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ORIGINAL RESEARCH ARTICLE

E-Learning and Cultural Meaning in Post-Conflict Liberian Universities: A Decolonial Sociological Analysis

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Abstract

This article examines how cultural attitudes shape the adoption of e-learning among students, faculty, and administrators at the African Methodist Episcopal University (AMEU) and the University of Liberia (UL). Using a qualitative comparative case study involving 65 participants (29 semi-structured interviews and four student focus group discussions with 36 participants), the study draws on the Technology Acceptance Model (TAM), Hofstede's Cultural Dimensions Theory, Structuration Theory, Cultural Lag Theory, and Decolonial Education Theory to analyze the sociocultural dimensions of digital learning in post-conflict Liberia. The findings identify six dominant cultural attitudes influencing e-learning adoption: the primacy of face-to-face interaction as a relational form of knowledge exchange; skepticism toward online credentials linked to perceived societal devaluation; communal learning preferences that conflict with individualized platform designs; the emergence of the "BBC" (Born-Before-Computer) cohort requiring dignity-preserving rather than deficit-oriented pedagogies; conditional acceptance shaped by infrastructure inequalities; and postcolonial awareness of epistemic assumptions embedded within digital platforms. The study further shows that participants routinely moved teaching and learning onto WhatsApp. Lower data costs and everyday familiarity explain much of this preference; the article argues that perceived alignment with collectivist and oral communication practices offers a useful additional interpretation, and it proposes perceived cultural alignment as a construct for future testing alongside conventional TAM explanations. The article argues that resistance to e-learning should not be read simply as technophobia, but often as culturally grounded evaluations of educational technologies whose embedded assumptions may conflict with local pedagogical traditions and postcolonial realities. Implications for platform design, faculty development, and digital education policy in post-conflict higher education contexts are discussed.

Keywords: *E-learning, cultural attitudes, Liberian higher education, decolonial education, Technology Acceptance Model*

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1. Introduction

The global expansion of e-learning has proceeded under assumptions that scholars have increasingly, and justifiably, found difficult to sustain. International organisations, including UNESCO, the OECD, and the World Bank, position digital education as a democratising mechanism for improving learning outcomes and widening access in low-income countries (UNESCO, 2021; World Bank, 2020). This framing carries an implicit logic: that platforms developed in high-resource, Western institutional contexts can transfer to radically different sociocultural and infrastructural environments with minimal adaptation. Palmer and Chandir (2023) name this logic "techno-global rationality," a framework that privileges efficiency, standardisation, and linear knowledge transmission over culturally grounded pedagogical practice. It is precisely this rationality that this study places under scrutiny.

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The COVID-19 pandemic served as an inadvertent stress test of these assumptions. Emergency shifts to remote instruction in 2020 exposed deep structural disparities between Global North and Global South universities, as institutions in high-income countries leveraged existing technological infrastructure while those in low- and middle-income countries confronted compounding constraints: inadequate connectivity, insufficient device access, undertrained faculty, and policy frameworks unprepared for rapid digital transformation (Adeniyi et al., 2024). What Vurayai (2025) calls the "digital poverty penalty" became visible at scale, with economically disadvantaged students absorbing disproportionate financial, temporal, and cognitive costs to participate in online education.

Liberia occupies a distinctive position within this broader picture. Its higher education system was devastated by two civil wars (1989–1997, 1999–2003), which destroyed infrastructure, decimated the educated professional class, and disrupted an entire generation's educational trajectories (Challoner & Forget, 2011). Post-conflict reconstruction has occurred under severe resource constraints substantially shaped by international donor priorities, producing what Cardoso and Faletto (1979) describe as "externally induced development" in which reform patterns are conditioned by the international situation rather than internally generated institutional logic. E-learning enters Liberia, as it enters much of Sub-Saharan Africa, through this historically produced structure of dependency.

Liberia has among the lowest internet penetration rates globally, with only 32.4% of the population online and access concentrated overwhelmingly in Monrovia (Kemp, 2025). Only about a third of the population had access to electricity in 2023 (32.5%; World Bank, 2025), and supply remains unreliable for many of those connected to the grid. High data costs, mobile-first device ownership, and severe faculty training deficits compound these material constraints (Kennedy, 2024). Yet the most analytically underexplored dimension of Liberian e-learning adoption is not infrastructural: it is cultural. Students and faculty at Liberian universities have articulated resistance to digital platforms that existing scholarship has too readily attributed to ignorance, technical deficit, or mere infrastructural frustration. This study argues that such resistance can constitute a principled, culturally grounded assessment of platforms whose architecture contradicts valued epistemological traditions.

The article draws on original qualitative data from AMEU and UL, two of Liberia's principal universities, one public and one private, to examine how collectivist values, oral epistemologies, high power distance relationships, and postcolonial consciousness shape e-learning attitudes. It contributes to three scholarly conversations: the literature on e-learning adoption in Sub-Saharan African higher education; theoretical debates about the adequacy of TAM in non-Western adoption contexts; and decolonial scholarship on the epistemic politics of educational technology transfer.

1.1 Problem Statement and Research Gap

The e-learning adoption literature for Sub-Saharan Africa is substantive in volume but uneven in analytical depth. Studies from Nigeria, Kenya, South Africa, Ghana, and Rwanda have documented platform uptake rates, catalogued infrastructural barriers, and generated faculty attitude surveys with varying methodological rigour. What this body of work has not systematically produced is a theoretically grounded account of why cultural attitudes take the specific forms they do, how they interact synergistically with infrastructural constraints to produce stable resistance equilibria, and what the decolonial dimensions of that resistance might actually be. Three interlocking gaps define the problem this study addresses.

First, the field has not resolved a foundational interpretive disagreement about the nature of resistance. TAM-informed scholarship, which remains dominant in educational technology research, treats adoption resistance primarily as a deficit of perceived usefulness or ease of use, amenable to interface redesign or training interventions (Davis, 1989; Venkatesh & Davis, 2000). Culturally situated analyses, by contrast, document resistance as expressing culturally coherent assessments of whether imported technologies serve valued pedagogical purposes (Avoseh, 2001; Bekele et al., 2023). These are not merely methodological differences; they produce incompatible policy prescriptions. The literature rarely confronts this contradiction with the analytical precision it demands.

Second, existing scholarship consistently undertheorises the synergistic relationship between cultural attitudes and practical barriers. Studies tend to treat cultural resistance and infrastructural constraints as separate, addressable obstacles. Cultural Lag Theory (Ogburn, 1957) and Structuration Theory (Giddens, 1984) together suggest a possible dynamic in which infrastructure failures validate cultural skepticism, cultural resistance weakens the case for infrastructure investment, and the two reinforce each other in a feedback loop that single-dimension interventions may struggle to break. This proposition has not been examined in Liberian contexts. The present study explores its plausibility through stakeholder accounts; a full test would require longitudinal and institutional data.

Third, the literature fails to capture what post-conflict contexts specifically do to technology adoption dynamics. Liberia's 14-year civil war did not merely disrupt infrastructure; it may also have weakened trust in institutions and left many stakeholders wary of externally imposed solutions, creating conditions in which what looks like technophobia may instead reflect reasoned institutional distrust. Sierra Leone's post-war experience offers partial parallels (Sawaneh et al., 2024; Jackson, 2019), but Liberia's distinctive colonial history, its specific war genealogy, and its particular relationship with

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American institutional influence require direct investigation rather than comparative inference.

Liberian e-learning research has been primarily quantitative and individually focused. Vululleh (2018) identified cultural barriers in a survey-based study without theorising how those barriers emerge from historical and epistemological contexts. Vaye et al. (2022) documented that 68% of engineering undergraduates felt unprepared for e-learning without exploring what cultural values their unpreparedness was protecting. Kennedy's survey studies of ICT integration and lecturer readiness (2023, 2024) and his reviews of digital inclusion and ICT integration in Liberia (2025a, 2025b) provide essential baseline evidence on systemic gaps, but they leave the cultural meanings that stakeholders attach to these gaps largely unexamined. No published study has examined both institutions together in a comparative design, and none has applied decolonial theory to Liberian e-learning adoption with empirical grounding in stakeholder narratives. This is the precise analytical space this research occupies.

1.2 Research Objectives and Questions

The study pursues four interconnected objectives. The first is to identify and analyse prevailing cultural attitudes toward e-learning at AMEU and UL, examining how collectivist values, power distance relationships, oral traditions, and postcolonial awareness shape technology adoption. The second is to examine how cultural attitudes intersect with practical barriers, including infrastructure deficits, economic constraints, training inadequacy, and platform design limitations, to influence adoption, effectiveness, and sustainability. The third is to evaluate the feasibility of aligning e-learning platforms and pedagogical practices with Liberian cultural values and educational traditions. The fourth is to propose evidence-based, culturally responsive strategies for promoting inclusive and equitable e-learning implementation grounded in stakeholder recommendations and theoretical insights.

These objectives generate four corresponding research questions: What are the prevailing cultural attitudes toward e-learning at AMEU and UL, and how do they reflect collectivist values, power distance, oral traditions, and postcolonial awareness? How do cultural attitudes intersect with infrastructural and economic constraints to influence adoption dynamics? What is the feasibility of aligning platforms and pedagogical practices with Liberian cultural values? And what evidence-based, culturally responsive strategies can promote inclusive e-learning that addresses resistance without dismissing the pedagogical values it protects?

2. Theoretical Framework and Critical Literature Review

2.1 The Inadequacy of TAM in Collectivist Contexts and the Case for Cultural Alignment

Davis's (1989) Technology Acceptance Model remains the dominant framework in e-learning adoption research, positing that perceived usefulness and perceived ease of use are primary adoption determinants. The model's limitations in cross-cultural applications are documented but less consistently addressed. TAM emerged from Western organisational psychology and assumes adoption as an individual, cognitive cost-benefit calculation. Subsequent revisions extended its architecture without resolving this individualist premise. TAM2 (Venkatesh & Davis, 2000) added social influence and cognitive instrumental processes as antecedents to perceived usefulness, while the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) elevated social influence to a primary adoption determinant alongside performance expectancy and effort expectancy. These extensions represent genuine theoretical advances, but they treat social influence as a moderating pressure on individual adoption decisions. They do not reconceptualise the adoption unit itself as communal, nor do they address whether the very constructs of "usefulness" and "ease of use" carry culturally specific definitions that render cross-cultural application unstable.

The distinction matters empirically. Culture-Level TAM adaptations (Straub et al., 2002; Al-Gahtani et al., 2007) have tested whether TAM constructs hold across national cultural contexts but have primarily examined whether the model's predictive validity varies rather than whether the constructs themselves are culturally defined. In collectivist societies, technology adoption reflects communal deliberation, social hierarchies, and relational obligations rather than individual utility assessments (McCoy et al., 2005). What this study proposes differs from UTAUT's social influence construct specifically: social influence captures interpersonal pressure on an individual's adoption decision; perceived cultural alignment, as theorised here, captures whether the technology's fundamental architecture, its social organisation of learning, is congruent with how knowledge is understood to be produced and transmitted in a given cultural context. A technology can receive high social influence endorsement while remaining culturally misaligned at the architectural level. These are analytically distinct phenomena with different policy implications.

WhatsApp's paradoxical educational success in West African universities illustrates this distinction with particular clarity. Usman and Bukar (2022) found that Nigerian students preferred WhatsApp for academic purposes because it supported collaborative, dialogic interactions that their collectivist context valued. Madge

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et al. (2019) documented African distance learners using WhatsApp to transfer, translate, and transform educational experiences through peer communication and collective problem-solving. Jackson (2019) found it effective in Sierra Leonean higher education precisely because of its peer-to-peer and peer-to-instructor interaction affordances. A platform not built for education was outperforming institutional learning management systems specifically built for it. Social influence alone seems an unlikely explanation, since institutional platforms carry far greater institutional endorsement. Lower data demands and everyday familiarity are obvious candidates, and architectural and cultural fit is a further possibility. This study therefore proposes perceived cultural alignment as a candidate construct for collectivist settings, to sit alongside usefulness and ease of use. It is offered as a proposition for future measurement and testing, not as an established determinant.

2.2 Cultural Dimensions Theory: Explanatory Power and Analytical Limits

Hofstede's Cultural Dimensions Theory (2011) provides the most widely deployed macro-level framework for predicting how national culture shapes technology adoption. The four most relevant dimensions for Liberian e-learning are power distance, collectivism-individualism, uncertainty avoidance, and long-term orientation. In high power distance contexts, e-learning platforms that embed low power distance assumptions, prioritising learner autonomy, peer feedback, and decentralised authority, create pedagogical dissonance. Bangura (2024) found that Sierra Leonean faculty worried about diminished authority in online settings where traditional status markers are less visible. Twagilimana and Ndayambaje (2024) show, for Rwanda, how ICT readiness and implementation in higher education depend on institutional and contextual conditions rather than on technology alone. High collectivism means that technologies perceived as isolating face resistance regardless of technical quality, while those enabling peer interaction and communal engagement gain traction (Usman & Bukar, 2022; Simeon et al., 2022).

The framework carries significant limitations that this study applies with deliberate critical caution. Hofstede's dimensions were derived from IBM corporate survey data, and critics have justifiably challenged the essentialisation of culture as a fixed national attribute and the obscuring of historical processes through which cultural values are formed (Ailon, 2008). In post-conflict Liberia, where institutional rupture and donor-driven reconstruction have actively reshaped social conditions, treating Hofstede's dimensions as stable predictors risks analytical overreach. This study therefore uses Hofstede's framework as a starting vocabulary for identifying cultural patterns, not as an explanatory endpoint, and supplements it with Structuration Theory and Decolonial Theory to account for the dynamic, contested character of cultural values and the power relations through which platforms enter African institutional contexts.

2.3 Cultural Lag Theory, Synergistic Barrier Dynamics, and Its Decolonial Limits

Ogburn's (1957) Cultural Lag Theory provides a conceptual language for temporal misalignments between technological change and cultural adaptation. Applied to e-learning, it illuminates why rapid platform introduction produced not adoption but resistance: non-material culture, including oral traditions, collectivist pedagogies, and face-to-face relational norms, adapts more slowly than material infrastructure. This study draws on Cultural Lag Theory to frame a possible feedback loop between material and non-material dimensions: infrastructure failures may validate cultural skepticism about technology's appropriateness, while cultural resistance may signal low political priority for infrastructure investment.

However, a decolonial deployment of this framework requires explicit limits. Ogburn's theory is teleological: its underlying logic positions non-material culture as passively lagging and implies that convergence toward material modernity is the appropriate direction of travel. Santos (2014) and Ndlovu-Gatsheni (2018) explicitly reject this teleology, arguing that what appears as lag from a Western developmental standpoint may constitute principled, distinct epistemological positioning. This study, therefore, retains Cultural Lag Theory's feedback loop mechanics while refusing its normative directionality. The point is not that Liberian culture must catch up to imported platforms, but that the simultaneous presence of infrastructure failures and cultural resistance may create a reinforcing system that technical interventions alone are unlikely to disrupt. Ogburn provides the structural diagnosis; decolonial theory provides the ethical orientation.

Abou-Khalil et al. (2021) found that slow internet and electricity outages were primary obstacles in Lebanese emergency remote teaching; Kennedy (2023, 2025a) documents similar constraints in Liberia as chronic rather than pandemic-specific, indicating deeper systemic entrenchment. When the same infrastructure failures that make e-learning frustrating also confirm stakeholders' existing doubts about whether the technology is appropriate for their context, the two dimensions cease to be separable problems with separable solutions.

2.4 Structuration Theory and Agentic Resistance

Giddens's (1984) Structuration Theory offers an analytical grammar for understanding how stakeholder agency and institutional structures mutually constitute each other through recursive practice. Platform architectures structure possible interactions while users exercise agency in appropriating platforms according to local values. Porter et al. (2016) show young people in Ghana, Malawi, and South Africa appropriating mobile phones for their own learning purposes, often outside formal institutional channels. Czerniewicz and Brown

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(2013) reveal South African students navigating severe connectivity constraints through creative workarounds that challenged institutional assumptions about legitimate e-learning use. Faculty resistance is not simply irrational conservatism; it is agency exercised within structural constraints, shaped by pedagogical identities, positional security, and institutional culture. The present data contain both patterns: some faculty adapted their teaching by moving interaction to WhatsApp, while others held to traditional practice (Section 6.1). Both responses were structurally positioned.

2.5 Decolonial Theory and Epistemic Politics

Decolonial theory provides the critical framework this study uses to interrogate power relations in technology transfer. Ndlovu-Gatsheni (2018), drawing on Quijano (2000) and Mignolo (2007), argues that colonialism established enduring patterns of coloniality, including persistent epistemic, cultural, and economic hierarchies that survive formal political independence. In educational technology contexts, coloniality operates through platform architectures that embed Western individualistic assumptions as universal pedagogical standards, linguistic hierarchies favouring English, and economic structures that make African institutions dependent consumers of foreign tools. Palmer and Chandir (2023) theorise this as a "neo-colonial ethic," while Coleman (2019) and Couldry and Mejias (2019) extend the analysis to contemporary digital and data colonialism, wherein multinational technology corporations extract data and control digital infrastructure in ways serving corporate profits rather than African development priorities.

Following Santos (2014), this study refuses to treat African pedagogical traditions as obstacles to technological progress and treats stakeholder resistance as potentially constituting what Santos calls "epistemologies of the South," legitimate knowledge frameworks about what learning is for and how it functions best. Following Smith (2012), it centres stakeholder narratives as authoritative knowledge about what works in their specific contexts. The decolonial approach also interrogates the existing strategy literature reviewed under alignment and resistance frameworks. Blended learning strategies advocated by scholars such as Graham (2006) and documented in Rwanda (Twagilimana & Ndayambaje, 2024) and Tanzania (Mtebe & Raisamo, 2014) carry a hidden assumption: that face-to-face and online components can be smoothly integrated in institutions with stable electricity, consistent internet, and a campus attendance culture that holds across diverse student populations. As Ngoasong (2021, p. 622) observes, blended learning in African universities faces the distinctive challenge of "limited access to digital technology and the internet" that "poses unique challenges to universities seeking to scale-up management education." Post-conflict Liberian universities meet few of these preconditions. The application of culturally responsive pedagogy frameworks developed by Gay (2018) and Hammond (2015) within U.S. multicultural education contexts involves assumptions about infrastructural stability, content library availability, and regulatory environments that do not hold in Liberia. The literature offers productive vocabulary, but its transferability requires critical scrutiny rather than direct importation.

3. Methodology

The study employs a qualitative comparative case study design, treating AMEU and UL as purposively selected bounded institutional cases enabling structured comparison across the public-private and resource-differentiated dimensions most consequential for understanding e-learning adoption in Liberian higher education (Yin, 2018; Stake, 2006). Constructivist epistemology consistent with Braun and Clarke's (2019, 2021a) positioning of reflexive thematic analysis informs the analytical disposition throughout: participant accounts are treated as co-constructed narratives shaped by context, relationship, and positionality rather than as transparent windows onto an independent reality.

Table 1: Institutional Comparison: AMEU and UL

Dimension	AMEU	University of Liberia (UL)
Established	1995	1862
Status	Private, Christian-affiliated	Public, tuition-free flagship
Enrolment	~7,300 students	~18,000 students
SES profile	Higher socioeconomic mix	Broad socioeconomic diversity
Primary LMS	Google Classroom	Moodle
Infrastructure	More stable; managed rollout	Chronic outages; bandwidth deficits
Governance	Flexible institutional management	Bureaucratic; government-funded
E-learning history	Systematic COVID-era rollout; maintained post-pandemic	Emergency COVID adoption; patchy post-pandemic use

AMEU and UL were selected for their strategic institutional contrast. The institutions differ across eight analytically relevant dimensions, as Table 1 summarises. UL, established in 1862, is the nation's flagship public university enrolling approximately 18,000 students, with a tuition-free model creating a socioeconomically diverse student body, severe infrastructure constraints, and a bureaucratic governance structure characteristic of large public institutions. AMEU, founded in 1995 as a private, Christian-affiliated institution, enrolls approximately 7,300 students from a relatively higher socioeconomic demographic, has greater institutional flexibility, and implemented Google Classroom more systematically during and after the COVID-19 period. This maximum variation approach enhances analytical robustness by identifying patterns that persist across divergent

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institutional contexts while surfacing institution-specific dynamics (Palinkas et al., 2015).

Data collection engaged 65 participants across two formats. Table 2 presents participant characteristics. Twenty-nine participated in semi-structured interviews: 16 students (9 from AMEU, 7 from UL), 10 faculty (5 from each institution), and 3 ICT/e-learning administrators. Thirty-six students took part in four focus group discussions (FGDs), two per institution. Each FGD had nine participants, with one male and one female group at each site, to enable frank discussion across the gender dynamics Kennedy (2025a) identifies as significant in Liberian e-learning access. Faculty and administrators did not take part in the FGDs. Data collection occurred between August and November 2025. All participants had a minimum of two years of e-learning exposure. Interviews and FGDs lasted 45 to 90 minutes, were audio-recorded with participant consent, and were conducted in English, Liberia's official medium of instruction.

Recruitment proceeded in two stages. Deans, heads of department, and programme coordinators at each institution first circulated study information through departmental announcements, email lists, and student associations. To reduce the risk that gatekeepers would steer participation toward institutionally favoured views, early participants were then asked to suggest peers who met the selection criteria, particularly from under-represented disciplines and age groups. Inclusion required current enrolment or employment at AMEU or UL and at least two years of exposure to institutional e-learning. Interview and FGD participation was tracked to avoid double counting. Because only three ICT and e-learning administrators took part, and one institution supplied a single administrator, administrators are reported jointly, without gender, age, or institutional attribution, and their quotations carry neutral codes (ADM-1 to ADM-3).

Table 2: Participant Characteristics

Category	AMEU (n)	UL (n)	Total	Gender split	Age cohorts
Students (Interview)	9	7	16	Mixed	18-45+
Faculty (Interview)	5	5	10	Mixed	Under 45 / 45+
ICT Administrators	–	–	3	Not reported	Not reported
FGD Participants	18	18	36	Gender-segregated	Mixed
TOTAL	32	30	65		

Note: The three ICT and e-learning administrators are reported jointly to protect their anonymity, so the institutional totals exclude them (32 AMEU + 30 UL + 3 administrators = 65). All four FGDs were student-only, with male and female groups held separately at each institution.

Participant selection employed purposive maximum variation sampling across age, gender, discipline, and digital proficiency. Faculty were stratified into under-45 and 45-plus cohorts to capture possible generational differences. Student participants were drawn from Sociology, Theology, Business, and Social Sciences. Consistent with the reflexive approach, saturation was not treated as a criterion for theme validity, since themes are constructed by the researcher rather than discovered in the data (Braun & Clarke, 2021b). A code log was kept instead as a pragmatic check on sample adequacy, in the spirit of information power (Malterud et al., 2016; Hennink & Kaiser, 2022). Few new codes appeared after Interview 12, later interviews elaborated rather than extended existing codes, and the FGDs added 12 codes on collective dynamics, all within the first two groups. This record informed the decision to close recruitment; it is not offered as evidence that the themes are complete.

Data analysis followed Braun and Clarke's (2019) six-phase reflexive thematic analysis. Transcripts were coded in NVivo 14, combining deductive codes drawn from the theoretical framework (for example, "power distance" and "perceived usefulness") with inductive codes for patterns the framework did not anticipate (for example, "WhatsApp as communal space" and "BBC identity"). To illustrate theme development: codes such as "online seen as not serious," "interaction makes class real," "seeing the instructor," and "accustomed to traditional teaching" were first grouped as a candidate theme on classroom presence. Reviewing these codes against the full dataset showed that participants were making a claim about how knowledge is produced, not simply stating a delivery preference, so the theme was redefined as face-to-face primacy as relational epistemology. Codes on in-person examinations and the standing of online degrees, initially placed in this cluster, were moved to a separate theme on credential skepticism. Thick description (Ponterotto, 2006) then embedded participant statements within their broader sociocultural meanings. Document analysis of the Ministry of Education Education Sector Plan 2022–2027 (Ministry of Education, 2022), the NCHE E-Learning Standards (NCHE, 2020b), and institutional e-learning documentation served two purposes. First, it established what policy assumes: the Standards, for instance, limit online delivery to 40% of a course and presuppose affordable connectivity and reliable electricity. Second, it allowed participant accounts to be read against official commitments; the gap between planned connectivity improvements and the conditions faculty described (Section 6.1) was identified in this way. Documents informed interpretation but were not coded as a source of cultural attitudes. The researcher's position as an academic employed at one of the case institutions required sustained reflexive attention; reflexive memos maintained throughout data collection documented interpretive decisions and managed potential confirmatory bias. The study received ethical approval before data collection from the University of Liberia Institutional Review Board (Approval No. IRB 00013730, [11/03/2025]). Because the researcher is employed at AMEU, particular care was taken to protect voluntariness and confidentiality at that institution: students were assured that taking part, or

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declining, would have no bearing on their academic standing, and faculty were assured that their responses would not be shared with institutional leadership.

4. Findings

4.1 Six Dominant Cultural Attitudes

Analysis identified six dominant cultural attitudes toward e-learning that were identified at both institutions and, with differing emphasis, in all three participant categories. They are not discrete attitudes but overlapping, mutually reinforcing orientations that together constitute a culturally coherent stance toward digital education. Where counts are reported below, they give the number of interview transcripts (out of 29) containing at least one segment coded to the theme. They show how widely a pattern ran through this purposive sample; they are not estimates of prevalence among Liberian students or faculty. FGD data are reported at group level, since group talk does not allow individual positions to be counted reliably.

Face-to-face primacy as relational epistemology. The most pervasive attitude across both institutions was a preference for physical co-presence articulated not as convenience but as a pedagogical requirement. Participants consistently described learning as a relational activity constituted through embodied dialogue, shared physical context, and the kinds of knowledge transmission that occur when teacher and student occupy the same room. This reflects what Ubuntu philosophy theorises as individual identity and knowledge emerging through relationships with others (Letseka, 2013). A UL faculty member was direct:

> *"Students often see anything that is not done like face-to-face… is just in passing and not serious."* **(UL-M-R9, Faculty, Interview)**

A UL student reinforced this relational framing:

> *"The reason why most students see that physical classes are more real than the online classes is that we interact with one another. We see the instructor face-to-face."* **(UL-M-FGD1, Student, Focus Group)**

An AMEU faculty member connected this preference to the cultural fabric of Liberian higher education:

> *"In Liberia, we are accustomed to traditional learning or teaching. Because of that, a few students and faculty members find it difficult to learn or teach online."* **(AMEU-M-R3, Faculty, Interview)**

Face-to-face primacy was coded in 27 of the 29 interview transcripts; the remaining two interviewees did not express it. Divergence also appeared among those who did: some mature working students valued online study for its flexibility and lower travel costs (AMEU-F-SR6, below), and one UL faculty member argued for online provision when heavy rains prevent travel (UL-M-R7, below). The breadth of the pattern across student and faculty categories and both institutions nonetheless suggests a widely shared cultural logic within this sample, rather than superficial resistance.

Credential skepticism. A second persistent attitude concerned fears that online credentials would face societal devaluation in Liberian employment and professional contexts. A student articulated this directly:

> *"And then going to a new way of learning, where you can only sit at home, you do your exam, and what are you? You have a degree, you stay at home, and no one takes your degree seriously. It is also a good thing, but it affects the students."* **(AMEU-M-SR1, Student, Interview)**

A UL faculty member confirmed that this perception is widespread:

> *"So even if someone tells you that I did my courses online, I graduated, I did my degree online, you feel that the person has done nothing."* **(UL-M-R9, Faculty, Interview)**

Faculty reinforced the institutional dimension of this concern:

> *"And I think the university backs my assertion about legitimacy because every time, they will tell us, although you are having online classes, when it's time to get midterm and final exams, they have to be in-person."* **(AMEU-F-R2, Faculty, Interview)**

Communal learning preferences in tension with individualistic platform design. Formal learning management systems at both institutions embed assumptions about learning as a solitary cognitive process: individual content consumption, individual assignment submission, and individual grade reception. A UL faculty member named this architectural contradiction precisely:

> *"Moodle is designed for students to work independently, read materials on their own, and submit assignments individually. But our students learn through discussion, explanation, and group work. The platform structure fights against how they actually learn."* **(UL-M-R6, Faculty, Interview)**

Students described creating informal compensatory structures around this mismatch:

> *"In the online classes I took, we had a separate chat room where we discussed everything. When we had assignments, and some people didn't understand, we scheduled time to meet in the chat and discuss as a group. Sometimes we even met physically in the library or on campus to work together."* **(AMEU-F-SR6, Student, Interview)**

An AMEU faculty member observed that even basic assignment comprehension improved when moved to communal channels:

> *"I have to open a WhatsApp group so that assignments, for some reason, they seem to understand the assignment when you put it in a WhatsApp chat group more than when you upload it on the e-learning platform."* **(AMEU-F-R2, Faculty, Interview)**

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The BBC (Born-Before-Computer) identity. A generational positioning emerged among older faculty and some mature students, one articulated not primarily as technical incompetence but as a concern about pedagogical dignity. This is what distinguishes the BBC finding analytically from simple skill deficits: participants described not lacking skills but fearing the consequences of skill exposure in institutional settings that could undermine their standing. An ICT administrator identified the dynamic:

> *"In our environment, in our culture, those people who teach good English are those who went to school in the 60s. They are the ones who are BBC (born before computer). But they're the guys who teach English. They have the materials, they know how to teach the materials, but they don't know how to use the technology to teach the materials."* **(ADM-1, ICT Administrator, Interview)**

A second ICT administrator confirmed that the stakes were institutional, not merely personal:

> *"Many senior faculty are referred to as BBC (Born Before Computer) and some fear losing relevance or positions if ICT becomes dominant."* **(ADM-2, ICT Administrator, Interview)**

A UL faculty member described how the BBC identity translated into active resistance:

> *"Many faculty are not technologically inclined so they either refuse to adapt or kick against it online teaching."* **(UL-M-R7, Faculty, Interview)**

Five of six faculty members over 50 explicitly invoked BBC language or directly related concepts. The BBC identity functions as a socially constructed collective narrative that legitimates technological outsider status through generational membership, making individual difficulty into shared cultural identity rather than personal failing.

Conditional acceptance contingent on infrastructure justice. Participants at both institutions expressed not categorical rejection but conditional willingness to engage with e-learning, provided that material conditions for equitable participation were met. This conditionality is analytically significant: it repositions adoption as something structurally owed rather than something individuals must earn through attitude change. A UL faculty member articulated this through the Liberian climate example:

> *"For me, I think having the online learning especially at the University or the mature people level, it's good to have the online learning. For instance, sometimes, like, look at our seasons in Liberia now, sometimes it rains heavily, and people don't have to say, it's raining, I'm not able to commute to school, so that means I'll not go to class today."* **(UL-M-R7, Faculty, Interview)**

A student grounded conditionality in economic calculation rather than cultural preference:

> *"For me, both are okay. Online gives you the flexibility to do other things. If you don't have transport fare to come to town, it's cheaper because you can join class from anywhere at any time and still do your activities."* **(AMEU-F-SR6, Student, Interview)**

The conditionality was typically stated through phrases like "if the platform works," "if I have data," and "if instructors are effective", indicating that acceptance depends on circumstances beyond participants' control. Eleven of 16 students expressed willingness to accept e-learning under appropriate circumstances, compared to 5 of 10 faculty, with mature working students showing the highest conditional acceptance. These figures describe patterns in this sample, not rates in the wider university population.

Postcolonial awareness of epistemic politics in platform design. Across faculty interviews and FGDs at both institutions, participants articulated a recognition that imported platforms carry cultural assumptions serving other contexts better than their own. Some described this as discomfort with platforms that feel foreign. Others were more specific. A UL faculty member pointed to the gap between imported policy assumptions and local conditions:

> *"Policy documents talk about digital transformation and IT infrastructure development, but we're still struggling with basic connectivity. The plans say connectivity will improve by 2026, but it's almost 2026, and we haven't seen the promised improvements. Meanwhile, we're expected to implement e-learning standards without the infrastructure they assume exists."* **(UL-M-R7, Faculty, Interview)**

A student made the cultural alienation explicit:

> *"Online mode of learning is Western way of learning that is strange to us. It will take a long time for our society to embrace it."* **(UL-F-SR13, Student, Interview)**

Postcolonial concerns about e-learning as a Western imposition were coded in 9 of the 29 interview transcripts. These participants tended to be faculty in humanities and social sciences, older faculty with historical memory of colonialism, and more politically conscious students. Because most interviewees did not raise these concerns explicitly, the finding shows that postcolonial reasoning is present across categories and at both institutions in this sample, not that it is a dominant or universal frame. It is one of several lenses through which stakeholders evaluate technologies arriving from outside.

4.2 The WhatsApp Paradox and Its Theoretical Implications

Alongside these attitudes, the study documents what it terms the WhatsApp paradox: the consistent finding that an application not designed for education, lacking grade books, assignment submission architecture, or curriculum alignment tools, was described by participants as working better as a learning medium than the institutional platforms specifically built for that purpose. A preference

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for WhatsApp over the institutional LMS was coded in 27 of the 29 interview transcripts and was raised in each of the four FGDs. The FGD finding describes the direction of group discussion, not a unanimous view of every member. A UL faculty member was categorical:

> *"I post lecture materials on Moodle as required, but real teaching happens in a WhatsApp group. That's where students engage, ask questions, and discuss concepts. WhatsApp accidentally got the social learning part right."* **(UL-M-R7, Faculty, Interview)**

An AMEU faculty member drew the contrast directly:

> *"If you create a WhatsApp group, you will see more interaction than on the Google Classroom platform."* **(AMEU-F-R2, Faculty, Interview)**

Students explained the practical dimension:

> *"WhatsApp is preferred as it consumes less data than platforms like Google Meet."* **(UL-F-FGD, Student, Focus Group Discussion)**

Several explanations for this preference are available, and they are not mutually exclusive. The most immediate are material and practical. WhatsApp uses less data than video platforms or LMS pages, a point participants raised directly, and where data costs are high this alone could account for much of its appeal. It is also already installed on most phones and used daily, so it demands no new learning; in TAM's own terms, this is ease of use grounded in familiarity. These explanations sit comfortably within existing adoption models. The data suggest, however, that they may not exhaust the preference. Faculty described WhatsApp as the place where "real teaching happens" and where students "engage, ask questions, and discuss," language that concerns the social organisation of learning rather than cost or convenience. Its group features support the communal learning participants valued, its voice notes suit oral communication, its synchronous exchanges preserve relational engagement, and its informal tone may soften the power distance that formal interfaces can heighten. Cultural fit is therefore offered here as a useful interpretive extension that may operate alongside cost and familiarity, not as an established primary determinant; the present data cannot separate these influences.

This interpretation carries a theoretical implication for TAM, which Section 7.1 develops. If cultural fit shapes how collectivist users judge educational technologies, a model limited to usefulness and ease of use may miss part of the picture. Whether cultural alignment adds explanatory power beyond data cost and familiarity is an empirical question that the present qualitative design can raise but not settle.

4.3 Synergistic Barrier Dynamics

A further pattern concerns the relationship between cultural attitudes and practical constraints. Participants' accounts suggest that these do not operate as independent obstacles. Infrastructure failures appeared not only to frustrate users but also to confirm existing skepticism about whether digital education suits Liberian contexts. A UL faculty member described the compounding mechanism:

> *"You need to have electricity, internet data, which in most instances are not affordable or available to many young people and faculty in Liberia, including many university students."* **(UL-M-R9, Faculty, Interview)**

An ICT administrator explained how technical failures are interpreted:

> *"When the platform is down or slow, students cannot submit assignments on time. Faculty get frustrated because they cannot upload materials or conduct assessments. Then everyone blames e-learning itself rather than the infrastructure problems."* **(ADM-3, ICT Administrator, Interview)**

When a faculty member has spent three years watching their Moodle-based course materials become inaccessible during power outages, telling them that e-learning is pedagogically appropriate requires not just evidence of its benefits but counterevidence against the failure experiences through which their skepticism has been constructed. The reverse direction of the loop, in which cultural resistance lowers the institutional and political priority given to infrastructure investment, is a plausible interpretation rather than an observed finding: participants did not describe budget decisions, and the study did not examine them. The proposed investment-resistance feedback loop is therefore best read as a hypothesis consistent with Cultural Lag Theory, which future longitudinal and institutional research should examine, for example by tracking budget allocations alongside platform performance and stakeholder attitudes.

4.4 Comparing AMEU and UL: Shared Themes and Site Differences

Read together, the two cases show more common ground than difference. Face-to-face primacy, credential skepticism, the preference for WhatsApp over the institutional LMS, and BBC language about older faculty appeared at both institutions and were voiced by students and faculty alike (for example, UL-M-R9 and AMEU-M-R3 on classroom presence; AMEU-M-SR1 and UL-M-R9 on credentials; UL-M-R7 and AMEU-F-R2 on WhatsApp). That these orientations hold across a large public, tuition-free flagship and a smaller private, church-affiliated university suggests that they belong to a shared national academic culture rather than to one institution's circumstances.

The differences the data can support are differences of emphasis, not of kind. At UL, where Moodle runs on chronically constrained infrastructure (Table 1), accounts were more often framed through power, data, and connectivity failures, including connectivity promised in policy but not delivered (UL-M-R9, UL-M-R7), and the most explicit description of online study as a "Western way of learning" came from a UL student (UL-F-SR13). At AMEU, where Google Classroom had a more systematic rollout, concerns centred less on whether the

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platform worked than on the quality of interaction it allowed and on institutional signals about legitimacy, such as the requirement that examinations remain in person (AMEU-F-R2, AMEU-M-SR1). One reading is that where basic access is more secure, pedagogical and cultural concerns come to the fore, whereas chronic failure keeps infrastructure at the centre of stakeholders' reasoning.

These contrasts should be read cautiously. The sub-samples at each site are small, the quotations cited are illustrative rather than exhaustive, and the study was not designed to estimate institutional effects. They are best treated as hypotheses for comparative work with larger and more balanced institutional samples.

5. Discussion

5.1 Extending TAM Through Perceived Cultural Alignment

The proposed TAM extension requires analytical precision in relation to prior work. The argument is not that perceived usefulness and ease of use are irrelevant in Liberian e-learning adoption contexts; they are present and operational. The argument is that in collectivist settings, the construct of "usefulness" is defined relationally rather than individually. A platform is useful not when it enhances individual learning performance in the manner Davis (1989) originally specified, but when it enables the kinds of communal knowledge construction, peer interaction, and hierarchically mediated guidance that define pedagogical quality in this cultural context. "Ease of use" similarly carries cultural loading: a platform is easy to use not simply when its interface is intuitive but when its social architecture is familiar. WhatsApp is easy to use in Liberian universities because it is already embedded in the social fabric through which participants conduct their communal lives. Moodle may feel difficult less because its interface is complex than because it requires the adoption of an entirely different social organisation of learning.

This respecification of perceived usefulness as culturally constituted aligns with Bhattacharya et al.'s (2024) observation that effective implementation of educational technology requires participatory processes that ensure solutions are appropriate for the communities they serve. It also aligns with Winschiers-Theophilus and Bidwell's (2013) theoretical argument that technology design in African contexts must be grounded in local epistemologies. Mwandosya et al.'s (2022) co-design research at the College of Business Education in Tanzania, which produced a mobile educational tool that outperformed the institution's previously adopted commercial system after iterative, locally grounded prototyping, provides empirical support for the same principle.

Because the distinction from UTAUT's social influence construct was set out in Section 4.1, it needs only to be applied here. WhatsApp lacked formal institutional endorsement, yet participants across categories preferred it to mandated platforms, which makes social influence an unlikely primary explanation. Once data cost and familiarity are acknowledged, what remains is a plausible role for architectural congruence with communal learning values. Perceived cultural alignment is therefore presented as a proposed construct whose distinctiveness from ease of use and social influence would need to be shown through scale development and testing in future quantitative work.

5.2 Resistance as Decolonial Agency

The decolonial reading of resistance documented in this study diverges from both TAM-informed deficit framings and from cultural lag analyses that position non-material culture as passively lagging behind material innovation. Participants at both institutions, most consistently among faculty with postgraduate education and among administrators who had engaged directly with platform procurement decisions, articulated resistance that constitutes protective agency: a deliberate refusal to accept that platforms whose assumptions contradict their pedagogical values should be uncritically adopted because they are institutionally mandated.

This is not a romantic celebration of tradition over innovation. Participants consistently expressed conditional willingness to adopt e-learning provided that material conditions and platform design addressed their concerns. The conditionality is itself decolonially significant: rather than accepting the terms of engagement set by platforms designed for other contexts, stakeholders asserted the right to define the conditions under which digital education becomes appropriate for their context. Santos (2014) theorises this as "epistemologies of the South," a refusal to accept the universalisation of North-produced knowledge frameworks. Ndlovu-Gatsheni (2018) frames it as epistemic disobedience. In the concrete Liberian context, it manifests as faculty who maintain traditional pedagogical practices not because they cannot change but because they have assessed the available alternatives and found them inadequate.

The postcolonial awareness documented among participants extends this analysis into the domain of platform politics. That a minority of Liberian faculty and students in this sample articulate, however informally, a recognition that imported platforms serve other contexts better than their own is a significant empirical finding. It suggests that decolonial awareness is not exclusively an academic discourse; it is a lived analytical disposition present in the practical reasoning of educational practitioners. This finding resonates with arguments by Palmer and Chandir (2023) and Koole et al. (2024) that the "neo-colonial ethic" of techno-global rationality produces concrete epistemic effects in the educational settings into which it is introduced, effects that stakeholders can name even without formal decolonial theoretical vocabulary.

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5.3 Convergences and Divergences with the Regional Literature: The Specificity of Post-Conflict Dynamics

The study's findings converge with key patterns across the regional literature while extending them in theoretically significant ways. The preference for WhatsApp over institutional LMS systems documented by Usman and Bukar (2022) in Nigeria, Madge et al. (2019) across African distance learners, and Jackson (2019) in Sierra Leone aligns directly with this study's findings at AMEU and UL. High power distance concerns about faculty authority erosion, documented by Bangura (2024) in Sierra Leone and Sawaneh et al. (2024), are also present in the Liberian data; whether the post-conflict history of institutional destruction intensifies them cannot be established from this study. The finding that infrastructure failures can validate cultural skepticism, rather than simply constraining adoption, resonates with South African evidence that connectivity constraints shape what students treat as legitimate e-learning practice (Czerniewicz & Brown, 2013).

The most significant divergence from the regional literature concerns the specificity of post-conflict institutional dynamics, and this divergence carries theoretical weight beyond infrastructure comparisons. Rwanda's blended learning literature (Twagilimana & Ndayambaje, 2024) and Tanzania's LMS adoption studies (Mtebe & Raisamo, 2014) assume a degree of institutional stability, faculty-student ratio manageability, and infrastructure reliability that Liberian universities do not yet possess. But the deeper divergence is epistemological, not merely logistical. Liberia's 14-year civil war not only destroyed physical infrastructure; it plausibly also weakened trust in institutional legitimacy itself. A generation of current faculty and senior students came of age in conditions where externally imposed solutions, delivered by international actors with donor priorities, repeatedly failed to serve Liberian interests. One plausible interpretation is that the conditionality documented in this study is less an attitudinal reluctance, addressable through communication campaigns or capacity building, than a historically produced, institutionally grounded specification of the terms under which adoption becomes rational for people with legitimate reasons to distrust externally imposed systems. Because the present data do not trace how war experiences shaped individual attitudes, this post-conflict reading remains an interpretation that future life-history, longitudinal, and institutional research should examine.

This distinction matters for policy. Rwanda's blended learning success occurred in a context of post-genocide institutional reconstruction substantially directed by the state toward explicit developmental goals, with relatively stable post-conflict governance producing institutional reliability that Liberia does not yet have. Sierra Leone offers the closest parallel (Sawaneh et al., 2024; Jackson, 2019), but Liberia's specific colonial genealogy, founded through the settlement of freed and freeborn African Americans with a complex relationship to American institutional influence, and its longer democratic fragility produce adoption dynamics that require dedicated investigation rather than borrowed frameworks. The conditional acceptance pattern documented here is more structurally grounded than the attitude change literature implies: conditions are not preferences to be addressed through persuasion, but requirements whose absence makes adoption genuinely irrational from the perspective of students who would bear the costs.

6. Conclusion and Implications

6.1 Limitations

This study carries several limitations that scope its contributions. The urban Monrovian focus means findings are not directly transferable to rural Liberian institutions, which face more severe infrastructure constraints and more pronounced traditional cultural orientations. The qualitative methodology supports analytical generalisation but not statistical representativeness. The cross-sectional design captures cultural attitudes at a single point in time and cannot track how attitudes shift as infrastructure develops or generational composition changes. Finally, data collection was conducted entirely in English, Liberia's official medium of instruction but not the first language of most participants; while this reflects standard academic practice at both institutions, it may underrepresent forms of cultural expression more naturally conveyed in indigenous languages. Descriptive counts derive from a purposive sample and indicate patterning, not prevalence. Lastly, the proposed investment-resistance feedback loop and the post-conflict reading of conditionality are interpretations that the cross-sectional design cannot test.

6.2 Scholarly Contribution

This study makes three interconnected contributions to scholarship on e-learning adoption, cultural attitudes, and higher education in developing contexts. First, it proposes a culturally situated respecification of TAM's adoption constructs for collectivist settings by proposing perceived cultural alignment as a candidate construct for future testing. The WhatsApp preference documented here is consistent with this proposal, although data cost and familiarity also contribute and cannot be separated from cultural fit in the present data. Second, it proposes that cultural attitudes and practical barriers may interact as a reinforcing feedback mechanism, a hypothesis consistent with Cultural Lag Theory that the qualitative evidence from a post-conflict African context makes plausible but does not test. Third, it provides empirical texture for decolonial education theory's claims about epistemic politics in technology adoption by showing that postcolonial awareness appears, among a minority of participants, as an observable practitioner disposition in Liberian higher education, present in stakeholder reasoning without formal theoretical vocabulary.

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The study also contributes to the comparative institutional literature on African higher education by examining whether public-private institutional differences, resource profiles, and implementation histories are associated with different emphases in e-learning attitudes within a shared national cultural context. The cross-site comparison (Section 6.4) suggests that AMEU's more systematically managed implementation may shift stakeholder concern from basic access toward interaction quality and legitimacy, raising the possibility that implementation quality and institutional trust act as mediating variables the adoption literature needs to model more explicitly.

6.3 Policy Implications

For Liberian higher education policy, the most immediate implication is that e-learning frameworks in the Education Sector Plan 2022–2027 and the NCHE strategic plan articulate culturally appropriate digital learning as a goal without specifying what cultural appropriateness requires or how it can be operationalised. Platform procurement criteria should require demonstrable collectivist learning affordances: group communication features, synchronous interaction capabilities, voice messaging options, and social architectures that enable rather than foreclose communal knowledge construction. Data costs must be treated as a structural equity issue rather than an individual access problem; internet data subsidies for educational purposes are a prerequisite for e-learning adoption, not an optional enhancement. Faculty development programmes must be reoriented from technical skill remediation to pedagogical transformation and dignity preservation, a shift that the BBC identity finding strongly supports.

For post-conflict contexts broadly, including South Sudan, the Central African Republic, and Somalia, the study offers a framework for navigating the tension between the urgency of digital transformation and the cultural legitimacy requirements that sustainable adoption demands. Conditionality is not obstruction; it is a specification of the terms under which adoption becomes rational. Policymakers who treat these conditions as obstacles to be overcome through communication campaigns will produce the same cycles of mandated adoption and persistent resistance that have characterised Liberian e-learning to date.

6.4 Institutional Practice

For AMEU and UL specifically, the study recommends hybrid pedagogical models that preserve face-to-face instruction primacy while incorporating digital supplements, rather than transitioning to fully online delivery. This is not a concession to resistance; it is a recognition that the relational epistemology participants articulated is a legitimate pedagogical framework that technology implementation should accommodate rather than displace. Platform redesign should prioritise synchronous communication, group features, and voice messaging capabilities. Economic support programmes eliminating differential data costs between institutional and commercial internet use are necessary before equity-based cultural resistance can be addressed. Stakeholder consultation must be treated as substantive design input rather than a communication strategy, recognising that faculty and students possess situated knowledge about what works in their contexts that external expertise cannot replicate.

6.5 Directions for Future Research

Rural Liberian institutions require dedicated investigation that this study's findings cannot simply be extended to cover. Longitudinal research tracking whether and how the six dominant attitudes documented here shift as infrastructure develops and generational composition of the student body changes would provide essential evidence for understanding the Cultural Lag dynamics this study theorises but cannot observe over time. Gender-specific qualitative investigations examining how Liberian women navigate the intersection of cultural, economic, and domestic barriers to e-learning participation represent an important adjacent research priority. Finally, comparative work examining whether the TAM respecification proposed here holds in other high-collectivism, post-conflict African contexts would test the contribution's generalisability and refine its specification. Longitudinal and institutional research should also examine the proposed investment-resistance feedback loop directly, for example by tracking budget allocations, platform uptime, and stakeholder attitudes over time, and should test whether perceived cultural alignment predicts adoption once data cost and platform familiarity are taken into account.

Declarations

Data Availability statement. The data supporting the findings of this study are available from the corresponding author upon reasonable request.

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References

Abou-Khalil, V., Helou, S., Khalifé, E., Chen, M. A., Majumdar, R., & Ogata, H. (2021). Emergency online learning in low-resource settings: Effective student engagement strategies. Education Sciences, 11(1), Article 24. https://doi.org/10.3390/educsci11010024

Adeniyi, I. S., Al Hamad, N. M., Adewusi, O. E., Unachukwu, C. C., Osawaru, B., Onyebuchi, C. N., Omolawal, S. A., Aliu, A. O., & David, I. O. (2024). E-learning platforms in higher education: A comparative review of the USA and Africa. International Journal of Science and Research

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Archive, 11(1), 1686–1697. https://doi.org/10.30574/ijsra.2024.11.1.0283

Ailon, G. (2008). Mirror, mirror on the wall: Culture's consequences in a value test of its own design. Academy of Management Review, 33(4), 885–904.

Al-Gahtani, S. S., Hubona, G. S., & Wang, J. (2007). Information technology (IT) in Saudi Arabia: Culture and the acceptance and use of IT. Information & Management, 44(8), 681–691.

Avoseh, M. B. M. (2001). Learning to be active citizens: Lessons of traditional Africa for lifelong learning. International Journal of Lifelong Education, 20(6), 479–486.

Bangura, M. (2024). Sociology of e-learning: A social observational trek at universities in Freetown, Sierra Leone. European Journal of Contemporary Education and E-Learning, 2(1), 193–207. https://doi.org/10.59324/ejceel.2024.2(1).16

Bekele, T. A., Amponsah, S., & Karkouti, I. M. (2023). African philosophy for successful integration of technology in higher education. British Journal of Educational Technology, 54(6), 1520–1538. https://doi.org/10.1111/bjet.13364

Bhattacharya, L., Nandakumar, M., Dasgupta, C., & Murthy, S. (2024). Shaping the discourse around quality EdTech in India: Including contextualized and evidence-based solutions in the ecosystem. Education Sciences, 14(5), Article 481. https://doi.org/10.3390/educsci14050481

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. Qualitative Research in Sport, Exercise and Health, 11(4), 589–597.

Braun, V., & Clarke, V. (2021a). Thematic Analysis: A Practical Guide. SAGE.

Braun, V., & Clarke, V. (2021b). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. Qualitative Research in Sport, Exercise and Health, 13(2), 201–216. https://doi.org/10.1080/2159676X.2019.1704846

Cardoso, F. H., & Faletto, E. (1979). Dependency and Development in Latin America. University of California Press.

Challoner, K. R., & Forget, N. (2011). Effect of civil war on medical education in Liberia. International Journal of Emergency Medicine, 4(1), 6. https://doi.org/10.1186/1865-1380-4-6

Coleman, D. (2019). Digital colonialism: The 21st century scramble for Africa through the extraction and control of user data and the limitations of data protection laws. Michigan Journal of Race and Law, 24(2), 417–439. https://repository.law.umich.edu/mjrl/vol24/iss2/6

Couldry, N., & Mejias, U. A. (2019). Data colonialism: Rethinking big data's relation to the contemporary subject. Television & New Media, 20(4), 336–349.

Czerniewicz, L., & Brown, C. (2013). The habitus of digital "strangers" in higher education. British Journal of Educational Technology, 44(1), 44–53.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340.

Gay, G. (2018). Culturally Responsive Teaching: Theory, Research, and Practice (3rd ed.). Teachers College Press.

Giddens, A. (1984). The Constitution of Society. Polity Press.

Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), Handbook of Blended Learning (pp. 3–21). Pfeiffer.

Hammond, Z. (2015). Culturally Responsive Teaching and the Brain. Corwin.

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. Social Science & Medicine, 292, 114523.

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. Online Readings in Psychology and Culture, 2(1). https://doi.org/10.9707/2307-0919.1014

Jackson, E. A. (2019). The use of WhatsApp for flexible learning: Its effectiveness in supporting teaching and learning in Sierra Leone's higher education institutions. International Journal of Advanced Corporate Learning, 13(1), 35–47. https://doi.org/10.3991/ijac.v13i1.11381

Kemp, S. (2025). Digital 2025: Liberia. DataReportal. https://datareportal.com/reports/digital-2025-liberia

Kennedy, G. M. (2023). Challenges of ICT integration in teachers' education: A case study of the College of Education, University of Liberia. International Journal of Social Science and Education Research Studies, 3(5), 860–870.

Kennedy, G. M. (2024). Assessing lecturers' technological pedagogical content knowledge in teaching online courses at selected universities in Liberia. American Journal of Educational Research, 12(6), 201–214. https://doi.org/10.12691/education-12-6-3

Kennedy, G. M. (2025a). Digital inclusion in Liberia's education sector: Review of barriers, policy gaps, and strategic interventions. American Journal of Educational Research, 13(3), 102–110. https://doi.org/10.12691/education-13-3-1

Kennedy, G. M. (2025b). Integrating ICT in higher education in Liberia: A review of best practices, challenges, and opportunities. Journal of Education and Practice, 16(3). https://doi.org/10.7176/JEP/16-3-14

Koole, M., Smith, M., Traxler, J., Adam, T., & Footring, S. (2024). Decolonising educational technology. Education Sciences, 14(10), Article 1070. https://doi.org/10.3390/educsci14101070

Letseka, M. (2013). Educating for ubuntu/botho: Lessons from Basotho indigenous education. Open Journal of Philosophy, 3(2), 337–344.

Madge, C., Breines, M. R., Dalu, M. T. B., Gunter, A., Mittelmeier, J., Prinsloo, P., & Raghuram, P. (2019). WhatsApp use among African international distance education (IDE) students. Learning, Media and Technology, 44(3), 267–282. https://doi.org/10.1080/17439884.2019.1628048

Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. Qualitative Health Research, 26(13), 1753–1760. https://doi.org/10.1177/1049732315617444

McCoy, S., Galletta, D. F., & King, W. R. (2005). Integrating national culture into IS research: The need for current individual level measures. Communications of the Association for Information Systems, 15(12), 211–224.

Mignolo, W. D. (2007). Delinking: The rhetoric of modernity, the logic of coloniality and the grammar of de-coloniality. Cultural Studies, 21(2–3), 449–514.

Ministry of Education, Liberia. (2022). Education Sector Plan 2022–2027. Government of Liberia.

Mtebe, J. S., & Raisamo, R. (2014). Challenges and instructors' intention to adopt and use open educational resources in higher education in Tanzania. International Review of

© 2026 *Eloho, G. (2026). CC BY-NC-SA 4.0.* ISSN 3134-7118 · e-ISSN 3134-7126

Research in Open and Distributed Learning, 15(1), 249–271.

Mwandosya, A., Kalinga, E., & Mwakibinga, F. (2022). Co-evaluation of a participatory educational mobile tool: Usability outcomes from four campuses. Distance Education, 43(3), 391–410.

National Commission for Higher Education (NCHE). (2020a). Strategic Plan for Higher Education in Liberia, 2020–2025. Government of Liberia.

National Commission for Higher Education (NCHE). (2020b). E-Learning Standards for Higher Education Institutions (HEIs) in Liberia. Ministry of Education, Republic of Liberia.

Ndlovu-Gatsheni, S. J. (2018). Epistemic Freedom in Africa: Deprovincialization and Decolonization. Routledge.

Ngoasong, M. Z. (2021). Curriculum adaptation for blended learning in resource-scarce contexts. Journal of Management Education, 46(4), 622–655. https://doi.org/10.1177/10525629211047168

Ogburn, W. F. (1957). Cultural lag as theory. Sociology and Social Research, 41(3), 167–174.

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed-methods implementation research. Administration and Policy in Mental Health and Mental Health Services Research, 42(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y

Palmer, N., & Chandir, H. (2023). Education beyond techno-global rationality: Transnational learning, communicative agency and the neo-colonial ethic. Journal of Creative Communications, 18(3), 343–361. https://doi.org/10.1177/09732586231214465

Ponterotto, J. G. (2006). Brief note on the origins, evolution, and meaning of the qualitative research concept "thick description." The Qualitative Report, 11(3), 538–549.

Porter, G., Hampshire, K., Milner, J., Munthali, A., Robson, E., de Lannoy, A., Bango, A., Gunguluza, N., Mashiri, M., Tanle, A., & Abane, A. (2016). Mobile phones and education in Sub-Saharan Africa: From youth practice to public policy. Journal of International Development, 28(1), 22–39. https://doi.org/10.1002/jid.3116

Quijano, A. (2000). Coloniality of power and Eurocentrism in Latin America. International Sociology, 15(2), 215–232.

Santos, B. de S. (2014). Epistemologies of the South: Justice Against Epistemicide. Paradigm Publishers.

Sawaneh, I. A., Sesay, B., Mansaray, S. S., Koroma, M., & Inthavong, P. (2024). Assessing the impact of e-learning adoption on learning behavior in Sierra Leonean higher education. Asian Journal of Education and Social Studies, 50(5). https://doi.org/10.9734/AJESS/2024/v50i51342

Simeon, A. N., Babatunde, A. A., Abiodun, N. L., Olu, R. O., & Emem, A. I. (2022). Uptake, barriers, and determinants of e-learning among university students in selected low-income countries in Sub-Saharan Africa amidst the COVID-19 disruption: An online survey. Advances in Medical Education and Practice, 13, 609–617. https://doi.org/10.2147/AMEP.S357677

Smith, L. T. (2012). Decolonizing Methodologies: Research and Indigenous Peoples (2nd ed.). Zed Books.

Stake, R. E. (2006). Multiple Case Study Analysis. Guilford Press.

Straub, D., Loch, K., Evaristo, R., Karahanna, E., & Srite, M. (2002). Toward a theory-based measurement of culture. Journal of Global Information Management, 10(1), 13–23.

Twagilimana, I., & Ndayambaje, I. (2024). ICT readiness, implementation, and trajectory in higher education in Rwanda. In Higher Education ICT Integration in Africa (pp. 85–100). Routledge. https://doi.org/10.4324/9781003394877-6

UNESCO. (2021). Reimagining Our Futures Together: A New Social Contract for Education. UNESCO.

Usman, Y. D., & Bukar, A. (2022). Students' usage of WhatsApp instant messenger as a supporting tool for learning in Kaduna State, Nigeria. International Journal of Education and Development using Information and Communication Technology, 18(3), 147–158.

Vaye, C. N., Eze, P. C., & Berhane, B. T. (2022). Work-in-progress: Liberian undergraduate engineering students' perceptions of the impact of COVID-19 on their learning experience. In Proceedings of the 2022 IEEE Frontiers in Education Conference (FIE). IEEE.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the Technology Acceptance Model. Management Science, 46(2), 186–204.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425–478.

Vululleh, P. (2018). Determinants of students' e-learning acceptance in developing countries: An approach based on Structural Equation Modeling. International Journal of Education and Development using ICT, 14(1), 141–151.

Vurayai, S. (2025). COVID-19 and the digital poverty penalty in higher education in Southern Africa. In E. T. Woldegiorgis, L. Govender, & D. Z. Atibuni (Eds.), Rethinking Higher Education in Post-Apartheid South Africa: Transformative Trajectories within a Decolonial Paradigm (pp. 143–161). Routledge. https://doi.org/10.4324/9781003530299

Winschiers-Theophilus, H., & Bidwell, N. J. (2013). Toward an Afrocentric indigenous HCI paradigm. International Journal of Human-Computer Interaction, 29(4), 243–255.

World Bank. (2020). Liberia: Digital Economy Diagnostic Report. World Bank Group.

World Bank. (2025). Access to electricity (% of population): Liberia [Data set]. World Development Indicators. https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=LR

Yin, R. K. (2018). Case Study Research and Applications: Design and Methods (6th ed.). SAGE.

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