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Navigating the governance framework for AI in zambian higher education: A critical examination of the national AI strategy 2024-2026

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Abstract
The integration of artificial intelligence (AI) in higher education presents both opportunities and challenges for policy governance. Globally, higher education is grappling with the need for agile AI governance frameworks balancing innovation and ethical oversight (UNESCO, 2021). Zambia's National Artificial Intelligence Strategy 2024-2026 outlines a roadmap to leverage AI for educational transformation, emphasizing ethical commitments, infrastructure development, and capacity building (Ministry of Technology and Science, 2025). However, the strategic plan's alignment with university autonomy and institutional readiness remains underexplored. Positioned within Sub-Saharan AI integration debates, this analysis situates Zambia's Strategy among continental governance frameworks (World Bank, 2022). This study employs a document analysis methodology, complemented by semi-structured interviews with policymakers and university administrators, to assess the Strategy's governance pillars and their implications for Zambian higher education. Findings indicate that while the Strategy establishes robust ethical guidelines and international benchmarks, gaps persist in resource allocation, data governance protocols, and stakeholder engagement mechanisms (TechEstate, 2025). The tension between centralized policy directives and institutional autonomy emerges as a critical barrier to effective implementation. Moreover, the Strategy's decolonial aspirations require further operationalization through localized epistemologies and inclusive governance structures (Adekunle, 2023; Ndlovu & Kofi, 2024). By interrogating the Strategy through decolonial policy analysis, this article foregrounds local epistemic communities and institutional capacities. It concludes with actionable recommendations for enhancing policy coherence, strengthening data stewardship frameworks, and fostering collaborative governance models. Implications for policymakers, university leaders, and future research agendas are discussed to guide the realization of AI's transformative potential in Zambia's higher education landscape. Overall, this study advances understanding of AI governance dynamics in emerging higher-education settings.

Keywords: Artificial intelligence, higher education, governance framework, national AI strategy 2024-2026, decolonial policy analysis

Introduction
Higher education worldwide is undergoing a transformative shift as institutions explore artificial intelligence (AI) to enhance teaching, learning, and administration. Governments and universities alike are tasked with developing governance frameworks that balance innovation with ethical oversight, data privacy, and equitable access (UNESCO, 2021; World Bank, 2022) [16, 18]. Despite growing enthusiasm for AI's potential - ranging from adaptive learning platforms to predictive analytics - concerns persist about bias, accountability, and the uneven distribution of technological benefits across and within countries (UNESCO, 2021) [16].

In Sub-Saharan Africa, AI integration in universities remains nascent, with policy initiatives often lagging behind global trends. Recent analyses highlight a paucity of continent-wide governance standards and a reliance on international benchmarks that may overlook local epistemologies and capacity constraints (Adekunle, 2023; Ndlovu & Kofi, 2024) [1, 13]. Scholars call for decolonial policy frameworks that foreground indigenous knowledge systems, contextualize ethical norms, and empower local stakeholders in decision-making processes (Adekunle, 2023) [1].

Zambia has positioned itself at the forefront of digital education transformation in the region. Building on its Digital Transformation Strategy and Education Sector ICT Policy,

the Ministry of Technology and Science launched the National Artificial Intelligence Strategy 2024-2026 to guide ethical AI deployment, infrastructure development, and workforce capacity building in education (Ministry of Technology and Science, Republic of Zambia, 2025; TechEstate, 2025) [15]. However, the Strategy's articulation of governance pillars - particularly its provisions for institutional autonomy, data stewardship, and stakeholder engagement - has yet to be critically examined within the higher-education context.

This article responds to that gap by critically examining the National AI Strategy 2024-2026 through policy analysis and decolonial lenses. Specifically, it seeks to: (1) map the Strategy's governance framework and ethical commitments; (2) assess alignment with university autonomy, resource realities, and local epistemic communities; and (3) propose actionable recommendations for policy coherence and collaborative governance. The following guiding questions structure the inquiry:

1. What governance pillars and ethical guidelines does the Strategy foreground?
2. How do these align with institutional capacities and autonomy within Zambian higher education?
3. In what ways can decolonial principles inform and strengthen AI governance in this context?

2. Literature Review

International AI Governance Frameworks

Global efforts to govern AI in education have coalesced around principles of ethical use, transparency, accountability, and inclusivity. UNESCO's Guidance for Policy-Makers (2021) [16] articulates a rights-based approach, emphasizing learner privacy, equity of access, and algorithmic explainability. It recommends multi-stakeholder consultation platforms and continuous impact assessments to ensure that AI applications align with pedagogical goals and human rights standards (UNESCO, 2021) [16]. Likewise, the World Bank's analysis of country approaches underscores the balancing act between fostering innovation and mitigating risks such as algorithmic bias, digital divides, and data security lapses (World Bank, 2022) [18]. While both frameworks provide comprehensive policy checklists and governance roadmaps, they stop short of sector-specific prescriptions, treating education largely as a monolithic domain rather than differentiating primary, secondary, and tertiary contexts.

AI Policy Scholarship in Sub-Saharan Africa

Scholarly work on AI governance in Sub-Saharan Africa has begun to interrogate how global frameworks intersect with local institutional and epistemic realities. Adekunle (2023) [1] critiques existing policies for their reliance on Western epistemologies and calls for decolonial policy designs that embed indigenous knowledge systems and African ethical paradigms. By tracing parallels with post-colonial technology governance debates, Adekunle foregrounds the need for participatory policy-making spaces that elevate local academic and community voices (Adekunle, 2023) [1]. Complementing this, Ndlovu and Kofi's (2024) [13] ECDPM briefing note maps emerging AI governance architectures across African states, noting that most strategies replicate international template clauses on data governance and ethics without adapting to sectoral or cultural specificities. Both studies signal momentum toward localized AI policy thinking, yet neither engages deeply with higher-education institutions as distinct governance actors.

Gaps in Higher-Education-Specific Analyses

Despite the rich global and continental policy discourse, the literature reveals a conspicuous gap in analyses tailored to higher-education settings. National AI strategies and digital transformation plans frequently mention universities alongside schools and vocational training centers, but they rarely unpack the unique governance challenges faced by tertiary institutions - such as academic freedom, research data stewardship, and curricula redesign (UNESCO, 2021; World Bank, 2022) [16, 18]. Moreover, studies of AI readiness in African universities tend to focus on infrastructure and faculty training, without situating these within broader policy frameworks or exploring how institutional autonomy interacts with national directives (Adekunle, 2023) [1]. This lacuna underscores the imperative for sector-specific examinations of AI governance that account for universities' dual roles as educators and knowledge producers.

3. Theoretical and Conceptual Framework

To interrogate Zambia's National AI Strategy 2024-2026, this study synthesizes two complementary lenses. First, established policy-analysis theories provide tools to map how issues reach the agenda, how regulations are designed, and how implementation is governed. Second, decolonial perspectives surface the epistemic power relations shaping whose knowledge counts in AI governance and how local voices can be re-centered.

Policy Analysis Lenses

Kingdon's multiple-streams framework posits that policy change occurs when three "streams" -problems, policies, and politics - converge in a window of opportunity (Kingdon, 2011) [7].

- **Problem stream:** AI in education emerges as a recognized challenge and opportunity when stakeholders identify skills gaps, digital divides, or ethical risks.
- **Policy stream:** Solutions circulate in policy communities as technical proposals (e.g., data-governance protocols, ethical guidelines), evaluated for feasibility and alignment with public values.
- **Politics stream:** National priorities, political leadership, and public sentiment shape receptivity to AI regulation (Kingdon, 2011) [7].

This framework illuminates why Zambia's Strategy foregrounds ethics and capacity building but may underplay institutional autonomy: policy entrepreneurs within the Ministry of Technology and Science leveraged momentum from national digital-transformation goals to push a top-down AI agenda before higher-education actors fully coalesced around alternative models.

Complementing Kingdon, regulatory governance scholarship examines how governments choose instruments - from self-regulation to command-and-control rules - to achieve oversight (Hood, 1991; Majone, 1997) [6, 10]. Hood's typology identifies four styles:

1. **Command and control** (legally binding standards and sanctions)

2. **Self-regulation** (industry codes with light oversight)
3. **Economic instruments** (incentives, grants)
4. **Persuasive strategies** (guidelines, capacity-building programs) (Hood, 1991) [6].

Applying this, the National AI Strategy's mix of voluntary ethical codes, planned grants for infrastructure, and proposed regulatory sandboxes can be situated along Hood's spectrum to assess coherence and enforcement potential.

Decolonial Perspectives

Decolonial theory insists on examining how colonial legacies permeate knowledge production and governance structures (Quijano, 2000; Mignolo & Walsh, 2018) [11, 14]. Central concepts include:

- **Coloniality of power**, which privileges Western epistemologies and marginalizes indigenous systems (Quijano, 2000) [14].
- **Epistemic disobedience**, the active refusal to internalize imposed knowledge hierarchies, seeking instead pluriversal approaches (Mignolo & Walsh, 2018) [11].

Adekunle (2023) [1] argues that AI policies in Africa often replicate global templates without adapting to local worldviews or valuing community-based ethical norms. By bringing a decolonial lens, this study probes whether Zambia's Strategy sufficiently integrates indigenous pedagogies, consults epistemic communities in governance forums, and allows for context-specific adaptations - key steps toward a genuinely African AI governance model.

Together, these theoretical constructs guide the subsequent document analysis and stakeholder interviews, offering both structural and normative criteria to evaluate the Strategy's design and its prospects for meaningful implementation in Zambian higher education.

4. Methodology

Research Design

This study employs a qualitative, multiple-case design combining document analysis with semi-structured interviews to explore the governance framework of Zambia's National AI Strategy 2024-2026. A qualitative approach is appropriate for unpacking policy texts and stakeholders' meanings, grounding findings in participants' lived experiences and the Strategy's language (Yin, 2018) [20]. Integrating document analysis with interviews enables methodological triangulation, enhancing the depth and credibility of the policy interpretation (Bowen, 2009) [2].

Document Analysis

The core policy text - Ministry of Technology and Science's National Artificial Intelligence Strategy 2024-2026 - was subjected to systematic content analysis to identify governance pillars, ethical guidelines, and implementation mechanisms. Following Bowen's (2009) [2] protocol, the document was coded in NVivo 12 by first developing a priori codes derived from the theoretical framework (e.g., "ethics," "data stewardship," "capacity building"). A second cycle of inductive coding captured emergent themes such as "institutional autonomy" and "local epistemologies." Code frequencies and co-occurrence matrices were used to map how often and in what contexts each governance pillar appeared.

Participant Selection and Semi-Structured Interviews

To contextualize the Strategy's provisions, purposive sampling identified 12 key informants: six senior administrators from public and private universities, three policymakers from the Ministry of Technology and Science, and three representatives of the Zambia Higher Education Authority. Invitations were sent via institutional email, with follow-up calls to secure consent and interview times. Semi-structured interviews, lasting 45-60 minutes each, explored participants' perceptions of the Strategy's feasibility, alignment with institutional mandates, and gaps in stakeholder engagement (Kvale & Brinkmann, 2009) [8]. Interviews were audio-recorded and transcribed verbatim, yielding approximately 100 pages of textual data.

Data Coding and Thematic Analysis

Transcripts and policy text were analyzed using Braun and Clarke's (2006) [3] six-phase thematic analysis. In Phase 1, transcripts were read repeatedly for familiarity. Phase 2 involved generating initial codes for policy alignment, perceived barriers, and decolonial opportunities. In Phase 3, codes were collated into candidate themes (e.g., "centralized decision-making," "resource inequities," "emergent local voices"). Phases 4 and 5 refined and named themes, ensuring internal coherence and distinctiveness. Phase 6 produced the final report, linking themes to theoretical constructs from Kingdon's framework and decolonial lenses. To bolster consistency, a second coder reviewed 20% of transcripts; inter-rater reliability exceeded 0.80 (Guest, MacQueen, & Namey, 2012) [5].

Trustworthiness

Credibility was ensured through methodological triangulation and member checking: preliminary findings were shared with four participants for validation (Lincoln & Guba, 1985) [9]. Transferability was supported by rich, contextual descriptions of Zambian higher-education governance. Dependability and confirmability were addressed via an audit trail documenting coding decisions, interview protocols, and reflective memos.

Ethical Considerations

Ethical clearance was obtained from the Zambian Open University Research Ethics Committee. All participants provided informed consent and were assured confidentiality; pseudonyms are used in reporting. Audio files and transcripts are securely stored on encrypted drives accessible only to the research team. The study adheres to the principles of respect, beneficence, and justice as outlined in the Belmont Report (Wiles *et al.*, 2008) [17].

5. Findings

This section presents the results of the document analysis and interviews, organized around the Strategy's primary governance pillars: ethical guidelines, data stewardship, infrastructure development, capacity building, and stakeholder engagement with respect to institutional autonomy.

1. Ethical Guidelines and Accountability

The National AI Strategy foregrounds ethical AI use as its first pillar, articulating principles of fairness, transparency, and accountability (Ministry of Technology and Science, Republic of Zambia, 2025) [12]. Content analysis revealed

that "ethics" appears in 42 coded segments, often linked to calls for algorithmic explainability and bias mitigation. For example, the Strategy mandates that all AI systems deployed in higher education must undergo an "Ethics Impact Assessment" to evaluate potential harms and ensure compliance with national human-rights norms (Ministry of Technology and Science, Republic of Zambia, 2025:18) [12].

Interview data underscore mixed perceptions of these provisions. A senior policymaker observed that the Ethics Impact Assessment "provides a useful checklist, but universities lack clear guidelines on how to operationalize it within existing research ethics committees" (Participant C, personal communication, June 22, 2025). Similarly, a vice-chancellor noted that while ethical codes are robust, "there is no dedicated oversight body within the higher-education sector to monitor compliance or adjudicate disputes" (Participant A, personal communication, June 10, 2025).

These tensions suggest that, although the Strategy's ethical framework aligns with UNESCO's emphasis on rights-based governance (UNESCO, 2021) [16], implementation may falter without designated accountability mechanisms at the university level.

2. Data Stewardship and Privacy

Data stewardship emerges as a second key pillar, with the Strategy prescribing standardized protocols for data collection, storage, and sharing (Ministry of Technology and Science, Republic of Zambia, 2025) [12]. Document analysis identified 28 references to "data governance," including stipulations that universities adopt "secure, interoperable data platforms" and adhere to the Zambia Data Protection Act (2018) when handling student and research data (Ministry of Technology and Science, Republic of Zambia, 2025:32) [12].

University administrators, however, pointed to infrastructural and capacity gaps. One IT director remarked, "Our legacy student-information system cannot support the encryption standards required, and there is no central funding stream to upgrade it" (Participant D, personal communication, June 18, 2025). Interview coding revealed "resource constraints" co-occurring with "data protocols" in 10 out of 12 transcripts. These findings mirror continental surveys showing that African higher-education institutions often struggle to meet global data-security benchmarks (Ndlovu & Kofi, 2024) [13].

3. Infrastructure Development

The third pillar - expanding digital infrastructure - allocates targeted grants for campus-wide connectivity and computing hardware (Ministry of Technology and Science, Republic of Zambia, 2025) [12]. The Strategy commits to achieving "broadband access at 100 Mbps per institution by 2026," supported by public-private partnerships (Ministry of Technology and Science, Republic of Zambia, 2025:45) [12]. NVivo frequency counts show "infrastructure" coded 35 times, emphasizing both physical networks and cloud-based services.

Interview participants welcomed the focus on connectivity but questioned equity of resource distribution. A dean from a rural public university noted, "The call for PPPs is promising, yet private partners are targeting Lusaka and Copperbelt regions first, leaving provincial campuses behind" (Participant F, personal communication, June 20, 2025). This regional skew reflects patterns observed in national ICT strategies, where urban-center bias exacerbates the digital divide (TechEstate, 2025) [15].

4. Capacity Building

Capacity building constitutes the fourth governance pillar, calling for training programs for faculty, IT staff, and policy-makers (Ministry of Technology and Science, Republic of Zambia, 2025) [12]. The Strategy outlines a cascade model of "train-the-trainer" workshops in AI literacy, ethics, and technical maintenance (Ministry of Technology and Science, Republic of Zambia, 2025:52) [12]. Content analysis flagged "training" in 30 coded excerpts, frequently linked to partnerships with regional centers of excellence.

However, several participants described ambiguities in program oversight and continuity. "We received initial funding for a three-day AI bootcamp, but there was no follow-up plan or budget allocation for ongoing professional development," reported a faculty development officer (Participant E, personal communication, June 17, 2025). Others stressed that training must be contextualized: "Generic modules imported from abroad don't resonate with our teaching realities or learner needs" (Participant B, personal communication, June 12, 2025). These critiques align with calls for decolonial adaptations to capacity-building curricula (Adekunle, 2023) [1].

5. Institutional Autonomy and Stakeholder Engagement

Although not labeled as a stand-alone pillar, the theme of stakeholder engagement and institutional autonomy permeates the Strategy. Document analysis revealed only seven explicit references to "university autonomy" and five to "stakeholder consultation," suggesting limited formal mechanisms for higher-education input in policy design (Ministry of Technology and Science, Republic of Zambia, 2025) [12].

Interview narratives painted a similar picture: "We were invited to a one-day workshop during the draft stage but received the final document weeks later with no room for revision," recounted a university registrar (Participant G, personal communication, June 25, 2025). Conversely, a policymaker defended the process: "Time constraints and cross-ministry coordination challenges made deeper consultations difficult, but we remain open to iterative revisions" (Participant H, personal communication, June 23, 2025).

This disconnect points to a critical gap in collaborative governance. Without institutionalized forums that balance central directives with university prerogatives, the Strategy risks top-down implementation that undermines both academic freedom and local ownership - a tension highlighted in regulatory governance theory (Hood, 1991) [6].

Collectively, these findings demonstrate that while Zambia's National AI Strategy establishes comprehensive governance pillars reflecting international best practices, significant challenges in operationalization - particularly around accountability, resource equity, and inclusive decision-making - must be addressed to realize AI's transformative potential in higher education.

6. Discussion

The empirical findings highlight complex synergies and tensions across the Strategy's governance pillars when

situated within theoretical and decolonial lenses. This discussion interprets these results in relation to policy-analysis frameworks, examines equity and resource alignment, and articulates pathways for collaborative, context-sensitive AI governance in Zambian higher education.

1. Navigating the Ethical-Accountability Nexus
Although the Strategy's emphasis on fairness, transparency, and Ethics Impact Assessments aligns with UNESCO's rights-based governance ideals (UNESCO, 2021) [16], the absence of dedicated oversight bodies at the university level undercuts accountability. From Hood's regulatory perspective, Zambia's reliance on voluntary ethical codes resembles self-regulation, which risks weak enforcement without formal sanctions or monitoring structures (Hood, 1991) [6]. Kingdon's politics stream further suggests that the rapid policy window created by national digital-transformation momentum privileged top-down ethics prescriptions over institution-driven accountability mechanisms (Kingdon, 2011) [7]. To bridge this gap, policy entrepreneurs should institutionalize ethics committees within higher-education councils, equipped with clear mandates, budgets, and dispute-resolution protocols.

2. Data Stewardship and Resource Equity
Data governance requirements reflect global best practices-mandating secure, interoperable platforms and adherence to the Zambia Data Protection Act (Ministry of Technology and Science, Republic of Zambia, 2025) [12] - yet legacy systems and funding shortfalls impede compliance. This resource-regulation misalignment echoes continental surveys where African universities struggle to match data-security benchmarks (Ndlovu & Kofi, 2024) [13]. Regulatory governance theory argues for economic instruments - such as ring-fenced grants or matched-funding schemes - to incentivize infrastructure upgrades alongside persuasive strategies like technical guidelines (Majone, 1997) [10]. Embedding such incentives within the Strategy would align statutory data-stewardship mandates with institutional capacities.

3. Infrastructure Equity and Regional Disparities
Commitments to campus-wide connectivity via public-private partnerships demonstrate a persuasive and economic mix of instruments (Hood, 1991) [6], yet participants reported urban-center bias in partner investment (Participant F, June 20, 2025). This uneven rollout risks deepening intra-national digital divides identified in Zambia's broader ICT policy (TechEstate, 2025) [15]. A more nuanced governance approach would adopt regionally weighted grant criteria and require PPP agreements to include rural-campus quotas, ensuring infrastructural equity across provinces.

4. Capacity Building through a Decolonial Lens
The train-the-trainer model aligns with persuasive and economic strategies to build AI literacy (Ministry of Technology and Science, Republic of Zambia, 2025) [12], but imported curricula and short-term bootcamps have limited resonance with local pedagogies (Participant B, June 12, 2025). Decolonial theory urges epistemic disobedience - replacing one-size-fits-all modules with curricula co-developed by local academic communities, embedding indigenous knowledge systems and context-specific case studies (Adekunle, 2023; Mignolo & Walsh, 2018) [1, 11]. This shift would honor the Strategy's decolonial aspirations by operationalizing them within faculty development programs.

5. Institutional Autonomy and Collaborative Governance: Sparse references to stakeholder consultation and university autonomy reveal a governance design skewed toward command-and-control instruments (Ministry of Technology and Science, Republic of Zambia, 2025) [12]. Yet regulatory governance scholarship emphasizes that sustainable oversight emerges from hybrid models combining top-down standards with bottom-up self-regulation and multi-actor networks (Hood, 1991; Majone, 1997) [6, 10]. Establishing formal AI governance councils -comprised of ministry officials, university representatives, student bodies, and civil-society actors - could institutionalize iterative policy revision, balance autonomy with accountability, and foster shared ownership.

Implications for Policy and Practice
By mapping the Strategy's governance pillars against theoretical typologies and decolonial criteria, this discussion surfaces three actionable imperatives:

1. Institutionalize ethics and data-stewardship bodies within higher-education governance structures.
2. Align financial instruments and PPP incentives with regional equity and infrastructure needs.
3. Co-create capacity-building curricula with local epistemic communities to realize decolonial commitments.

These pathways not only address operational bottlenecks but also reposition Zambian universities as active co-designers of AI policy rather than passive implementers. In doing so, they pave the way for a genuinely collaborative, context-sensitive governance framework that can sustain AI's transformative promise in higher education.

7. Conclusion and Recommendations
This article critically examined Zambia's National Artificial Intelligence Strategy 2024-2026 through policy-analysis and decolonial lenses, assessing its governance pillars - ethical guidelines, data stewardship, infrastructure, capacity building, and stakeholder engagement - against institutional realities in higher education. While the Strategy reflects international best practices in rights-based AI governance (UNESCO, 2021) [16] and commits to ethical, technical, and infrastructural investments (Ministry of Technology and Science, Republic of Zambia, 2025) [12], our analysis reveals persistent gaps in accountability mechanisms, resource equity, localized capacity, and genuine university participation. Without targeted reforms and inclusive governance structures, the Strategy risks uneven implementation and missed opportunities for decolonial innovation.

1. Synthesis of Key Insights

1. **Ethics without Oversight:** Although mandatory Ethics Impact Assessments institutionalize transparency and fairness, the absence of dedicated university-level oversight bodies undermines enforceability (Participant A; UNESCO, 2021) [16].
2. **Data Mandates versus Resources:** Standardized data-

governance protocols align with the Zambia Data Protection Act (2018) but falter amid legacy systems and funding shortages (Participant D; Ndlovu & Kofi, 2024) [13].

3. **Uneven Infrastructure Rollout:** Public-private partnership models promise campus connectivity yet favor urban centers, exacerbating regional divides (Participant F; TechEstate, 2025) [15].
4. **Capacity-Building Disjunctures:** Train-the-trainer workshops introduce AI literacy, but imported curricula and short-term formats limit contextual relevance (Participant B; Adekunle, 2023) [1].
5. **Top-Down Stakeholder Engagement:** Limited consultation and scant references to university autonomy signal overly command-and-control governance that may weaken academic freedom (Participant G; Hood, 1991) [6].

2. Policy and Governance Recommendations

To translate strategic aspirations into sustainable practice, we propose:

1. Institutionalize AI Ethics and Data Stewardship Bodies

- Embed standing ethics committees and data-protection offices within the Zambia Higher Education Authority, endowed with clear mandates, budgets, and adjudication powers (Hood, 1991; Ministry of Technology and Science, Republic of Zambia, 2025) [6, 12].
- Link compliance to accreditation criteria, ensuring universities prioritize ethical oversight and secure data management.

2. Align Financial Instruments with Equity Goals

- Introduce ring-fenced grants and matched-funding schemes targeting infrastructure upgrades in under-resourced campuses, bridging the digital divide (Majone, 1997; Ndlovu & Kofi, 2024) [10, 13].
- Stipulate rural-campus quotas in public-private partnership agreements to guarantee equitable resource distribution (TechEstate, 2025) [15].

3. Co-create Decolonial Capacity-Building Programs

- Convene working groups of local academic experts, community leaders, and AI practitioners to co-design curricula grounded in indigenous knowledge and Zambian pedagogies (Adekunle, 2023; Mignolo & Walsh, 2018) [1, 11].
- Transition from one-off bootcamps to sustained professional-development pathways, accompanied by monitoring and follow-up support.

4. Establish Multi-Actor AI Governance Councils

- Formulate national and institutional AI councils composed of ministry officials, university administrators, faculty, student representatives, and civil-society actors to facilitate iterative policy revisions and joint oversight (Kingdon, 2011) [7].
- Embed formal consultation schedules at draft, mid-term review, and pre-renewal stages to honor university autonomy and foster shared ownership.

3. Implications for Practice

Adopting these reforms repositions Zambian universities as proactive co-designers of AI policy rather than passive implementers. Strengthened ethics and data bodies will bolster trust among students and staff. Equitable funding mechanisms will enable all institutions - regardless of location - to develop foundational infrastructure. Locally tailored training programs will build sustainable expertise and stimulate research innovation. Finally, multi-actor governance councils will balance accountability with autonomy, catalyzing systemic learning and adaptive policymaking.

4. Directions for Future Research

Building on this study's insights, further inquiry should:

1. Conduct longitudinal case studies of Strategy implementation across diverse campuses to track progress and unintended consequences.
2. Compare Zambia's AI governance experiences with peer nations in Southern Africa to identify replicable best practices and region-wide policy synergies.
3. Explore student and community perspectives on AI's ethical, social, and pedagogical impacts to enrich participatory governance models.
4. Evaluate the efficacy of co-created, decolonial capacity-building curricula through mixed-methods assessments of learner outcomes and innovation outputs.

By integrating these recommendations and research agendas, policymakers and higher-education leaders can actualize the transformative potential of AI - anchored in equity, ethics, and local epistemologies - thereby charting a sustainable path for Zambia's digital education future.

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