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Reimagining cultural heritage archives through motion-based digital narratives in design education

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Abstract

The inaccessibility of global cultural heritage limits its potential to shape identities and inform design, a challenge compounded by historical power imbalances in knowledge production. This paper proposes a design education framework integrating Indigenous knowledge systems, critical theory, and human-centred design. It addresses digital cultural heritage preservation in a postcolonial context using a South African case study. Drawing on a Title Sequence Design Module at a South African university in a Digital Design department, we developed a project collaboration with a South African art museum that explores motion-based digital narratives to democratise access to heritage, preserve culture and traditions, disrupt colonial legacies, and cultivate ethical designers. The model anchors Indigenous knowledge systems for culturally embedded heritage preservation; critical theory to interrogate power structures in knowledge representation; and human-centred design for a cyclical process of empathising, defining, ideating, prototyping, and testing cultural narratives. This approach emphasises participatory engagement with cultural custodians to ensure ethical digital transformations, guiding students to navigate the tensions between creative reinterpretation and historical authenticity while addressing risks of cultural appropriation. This study reviews the literature, interrogates heritage, education, and design paradigms, reflects on teaching and learning classroom experiences, and offers insights and recommendations for curricular and institutional innovation. Key questions arise about balancing reinterpretation with authenticity, the ethics of digital narratives, and perceptions of the original cultural communities. This paper highlights that engaging custodians mitigates the reduction of artefacts to aesthetics, fostering meaningful reinterpretations. This framework attempts to contribute to responsible design education by offering educators a methodology to guide students in ethically preserving and reinterpreting cultural heritage through digital narratives, ensuring socially responsible practices across diverse contexts.

Keywords: Cultural heritage, design education, decolonial practice, human-centred design, Indigenous knowledge systems, motion-based digital narratives

Introduction

The global inaccessibility of cultural heritage reflects profound epistemic inequities, a crisis in which dominant knowledge systems marginalise Indigenous ways of knowing (Smith 2012, p. 51). The challenge of preserving and representing cultural heritage in postcolonial society is complex, intersecting issues of history, power, education, and creativity. Cultural heritage is especially salient in Africa, where, as Pophiwa and Saidi (2023, p. 5) assert:

Indigenous knowledge systems define African existence for the simple reason that Indigenous knowledge is a key resource Africans use to engage with each other and the environment for the common good of all, as well as their survival.

Colonial and apartheid legacies in South Africa have exacerbated this tension. In this environment, Western epistemologies and museological practices have historically dominated public narratives, often separating artefacts from their original cultural contexts, silencing Indigenous knowledge systems (IKS), and perpetuating a version of history that privileges Eurocentric perspectives over African voices (Bennett 2004, p. 103; Sithole 2007, p. 4). However, transformative shifts have also emerged. Recent years have witnessed a turn towards reimagining heritage preservation and design education in more inclusive, equitable, and participatory terms. This shift has gained momentum through student protests for decolonised curricula, institutional calls for epistemic redress, and technological advances that open new avenues for dialogue and knowledge sharing (Smith 2012, p. 51).

Global digitisation initiatives, such as the Google Arts and Culture project, have significantly expanded access to South African museum collections, including the Iziko Social History Textile and Beadwork collections, such as the Isishweshwe collection (Google Arts & Culture 2017a; 2017b; Iziko Museums of South Africa, n.d.). These efforts provide valuable platforms for sharing cultural heritage with global audiences through high-resolution images and virtual exhibits. Our approach complements these initiatives by focusing on co-creation with communities and museums, integrating IKS, and engaging critically with colonial legacies to create motion-based narratives that prioritise cultural authenticity and community agency. Crucially, this is not about "adding" IKS to existing frameworks, but about recognising the knowledge systems as foundational knowledge co-equal with Western paradigms (Odora-Hoppers 2002, p. 10).

In response to this imperative, our Title Sequence Design Module lecturers and students have partnered with the art museum to integrate IKS, critical theory, and human-centred design (HCD). The collaboration between a South African university and the art museum, which is at the centre of this paper, seeks to break new ground by integrating IKS, critical theory, and HCD into a design project. Students co-create motion narratives to reanimate museum artefacts, transforming static collections into living dialogues that democratise access to culturally significant artefacts by making them available to global audiences through innovative digital storytelling. For example, student projects reanimated artefacts like textiles, pottery, sculptures, beading, maps, and traditional patterns through visual metaphors, bridging historical memory and contemporary design practice (Figure 1: Engaging and filming artefacts at the museum, and Figure 2: An artwork translated into an animated title sequence).



Figure 19: Students engaging and filming artefacts at the museum (images by authors 2025)

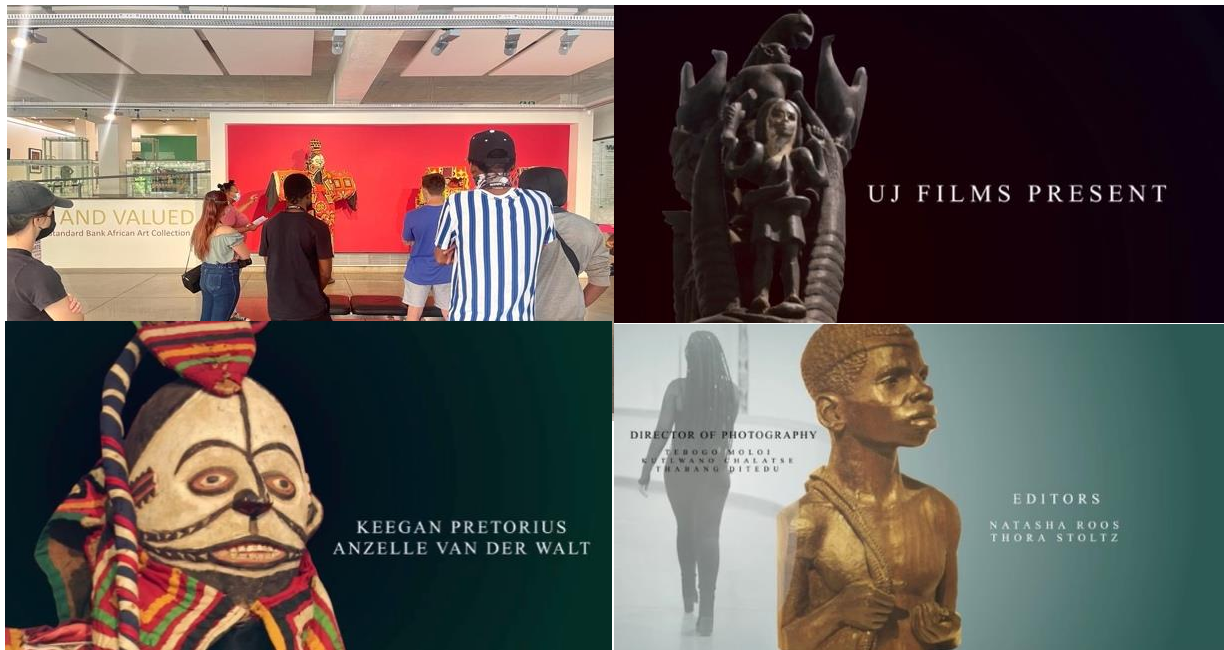


Figure 20: Artefact translated into a title sequence (images by authors 2025)

These narratives actively disrupt colonial legacies by challenging traditional Western-centric interpretations and exhibition practices that have long dominated museum spaces. Most significantly, the narratives centre Indigenous custodianship by positioning local communities as primary stakeholders and authorities in the representation of their own cultural heritage.

By exploring these issues of Western legacies and Indigenous custodianship, this study makes several contributions. It offers an updated, nuanced account of why and how Indigenous and critical approaches are essential to the revitalisation of the curriculum, museum practice, archiving, and digital narratives. It documents the implementation of a practice-based model for curriculum transformation in the Global South, specifically Southern Africa, supported by current research and policy literature (Sithole 2007, p. 8).

Decolonial foundations – reframing heritage, learning, and digital practice

Impact of colonial knowledge structures

Decades of critical scholarship and activism have reinforced the urgent quest to reconfigure heritage and learning in postcolonial societies. Within the Global South, particularly in South Africa, scholars and practitioners have pointed to the enduring impact of colonialism in structuring whose past is documented, whose knowledge is considered legitimate, and whose stories are told and retold in the public sphere (Bennett 2004, p. 103; Sithole 2007, p. 4).

Museums have become central sites for this struggle. In a critique of museology, Hooper-Greenhill (2007, p. 90) argues that the museum's ostensible neutrality is an illusion; its authority, collections, and interpretive frames have always been shaped by colonial intent and ideology.

Indigenous knowledge systems (IKS) and critical theory

IKS have emerged as profoundly relevant in this context. Far from being static repositories of tradition, IKS represent dynamic living processes of knowing embedded in local histories, ecological cycles, social relations, and spiritual cosmologies (Sithole 2007, p. 4; Odora-Hoppers 2002, p. 27).

Critical theory, meanwhile, provides the analytical tools to interrogate inherited frameworks, unmasking the structures of exclusion and the “hidden curriculum” that persists in both educational and heritage spaces (Smith 2012, p. 140; Mbembe 2016, p. 28). In design education, the hidden curriculum manifests as a call to question whose needs are prioritised, whose aesthetics are normalised, and which histories are foregrounded in narrative and creative work (Nakata 2007, p. 208; Mignolo 2009, p. 165).

Digital innovation, human-centred design (HCD), and ethical knowledge management

Contemporary digital technology innovations have introduced promises and perils to this landscape. Scholars such as Lambert (2013, p. 21) and Armatas *et al.* (2016, p. 2) highlight how digital storytelling, open educational resources, and new media can breathe life into forms of knowing and expression that may be under threat in other contexts. This nature of digital practice means that any curricular or heritage initiative seeking to deploy technology must do so critically and reflexively. The HCD paradigm, particularly its more mature forms, offers valuable tools for navigating this aspect. Rooted in empathy, iterative prototyping, and user participation, HCD principles encourage designers and educators to begin with the lived realities and aspirations of the people they are in service of and to continuously iterate solutions in response to context, feedback, and ethical insight (IDEO.org 2015, p. 163; Hassenzahl *et al.* 2013, p. 18). From the above literature, it can be seen that effective pedagogy requires a blending of HCD with both critical theory and IKS, ensuring that practical engagement with technology is allied to a project of epistemic and social transformation.

There is a growing body of literature on ethical digital knowledge management, particularly regarding Indigenous and community heritages. Researchers such as Mdhluli *et al.* (2021, p. 4) and Sithole (2007, p. 8), emphasise the importance of secure, plural, and rights-based infrastructures for the preservation and dissemination of knowledge.

Theoretical and conceptual framework: indigenous knowledge systems (IKS), critical theory, and human-centred design (HCD) in dialogue

This paper offers a conceptual reflection on the Title Sequence Design Module, situating the module within the wider project of decolonising both heritage and design pedagogy in South Africa and beyond. The reflective paper begins with four key sets of questions. First, how can plural knowledge systems, including IKS, be authentically and equitably integrated into educational practice so that innovation, even when informed by critical theory or (HCD), does not become another mode of extraction or appropriation? Second, what are the ethical stakes and practical challenges involved in designing digital archives and digital representations of African heritage artefacts for global audiences using HCD approaches, informed by critical theoretical perspectives? Third, in what ways can carefully structured curricular models grounded in critical theory and attentive to the integration of IKS encourage sustained epistemic justice, participatory creativity, and institutional transformation? And fourthly, what recommendations and frameworks can be drawn from this case to inform future pedagogies, research, and policy development for digital heritage work and digital archives in non-Western and postcolonial settings?

Indigenous knowledge systems (IKS)

IKS are increasingly recognised as vital, dynamic bodies of wisdom, expertise, and worldviews embedded in the lived experiences of Indigenous peoples. Rather than a collection of static traditions, IKS embody multifaceted ways of knowing that arise from long histories of interaction with the land, community, and sacred (Odora-Hoppers 2002, p. 27; Sithole 2007, p. 4). This knowledge, frequently transmitted through oral traditions, rituals, and collaborative practices, incorporates domains as diverse as ecological stewardship, healthcare, conflict resolution, education, and the arts (Masenya 2023b, p. 6; Mdhluli *et al.* 2021, p. 1). The preservation and revitalisation of IKS are now viewed not only as acts of cultural reclamation but also as essential to environmental sustainability and resilience in the face of global challenges (Armatas *et al.* 2016, p. 2).

Theorists such as Odora-Hoppers (2002, pp. 10-11) and Masenya (2023b, p. 6) challenge the historical relegation of IKS to a marginal, pre-modern position within Western-dominated curricula and institutions. Instead, they advocate for its status as a co-equal system of thought best understood through its own ontologies, worldviews that emphasise collective responsibility, spiritual interconnectedness, and embodied experience (Sithole 2007, p. 4; Odora-Hoppers 2002, p. 27).

Critical theory

Critical theory operates as both an intellectual and pragmatic tradition, concerned with exposing, critiquing, and ultimately transforming systems of domination, exclusion, and injustice. Its roots in the Frankfurt School, radical pedagogy (Freire 1972, p. 72), and decolonial thought (Smith 2012, p. 140) have inspired generations of educators and activists to interrogate the underlying power relations embedded in educational, heritage, and digital spaces. In South African and global postcolonial contexts, critical theory compels stakeholders to ask who benefits from existing systems of knowledge production, who is silenced or marginalised, and how hierarchies of value can be disrupted or transformed (Mbembe 2016, p. 28; Cameron & Kenderdine 2007, p. 220).

This critical orientation is indispensable for design education and digital heritage. Designers must grapple honestly with the risk of reproducing the very structures of oppression from which they hope to liberate artefacts.

Human-centred design (HCD)

HCD has emerged as a globally influential methodology for innovation, problem-solving, and creative practice (IDEO.org 2015, p. 163; Hassenzahl *et al.* 2013, p. 18). At its core, HCD insists on empathetic engagement – understanding the desires, aspirations, constraints, and contexts of those for whom one is designing. Through iterative research cycles, idea generation, prototyping, and testing, HCD invites designers to treat “failure” and feedback as essential conditions for ethical and practical practice (Field Guide to Human-Centred Design 2015; IDEO.org 2015, p. 163).

In educational and heritage settings, HCD’s most significant potential lies in its ability to facilitate deep listening and co-creation – not only with formal “users” or audiences, but also with knowledge-holders, curators, communities, and future generations (IDEO.org 2015, p. 164).

Dialogical foundations for decolonial pedagogy

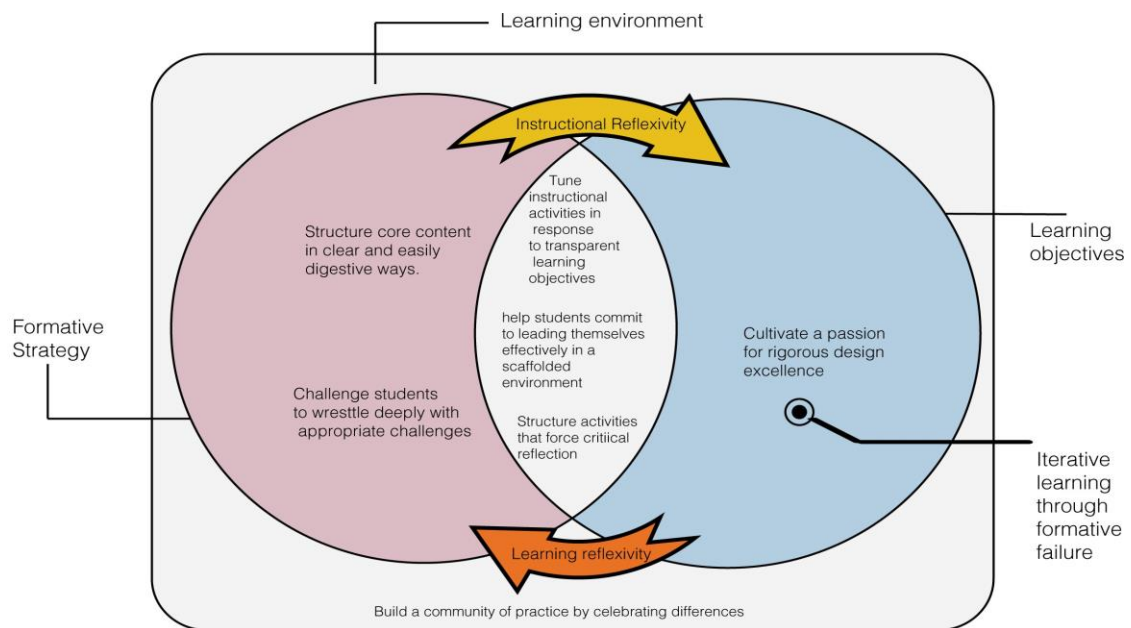
Integrating IKS, critical theory, and HCD establishes a dialogic foundation for decolonial design and pedagogy in heritage education. IKS provide a wellspring of knowledge, meaning, and narrative forms. Critical theory ensures the continual interrogation of power, complicity, and historical harm, preventing the subsuming of IKS or community perspectives into extractive or tokenistic roles. HCD

supplies actionable, iterative processes that make real-world collaboration, co-design, and formative learning possible (Field Guide to Human-Centred Design 2015; IDEO.org 2015, p. 170; Odora-Hoppers 2002, p. 35).

Proposed framework model: decolonial title sequence design pedagogy

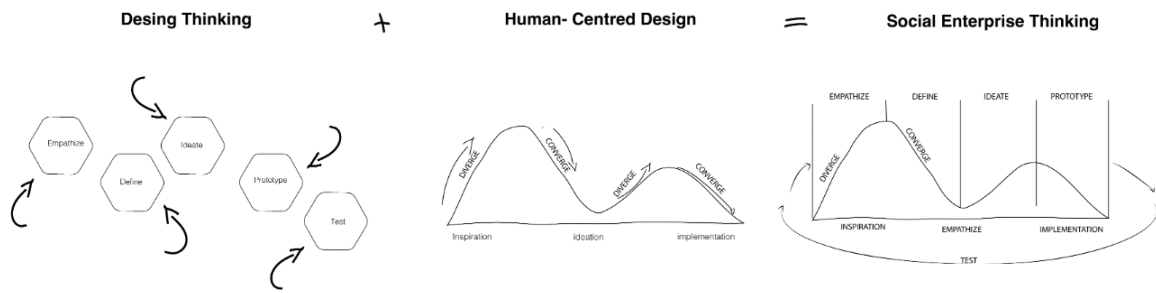
This conceptual framework proposes a structured pedagogical model integrating IKS, critical theory, and HCD into design education. The model emphasises the importance of cultural narratives and ethical engagement, guiding students to navigate the tension between creative reinterpretation and historical authenticity (Armatas *et al.* 2016). By incorporating IKS encompassing ecological, phenological, and seasonal knowledge, educators can better understand Indigenous perspectives and their relevance to contemporary design challenges. This approach aligns with the learning environment principles outlined in the first image, which highlights formative strategies, instructional reflexivity, and iterative learning through formative failure. These elements encourage students to critically reflect on their design processes, while respecting their cultural integrity.

The integration of HCD, as depicted in the second image, provides a practical framework for applying these principles. The diagrams emphasise iterative processes, such as prototyping, testing, and social enterprise thinking, which are central to HCD methodologies (IDEO.org, n.d.).



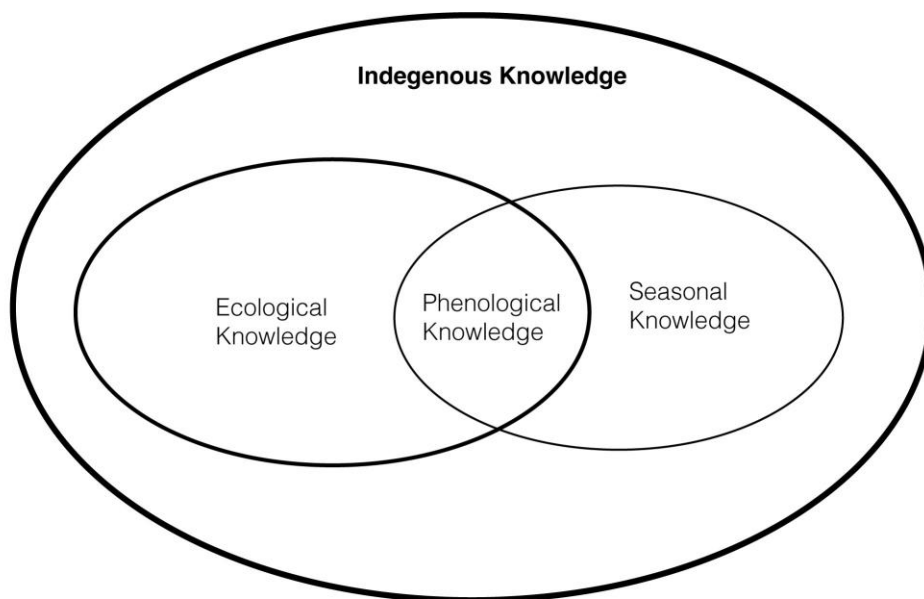
Armatas, C. A., Venn, T. J., McBride, B. B., Watson, A. E., & Carver, S. J. (2016). Opportunities to utilize traditional phenological knowledge to support adaptive management of social-ecological systems vulnerable to changes in climate and fire regimes. *Ecology and Society*, 21(1).

Figure 3: Adapted reflexive learning model in design education (Rivard & Faste 2012)



IDEO.org

Figure 4: Design thinking process framework (Moving Worlds Institute 2024)



The relationship between indigenous knowledge and its subsets

Figure 5: Exploring traditional phenological knowledge for adaptive management of climate-impacted social-ecological systems (Armatas *et al.* 2016)

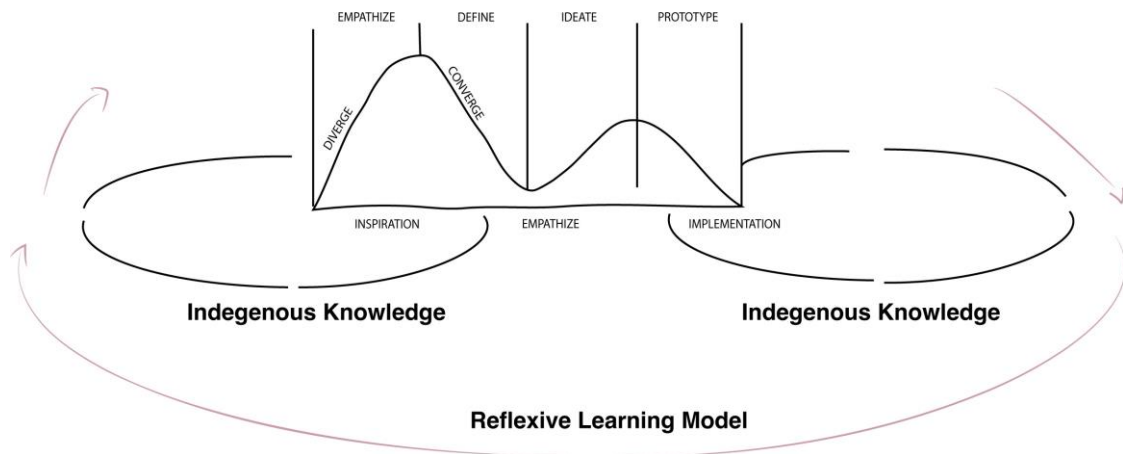


Figure 6: Integrated conceptual framework (Figure by authors 2025)

To operationalise these dialogical and decolonial principles, a mix of the three models represented by Figures 3 to 5 is proposed for heritage-focused and design-focused curricula represented in Figure 6.

Co-contextual research and immersion

The cycle begins with immersive research, an active, respectful process of learning from archives, museum collections, oral histories, and (wherever feasible) direct engagement with knowledge-holders and source communities (Masenya 2023b, p. 6; Odora-Hoppers 2002, p. 27). This phase emphasises humility over expertise and often requires unlearning, deep listening, and patience. Ethical protocols concerning consent, intellectual property, and benefit-sharing are negotiated with all stakeholders at the outset (Mdhluli *et al.* 2021, p. 4).

Iterative, participatory design process

Drawing on HCD, students and facilitators embark on iterative cycles of ideation, rapid prototyping, storytelling, and critical feedback, continuously returning to the community, curator, and peer input at every stage (Field Guide to Human-Centred Design 2015; IDEO.org 2015, pp. 164-170). Early concepts are deliberately provisional and judged less by technical polish than by responsiveness to context and insight.

Critical dialogue and reflexivity

Throughout the process, structured dialogue sessions invite participants to interrogate assumptions, examine the socio-historical context of artefacts and design decisions, and surface anxieties or points of conflict (Smith 2012, p. 140; Nakata 2007, p. 208).

Multimodal, plural storytelling

The final outputs are the motion-based title sequences, which are designed as multimodal narratives, often blending digital animation, soundscapes, text, and oral storytelling. Artefacts are reinterpreted not as fixed “objects” but as storied entities with ongoing lives and meanings, inviting multiple readings and sustained engagement (Lambert 2013, p. 21; Odora-Hoppers 2002, p. 35). Where language diversity is possible, Indigenous languages are prioritised, and mechanisms for ongoing commentary, update, or reinterpretation are established.

Ethics, attribution, and legacy

Projects are archived digitally in ways that foreground ownership, stewardship, and collective authorship using secure, flexible repositories that enable stakeholders to revisit, annotate, or even retract work as community needs evolve (Mdhluli *et al.* 2021, p. 4).

Model adaptability and transferability

While the proposed structured pedagogical model is drawn from the context of South African heritage and design education, its modular principle-based structure enables adaptation to global contexts, especially those with histories of epistemic injustice or institutional exclusion. The model is scalable for use by single educators, cross-institutional partnerships, or national curriculum reform efforts (Hooper-Greenhill 2007, p. 192; Prehn *et al.* 2021, p. 7).

Pedagogical application, the title sequence design module context, and institutional collaboration

The Title Sequence Design Module was developed, and students were given a learning opportunity to re-create a motion graphics project for a fictitious or existing title sequence design project in collaboration with the art museum. The lecturers provided a structured outline for students to engage in cultural heritage through motion-based digital narratives. Uniquely, the project unfolds across three key phases: pre-production, production, and post-production, each meticulously designed to encourage deep conceptual engagement with the art museum's collection of over 10,000 artefacts, while embedding the pedagogical imperatives highlighted throughout this study, namely, the integration of IKS, critical theory, and HCD.

Module phases, from research to reflexive storytelling

Pre-production, conceptual research, and ethical framing

In the pre-production phase, students undertake critical research into selected art museum artefacts, investigating their historical, cultural, and artistic significance through sources such as museum databases, oral histories, scholarly literature, and, whenever possible, direct consultation with curators at the museum. This phase is fundamentally anchored in IKS and critical theory, compelling students to approach artefacts not as isolated design resources but as living carriers of meaning and memory. Students develop concept pitches, mood boards, and storyboards, ensuring that their reinterpretations respect the original context, acknowledge the artefacts' provenance, and avoid any form of cultural appropriation. At this point, students seek consent to use the artefacts in their project, and agreements in the form of contracts are signed.

Production, motion design, and narrative experimentation

During the production stage, students transformed their research and conceptual frameworks into compelling motion-based narratives. They use Adobe After Effects, Premiere Pro, and other digital tools to bring concepts to life through animation, typography, sound design, and experimental storytelling techniques. HCD is central in this phase, as students prototype their sequences and gather iterative feedback from facilitators, peers, and, where feasible, community or curatorial partners. Rather than merely functioning as aesthetic backdrops, art museum artefacts serve as narrative anchors, whether they are visually incorporated, inform underlying themes, or catalyse new

speculative visions, including other discourse interpretations. This blend of traditional artefacts and contemporary storytelling revitalises heritage through an iterative, research-driven design.

Post-production, reflection, and ethical validation

The post-production phase focused on final editing, lecturer feedback, cultural validation, and reflexive assessment. Students refine their sequences and attend to nuances in representation. This process reinforces the module's emphasis on participatory, respectful design, as work is reviewed not only for technical accomplishment but also for its ability to balance creative ambition, cultural authenticity, and ethical responsibility, a core tenet of the proposed structured pedagogical model. Due to the nature of the collaboration and the sensitivities of the artefacts, students are prohibited from exhibiting the work in any capacity; however, based on agreements, the adoption of this framework allows for future projects to be exhibited in both institutional and digital spaces, with the strongest pieces serving as open educational resources or exemplars for museum education programmes.

Linking practice to theory, operationalising the decolonial approach

The module's design, implementation, and assessment are tightly coupled with the theoretical framework established in the abstract, operationalising IKS, critical theory, and HCD through each phase. Art museum artefacts act as foundation stones, ensuring that African heritage and living epistemologies are centred (Odora-Hoppers 2002, p. 27). Critical theory animates the process of deconstruction and re-narration, and students are called to challenge colonial narratives and reimagine artefacts through contemporary interpretive lenses such as Afrofuturism, Pan-Africanism, colonisation, and similar discourses. HCD ensures that all narratives and storytelling choices are iteratively refined in collaboration with various audiences, continually honouring the origins of artefacts.

Reflection, revitalising heritage through participatory digital pedagogy

The Title Sequence Design Module and project demonstrate that motion-based narrative, when grounded in ethical partnerships and theoretical rigour, offers more than technical skill building and becomes a transformative act of cultural reclamation. For example, student projects such as Title Sequence Design, which reanimated precolonial artefacts (such as textiles, beading, maps, and traditional patterns) through Afrofuturist visual metaphors, exemplify how digital storytelling can bridge historical memory and contemporary design practice. By centring IKS in the research phase, applying critical theory to interrogate representation choices, and iterating designs through HCD methods, students transformed static artefacts into living dialogues.

This framework exemplifies how digital storytelling, when ethically grounded, serves as both a pedagogical initiative and cultural reclamation. One student group's collaboration with an exhibiting artist during their project narrated beadwork symbolism, resulting in a title sequence in which each animated pattern was validated by a knowledge holder, showing how the model resists extractive practices. Such work transcends aesthetic outcomes to address what Odora-Hoppers (2002, p. 27) calls "the epistemic violence of archives" by restoring agency to source communities.

The module's success hinges on three principles evident in these case studies:

1. **Co-creation as a reparative practice:** The project partnered with the art museum's curators and Indigenous consultants at every phase.
2. **Iteration as epistemic humility:** The prototypes were revised through feedback loops with communities, not just instructors.

3. **Outputs as open-ended narratives:** The final sequences included QR codes linked to oral histories, inviting ongoing reinterpretation.

This work offers a blueprint for decolonial pedagogy in postcolonial contexts by anchoring design to IKS, critical theory, and HCD. The art museum partnership's scalability, adaptable to other institutions through its phased approach (Figure 3), suggests pathways for museums and universities to move beyond tokenism.

Discussion

Key insights from the decolonial design curriculum

The process of implementing, evaluating, and reflecting on the Title Sequence Design Module and project, developed in collaboration with the art museum, has generated important insights into the future of decolonial education and digital heritage practice. The structure of the module demonstrates that such frameworks can foster ethical engagement and creative innovation in student projects.

A fundamental insight is the significance of authentic partnership and dialogue. The joint work between the university, museum, and, where possible, community stakeholders surfaces the value of co-design and highlights the ways plural expertise can generate richer, more meaningful digital narratives. Adherence to iterative feedback, consent, and community input, as seen throughout the pre-production, production, and post-production phases, reveals that genuine decolonial practice is inherently collaborative and reflexive.

The integration of IKS, critical theory, and HCD is a crucial aspect of the proposed structured pedagogical model. Students noted that, when engaging with artefacts, IKS revealed heritage as a living system rather than a static archive; critical theory raised their consciousness of historical erasure and power dynamics; and HCD practices equipped them with the methodologies needed to iteratively revise their narratives based on feedback and evolving ethical awareness.

Practical recommendations for educators and institutions

Building on these insights, several recommendations have emerged for educators, museum professionals (curators), and policymakers seeking to implement decolonial and ethical digital design pedagogy.

Prioritise contextual immersion and relationship building

Institutions should allocate time and resources to structured immersion activities, enabling students and educators to meaningfully engage with source communities, knowledge holders, and cultural artefacts. These relationships are foundational for trust, accurate contextualisation, and the negotiation of rights and benefits.

Embed ethical reflexivity in all stages of design

Commitment to ongoing ethical reflection should be made explicit in the curricula, including formal protocols for attribution, intellectual property, consent, and community feedback.

Promote iterative, participatory design approaches

Pedagogical practices should move away from static, linear projects and instead emphasise cyclical learning through prototyping, critique, and iterative improvement. Process-based practices foster

creative resilience while also modelling the adaptive nature of both traditional and contemporary knowledge systems.

Support multimodal and multilingual storytelling

Heritage projects should encourage students to experiment with a range of narrative formats and languages, increasing accessibility and reflecting the plural realities of the African experience. Where possible, the outputs should be openly licensed and digitally archived for future adaptation and community use.

Invest in institutional change and educator training

Truly, decolonial practice is not achieved by curriculum change alone. Institutions need to support faculty and facilitator development, cultivate long-term partnerships with museums and communities, and review bureaucratic and legal structures to enable rather than constrain ethical, collaborative heritage work.

Remaining challenges and limitations

Although the case study demonstrates the promise of these process-based practices, several persistent challenges are acknowledged. Resource limitations, including infrastructure, staffing, and digital access, can hinder the full engagement of all stakeholders, especially source communities or knowledge holders, who remain geographically or technologically distant.

Future directions

The lessons from the Title Sequence Design Module clarify the direction for future practice in decolonial design pedagogy and digital heritage education. Sustaining and extending the impact of this work will require continued commitment to resource allocation, particularly to securing funding and technical infrastructure that support genuine long-term community engagement. Equitable digital access remains a foundational challenge that must be addressed to ensure that knowledge holders and community members participate as co-authors and collaborators, rather than merely as research subjects. Future curriculum development should embrace adaptable, flexible models that encourage language diversity, multimodal storytelling, and participatory design at all educational levels, from undergraduate coursework to professional and community education.

Building robust institutional partnerships between universities, museums, and communities is also paramount, as such collaboration democratises access to heritage, facilitates the sharing of intercultural skills, and grounds scholarships in the lived realities of local contexts. By embracing these directions and remaining attentive to the evolving needs of the communities they serve, designers and educators can ensure that their efforts contribute to a living, iterative, and just curriculum that continues to challenge colonial legacies and advance the reclamation and revitalisation of cultural heritage.

This study illustrates that when decolonial principles move from theory to practice, results have the potential to be transformative. The success of the Title Sequence Design Module points to the viability and necessity of frameworks that centre Indigenous knowledge, critical analysis, and collaborative creation in digital heritage education. Nevertheless, it is clear that institutional challenges persist, including time and resource limitations and infrastructural inequities, and must be addressed through systemic advocacy and policy reforms.

The lessons learned from this module should serve as a template and inspiration for other design programmes, cultural institutions, and curriculum reformers. By embracing contextual research, ethical reflexivity, participatory design, and community-centred storytelling, educators and students can reclaim heritage as a site of living dialogue, invention, and justice. Ongoing work will demand humility, flexibility, and sustained commitment, making the promise of a truly decolonised and inclusive digital future now within reach.

This study proposed a framework for a decolonial curriculum in digital design education and presented an illustrative case study of the Title Sequence Design Module curriculum realised in partnership with an art museum. The module's structure, including processes of immersion, production, and reflective evaluation, suggests that purposeful integration of IKS, critical theory, and HCD holds transformative potential for both learning outcomes and institutional culture. However, the framework itself has yet to be empirically tested and validated in broader or longitudinal contexts. The collaborative, iterative, and pluralist model outlined here was designed to empower students to become not only technically competent designers but also ethical, self-aware, and culturally grounded practitioners.

By foregrounding dialogical encounters between students, artefacts, educators, curators, and, where possible, source communities, this curriculum aims to disrupt inherited colonial hierarchies. The curriculum offers a template for responsible, innovative practices in heritage storytelling. Initial indications suggest that authentic partnership, humility, and structured ethical engagement may foster critical self-reflection and support the reclamation of marginalised histories and worldviews. Further implementation and evaluation are needed to assess the framework's effectiveness and adaptability across diverse settings.

Conclusion

If heritage and design education remain relevant and just, they must be rooted in the self-determination of communities, linked to living epistemologies, and equipped to address twenty-first-century challenges. The decolonial, dialogue-based methods outlined in this study are not only feasible but also essential. By embedding humility, criticality, and genuine collaboration into every stage of design and narrative inquiry, educators and institutions can cultivate practitioners who are truly equipped to reclaim, reimagine, and revitalise cultural knowledge for generations.

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