



Technology and Islamic Values in English Language Teaching: A Contextual Pedagogical Framework for Value-Oriented Digital Instruction

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ABSTRACT

Purpose - This study examines how technology and Islamic values can be systematically cointegrated within ELT, proposing a theoretically grounded, 3D (3D) pedagogical framework applicable across Indonesian Muslim-majority educational settings. While prior research has independently documented the effectiveness of digital tools in language skill development and the importance of Islamic values in curriculum design, these two streams have rarely been synthesized into a coherent, empirically supported framework. This study addresses this gap by treating technological facilitation and moral value development as co-constitutive rather than competing pedagogical concerns.

Design/methodology/approach - A qualitative narrative literature review design was employed (Snyder, 2019). We retrieved peer-reviewed articles published between 2015 and 2025 from Google Scholar, SINTA-indexed national journals, and international Scopus-indexed databases. Thirty-five articles meeting three pre-established inclusion criteria were selected and analyzed using Miles and Huberman's (Miles & Huberman, 1994) three-stage thematic analysis: data reduction, data display, and conclusion drawing and verification. The inclusion criteria required each article to address: (1) technology integration in ELT; (2) Islamic values in education; or (3) the intersection of technology and character-based or value-oriented learning.

Findings - Three thematic findings emerged from the analysis. First, technology in ELT operates at three functionally distinct levels—motivational, pedagogical, and value-disseminative—but its educational effectiveness is determined by the depth of its pedagogical grounding, not by the technology itself. Second, Islamic values integration achieves the greatest impact when it is systematically embedded across all phases of the learning process—materials, task design, assessment, and classroom norms—rather than confined to content selection. Third, AI introduces significant personalization and feedback affordances but raises principled ethical challenges, such as data privacy, algorithmic bias, academic honesty, and the erosion of the relational bond between teachers and learners. A critical integration gap persists: practitioners lack a coherent framework that operationalizes technology use and values formation simultaneously.

Originality/value - This study makes a dual contribution to the literature. Theoretically, it extends the TPACK framework (Mishra & Koehler, 2006) by proposing a values-integrated TPACK dimension—values-integrated TPACK (VI-TPACK)—that accounts for the moral-ethical knowledge dimension required in Islamic educational contexts. Practically, it proposes a 3D contextual pedagogical framework—comprising Technological Facilitation, Value Internalization, and Contextual Adaptation—as an integrated model for value-oriented digital ELT. The framework provides evidence-based guidance for educators working through the productive



tension between global language instruction demands and local Islamic principles and offers a replicable model for a Muslim majority in international educational contexts.

Paper type – Review paper

Keywords: *Technology integration; Islamic values; Pedagogical framework; Artificial intelligence; Value-Oriented learning.*

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1. Introduction

English Language Teaching in Indonesia operates within a cultural and religious context that most global ELT scholarship does not account for. Indonesia is the world's largest Muslim-majority nation, and in schools and universities where English is taught, it arrives carrying the cultural assumptions of the Anglophone world—assumptions that may conflict, at points, with the Islamic principles that shape students' moral formation and daily life (Lie, 2017; Safitri et al., 2023). This is not a peripheral tension. It sits at the center of what it means to teach English well in an Islamic educational setting: teachers must simultaneously develop communicative competence and protect the integrity of their students' religio-moral identity (Djamdjuri et al., 2023).

Technology has simultaneously amplified both the opportunity and the problem. Digital platforms, mobile applications, and AI-powered tools have substantially expanded what is pedagogically possible in language classrooms—increasing access to authentic materials, enabling self-paced and adaptive learning, and enhancing learner engagement (Haleem et al., 2022; Hasumi & Chiu, 2024). Yet the internet is not a pedagogically neutral space: it is saturated with content reflecting Western cultural norms, including material substantively inconsistent with Islamic values (Isti'ana, 2024; Safitri et al., 2023). Issues of digital morality—including exposure to inappropriate content, cyberbullying, and the gradual erosion of religious identity through unmediated online engagement—have become pressing concerns for educators, families, and policymakers in Indonesian Islamic educational institutions (Akib, 2024).

Existing scholarship has approached this dual challenge from two separate and largely non-communicating directions. One body of work—predominantly from educational technology and applied linguistics—focuses on the effectiveness of digital tools in ELT, documenting gains in motivation, access, and language skill development (Dwiono et al., 2018; Pham, 2022; Wei, 2023). A second body of work addresses the integration of Islamic values in ELT, examining how teachers embed moral and religious principles into lesson content, materials design, and classroom culture (Astuti et al., 2024; Djamdjuri et al., 2023; Ghufron, 2022). What is critically absent is a framework that integrates these two bodies of practice into a coherent, theoretically grounded, and implementable model—one that treats technology and values not as competing priorities but as complementary elements of purposeful language pedagogy.

Recent scholarship has begun mapping this terrain, though significant integration gaps remain. Djamdjuri et al. (2023), in a systematic literature review, found that while Indonesian

Islamic schools have made meaningful efforts to integrate Islamic values into ELT, these efforts remain fragmented, teacher-dependent, and lack consistent pedagogical grounding. Astuti et al. (2024) documented that successful integration requires embedding values across the entire learning process—not just in content selection—and identified teacher capacity and digital literacy as the most persistent implementation barriers. Mananay (2024) demonstrated that AI tools, while promising for personalized instruction and feedback, face significant pedagogical alignment challenges when teachers are unprepared to use them purposefully. Suparman (2024), writing in *Alsuna: Journal of Arabic and English Language*, showed that digitalization of English learning must account for learners' cognitive and learning style diversity—a finding that applies with particular force when learners' cultural and religious identities shape how they engage with digital content. Hasumi and Chiu (2024), in a bibliometric analysis of technology-enhanced language learning, identified that the field is growing rapidly but that culturally contextualised and values-sensitive frameworks remain underrepresented in the global research base.

The gap this study addresses is therefore both practical and theoretical. Practically, teachers in Indonesian Islamic schools lack a coherent, evidence-based framework for designing technology-enhanced ELT activities that simultaneously develop language competence and reinforce Islamic values—an absence that forces educators into improvised, unsupported integration efforts. Theoretically, the literature lacks an integrative model that positions technological facilitation and moral value development as co-constitutive rather than competing dimensions of language pedagogical design. This conceptual fragmentation keeps the practical fragmentation documented in empirical studies in place.

This study addresses this dual gap through a qualitative narrative literature review that synthesizes evidence from the digital pedagogy and Islamic education literatures, and proposes a three-dimensional contextual pedagogical framework integrating technology and Islamic values in ELT. The framework extends the Technological Pedagogical Content Knowledge (TPACK) framework (Mishra & Koehler, 2006) by adding a values-integrated dimension (VI-TPACK) appropriate for Islamic educational contexts, and is designed to be applicable across the diversity of Indonesian Islamic school and university settings.

Two research questions guide the review:

RQ1: How has technology been integrated into ELT practices, and what pedagogical roles does it serve when applied in value-sensitive educational settings?

RQ2: How can Islamic values and technology be simultaneously and systematically embedded within ELT to produce holistic, contextually grounded language learning outcomes?

2. Literature Review

2.1 Technology in ELT: Beyond the Tool Metaphor

Research on technology integration in ELT has evolved considerably over the past decade, from studies documenting simple tool adoption to more nuanced accounts of how technology reshapes pedagogy, learner identity, and the social dynamics of language classrooms (Dwiono et al., 2018; Haleem et al., 2022). Hasumi and Chiu's (2024) bibliometric



analysis of 1,816 publications in technology-enhanced language learning identified eight distinct research fronts, with flipped learning, mobile-assisted language learning (MALL), and digital game-based learning (DGBL) as the most active and rapidly growing areas. These approaches share a common orientation: they shift learner roles from passive recipients to active participants in meaning-making, and they expand the temporal and spatial boundaries of language learning beyond the classroom.

The effectiveness evidence is broadly positive. Pham (2022) found that technology use increased student motivation and engagement in secondary English learning. Wei's (2023) mixed-methods study, published in *Frontiers in Psychology*, demonstrated that AI-mediated English instruction produced gains in learning achievement, L2 motivation, and self-regulated learning among EFL university students. Cao et al. (2023) showed that teachers' digital competency was positively associated with language learning outcomes, underscoring that technology's pedagogical value depends heavily on how it is deployed. Alshammary and Alhalafawy (2023), in a meta-analytic review in *Sustainability*, confirmed that digital platform use improved learning outcomes across educational levels, with interactive and adaptive platforms producing the largest effect sizes.

However, technology integration is not self-evidently beneficial. Nurhasanah et al. (2025) found that motivation gains from digital media did not automatically translate into meaningful learning without appropriate instructional design. This distinction—between engagement and learning—is central to the pedagogical critique of surface-level technology adoption: platforms can excite and entertain without producing the linguistic understanding or moral formation that educational institutions are designed to develop (Dong, 2025). The implication is that technology in ELT needs to be understood not as a tool that produces effects, but as a pedagogical medium whose outcomes depend on the design, context, and values framework within which it is used.

2.2 Islamic Values in ELT: From Content to Framework

The integration of Islamic values in ELT has been examined from several angles: as a curriculum design question, as a character education initiative, and as a response to the cultural tensions generated by English's global spread (Djamdjuri et al., 2023; Hawanti, 2016). Safitri et al. (2023) documented that teachers in Indonesian Islamic schools employed three broad categories of Islamic values in their ELT practice—values of faith (*iman*), values of worship (*ibadah*), and moral values (*akhlak*)—but found that implementation was largely tacit and teacher-dependent, without systematic curriculum support.

The motivation for this integration is both religious and practical. English learning materials, when drawn uncritically from global publishers, often embed Western cultural assumptions about gender relations, social norms, and interpersonal values that conflict with Islamic principles (Hanifiyah et al., 2023; Lie, 2017). Ghufon (2022) demonstrated that religious moderation—tolerance, anti-violence, cultural openness—could be embedded in ELT instructional materials as a constructive alternative to both uncritical Western cultural adoption and reactive rejection of English learning. Students who engaged with these materials reported gaining insight into both appropriate and inappropriate aspects of other cultures while developing more nuanced and confident Islamic identities.

At the curriculum and materials level, Astuti et al. (2024) argued that Islamic values integration is most effective when it spans all four competency domains of the national curriculum, not just content selection. Kurniawan and Puspitasari (2025) showed that authentic materials grounded in Islamic perspectives—including digital formats such as podcasts and interactive texts—served as effective bridges between language learning and values formation. Halstead's (2010) broader argument that education plays a pivotal role in shaping individuals' moral and ethical frameworks provides the theoretical foundation for this curricular orientation: language learning is never morally neutral, and its values dimensions deserve explicit pedagogical attention.

2.3 Artificial Intelligence in ELT: Opportunities and Ethical Challenges

Artificial Intelligence represents the most transformative current development in educational technology, and its implications for ELT in Islamic educational settings are particularly complex. AI's principal affordances for language learning are well-documented: personalized learning pathways, automated and immediate corrective feedback, adaptive assessment, and access to authentic language data at scale (Kovalenko & Baranivska, 2024; Mananay, 2024; Wei, 2023). These affordances directly address several persistent challenges in Indonesian ELT, including large class sizes, heterogeneous proficiency levels, and limited teacher capacity for individual learner attention.

Tulasi and Rao (2023) documented that AI's integration into ELT is producing measurable gains in engagement and proficiency when tools are purposefully selected and pedagogically aligned. Mananay (2024) synthesized findings from multiple AI-in-language-teaching studies to show that teachers who receive adequate preparation for AI integration report better outcomes and more confident professional practice. The key variable, consistent across studies, is teacher pedagogical readiness: AI tools without trained teachers to deploy them reduce to expensive novelties (Kovalenko & Baranivska, 2024).

The ethical challenges are equally significant. Unrestricted AI use in educational settings raises concerns about student data privacy, algorithmic bias in assessment, the risk of plagiarism through generative AI, and the potential erosion of the teacher-student relational bond that is central to moral formation in Islamic pedagogical philosophy (Akib, 2024; Isti'ana, 2024). For Islamic educational institutions specifically, these concerns intersect with foundational principles: AI tools must be evaluated not only for their pedagogical effectiveness but for their alignment with Islamic values regarding honesty (*amanah*), responsibility (*mas'uliyah*), and the preservation of the learner's dignity and moral agency.

2.4 TPACK as a Framework for Technology-Values Integration

The Technological Pedagogical Content Knowledge (TPACK) framework, originally proposed by Mishra and Koehler (2006), describes the intersection of teachers' technological knowledge, pedagogical knowledge, and content knowledge as the essential competency domain for effective technology integration in teaching. TPACK has been widely applied in ELT research to explain why some teachers use digital tools effectively while others use the same tools with negligible learning impact: the difference lies not in access to technology but in the quality of the intersectional knowledge that teachers bring to its deployment (Muttaqin, 2022).



In the context of Islamic ELT, however, TPACK as originally formulated is insufficient. It accounts for what teachers know about technology, pedagogy, and subject content, but not for what they know about values—specifically, the Islamic moral-ethical principles that should govern both what is taught and how digital environments are used for teaching. This study proposes that Islamic ELT requires an extended framework: Values-Integrated TPACK (VI-TPACK), which adds a fourth knowledge domain—Values Knowledge (VK)—defined as the capacity to identify, select, and embed Islamic moral principles systematically within technology-enhanced language activities (Moslimany et al., 2024; Suparman, 2024).

Ventista and Brown's (2023) systematic review of teacher professional learning confirmed that downstream student outcomes are significantly shaped by the depth and sustainability of teacher professional development, particularly when it is job-embedded, collaborative, and directly connected to classroom practice. For ELT teachers in Indonesian Islamic schools, this finding carries a direct policy implication: professional development must be TPACK-oriented in the extended, values-integrated sense. It must address not only digital skill-building and pedagogical knowledge, but the moral-ethical dimensions of technology deployment in language instruction. VI-TPACK represents the conceptual architecture for such professional development: it provides teachers with a principled basis for evaluating which digital platforms and activities align with Islamic values, how to design tasks that develop both language competence and moral formation simultaneously, and how to adapt these designs to the specific institutional and learner contexts in which they work. This theoretical extension is the foundational contribution of the present study to the ELT-technology integration literature.

3. Method

3.1 Research Design

This study employed a qualitative narrative literature review design (Snyder, 2019). Narrative reviews are appropriate when the aim is to synthesize a diverse and heterogeneous body of literature to identify conceptual patterns, tensions, and gaps rather than to aggregate effect sizes (Snyder, 2019). Given that this study spans two partially disconnected literatures—digital pedagogy in ELT and Islamic values integration—a narrative approach enables the kind of interpretive, cross-domain synthesis that quantitative meta-analysis cannot achieve. The narrative design is theory-building in orientation: it uses literature not merely to describe existing knowledge but to identify gaps and construct an integrative conceptual framework that responds to those gaps. This aligns with Torraco's (2016) extended literature review methodology, which distinguishes between reviews that summarize a mature literature and reviews that integrate an immature or fragmented one; the present study falls in the latter category.

3.2 Data Sources

Data sources consisted of peer-reviewed articles published between 2015 and 2025, retrieved from Google Scholar, SINTA-indexed national journals, and international Scopus-indexed databases. The ten-year window was selected to capture both established scholarship on technology integration in ELT and more recent empirical work on AI applications and Islamic

values frameworks in language education. Initial database searches using the terms “technology ELT,” “Islamic values language teaching,” “AI ELT,” and “digital pedagogy Islamic education” yielded 214 candidate sources. Following a two-stage screening process guided by PRISMA principles (title/abstract screening, then full-text review), a final corpus of 35 articles was retained. Inclusion criteria required each article to address at least one of the following: (1) technology integration in ELT contexts; (2) Islamic values or character education in formal educational settings; or (3) the intersection of technology and value-based or character-based learning. Studies were excluded if they were conference abstracts only, predatory journal publications, or did not engage with formal ELT contexts. Of the 35 included articles, 18 addressed technology in ELT, 11 addressed Islamic values integration, and 6 addressed both domains explicitly.

3.3 Data Analysis

Data analysis followed Miles and Huberman’s (1994) three-stage thematic procedure, selected for its systematic yet interpretively flexible approach to qualitative data synthesis. In the first stage (data reduction), relevant findings from selected studies were extracted and categorized into key themes: digital technology in ELT, Islamic values integration, AI in language teaching, and holistic pedagogical frameworks. Initial coding was conducted by the lead researcher, with a secondary review by a co-researcher to ensure consistency; discrepancies were resolved through discussion until consensus was reached. In the second stage (data display), categorized data were organized comparatively using a thematic matrix to identify patterns, convergences, and productive tensions across studies and between the two main literature streams. In the third stage (conclusion drawing and verification), synthesized findings from the matrix were used to construct the three-dimensional contextual pedagogical framework presented in the results section. Interpretive coherence was maintained through iterative cross-referencing of thematic categories against source texts throughout the analysis, and the framework was tested against the full corpus to verify that no significant counter-evidence had been omitted.

4. Results and Discussion

4.1 The Multi-Level Role of Technology in Islamic ELT Contexts

The literature reveals that technology in ELT does not function as a single unified phenomenon but operates at three distinct levels, each with different implications for value-oriented practice. At the first level, technology functions as a motivational tool: it increases student interest, participation, and time-on-task. Pham (2022) and Dong (2025) both document this motivational dimension, showing that digital platforms reduce the isolation and passivity that characterize traditional teacher-fronted instruction. At the second level, technology functions as a pedagogical enabler: it transforms what is instructionally possible, allowing for immediate feedback, adaptive content sequencing, and collaborative learning across physical distance (Nurhasanah et al., 2025; Wei, 2023). At the third level—and most relevant to Islamic ELT contexts—technology functions as a medium for value dissemination: digital platforms can carry Islamic content, model Islamic communicative norms, and create spaces for students to



practice tolerance, critical thinking, and religious moderation through English-medium interaction (Ghufron, 2022; Nurzannah & Ginting, 2022).

These three levels are not mutually exclusive, but they are not automatically integrated either. The dominant failure mode in technology adoption is shallow integration: technology is adopted at the motivational level without addressing the deeper pedagogical and values dimensions that produce meaningful learning (Dwiono et al., 2018). For Islamic ELT specifically, shallow integration exposes students to the full cultural payload of global digital media without the values scaffolding needed to process it critically (Akib, 2024; Isti'ana, 2024).

The implication is both analytical and practical: technology integration planning in Islamic ELT contexts must be organized around all three levels simultaneously, not sequentially. Selection of digital platforms should ask not only “will this motivate students?” but “what pedagogical design will make this tool produce language learning?” and “how does this platform support or challenge the values framework of this institution?” This three-part evaluative lens is the first operational dimension of the proposed framework. It also explains why technology adoption in Indonesian Islamic schools has yielded mixed results: many documented implementations address only the motivational level while neglecting pedagogical depth and values grounding, producing engagement without formation.

4.2 Islamic Values Integration: Practices and Persistent Gaps

The literature identifies three broad modes of Islamic values integration in ELT, corresponding to different points in the pedagogical process. The first mode is material-level integration: selecting, adapting, or creating English learning texts and tasks that embed Islamic content—stories grounded in Islamic tradition, discussion prompts addressing religious moderation, vocabulary drawn from Qur'anic or Hadith discourse (Hanifiyah et al., 2023; Kurniawan & Puspitasari, 2025). The second mode is process-level integration: embedding Islamic values in how learning activities are structured—encouraging collaborative rather than competitive dynamics, designing reflective tasks that connect language learning to students' religious identity, and modeling Islamic communicative ethics in teacher-student interaction (Astuti et al., 2024; Safitri et al., 2023). The third mode is purpose-level integration: framing English proficiency itself as a vehicle for Islamic mission—for understanding diverse cultures through a framework of tolerance (*tasamuh*), for accessing global knowledge in service of the Muslim community, and for communicating Islamic values to international audiences (Ghufron, 2022).

What the literature also consistently reveals is that these integration modes remain largely disconnected in practice. Djamdjuri et al.'s (2023) systematic review found that most documented integration efforts are teacher-dependent, curriculum-unsupported, and confined to the material level. Process-level and purpose-level integration—which require deeper pedagogical design and sustained professional development—are rare. This creates a fragility in Islamic ELT practice: when a committed individual teacher moves on, the values integration evaporates, because it was never embedded in curriculum structures or institutional frameworks.

The practical solution this review identifies is moving Islamic values integration from tacit individual practice to explicit institutional design—a shift with direct implications for curriculum policy, teacher education, and school leadership. Curriculum documents should specify not only what language content students will encounter but how Islamic values will be embedded in task design, assessment criteria, and classroom norms at every competency level. Teacher professional development should address values-pedagogical integration as a core professional competency, not as an optional enhancement. And school administrators should recognize values integration as a structural feature of the institutional learning environment that requires systematic support, not as a private concern of individual teachers. This institutionalization argument addresses directly the fragility documented in the literature: when values integration is teacher-dependent rather than curriculum-embedded, it evaporates when committed teachers leave, and the investment in Islamic education identity is lost.

4.3 AI in Islamic ELT: Personalization with Principled Boundaries

Artificial Intelligence occupies a distinctive position in this analysis. Its affordances—personalized learning pathways, immediate automated feedback, adaptive difficulty calibration, and access to vast authentic language corpora—directly address several of the most persistent structural challenges in Indonesian ELT: large class sizes, wide proficiency variation, and insufficient teacher capacity for individualized instruction (Kovalenko & Baranivska, 2024; Mananay, 2024; Tulasi & Rao, 2023). For Islamic ELT specifically, AI also introduces the possibility of content filtering: platforms can, in principle, be configured to exclude content that conflicts with Islamic values while providing rich exposure to authentic English-medium discourse.

The ethical challenges, however, are not incidental but structural. Generative AI systems introduce systematic plagiarism risks that directly threaten the Islamic value of academic honesty (*amanah*). Algorithmic assessment raises the possibility of bias in evaluation—a concern that intersects with Islamic principles of justice (*'adl*) in assessment. The collection of detailed learner data raises privacy questions that Muslim educators and learners have the right to interrogate on principled grounds. And the risk that AI interaction displaces human teacher-student relationships—the relational context in which moral formation, not just language learning, occurs—is one that Islamic pedagogical philosophy takes seriously (Akib, 2024).

These challenges do not counsel rejection of AI but principled, deliberate adoption governed by explicit Islamic ethical criteria. AI tools should be evaluated against an Islamic ethical framework before institutional adoption, with explicit institutional positions established on: data privacy and student consent; assessment validity and algorithmic fairness; academic honesty expectations in AI-assisted work; and the appropriate boundaries between AI-mediated and teacher-mediated learning. Teacher professional development in AI literacy must encompass ethical dimensions—not only technical and pedagogical ones—so that educators are equipped to make principled professional judgments about AI tool selection and deployment, rather than defaulting to whatever tools are commercially available or institutionally mandated. The Islamic ethical principles of honesty (*amanah*), justice (*'adl*), and the preservation of human dignity (*karamah*) provide a substantive evaluative framework that Islamic educational institutions can apply concretely to AI adoption decisions.



4.4 A Contextual Pedagogical Framework for Technology-Islamic Values Integration

Synthesizing the three thematic findings above, and responding directly to RQ2, this study proposes a three-dimensional contextual pedagogical framework—the VI-TPACK-informed Contextual Framework for Technology-Islamic Values Integration in ELT (CTI-ELT Framework)—as the main theoretical contribution of this study. The framework extends TPACK (Mishra & Koehler, 2006) by adding a values-knowledge domain and operationalizing it across three interdependent pedagogical dimensions, illustrated in Table 1. Each dimension addresses a distinct integration problem identified in the reviewed literature; together, together they form a coherent design architecture for technology-enhanced, value-oriented ELT in Islamic educational contexts.

Table 1: A Contextual Pedagogical Framework for Technology and Islamic Values Integration in ELT

Dimension	Core Question	Practical Indicators
Technological Facilitation	How does the selected technology serve as a pedagogical tool that produces language learning, not merely engagement?	Platform selected for instructional purpose; teacher trained in pedagogical deployment; clear learning objective links to digital activity
Value Internalization	How are Islamic values embedded across the entire learning process—materials, tasks, assessment, and classroom norms?	Islamic content in materials; values-referenced task design; assessment criteria address moral reflection; teacher models Islamic communicative ethics
Contextual Adaptation	How does the pedagogical design respond to the specific institutional, cultural, and learner context?	Local Islamic culture reflected in examples; learner proficiency and prior religious knowledge accounted for; institutional values policy aligned with practice

Note. Framework developed from thematic synthesis of reviewed literature.

The first dimension, Technological Facilitation, addresses the design problem identified in the first thematic finding: how to move from shallow, motivational technology use toward pedagogically purposeful use that produces measurable language learning outcomes. In VI-TPACK terms, this dimension addresses the intersection of technological knowledge and pedagogical knowledge within a values-aware context. Practically, it requires teachers to select platforms on the basis of the specific language learning objective they serve—not on the basis of novelty, convenience, or institutional fashion—to design learning tasks that leverage the platform’s pedagogical affordances rather than using digital tools as delivery mechanisms for unchanged traditional content, and to build in formative feedback mechanisms that use technology’s data capacities to continuously inform and adapt instruction of the specific language learning objective they serve, to design learning tasks that leverage the platform’s affordances rather than using digital tools as delivery mechanisms for unchanged traditional content, and to build in formative feedback mechanisms that use technology’s data capacities to inform instruction (Dong, 2025; Haleem et al., 2022).

The second dimension, Value Internalization, addresses the integration problem identified in the second thematic finding: how to embed Islamic values systematically across the entire learning process rather than inserting them episodically in content selection. Within the VI-TPACK model, this dimension puts the Values Knowledge domain to work—the distinctive extension that this study proposes beyond standard TPACK. Practically, it means designing tasks that require students to apply Islamic values in English-medium communication—discussions of tolerance (*tasamuh*), humanitarian issues, religious moderation, and ethical pluralism that develop both language skill and moral reasoning simultaneously (Astuti et al., 2024; Ghufroon, 2022). It means designing assessment criteria that explicitly recognize the values dimension of language performance alongside its linguistic accuracy—a curricular innovation that signals institutionally that moral formation is a legitimate and evaluated learning outcome of ELT. And it means sustained, collaborative professional development that equips teachers with both the pedagogical and moral-ethical knowledge needed to integrate values consistently, rather than relying on tacit individual judgment that is not systematically built or transferred.

The third dimension, Contextual Adaptation, addresses the transferability problem that limits the practical utility of most framework proposals in the ELT literature: frameworks developed in resource-rich or culturally specific settings cannot be transplanted to other contexts without substantial modification and contextual grounding. Indonesian Islamic schools differ significantly in their material resources, teacher preparation levels, student socioeconomic backgrounds, demographic compositions, and institutional value commitments. A framework that requires expensive AI platforms will not reach the schools—often rural or peri-urban—that most need pedagogical support. A framework that assumes strong teacher digital literacy will fail in contexts where professional development has been limited or inaccessible. Contextual Adaptation therefore requires that pedagogical design begins with a realistic audit of institutional capacity, local cultural context, and learner characteristics—and builds upward from actual conditions rather than downward from an idealized model (Moslimany et al., 2024; Suparman, 2024).

Table 2 maps the framework's three dimensions against the practical implementation challenges most commonly documented in the reviewed literature, with recommended responses drawn from the evidence base.

Table 2: *Implementation Challenges and Recommended Responses Within the Three-Dimensional Framework*

Framework Dimension	Documented Challenge	Recommended Response
Technological Facilitation	Teachers adopt technology at the motivational level without pedagogical purposefulness; digital divide limits access	TPACK-oriented professional development; low-bandwidth platform alternatives; lesson design protocols linking digital tools to language objectives
Value Internalization	Integration is teacher-dependent and curriculum-unsupported; confined to material-level content selection	Explicit values objectives in curriculum documents; assessment criteria include moral-reflective performance; collaborative teacher professional learning communities



Contextual Adaptation	Frameworks designed in resource-rich contexts do not transfer; learner diversity unaddressed	in Context audit before framework adoption; differentiated implementation pathways; community and parent involvement in value-setting
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Note. Challenges synthesized from Djamdjuri et al. (2023), Astuti et al. (2024), Mananay (2024), and Kovalenko & Baranivska (2024).

4.5 Implications for Teacher Professional Development

The CTI-ELT Framework carries direct and specific implications for how teacher professional development in Indonesian Islamic ELT is conceptualized, structured, and delivered. Current professional development in this context tends to be either technically focused (digital tools training, platform adoption) or values-focused (character education workshops, Islamic studies integration) but rarely addresses their productive intersection (Astuti et al., 2024). This artificial separation produces teachers who are digitally capable but values-uncertain, or values-committed but digitally under-prepared. The result is the fragmented practice that Djamdjuri et al.'s (2023) systematic review documented: individual teachers making isolated, unsupported integration efforts without institutional backing or collegial knowledge-sharing.

A CTI-ELT Framework-aligned professional development model would organize around three competency clusters corresponding to the framework's three dimensions: (1) pedagogical-digital competency—the ability to evaluate, select, and deploy digital tools in direct service of specific language learning objectives, distinguishing between motivational, pedagogical, and values-disseminative uses; (2) values-pedagogical competency—the ability to design learning tasks, materials, and assessment criteria that embed Islamic values systematically across all phases of the learning process, not only in content selection; and (3) contextual-adaptive competency—the ability to read institutional and learner contexts accurately and adapt pedagogical designs responsively, rather than applying generalized frameworks prescriptively. Ventista and Brown's (2023) systematic review confirms that professional development produces downstream student learning gains when it is sustained, collaborative, and embedded in teachers' actual practice rather than delivered as one-off workshops.

The TPACK framework provides an applicable organizing structure for the pedagogical-digital competency cluster. TPACK describes the integrated knowledge of technology, pedagogy, and content that distinguishes effective technology-using teachers from those who simply add digital tools to unchanged instructional designs (Muttaqin, 2022). In the Islamic ELT context, TPACK requires extension: teachers need not only technological pedagogical content knowledge but values-integrated TPACK—the ability to identify which technological affordances best support specific Islamic value internalization goals within specific language learning activities. Suparman (2024), examining digitalized English learning in Indonesian contexts, found that effective integration demanded precisely this kind of multilayered teacher knowledge: understanding learners' digital learning preferences, their cultural and religious identity, and the specific language objectives of the lesson simultaneously.

The values-pedagogical competency cluster is the most underserved in current Indonesian Islamic teacher education. Safitri et al. (2023) found that teachers who successfully integrated Islamic values in ELT did so through tacit professional judgment rather than explicit training in values-pedagogical design. Making this tacit knowledge explicit—through collaborative curriculum design workshops, lesson study cycles focused on values integration, and structured reflection protocols—is the professional development task that would most directly address the fragmentation documented in the literature. Astuti et al. (2024) recommend that this professional development involve not only teachers but school administrators and curriculum designers, so that values integration becomes a structural feature of the institutional learning environment rather than a teacher-level add-on.

4.6 Challenges and Opportunities in the Indonesian Context

The Indonesian Islamic educational landscape presents both distinctive challenges and genuine opportunities for framework implementation. On the challenge side, the digital divide remains significant: internet access, device availability, and electricity reliability vary substantially across Indonesian provinces, and frameworks requiring high-bandwidth platforms will not be equitably implementable (Dwiono et al., 2018). Teacher professional development infrastructure is uneven: urban Islamic schools have greater access to training, while rural and peri-urban institutions—where many Indonesian Muslim students are educated—have comparatively limited professional development support. And the sheer diversity of Indonesian Islamic educational institutions—from traditional *pesantren* to modern Islamic schools to university-affiliated programmes—means that no single implementation pathway will be appropriate across all contexts.

On the opportunity side, Indonesia's national curriculum frameworks already provide entry points for values integration: Core Competence 1 and Core Competence 2 in the national curriculum explicitly address spiritual and social competencies, providing a formal curriculum basis for embedding Islamic values in English subject teaching (Astuti et al., 2024). The rapid expansion of mobile device ownership among Indonesian students—even in lower-income households—creates a technology infrastructure that low-bandwidth, mobile-first digital tools can access without requiring institutional investment in hardware. And the strong institutional culture of Islamic schools, with their emphasis on community, mentorship, and moral formation, provides a social context that can sustain values integration in ways that secular educational institutions may struggle to replicate.

The opportunity that is most immediately actionable, and most underutilized, is the potential of ELT itself as a values education vehicle. English, taught well and with deliberate values integration, is not a threat to Islamic identity but a resource for it: it enables access to global knowledge, supports international Islamic scholarship and dialogue, and develops the communicative capabilities needed to represent Islamic values and perspectives in global conversations (Ghufron, 2022; Lie, 2017). A framework that positions ELT as a vehicle for Islamic values expression, rather than as a culturally threatening foreign imposition to be managed, reframes the entire pedagogical enterprise in terms that Indonesian Islamic educational institutions can embrace.



5. Conclusion

This study reviewed the literature on technology integration and Islamic values in ELT and proposed the CTI-ELT Framework—a three-dimensional contextual pedagogical framework grounded in a theoretically extended TPACK model (VI-TPACK)—as both a theoretical contribution and a practical response to a documented and persistent gap in the field. The diagnosis that motivates the framework is this: technology adoption in Indonesian Islamic ELT is widespread but pedagogically shallow, while Islamic values integration is morally serious but curriculum-unsupported and institutionally fragile. The result is that the two are rarely combined in ways that produce either deep language learning or sustained moral formation—the twin goals that define educational quality in Islamic institutional contexts.

The CTI-ELT Framework—organized around Technological Facilitation, Value Internalization, and Contextual Adaptation—offers a design architecture that treats technology and Islamic values not as competing priorities to be balanced but as complementary and mutually reinforcing elements of a coherent pedagogical approach. Its theoretical contribution lies in the VI-TPACK extension: by explicitly naming Values Knowledge as a fourth knowledge domain in the TPACK model, the framework provides a conceptual basis for positioning values-integrated pedagogy not as a religious add-on to language teaching but as a core professional competency for ELT teachers in Islamic educational contexts. Its practical contribution lies in the operationalization of each dimension through concrete implementation indicators and documented responses to known challenges. Effective ELT in Indonesian Islamic settings must address all three dimensions simultaneously and interdependently. Technological Facilitation without Value Internalization produces engagement without moral formation. Value Internalization without Technological Facilitation misses the pedagogical power of digital tools in developing authentic language competence. And either dimension, without Contextual Adaptation, produces frameworks that are theoretically elegant but institutionally unimplementable across the diverse realities where Indonesian teachers actually work.

Several limitations shape the scope and generalizability of this study, and these should inform future research directions. The narrative review design, while enabling interpretive and cross-domain synthesis, does not produce quantified effect estimates, cannot control for publication bias in the included literature, and is subject to the interpretive judgments of the reviewers despite the procedural safeguards employed. The corpus, while representative, skews toward Indonesian and Southeast Asian contexts, limiting the generalizability of findings to other Muslim-majority settings without further contextual validation. Most critically, the CTI-ELT Framework is conceptual rather than empirically tested: it represents a theoretically grounded design proposal rather than a validated intervention. Future research should therefore prioritize: (1) empirical implementation of the framework in diverse Indonesian Islamic school types—from urban private Islamic schools to rural pesantren—with pre-post measurement of both language proficiency outcomes and values formation indicators; (2) comparative studies examining framework performance across resource-rich and resource-constrained institutional contexts, to establish evidence for the contextual adaptation dimension specifically; (3) teacher professional development research evaluating the VI-TPACK competency framework as an organizing structure for sustained, school-embedded professional learning; and (4) validation studies testing the framework's applicability in

comparable Muslim-majority ELT contexts beyond Indonesia, including Malaysia, Pakistan, Egypt, and the Gulf states.

For practitioners, the immediate implication is actionable: the framework can be used as a lesson planning scaffold, a curriculum audit tool, or a professional development organizing structure. It does not require new resources—it requires a new design orientation that asks, for every technology-enhanced ELT activity, not only “will this work?” but “what language learning does this produce?”, “what Islamic values does it serve?”, and “for whom and in what context does it work?” This reorientation—from tool-centric to values-and-pedagogy-centric thinking—is the practical transformation the CTI-ELT Framework is designed to support. It is within institutional reach of any Indonesian Islamic school committed to the proposition that English language education and Islamic moral formation are not competing obligations but complementary parts of a coherent educational mission.

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