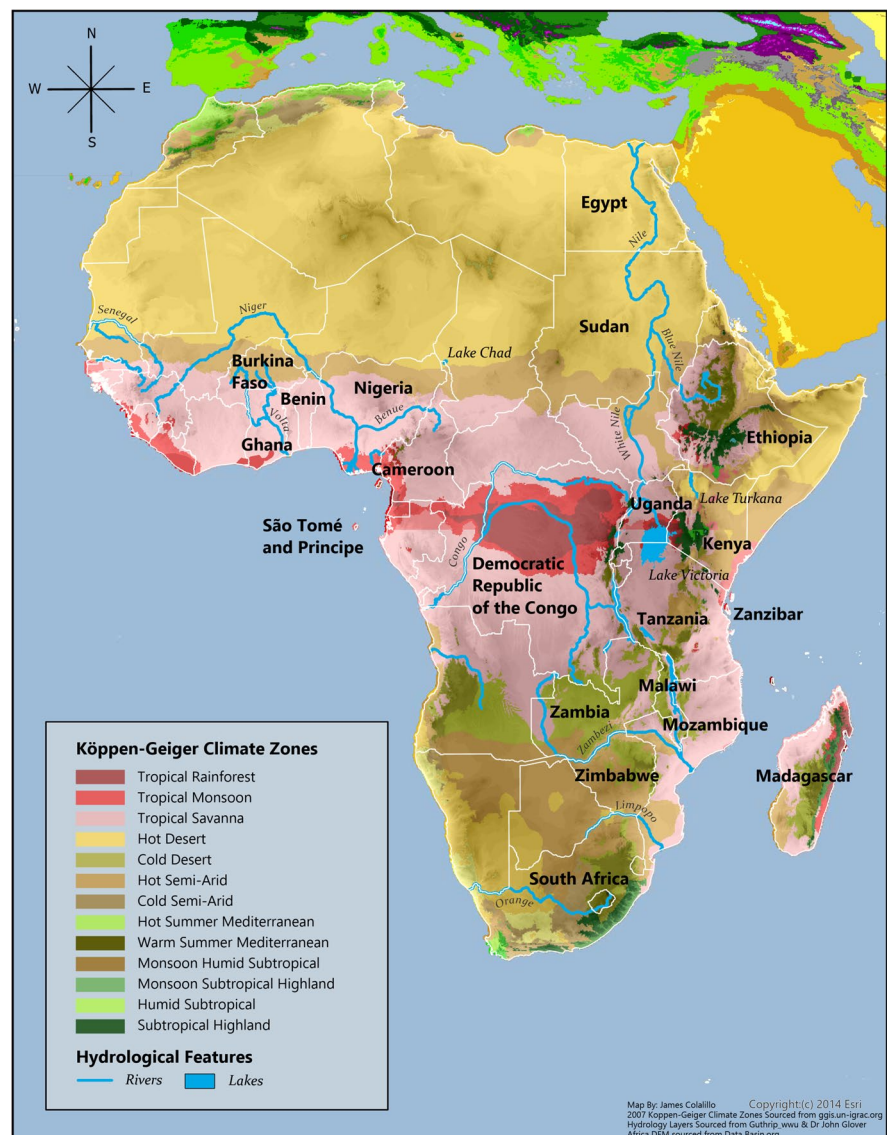
tion, and relevance to SDGs 5, 10, and 12 (*Gender Equality, Reduced Inequalities, Responsible Consumption and Production*).

- Basanti and Mekonen use art and a poetic writing approach in “Communities and the dead in Africa and ancient Ethiopia (50–800 CE)” to take us on a journey into deathways and the study of ancestors. Based on insights from archaeology, they demonstrate how death is communicated through themes of family, the maintenance of healthy communities, and celebrations of culture, relevant to SDGs 3, 5, and 16, and AU *Agenda 2063* Aspiration 5

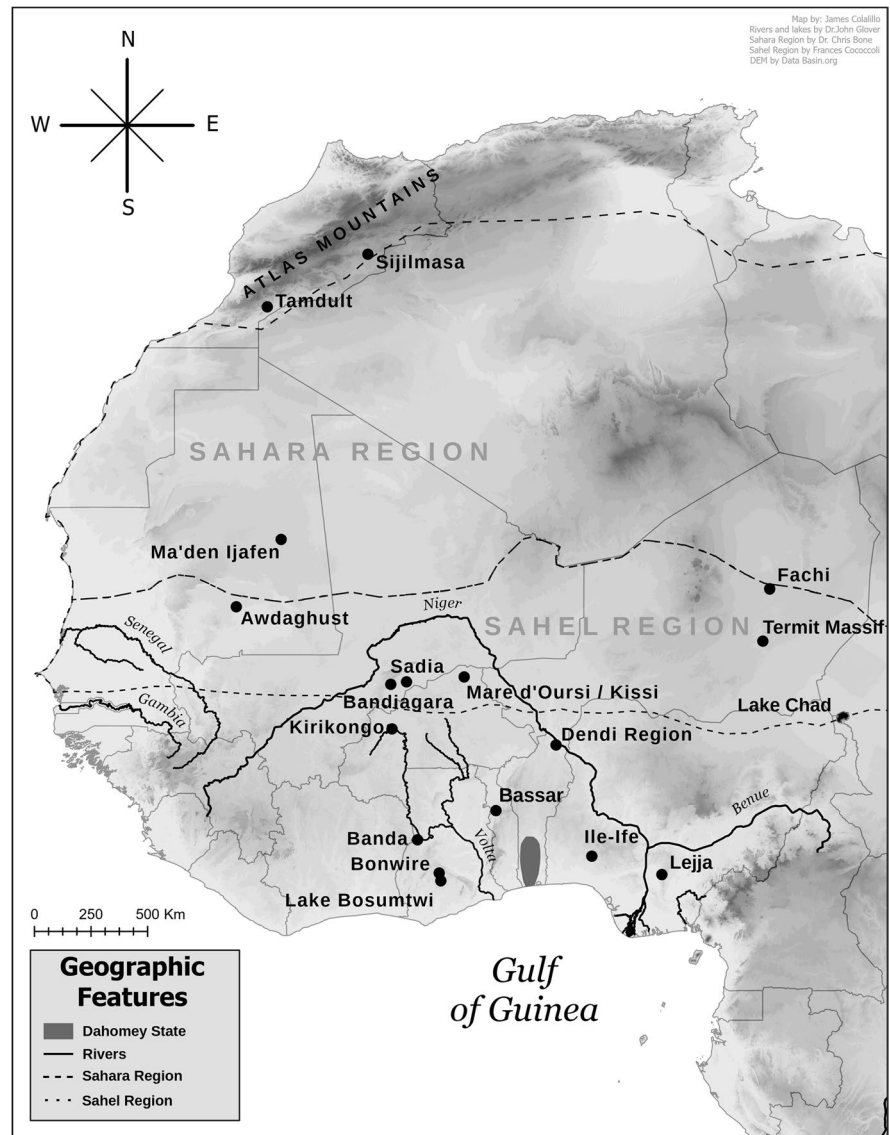
(*Well-being; Gender Equality; Strong Institutions; Cultural Heritage-Values-Ethics*).

Fostering gender equality, poverty reduction, and sustainable livelihoods are key concerns that thread through UN SDGs and AU *Agenda 2063*, as is sparking innovation that fosters sustainable production. Through its study of the histories of technologies and livelihoods—past and present—archaeology helps students to appreciate how men and women solve problems and innovate through ongoing practice. For example:

**Fig. 1** Africa, showing the distribution of climate zones and the names of countries discussed in contributions to this special issue on “African Archaeology in Support of School Learning.” Map by James Colalillo

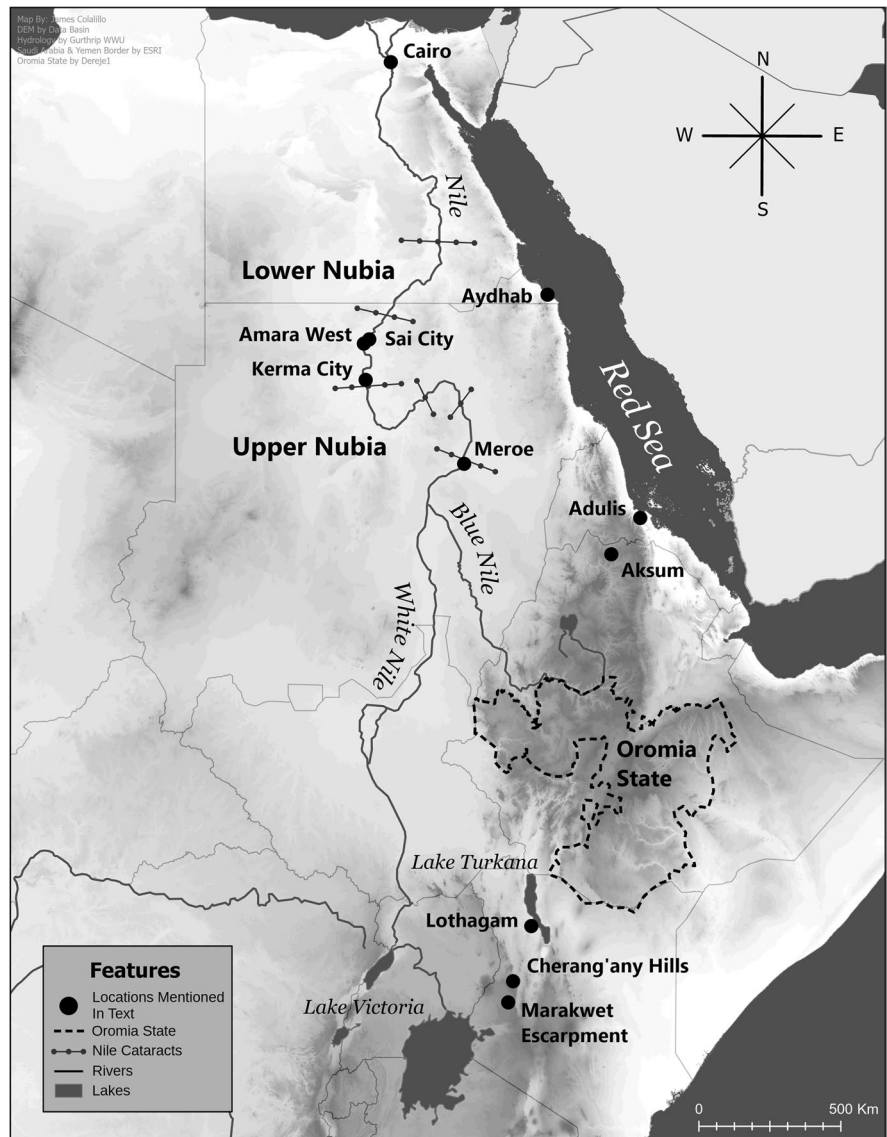


**Fig. 2** Western Africa, showing the locations of geographical features and sites mentioned in contributions to this special issue on “African Archaeology in Support of School Learning.” Map by James Colalillo



- Wayessa, in “My meals are in the pots,” highlights the practical skills involved in potting technology and its ongoing potential as a source of economic sustainability for women. He describes how women have taught younger generations the skills involved, drawing attention to African ways of teaching and knowing through proverbs and puzzles. We learn how women have innovated the craft while navigating changing conditions in resource access, with implications for sustainability and SDGs 1, 5, 8, and 12 (*No Poverty, Gender Equality, Decent Work, Responsible Production, and Consumption*).
- Bandama and Babalola, in “Science, not black magic,” challenge stereotyped notions of science and technology in Africa by discussing metal and glass working. They introduce readers to the rich history of these transformational pyrotechnologies in Africa that long predate European contact. Their focus on ingenuity and the innovative character of Indigenous knowledge and technologies inspires an interest in how things were—and are—made and provides students with models of problem-solving through practical science pertinent to SDGs 8, 9, and 12 (*Decent Work & Economic Growth, Industry*).

**Fig. 3** Eastern Africa, showing the locations of geographical features and sites mentioned in contributions to this special issue on “African Archaeology in Support of School Learning.” Map by James Colalillo

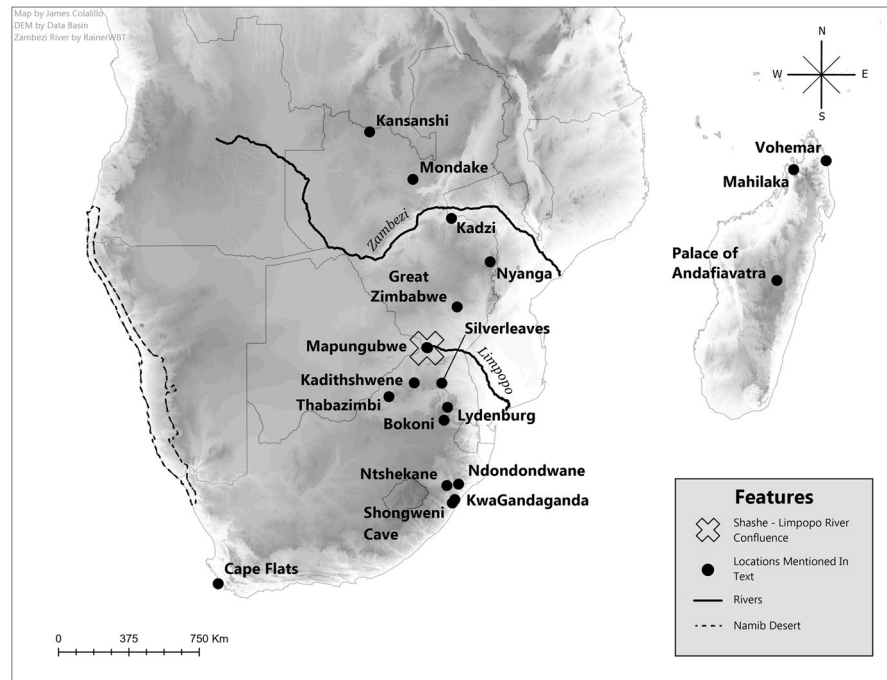


*Innovation & Infrastructure, Responsible Consumption & Production).*

Finally, the pressing question of how to live in cities that are home to people of varied backgrounds and do so peaceably and sustainably is a concern highlighted by UN SDGs and AU *Agenda 2063*. Archaeology helps to illuminate how people did so in the past, demonstrating the varied forms and institutional arrangements that characterized Africa’s ancient cities (McIntosh, 2015), with relevance to how students appreciate and imagine alternatives today and in the future.

- In “A day on the Nile: Living in a town in Nubia,” Budka, Ward, and Elkins help us to imagine the sights, sounds, and activities in the ethnically diverse ancient city of Sai in the Nubian Nile Valley as described by a young girl in search of her lost dog. The archaeologists take advantage of virtual reconstructions to help us see the city as it was and prompt us to reflect on the commonalities and differences in urban life then and now, with relevance to SDGs 11 and 12 (*Sustainable Cities and Communities, Responsible Consumption and Production*).

**Fig. 4** Southern Africa, showing the locations of geographical features and sites mentioned in contributions to this special issue on “African Archaeology in Support of School Learning.” Map by James Colalillo



Each contribution is accompanied by sources where readers can “Learn More,” together with a list of academic sources on which the authors drew in developing their pieces. The maps included in this introduction (Figs. 1, 2, 3, and 4) show the locations of sites and geographical features mentioned in the following essays, and we encourage you to use these maps as accompaniments to your reading.

This special issue is a mere sample of the stories archaeology can offer to enrich school learning through its inherently interdisciplinary lens and its fascinating subject matter. Archaeology offers rich material through which educators can approach Big Ideas, including those highlighted in UN SDGs and *Agenda 2063*. However, getting archaeology’s insights into the hands of the agents of Quality Education—educators!—requires that we collaborate and communicate in new ways. We aspire to grow a community dedicated to doing so, and we hope you will be inspired to join!

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#### Declarations

**Conflict of Interest** The authors declare no competing interests.

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