

Integrating the ARCS Motivational Model into Arabic Pedagogy: Synergizing Islamic Values and Western Educational Psychology for Digital Learning Resilience

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Abstract: This study proposes an integrative instructional framework for Arabic language pedagogy by synthesizing Keller's ARCS motivational model with Islamic educational values and Malay-Islamic ecotheological awareness. It responds to the growing problem of student disengagement and declining motivation in technology-mediated Arabic learning, particularly in Islamic higher education contexts where digital transformation often emphasizes technical efficiency while neglecting spiritual, cultural, and ecological dimensions. Using a qualitative conceptual review, this study analyzes and synthesizes literature on ARCS-based motivation, digital learning resilience, Arabic pedagogy, Islamic values, and ecotheology. The analysis reconstructs the four ARCS dimensions through an Islamic epistemological lens: Attention is strengthened through reflective engagement with ayat kauniyah; Relevance is deepened through the concepts of khalifah and amanah; Confidence is supported through digital scaffolding grounded in husnuzzan; and Satisfaction is redefined through niyyah, ridha, and empathetic instructor presence. The findings indicate that integrating ARCS with Islamic values can transform Arabic learning from a merely linguistic and technological activity into a spiritually meaningful, ecologically responsive, and resilience-oriented pedagogical process. This framework offers practical implications for curriculum designers and Arabic lecturers in developing hybrid or digital learning modules aligned with Outcome-Based Education and LSTEAMS principles. The originality of this study lies in its effort to bridge Western motivational psychology and Islamic epistemology to cultivate digital resilience, moral responsibility, and ecotheological literacy in Arabic language education.

Keywords: Arabic pedagogy; ARCS model; Islamic values; digital learning resilience; ecotheological literacy; LSTEAMS.

Introduction

Arabic language education in Islamic higher education institutions is currently undergoing an unprecedented structural transformation, driven by a massive shift toward digital learning ecosystems. The transition from traditional face-to-face instruction and talaqqi-based pedagogical practices to Learning Management Systems (LMS), hybrid classrooms, and asynchronous learning environments has expanded flexibility, accessibility, and instructional reach (Huda et al., 2024; Millie, 2025). Nevertheless, this digital turn has also introduced complex pedagogical challenges. Arabic learning is inherently demanding due to diglossia, distinctive orthographic features, and dense morphological structures (Asadi, 2026). When these linguistic complexities intersect with social isolation, screen fatigue, and fragmented interaction in e-learning environments, students become increasingly vulnerable to declining intrinsic motivation, reduced engagement, and learning disengagement (Kamal, 2025; Kasperski et al., 2023).

In responding to these disruptions, learners' ability to persist, regulate emotions, and remain focused on academic goals within cyber-mediated environments—commonly referred to as digital resilience—has become an essential prerequisite for successful learning (Lee, 2023). Digital resilience is not merely a passive coping mechanism; rather, it functions as a critical mediator between the fulfillment of basic psychological needs and active learner engagement in digital ecosystems (Gao et al., 2025; Pan et al., 2024). To strengthen resilience and manage motivation, Western educational psychology has long offered structured motivational frameworks, one of the most influential being Keller's ARCS model, which consists of Attention, Relevance, Confidence, and Satisfaction (Keller, 1987). A growing body of empirical research has shown that the integration of the ARCS model into mobile learning, augmented reality, and other technology-enhanced learning environments can stimulate students' attention, confidence, and satisfaction in language learning (AL-Amri et al., 2023; Daud et al., 2020; Lin & Hsu, 2026).

However, the linear and rigid application of Western motivational models in Islamic educational settings may generate epistemological dissonance. In its original formulation, the ARCS model tends to be grounded in a secular psychological paradigm that defines relevance and satisfaction in terms of individual achievement, academic metrics, existential self-fulfillment, or extrinsic recognition (Fitriyah et al., 2021). For Muslim students in the Malay-Indonesian world, however, Arabic language mastery cannot be separated from a transcendental and civilizational context. Arabic is not merely a utilitarian instrument of communication; it is also the lingua franca of Islamic civilization and a hermeneutical key for accessing authoritative Islamic texts, particularly the Qur'an

(Abouzeid, 2025; Muthoifin & Elbanna, 2026). Many contemporary digital curricula fail to address this spiritual and cultural dimension, adopting technology pragmatically without anchoring it in theological values that shape learners' identities and moral orientations (Hanifah et al., 2024; Syukur et al., 2024).

In light of this theoretical gap, a transdisciplinary approach is needed to reconstruct Western motivational psychology in a manner that is compatible with the ontology of Islamic education. The LSTEAMS framework—Law, Science, Technology, Engineering, Arts, Mathematics, and Spiritual—offers a comprehensive foundation for such an integrative project (Arizona et al., 2025). Through LSTEAMS, Arabic language education, as part of the humanities and arts, can be organically connected with environmental awareness, scientific literacy, digital technology, and spiritual formation. This integration is particularly relevant in relation to the urgency of ecotheology. Global climate change and environmental degradation require Islamic educational institutions to revive the ethical consciousness of *khalifah fil ardh*, or human stewardship on earth, and *amanah*, or moral responsibility, among students (As'ad & Hakim, 2022; Zabidi et al., 2021). By integrating ecotheological issues into Arabic language materials, students' motivation can be transformed from the pursuit of grades into a deeper civilizational and spiritual calling.

Therefore, this conceptual study aims to formulate an innovative instructional framework that synergizes the ARCS motivational model with Islamic epistemology, particularly ecotheological values, in order to strengthen digital learning resilience in Arabic language education. This study deconstructs the four dimensions of ARCS and reconstructs them through Islamic conceptual resources such as *ayat kauniyah*, *husnuzzan*, *niyyah*, *ridha*, *khalifah*, and *amanah*. Through this synthesis, the study seeks to develop a pedagogical strategy that can be implemented within Outcome-Based Education (OBE) and transdisciplinary LSTEAMS-oriented curriculum design. The novelty of this paper lies in its argument that resilience in the cyber era cannot be achieved solely through educational software engineering or EdTech innovation. Rather, it requires the integration of Western psychological resilience, Islamic spiritual orientation, and ecotheological consciousness to cultivate Arabic learners who are linguistically competent, digitally adaptive, morally grounded, and ecologically responsible.

Method

1. Research Design

This study employs a qualitative-descriptive approach through a conceptual review design, which is appropriate for developing theoretical arguments, clarifying conceptual relationships, and constructing new analytical frameworks from existing bodies of literature (Jesson et al., 2011; Snyder, 2019). This design was selected because the primary objective of the study is not to test hypotheses statistically or measure causal relationships empirically, but to formulate and construct a new instructional framework for Arabic language pedagogy. The proposed framework seeks to bridge the theoretical gap between Western educational psychology, particularly motivational theory, and Islamic educational epistemology in the context of digital learning resilience.

As a conceptual study, this research focuses on developing theoretical synthesis rather than collecting field-based empirical data. The analysis is directed toward identifying, comparing, and integrating key concepts from several intersecting domains, namely Keller's ARCS motivational model, Islamic values in education, digital learning resilience, ecotheological awareness, and Arabic language pedagogy in Islamic higher education. Through this design, the study aims to produce a pedagogical framework that is theoretically grounded, contextually relevant, and applicable to contemporary digital and hybrid learning environments.

The qualitative-descriptive orientation enables the study to examine the meanings, assumptions, and epistemological foundations underlying the selected concepts. It also allows the researcher to reinterpret the ARCS model through an Islamic worldview, particularly by connecting motivational dimensions with concepts such as *khalifah*, *amanah*, *husnuzzan*, *niyyah*, and *ridha*. In this sense, the research design is not merely descriptive, but also reconstructive, as it seeks to reformulate an established motivational framework into a spiritually responsive and ecologically aware model for Arabic language education.

2. Literature Collection and Selection

The data for this study were derived from an integrative review of relevant academic literature, a review approach that enables researchers to synthesize diverse theoretical, empirical, and methodological sources in order to generate a comprehensive understanding of a given phenomenon (Snyder, 2019; Torraco, 2005; Whittemore & Knafl, 2005). The literature collection process focused on journal articles, conference proceedings, academic books, and recent scholarly works published mainly between 2020 and 2026, while foundational sources such as Keller's original ARCS model were retained as key theoretical references. Reference management software, including Mendeley and Zotero, was used to organize, classify, and verify the collected sources systematically.

The selection of literature was guided by four interrelated domains. The first domain includes studies on the application of the ARCS motivational model in language learning, mobile learning, augmented reality, and technology-enhanced education. The second domain covers research on digital resilience, particularly learners'

capacity to persist, regulate emotions, and remain engaged in online or hybrid learning environments. The third domain consists of literature on Islamic educational values, ecotheology, and moral-spiritual concepts such as *khalifah fil ardh*, *amanah*, *niyyah*, *ridha*, and *husnuzzan*. The fourth domain focuses on Arabic language pedagogy in Islamic higher education, especially in Southeast Asian and Malay-Indonesian contexts.

The inclusion criteria were based on conceptual relevance, academic credibility, and thematic contribution to the construction of the proposed framework. Literature was prioritized when it directly discussed motivational design, digital learning resilience, Arabic language education, Islamic pedagogy, or ecological consciousness in education. Sources were excluded when they were only marginally related to the topic, lacked clear academic grounding, or did not contribute substantively to the synthesis of ARCS, Islamic values, and digital Arabic pedagogy. Through this selection process, the study developed a focused body of literature that supports the formulation of an integrative and contextually responsive instructional framework.

3. Data Analysis and Conceptual Synthesis

The collected literature was analyzed through concept mapping and thematic analysis. Concept mapping was used to visualize and organize relationships among key theoretical constructs, while thematic analysis was employed to identify recurring patterns and interpretive categories within the selected literature (Braun & Clarke, 2006; Novak & Cañas, 2008). Concept mapping was used to identify the relationships among the main theoretical constructs, particularly Keller's ARCS model, digital learning resilience, Islamic educational values, ecotheological awareness, and Arabic language pedagogy. This process enabled the study to trace conceptual intersections and determine how each component could contribute to the construction of an integrated instructional framework.

The thematic analysis was conducted by classifying the selected literature into recurring themes related to motivation, digital engagement, spiritual values, ecological responsibility, and curriculum transformation. These themes were then interpreted in relation to the four dimensions of the ARCS model: Attention, Relevance, Confidence, and Satisfaction. Each ARCS dimension was examined not only as a psychological category but also as a pedagogical space that can be enriched through Islamic epistemology and Malay-Islamic ecotheological values.

The synthesis process involved two main stages. First, the study deconstructed the basic motivational elements of the ARCS model by examining how attention, relevance, confidence, and satisfaction function in digital and language-learning contexts. This stage was intended to clarify the strengths and limitations of ARCS when applied to Arabic language education in Islamic higher education. Second, the study reconstructed these dimensions by integrating Islamic concepts into each motivational category. Attention was linked to reflective engagement with *ayat kauniyah*; Relevance was connected with *khalifah* and *amanah*; Confidence was strengthened through *husnuzzan* and guided digital scaffolding; and Satisfaction was redefined through *niyyah*, *ridha*, and the affective presence of the instructor.

Through this analytical procedure, the study produced a conceptual synthesis that positions motivation not merely as a psychological mechanism, but as a multidimensional process involving cognition, spirituality, morality, and ecological awareness. The resulting framework is intended to support Arabic language learning that is not only digitally adaptive, but also spiritually meaningful and socially responsible.

4. Curriculum Mapping

As the final stage of the methodological process, the conceptual synthesis was translated into a curriculum mapping framework. Curriculum mapping is useful for aligning learning outcomes, instructional activities, assessment strategies, and curriculum content in a coherent educational design (Harden, 2001; Uchiyama & Radin, 2009). This stage was conducted to ensure that the proposed integration of the ARCS motivational model, Islamic values, digital learning resilience, and ecotheological awareness could be applied within concrete instructional design. Curriculum mapping was used not as an empirical measurement tool, but as a conceptual procedure for aligning theoretical constructs with learning outcomes, instructional strategies, learning activities, and assessment indicators.

The mapping process was aligned with the principles of Outcome-Based Education (OBE), which emphasizes the formulation of clear, measurable, and meaningful learning outcomes. In this context, Arabic language learning outcomes are not limited to linguistic competence, such as vocabulary mastery, grammatical accuracy, reading comprehension, or oral proficiency. They are also expanded to include students' digital resilience, moral responsibility, spiritual awareness, and ecological literacy. Therefore, the proposed framework encourages Arabic lecturers to design learning outcomes that integrate language mastery with broader educational purposes rooted in Islamic values and contemporary global concerns.

The curriculum mapping also adopts the LSTEAMS framework Law, Science, Technology, Engineering, Arts, Mathematics, and Spiritual as a transdisciplinary orientation. Within this framework, Arabic language education is positioned in the domain of Arts and Humanities, while ecotheological themes are connected with

Science, environmental ethics, and Islamic legal-moral responsibility. Digital platforms, learning management systems, artificial intelligence tools, and interactive media represent the Technology and Engineering dimensions. The Spiritual dimension functions as the central integrative axis that gives ethical direction and meaning to all learning activities.

Through this mapping, each dimension of the reconstructed ARCS model can be linked to practical instructional components. Attention may be developed through digital learning materials that invite students to reflect on ayat kauniyah and ecological phenomena. Relevance may be strengthened through Arabic texts discussing khalifah, amanah, environmental stewardship, and ethical responsibility. Confidence may be supported through structured digital scaffolding, formative feedback, and gradual task progression. Satisfaction may be cultivated through reflective evaluation, instructor presence, appreciation of learning effort, and the internalization of niyyah and ridha in the learning process.

This curriculum mapping stage provides an operational bridge between conceptual synthesis and pedagogical implementation. It enables Arabic lecturers and curriculum designers in Islamic higher education to develop hybrid or asynchronous learning modules that are motivationally effective, spiritually meaningful, and ecologically responsive. In this way, the proposed framework is expected to support a resilient Arabic learning ecosystem that integrates linguistic competence, digital adaptability, Islamic character formation, and environmental consciousness.

Results and Discussion

1. Conceptual Architecture: Synergizing the ARCS Model and Islamic Epistemology within a Transdisciplinary Framework

The transformation of Islamic higher education in the contemporary era is marked by the rapid adoption of digital technologies, which increasingly brings classical pedagogical traditions into contact with cyber-mediated learning ecosystems. In Arabic language pedagogy, the shift toward hybrid, online, and asynchronous learning has often been implemented pragmatically, without sufficient philosophical reflection on learners' psychological, spiritual, and cultural readiness (Hanifah et al., 2024; Kamal, 2025). The adoption of Learning Management Systems (LMS), artificial intelligence tools, and digital learning platforms may expand instructional access, yet it also risks producing disengagement and digital fatigue when it is not supported by a contextual motivational framework (Almalahmeh, 2026; Syukur et al., 2024). In this context, Keller's ARCS motivational model Attention, Relevance, Confidence, and Satisfaction offers a systematic psychological structure for managing learners' motivation and persistence (Keller, 1987). However, when applied rigidly within Islamic educational settings, the ARCS model may remain limited because it tends to position Arabic merely as a functional or mechanical communication tool while neglecting its inherent transcendental and civilizational dimensions (Abouzeid, 2025; Muthoifin & Elbanna, 2026).

The conceptual architecture proposed in this study therefore seeks to overcome this dichotomy through a theoretical reconstruction that brings Western educational psychology into dialogue with Islamic epistemology. This reconstruction requires a robust transdisciplinary paradigm, which can be accommodated through the LSTEAMS framework—Law, Science, Technology, Engineering, Arts, Mathematics, and Spiritual. LSTEAMS serves as an ontological bridge that rejects the separation between modern science, technology, and spiritual values (Arizona et al., 2025; As'ad & Hakim, 2022). From this perspective, Arabic language education, located within the domains of Arts and Humanities, is no longer treated as an isolated linguistic field. Instead, it is functionally integrated with environmental science, digital systems, Islamic legal-ethical reasoning, and spiritual formation. The Spiritual dimension functions as the core axis that gives ethical direction and meaning to the entire transdisciplinary structure (Permadi et al., 2025; Zabidi et al., 2021).

This theoretical synergy significantly transforms the meaning of learning motivation. In conventional Western psychology, motivation is often framed through individual goal orientation, self-fulfillment, performance achievement, or external incentive (Keller, 1987). In Islamic epistemology, however, the pursuit of knowledge is understood as a spiritual calling and a form of worship directed toward public benefit, moral refinement, and existential meaning (Memon et al., 2021; R'boul, 2021). This critique of secularized educational psychology resonates with broader efforts toward the Islamization of knowledge, which call for the decolonization of educational methodologies in Islamic institutions. Such a shift moves pedagogy from a material-centered orientation to a values-centered orientation (Alazmi & Bush, 2024; Chande, 2023). The integration of ARCS and Islamic epistemology thus produces a motivational model that is not only responsive to technological change but also grounded in civilizational depth and the spiritual nature of human beings (Abdul-Jabbar, 2022; Ma'arif et al., 2024).

In the context of digital learning resilience, this integrated conceptual architecture functions as a psychological and spiritual buffer for learners. Students who encounter the orthographic, morphological, and syntactic complexities of Arabic through rigid asynchronous interaction may experience anxiety, frustration, and

declining confidence (Asadi & Asli-Badarneh, 2026; Solimando, 2025). Without a strong value-based anchor, superficial digital stimuli such as gamification, badges, or interactive features may lose their motivational effect over time (Lee & Hancock, 2023; Lin & Hsu, 2026). An Islamic values-based ARCS framework addresses this vulnerability by shifting learners' locus of control from narrow academic performance toward moral awareness of knowledge as an amanah. Technical and cognitive obstacles in cyber learning are therefore not perceived merely as instructional disruptions, but are reinterpreted as part of an intellectual struggle, or jihad 'ilmi, that carries ethical and spiritual significance (Eri et al., 2021; Sun et al., 2022).

Through this reconstruction, the four dimensions of ARCS are reoriented by Islamic ecotheological values to respond simultaneously to the challenges of digital disruption and global sustainability. Arabic language learning in the Malay-Islamic world can be directed toward enabling students to read, analyze, and produce discourse on environmental stewardship, fiqh al-bi'ah, ecological justice, and moral responsibility through authoritative Arabic texts (Sapawi & Yusoff, 2025; Taufiqurrochman, 2025). By integrating real-world issues such as climate change, circular economy, and the moral crisis of consumerism into Arabic grammar, reading, writing, and speaking activities, the relevance of learning becomes more personal, ethical, and transcendental (Mustofa et al., 2026; Zabidi et al., 2021). This conceptual synergy aims to produce Arabic learners who are not only linguistically competent and technologically adaptive, but also spiritually resilient, ecologically conscious, and prepared to contribute to the moral and civilizational challenges of the modern world (Abdul-Jabbar & Makki, 2024; As'ad & Hakim, 2022).

2. Reconstructing Attention and Relevance through an Ecotheological Approach

Within the ARCS motivational architecture, Attention and Relevance function as the cognitive gateways of learning (Keller, 1987). These two dimensions determine whether learners allocate their cognitive resources to engage actively with instructional materials or withdraw from the learning process. In digital learning ecosystems, particularly asynchronous and hybrid environments, Attention and Relevance are among the most vulnerable dimensions because learners are constantly exposed to screen fatigue, algorithmic distraction, and spatial disorientation in online learning (Alfraih, 2025; Lee & Hancock, 2023). To strengthen digital resilience among Arabic language learners, the proposed framework reconstructs Attention and Relevance by moving beyond superficial pedagogical techniques. Instead, it anchors these dimensions in ecotheological consciousness, transforming motivation from momentary interest into existential and spiritual engagement.

a. Transforming Attention through the Stimulus of Ayat Kauniyah

Keller's ARCS model explains that Attention can be generated through two main mechanisms: perceptual arousal, which is stimulated by novelty, surprise, or sensory appeal, and inquiry arousal, which is stimulated by curiosity, questioning, and problem-solving challenges (Keller, 1987). In contemporary digital pedagogy, these mechanisms are often translated into technological interventions, such as augmented reality, gamification, interactive multimedia, and virtual learning environments (AL-Amri et al., 2023; Sdravopoulou et al., 2021). Although digital innovations such as mobile learning and virtual reality modules have been shown to increase students' initial motivation in foreign language learning (Daud et al., 2020; Lin & Hsu, 2026), these stimuli may have an inherent limitation: they are often transient and vulnerable to habituation. Once the novelty of the technology fades, students' attention may gradually decline (Karampa & Paraskeva, 2024).

In response to this limitation, the present framework proposes a shift from merely mechanical stimuli to spiritually meaningful stimuli. Inquiry arousal is reconstructed as a process of tafakkur, namely reflective and spiritual contemplation, by presenting Arabic learning materials that explore ayat kauniyah, or signs of God's creation manifested in the natural world. These may include themes such as the order of the universe, the water cycle, ecological balance, biodiversity, and environmental degradation. Rather than using digital animation simply to teach isolated vocabulary items, technology is repositioned as a medium of spiritual reflection and epistemic awakening (Arizona et al., 2025). For example, an Arabic reading text may discuss the concept of mizan, or cosmic balance, while being accompanied by digital visualizations of real climate crises. As students analyze the morphology, syntax, and semantic structure of the text, their attention is no longer captured merely by the visual features of the LMS interface, but by an ontological sense of wonder toward the divine order of creation (Zabidi et al., 2021).

The cognitive engagement generated through spiritual wonder is potentially more resilient than attention produced by surface-level digital novelty. This is because the ayat kauniyah approach stimulates higher-order thinking that continuously searches for deeper meaning within the text being studied (Abdel-Malek, 2023). Within the LSTEAMS framework, where science and spirituality are integrated, Attention is no longer understood merely as a behavioral response to instructional stimuli. It becomes a manifestation of critical reasoning, theological reflection, and moral awareness in the learning process (As'ad & Hakim, 2022; Syarif, 2020). In this sense, Arabic language learning becomes not only a linguistic exercise, but also a reflective encounter with the natural world as a text of divine signs.

b. Actualizing Relevance through the Constructs of Khalifah and Amanah

If Attention functions to draw students into the learning process, Relevance functions to sustain their

engagement and persistence amid learning difficulties. Keller (1987) emphasizes that Relevance is achieved when instructional materials are connected to learners' personal experiences, values, and future goal orientation. For students in Islamic higher education, particularly in the Malay-Indonesian world, theological orientation plays a decisive role in shaping the perceived meaning of learning. The Qur'an and the classical Islamic intellectual tradition are not merely historical or religious texts; they are living sources of meaning that legitimize the urgency of mastering academic Arabic (Abouzeid, 2025; Muthoifin & Elbanna, 2026).

However, one of the weaknesses of many modern Arabic curricula lies in the disconnection between linguistic materials and the global crises faced by contemporary students (Kamal, 2025). In the integrative framework proposed in this study, Relevance is strengthened by embedding ecological issues into the core of Arabic language learning. This approach transforms linguistic learning into a dynamic ecotheological discourse. Relevance is actualized through two central Islamic concepts: *khalifah fil ardh*, or human stewardship on earth, and *amanah*, or moral responsibility and trust (Speidl, 2025; Taufiqurrochman, 2025).

As an instructional illustration, when students learn *maharah al-kitabah* or translation techniques, they should not be limited to artificial sentences detached from social and ecological realities (Sabtan et al., 2023). Instead, the syllabus can guide students to analyze and produce Arabic texts dealing with the prohibition of *israf*, excessive consumption and exploitation, the ethics of water conservation, climate change mitigation, and *fiqh al-bi'ah*, or Islamic environmental jurisprudence (Mustofa et al., 2026; Riouch & Benamar, 2025). Through this design, a strong process of motive matching occurs. Students begin to realize that the Arabic proficiency they struggle to develop through digital platforms is not merely an academic requirement, but an essential instrument for accessing Islamic legal and ethical discourses that can contribute to solving environmental crises (Zabidi et al., 2021).

This reconstruction of Relevance has direct implications for the development of digital resilience (Lee & Hancock, 2023). Arabic is no longer perceived as a difficult foreign language subject or a purely linguistic academic requirement. Rather, it is understood as an operational prerequisite for fulfilling students' civilizational mandate as *khalifah*. When students encounter cognitive dissonance caused by the complexity of Arabic grammar or experience social isolation in asynchronous e-learning environments, their awareness of ecological *amanah* can activate a more durable coping mechanism. This intrinsic motivational force helps them regulate negative emotions, reinterpret learning difficulties, and return to academic tasks with renewed purpose (Gao et al., 2025; Pan et al., 2024). In this way, ecotheology-based Relevance functions as a protective layer against the motivational decline that often weakens conventional e-learning systems (Almalahmeh, 2026; Hanifah et al., 2024).

3. Building Confidence and Satisfaction to Strengthen Digital Resilience

After students' Attention has been stimulated and their awareness of the ecological and theological significance of Arabic learning has been strengthened through Relevance, the next pedagogical challenge in digital learning environments is to sustain their confidence in completing tasks that are inherently demanding. Arabic language learning involves orthographic complexity, dense morphological structures, syntactic variation, and diglossic realities, all of which create a high cognitive load for non-native learners (Asadi & Asli-Badarneh, 2026). When these linguistic challenges intersect with physical isolation, delayed communication, and limited affective interaction in e-learning environments, students may become vulnerable to academic anxiety, frustration, and demotivation (Kasperski et al., 2023). For this reason, the proposed framework deconstructs and reconstructs the dimensions of Confidence and Satisfaction through Islamic spirituality in order to cultivate a more holistic form of digital resilience.

a. Constructing Confidence through Digital Scaffolding and *Husnuzzan*

In Western educational psychology, Confidence is generally developed by providing clear expectations of success, gradual challenges, constructive feedback, and structured scaffolding (Keller, 1987). In contemporary digital education, such scaffolding is often implemented through adaptive learning systems, automated feedback, staged assignments, and learning analytics that guide students step by step. These technological supports are important because they help learners monitor their progress and reduce uncertainty in online learning. However, from the perspective of Islamic pedagogy, technological scaffolding alone is insufficient if it is not supported by an existential and spiritual foundation that enables students to cope with deeper crises of self-belief.

Within the framework proposed in this study, Confidence is strengthened through the value of *husnuzzan*, or positive trust in God's wisdom and in the intellectual capacity that God has granted to human beings. In pedagogical terms, *husnuzzan* refers to students' optimistic belief that the difficulties they encounter in learning Arabic are not signs of permanent incapacity, but part of a meaningful process of intellectual and spiritual formation (Syarif, 2021). When students struggle to decode complex Arabic texts, analyze grammatical structures, or understand Arabic discourses related to *fiqh al-bi'ah* and environmental ethics, their frustration is not interpreted as failure. Instead, it is reframed as a learning trial, or *ibtala'*, that contributes to the strengthening of their intellectual endurance and moral maturity (Muthoifin & Elbanna, 2026; Sauri et al., 2022).

The integration of *husnuzzan* with digital scaffolding creates a psychological safety net for learners. When an LMS, an adaptive platform, or an automated feedback system identifies syntactic, lexical, or translation errors, students are encouraged not to internalize these corrections as indicators of personal failure. Rather, errors are

understood as part of the sunnatullah of learning, namely a natural and necessary process through which knowledge is gradually acquired. In this way, Confidence is not constructed as academic arrogance or mere performance assurance, but as a form of self-regulated learning supported by tawakkul, perseverance, and reflective self-improvement (Gao et al., 2025).

This reconstruction of Confidence directly contributes to digital resilience. Students who possess husnuzzan are more likely to regulate anxiety, reinterpret obstacles positively, recover from setbacks, and redesign their learning strategies when facing digital or linguistic challenges (Lee & Hancock, 2023; Pan et al., 2024). Confidence, therefore, becomes more than a psychological belief in one's ability to succeed. It becomes an integrated disposition that combines cognitive readiness, emotional regulation, spiritual optimism, and sustained effort in navigating Arabic learning within digital environments.

b. Redefining Satisfaction through *Niyyah*, *Ridha*, and Instructor Presence

The final dimension of the ARCS model is Satisfaction, which refers to the learner's sense of fulfillment after investing effort in the learning process. In secular instructional design and educational technology, Satisfaction is often associated with measurable rewards, such as quiz scores, digital badges, leaderboards, certificates, or other forms of gamified recognition. These extrinsic mechanisms may be effective in stimulating short-term engagement, but they are often insufficient to address the deeper ontological meaning of learning in Islamic education. When satisfaction is reduced merely to quantitative achievement, the learning process may leave students with a sense of emptiness once external rewards disappear (Fitriyah et al., 2021; Kasperski et al., 2023).

The integrative framework proposed in this study redefines Satisfaction by restoring the centrality of *niyyah* and *ridha*. *Niyyah* refers to the existential intention that directs learning toward a higher moral and spiritual purpose. In Arabic language education, *niyyah* means that students learn Arabic not merely to obtain grades, pass examinations, or fulfill curriculum requirements, but to access Islamic knowledge, understand revealed texts, and contribute to the moral and ecological responsibilities of Muslim civilization (Abouzeid, 2025; Ma'arif et al., 2024). *Ridha*, in this context, refers to inner fulfillment and spiritual peace that emerge when students recognize that their learning effort carries the value of worship and ethical responsibility.

Accordingly, true Satisfaction is not measured only by the number of vocabulary items memorized, the accuracy of grammatical exercises, or the completion of online assignments. It is also reflected in students' awareness that their engagement with Arabic texts, even through digital screens, can become part of a meaningful spiritual journey. When students understand that their linguistic effort contributes to the pursuit of knowledge, the preservation of divine trust, and the articulation of ecological responsibility, Satisfaction becomes deeper and more enduring than external academic reward.

Nevertheless, the cultivation of *ridha* in cyber-mediated learning spaces requires human and affective validation. This is where instructor presence becomes a crucial element. In digital Arabic learning, lecturers should not function merely as LMS operators, task distributors, or evaluators of online submissions. They are expected to act as *murabbi*, namely educators who guide not only students' intellectual development but also their emotional and spiritual growth. Empathetic feedback, affective communication, timely responses, and recognition of students' effort can significantly strengthen students' satisfaction and persistence in online learning environments (Almalahmeh, 2026; Hanifah et al., 2024).

For example, when a lecturer responds to students' online discussion posts, the feedback should not only assess the accuracy of translation or grammatical structure. It should also acknowledge students' perseverance, reflective effort, and willingness to engage with complex Arabic materials despite digital limitations. Such feedback communicates that students' intellectual struggle is valued, meaningful, and spiritually significant. In this sense, instructor presence transforms Satisfaction into a dual experience: institutional recognition and spiritual affirmation.

At this point, the combination of Confidence rooted in husnuzzan and Satisfaction oriented toward *ridha* confirms that digital resilience is not simply the outcome of technological engineering. It is the result of a holistic socio-spiritual learning ecosystem in which digital tools, pedagogical guidance, emotional support, and Islamic values work together. Through this integration, Arabic language learning becomes a space where students' cognitive abilities are strengthened, their emotional endurance is nurtured, and their spiritual orientation is continuously maintained amid the disruptions of digital learning.

4. Transforming Arabic Pedagogy in Islamic Educational Institutions: Curriculum and LSTEAMS Implications

The implementation of an ARCS motivational architecture integrated with Islamic ecotheological values requires systemic restructuring at the institutional level. The transformation of Arabic language pedagogy in the age of digital disruption can no longer rely solely on conventional curricula dominated by the grammar-translation method, nor on pragmatic and instrumental adoption of educational technology (Hanifah et al., 2024; Jumhana et al., 2025). Islamic higher education institutions need to respond to digital transformation not merely as a change

in the medium of knowledge transmission, but as an opportunity to redefine the nature of literacy in the twenty-first century. Therefore, the proposed integrative framework implies the urgent need to implement Outcome-Based Education (OBE) in alignment with the transdisciplinary orientation of LSTEAMS: Law, Science, Technology, Engineering, Arts, Mathematics, and Spiritual.

In an OBE curriculum oriented toward digital resilience, graduate learning outcomes need to be reoriented beyond standard linguistic indicators. Arabic language competence should not be reduced merely to high TOAFL scores, grammatical mastery, vocabulary acquisition, or formal syntactic accuracy. Instead, the indicators of pedagogical success should be expanded to include ecotheological literacy, digital resilience, moral responsibility, and spiritual awareness (Amalia et al., 2024; Efendi & Sholeh, 2023). For instance, specific learning outcomes in courses such as Muthala'ah, Maharah al-Kalam, Maharah al-Kitabah, or translation can be designed to assess students' ability to reconstruct arguments on environmental stewardship, critique exploitative lifestyles, and articulate ecological responsibility in academic Arabic through digital platforms (Muthoifin & Elbanna, 2026; Taufiqurrochman, 2025). In this way, the curriculum does not merely produce students who are linguistically proficient, but also "cultivates *insan kamil*, namely holistic Muslim learners who possess critical awareness of global ecological challenges" (Sauri et al., 2022; Taufik, 2020).

This curricular transformation finds its most operational form through the LSTEAMS framework. Within Islamic higher education, Arabic language education, as part of the Arts and Humanities, can function as a civilizational lingua franca for examining Islamic environmental law, ecological science, ethical responsibility, and digital knowledge dissemination. The Law dimension may be represented through fiqh al-bi'ah and Islamic legal-ethical reasoning on environmental protection. The Science dimension may be reflected in ecological literacy and sustainability issues. The Technology and Engineering dimensions may involve the use of Learning Management Systems, artificial intelligence tools, interactive media, and digital learning design. Meanwhile, the Spiritual dimension acts as the central axis that ensures all scientific and technological activities are directed toward worship, moral responsibility, and the preservation of creation (Arizona et al., 2025; As'ad & Hakim, 2022).

This approach deconstructs disciplinary boundaries that have often isolated Arabic language learners from contemporary scientific and ecological discourses. Classical Islamic texts and Arabic sources are not treated merely as historical materials, but as epistemological entry points for understanding and responding to modern crises. Students are therefore encouraged to recognize that their Arabic linguistic competence is a strategic asset for engaging with global problems such as climate change, environmental degradation, consumerism, and ethical technological use (Abouzeid, 2025; Zabidi et al., 2021). Through this integration, Arabic learning becomes a site of transdisciplinary formation, where language, science, technology, ethics, and spirituality are brought into meaningful dialogue.

Nevertheless, such an ambitious curricular transformation cannot be realized without agile institutional leadership and holistic policy infrastructure (Alazmi & Bush, 2024; Syamsir et al., 2025). Digital resilience in higher education requires change management that synergizes technological innovation with commitment to Islamic ethical values (Awad & Martín-Rojas, 2024; Volpentesta et al., 2023). University and faculty leaders should facilitate an academic ecosystem that allows pedagogical flexibility, enabling lecturers to integrate contemporary digital tools with the wisdom of Islamic pedagogical traditions, including the modernization of talaqqi-based learning practices (Huda et al., 2024; Millie, 2025). Institutional policies should ensure that investment in software and technological infrastructure is accompanied by investment in the "heartware" of the academic community, namely ethical awareness, spiritual commitment, and pedagogical empathy (Park et al., 2023).

Furthermore, the success of this ARCS-LSTEAMS curriculum depends greatly on lecturer competence. Students' digital resilience is unlikely to grow in an ecosystem where lecturers themselves experience technological anxiety or show limited engagement in asynchronous interaction. The acceleration of post-pandemic digitalization therefore requires continuous improvement of lecturers' pedagogical, technological, and affective competencies (Akmalia & Faizin, 2026; Hanifah et al., 2024). Modern Arabic lecturers are expected to possess empathetic digital literacy and strong instructor presence. They should be able to orchestrate digital classrooms not merely as spaces for uploading files and assigning tasks, but as environments for nurturing husnuzzan, validating students' perseverance, strengthening niyyah, and sustaining moral-spiritual engagement across the boundaries of digital screens (Almalahmeh, 2026; Fitriyah et al., 2021).

In conclusion, integrating the ARCS motivational model with Islamic epistemology within an OBE and LSTEAMS-oriented curriculum is not merely a methodological innovation in Arabic language teaching. It represents a broader socio-educational transformation. This framework positions Islamic higher education institutions as resilient academic ecosystems capable of producing Muslim scholars who are not only proficient in interpreting Arabic texts, but also psychologically resilient, digitally adaptive, spiritually grounded, and ecologically committed. Such graduates are expected to contribute meaningfully to the moral and civilizational challenges of the contemporary multipolar world (Abulibdeh et al., 2024; Dohale et al., 2024).

Conclusion

This study constructs a new conceptual paradigm for addressing motivational decline and student disengagement in Arabic language learning in the digital era. By synthesizing Keller's ARCS motivational model with Islamic educational epistemology and Malay-Islamic ecotheological values, the study argues that digital learning resilience cannot be developed solely through technological infrastructure, platform innovation, or instructional efficiency. Rather, it requires the integration of psychological motivation, spiritual orientation, moral responsibility, and ecological awareness within a coherent pedagogical framework.

The proposed framework reconstructs the four ARCS dimensions through Islamic values. Attention is strengthened through reflective engagement with *ayat kauniyah*, enabling students to encounter Arabic texts as linguistic materials and as signs of divine creation. Relevance is deepened through the concepts of *khalifah* and *amanah*, which connect Arabic mastery with ecological stewardship and civilizational responsibility. Confidence is developed through digital scaffolding grounded in *husnuzzan*, allowing students to reinterpret linguistic and technological difficulties as part of a meaningful learning process. Satisfaction is redefined through *niyyah*, *ridha*, and empathetic instructor presence, transforming learning fulfillment from external academic reward into spiritual and moral affirmation.

This integration positions Arabic language education as more than a technical process of linguistic competence development. It becomes a transdisciplinary space where language, digital technology, Islamic values, and ecological consciousness interact meaningfully. Within the framework of Outcome-Based Education and LSTEAMS, Arabic pedagogy can be redesigned to cultivate learners who are not only proficient in Arabic, but also digitally adaptive, spiritually grounded, psychologically resilient, and ecologically responsible. For Islamic higher education institutions, this framework offers a strategic direction for developing hybrid and digital learning models that remain faithful to Islamic epistemology while responding to contemporary global challenges.

The study is limited by its conceptual nature and therefore requires further empirical validation. Future research may examine the implementation of this ARCS-Islamic ecotheological framework in Arabic language classrooms, particularly through experimental, design-based, or mixed-method studies. Such research can assess its impact on students' motivation, digital resilience, Arabic proficiency, and ecological literacy. Despite this limitation, the framework offers an original contribution by bridging Western motivational psychology and Islamic educational values to strengthen Arabic pedagogy in the digital and multipolar era.

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