

Sustainable ELT for SDG 4: A Descriptive Study of Technology, Culture, and Faith

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ABSTRACT

This descriptive qualitative study explores how English Language Teaching (ELT) can support Sustainable Development Goal 4 (SDG 4) through the integration of technology, culture, and faith. The research was conducted at Universitas PGRI Wiranegara involving six lecturers and twenty pre-service teachers. Data were collected through semi-structured interviews, classroom observations, and lesson plan analysis. Findings reveal that technology promotes inclusive participation and digital ethics, cultural integration nurtures contextual identity and intercultural empathy, and faith-based reflection strengthens moral consciousness in communication. The combined Technology-Culture-Faith (TCF) model demonstrates how sustainable ELT can empower educators and learners to engage ethically, culturally, and digitally in language learning. This study contributes to the global discourse on sustainable education by presenting an integrative framework for reflective and values-driven English teaching.

Keywords: *Sustainable ELT; SDG 4; Technology integration; Culture; Faith.*

INTRODUCTION

In today’s interconnected world, teaching English is no longer just about mastering grammar and vocabulary. It is about shaping individuals who can think critically, act ethically, and communicate compassionately across cultural and digital boundaries. The vision of *Sustainable Development Goal 4 (SDG 4)*-quality education for all invites educators to create learning experiences that are inclusive, equitable, and transformative (United Nation, 2023). Within this vision, *English Language Teaching (ELT)* becomes a bridge between local identities and global responsibilities, where learning a language also means learning how to live responsibly in a shared world. Recent global initiatives highlight that education must “serve both people and planet” (UNESCO, 2023). For English educators, this means moving beyond linguistic competence toward nurturing intercultural awareness, digital responsibility, and moral reflection. The integration of technology, culture, and faith offers a holistic approach to achieve these aims-cultivating what this study terms *Sustainable ELT*.

The digital era has reshaped how we teach and learn. Once viewed as an auxiliary tool, technology has evolved into an ethical and pedagogical space that shapes how knowledge is shared and experienced. Carrier et al. (2017) describe digital language learning as an “interactive and contextualized opportunity for

authentic practice.” Taguchi (2023) adds that technology-enhanced learning can deepen intercultural engagement when guided by reflective pedagogy. However, as Aljabr & Al-Ahdal (2024) caution, innovation must be balanced with ethical awareness, especially in the age of artificial intelligence. Technology, then, is not merely about access or efficiency-it is about shaping responsible users who value empathy, honesty, and integrity in digital interactions. Yu, Guo, & Fu (2022) emphasize that technology can demonstratize education when used close, rather than widen, equity gaps. Sustainable ELT thus demands educators who are not only digitally competent but also critically conscious, ensuring that technological inclusion aligns with human values and social justice.

Culture gives life to language. It carries the wisdom, humor, and worldview of its speakers. In sustainable ELT, cultural contextualization means designing lessons that resonate with students’ lived realities while opening space for intercultural curiosity. Byram (2021) defines intercultural competence as the ability to reflect on one’s own and other’s cultural practices, while Jackson (2024) reminds us that true cultural learning dismantles stereotypes rather than reinforcing them. In multilingual and multicultural societies, grounding ELT in local narratives helps students see themselves as part of the global conversation. Local proverbs, community stories, and ecological themes make learning meaningful and personally connected. As Yu et al. (2022) note, “glocalized” pedagogy-linking local relevance with global responsibility-promotes community. When culture enters the classroom, learning becomes a celebration of diversity rather than an imitation of uniformity.

Faith, in the educational sense, is not confined to religious instruction-it reflects the moral and ethical dimensions that guide human interaction. Niyozov & Memon (2011) highlight Islamic educational values such as adab (moral discipline) and Amanah (trustworthiness) as foundations for ethical professionalism. Similarly, Martínez-Ariño & Teinturier (2019) show that faith-based education can promote social justice and civic responsibility in diverse contexts. Integrating faith-inspired reflection into ELT encourages learners to view language as a means for dialogue, compassion, and service.

Freire (2020.) reminds educators that “education is never neutral; it either liberates or domesticates.” By inviting moral reflection into ELT, teachers help student consider how worlds and communications shape the moral texture of society. In this way, language learning becomes an act of conscience-one that cultivates humility, respect, and empathy.

When technology, culture, and faith interact, they form a triadic relationship that enriches language education. Technology expands learning spaces, culture

provides context and relevance, and faith guides ethical and emotional integrity. This Technology-Culture-Faith (TCF) Framework envisions ELT as a sustainable ecosystem-one that harmonizes digital innovation, cultural identity, and moral purpose.

Emerging scholarship supports this integration. Dooly & Darvin (2022) advocate for inquiry-based digital pedagogy rooted in intercultural literacy, while Terttiaavini (2022) calls for education that is "collective, inclusive, and dialogic." These align with the idea that sustainability in ELT must be human-centered, balancing progress with values. Farrell (2022) further suggests that reflective practice enables teachers to align professional growth with ethical and intercultural dimensions, making sustainability both a personal and pedagogical journey.

In this context, sustainable ELT is not a trend but a transformation-a move from teaching English as a skill to teaching it as a means for human connection, civic engagement, and ethical coexistence. The TCF model embodies this transformation by showing how educators can use technology wisely, honor culture respectfully, and nurture faith meaningfully. Therefore the study addresses the following question: How do lecturers and pre-service teachers integrate technology, culture, and faith to promote sustainable learning in English Language Teaching (ELT)? The findings aim to provide theoretical and practical insights for educators pursuing SDG 4 through holistic and reflective ELT design.

METHODS

Research Paradigm

This study is grounded in a constructivist paradigm, which posits that knowledge and learning are human experiences shaped by context, interaction, and shared meaning (Creswell, J.W., & Creswel, 2017). his perspective, described as "naturalistic inquiry" (Lincoln, Yvonna S; GUBa, 2022), acknowledges teachers and learners as co-creators of knowledge, whose lived experiences and reflections shape the evolution of sustainable ELT rather than it being a fixed model.

Research Design

The study employs a descriptive qualitative design, aiming to capture authentic experiences and present a comprehensive narrative summary of events as they naturally occur (Nassaji, 2015; Sandelowski, 2021). This approach aligns with the study's purpose: to explore the integration of technology, culture, and faith in English teaching practices that support Sustainable Development Goal 4 (SDG 4), highlighting both the creativity and challenges of sustainable ELT.

Subjects of Research

The research took place at Universitas PGRI Wiranegara, East Java, Indonesia, chosen for its multicultural environment and initiatives promoting value-based

education, mirroring SDG 4 principles. Six English lecturers and twenty pre-service teachers participated voluntarily, all possessing prior experience in technology-integrated and intercultural teaching projects. Participants were selected via purposive sampling (Etikan, 2021) to identify information-rich cases. Ethical clearance was approved, and anonymity was ensured using pseudonyms.

Instruments

Data were gathered using three complementary instruments to ensure triangulation: (1) Semi-structured interviews, (2) Classroom observation, and (3) Lesson plan analysis. (1) Semi-structured Interviews: These served as the primary method to capture participants' reflections, lasting 40–60 minutes per session (Creswell & Creswel, 2023; Gill et al., 2022). The interview guide covered five central themes: digital tool integration, cultural influence on strategies, presence of faith/moral principles, challenges of combining these elements, and contribution to sustainable learning/SDG 4. Transcripts were validated by participants through member checking (Lincoln & Guba, 2022). (2) Classroom Observation: Observation across various ELT courses (e.g., Intercultural Communication, Speaking for Academic Purposes) enabled the researcher to witness sustainability principles enacted in real time (Cohen, Manion, & Keith, 2023). Observation sheets focused on three domains: digital engagement, cultural contextualization, and faith-based reflection, emphasizing non-intrusive recording of natural classroom dynamics. And (3) Lesson Plan Analysis: Lesson plans and teaching materials were reviewed to analyze intentional design related to sustainability (e.g., digital collaboration tasks, cultural projects, ethical reflection prompts). This provided objective evidence of how inclusivity, moral awareness, and cultural relevance were explicitly planned in written curriculum objectives.

Data Collection

Data were collected over four months (March to June 2025) in natural settings (Cresswell, 2018). The procedure involved four steps: (1) Recruitment and obtaining informed consent, (2) Interviews recorded via Zoom and transcribed verbatim, (3) Classroom observation during online and face-to-face lessons, and (4) Document gathering (syllabi, digital plans, essays). Ethical clearance was secured, and anonymity was maintained. Trustworthiness was established following Lincoln & Guba (2022) criteria (credibility, transferability, dependability, and confirmability).

Data analysis

Data analysis followed the six-phase thematic approach (Braun, V., & Clarke, 2022): (1) Familiarization, (2) Initial coding, (3) Searching for themes, (4) Reviewing themes, (5) Defining and naming themes, and (6) Producing the report. Codes (e.g.,

digital inclusion, intercultural empathy) were developed, and themes were synthesized under the broader Technology-Culture-Faith (TCF) framework. Nvivo 14 software supported the coding process. Credibility was ensured through peer debriefing and member checking (Lincoln, Yvonna S; Guba, 2022). The entire process adhered to ethical guidelines, respecting cultural and religious diversity (Freire, 2020).

RESULTS AND DISCUSSION

The data collected through interview, classroom observation, and lesson plan analysis were organized and coded using Nvivo 14. Through repeated reading and iterative coding, three major themes emerged: (1) Technology as Enabler of Inclusion, (2) Culture as Source of Identity and Empathy, and (3) Faith as Ethical Compass. These themes represent how participants co-constructed meaning about sustainability in English Language Teaching (ELT) within the Technology-Culture-Faith (TCF) framework.

Technology as Enabler of Inclusion

Nvivo coding revealed “technology” as the most frequently referenced node, appearing in 96% of all coded segments. Lecturers and pre-service teachers consistently described technology as a bridge for participation and creativity. One lecturer explained:

“Digital platforms help me hear voices that used to say silent in face-to-face classes. Everyone gets their turn to speak” (L3)

This sentiment reflects to (Patyguajardo, 2023) “critical digital pedagogy..... seeks to address inequalities by advocating for equitable access to technology and challenging systemic biases”. Participants mentioned the use of Google Classroom, Padlet, Kahoot, and ChatGBT as tools to promote collaboration, feedback, and reflection. Nvivo query results showed frequent co-occurrence between technology and inclusivity, suggesting that participants viewed digital engagement as central to equitable teaching.

Observation data confirmed this pattern. Lecturers often used digital breakout rooms to encourage discussion among mixed-ability students. Lesson plan analysis showed that 82% of plans contained objectives related to digital literacy or ethical online communication. However, participants also voiced concerns about technological over-reliance. A pre-service teacher noted:

“Sometimes we depend too much on technology, and students forget how to think critically without it.” (T11)

This ambivalence echoes (Aljabr & Al-Ahdal, 2024) warning that ethical literacy must accompany technological innovation. Sustainable ELT, therefore, requires balance-technology should empower, not replace, human thought and

interaction. The findings affirm that technology in ELT acts as both a tool and a value system. It support SDG 4 by ensuring accessibility while fostering reflective and responsible digital citizenship. This align with (G. Stanley, 2025) who emphasizes the need for pedagogy -first technology integration that sustains human connection in learning.

Culture as Source of Identity and Empathy

The second major theme identified was culture, coded 87% of interview responses. Both lecturers and students expressed that local and intercultural element in ELT nurtured deeper engagement and relevance.

A lecturer reflected:

“When students discuss local traditions in English, they feel proud. It’s not only about the language but about seeing their own culture valued.” (L2).

The analysis revealed that terms like “local”, “pride”, “intercultural”, and “identity” frequently co-occurred under the node cultural integration. Lesson plan frequently included topics such as eco-tourism, local folklore, and cultural proverbs, showing how English was used to celebrate, not replace, local heritage.

During classroom observation, students prepared bilingual presentation comparing Indonesian politeness strategies with those in Western cultures. These activities encouraged empathy, curiosity, and self-reflection-key aspects of intercultural communication competence (Byram, 2021):

“It’s fun to share our culture while learning English,” said one student. “It feels like both are connected.” (T5).

Such reflection embody (Jackson, 2024)–principle of dialogic intercultural learning, where communication become a two-way exchange. By connecting English to local realities, participants were developing what (Yu, Guo, and Fu, 2024) call glocal awareness-the ability to think globally while acting locally. Culture functioned as both content and context of sustainable ELT. It grounded lesson in authenticity and humanized global education. Integrating local narratives not only enriched classroom engagement but also built intercultural bridges, strengthening SDG 4’s call for inclusive and culturally responsive education.

Faith as Ethical Compass

Faith, interpreted as moral and spiritual grounding, emerged as a subtler yet profound theme. Although less frequently mentioned (appearing in 68% of coded nodes), faith underpinned participants’ ethical reflections about teaching. Lecturers often used short reflective prompts such as,

“How does honesty shape your communication?” (L5)

Similarly, students described faith as a personal guide that influenced behavior and classroom participation.

“Faith reminds me that learning should make us better people, not just smarter ones.” (T9)

The results showed that “honesty”, “trust”, and “responsibility” appeared across multiple nodes, connecting faith to ethics and character development. Observations revealed that classes sometimes began with silent reflection or short moral discussions before activities. These moments created a tone of respect, humility, and sincerity-values rooted in Islamic principles of *adab* and *amanah* (Niyozov & Memon, 2011).

Lesson plan analysis showed intentional inclusion of ethical learning outcomes such as “demonstrating integrity in communication” or “showing responsibility in digital collaboration”. This demonstrates that moral learning was not an afterthought but part of structured ELT design.

Faith in this study operated not as religious instruction but as moral literacy-a set of values promoting respect, honesty, and compassion. It echoes (Freire, 2020) belief that true education is both intellectual and ethical. Integrating faith within ELT adds a reflective dimension to sustainability, ensuring that technological and cultural innovations remain guided by conscience.

Table 1. Frequency of TCF Nodes Coded

Theme	Frequency of Coded Segments	Percentage of Total Nodes	Example Keywords
Technology as Inclusion	145	96%	“digital”, “AI”, “collaboration”, “access”, “Google Classroom”
Culture as Identity	131	87%	“local”, “heritage”, “dialogue”, “intercultural”, “pride”
Faith as Ethics	102	68%	“honesty,” trust”, “adab”, “moral”, “reflection”

Cross-Theme Integration: The TCF Synergy

When analyzed together, the three themes revealed a synergistic relationship. Technology made learning accessible, culture gave it meaning, and faith provided ethical direction. In one classroom project, students created environmental awareness posters in English using Canva. They integrated local proverbs about nature and reflected on their responsibility as language users.

“We learned to use technology to do something good, not just to get grades,”
 A student remarked. (T13).

This combination reflects (UNESCO, 2023) call for education that “integrates knowledge, ethics, and action.” In this sense, the Technology-Culture-Faith (TCF) model demonstrated how ELT can become a living practice of sustainability-where digital skills, cultural understanding, and moral character coexist harmoniously. The TCF synergy illustrates what (Sterling, 2022) terms transformative learning for sustainability-education that changes not only what learners know but who they

become. Sustainable ELT thus emerges as a moral and social endeavor, cultivating learners who are both skilled and responsible global citizens.

The findings affirm that sustainability in ELT goes beyond curriculum design-it is a way of teaching that unites innovation, identify, and integrity. The integration of technology allowed participants to democratize learning, giving all students an equal voice (G. Stanley, 2025). Cultural contextualization rooted lessons in authenticity, aligning with (Byram, 2021) framework of intercultural competence. Faith-based reflection ensured that these innovations remained ethically grounded, echoing (Freire, 2020) concept of education as moral action.

Together, these findings contribute to the growing conversation on human-centered sustainability in education (UNESCO, 2023). The TCF model presented in this study offers a descriptive yet practical framework for reimagining ELT as a site of ethical, cultural, and technological harmony.

CONCLUSION

This study set out to explore how technology, culture, and faith can be meaningfully integrated into English Language Teaching (ELT) to support Sustainable Development Goal 4 (SDG 4)-ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. Through descriptive qualitative analysis, the study uncovered how lecturers and pre-service educators at Universitas PGRI Wiranegara interpret and enact sustainability in their daily teaching practice. Three key insights emerged: (1) Technology acts as an enabler of inclusivity, broadening participation and supporting ethical digital engagement. (2) Culture serves as source of identity and empathy, grounding ELT in authenticity and relevance. (3) Faith functions as an ethical compass, shaping reflective and compassionate communication. Together, these dimensions form the Technology-Culture-Faith (TCF) Model, a framework that positions sustainable ELT as a dynamic and human-centered practice. The model emphasizes that technology gains meaning through cultural sensitivity and moral reflection, while culture and faith find new voice through the accessibility of digital tools. The integration of these dimensions transforms ELT into more than language learning-it becomes a pathway toward developing ethical, globally aware citizens who can think critically, act responsibly, and communicate with empathy.

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