

Integrating Empathy into AI-Supported EFL Pedagogy

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Abstract

This conceptual paper proposes a comprehensive framework aimed at integrating empathy-based strategies into AI-supported English as a Foreign Language (EFL) instruction. This is part of a broader agenda to humanize digital learning. Although digital tools and artificial intelligence have expanded opportunities for efficient and personalized language learning, there is a risk that their use can create classroom environments that are transactional, emotionally distant, and dehumanized. To address this challenge, this library research synthesizes various theories, including humanizing pedagogy (Freire, 1970), care ethics (Noddings, 2005), social-emotional learning, digital pedagogy, and AI-assisted language learning. The result is a "Seven-Step Digital Humanizing Framework" that outlines practical, empathy-centered strategies. These strategies can be applied by teachers when designing, mediating, and assessing EFL learning that uses digital technologies. These steps include awareness building, empathetic task design, humanized teacher presence, supportive AI integration, reflective social-emotional learning tasks, dialogic feedback, and ethical AI use. This framework demonstrates that AI and digital tools can support not replace human connection. This can occur if the technology is used intentionally to enhance emotional safety, learner agency, and dialogic engagement. This research provides a theoretical contribution by bridging humanistic education principles with contemporary AI-driven EFL practices. Practically, this study offers actionable guidance for teachers seeking to implement human-centered innovation.

Keyword: Humanizing Education; Empathy-Based Pedagogy; AI-Supported EFL Learning; Digital Humanizing Framework; Human-Centered Innovation

Introduction

The rise of artificial intelligence (AI) in digital learning has transformed education dramatically; however, this progress also introduces the risk of dehumanization. While AI enhances personalization and student autonomy, it simultaneously reduces direct communication between teachers and learners, thereby weakening emotional engagement and empathy (Aly & Setiadi, 2025). Furthermore, many educators express concern that an overreliance on AI could strip education of its human essence, turning learning into a mechanical process rather than a relational experience (Ghalia et al., 2024). Similar patterns emerge in the medical field, where patients often perceive AI-driven diagnoses as less dignified and more impersonal than those provided by human doctors (Formosa et al., 2022). As a result, the psychological consequences of AI-driven interaction can include alienation, mistrust, and a sense of diminished humanity (European Economic Letters, 2023). Thus, although AI offers efficiency and precision, it simultaneously threatens the warmth, empathy, and dignity that define meaningful education.

In this context, humanizing education emerges as a fundamental necessity rather than an optional pursuit. Since education aims to cultivate empathy, critical reflection, and ethical awareness, it must not be reduced to a mere tool of technological optimization (Niemi, 2021). Moreover, advocates of critical pedagogy argue that technology should serve human connection and not replace it, warning that a purely instrumental approach risks alienating learners from their moral and social identities (Sari, Nayır, & Bozkurt, 2023). In addition, research on AI and human dignity reveals that human bias our natural inclination for empathy and fairness remains vital in preserving ethical integrity in automated environments (Formosa et al., 2022). Consequently, as Stockman (2024) argues, true education must continue to nurture human potential, resisting the temptation to measure success solely through efficiency or productivity (Stockman, 2024). Ultimately, the integration of AI should enhance not erode the moral and emotional foundations of learning.

Nevertheless, AI integration in English as a Foreign Language (EFL) education presents unique challenges that extend beyond technology. Although AI provides personalized feedback, promotes autonomy, and enhances motivation, it often reduces emotional engagement between teachers and students, thereby diminishing the human dimension of learning (Aly & Setiadi, 2025). To address this issue, some scholars propose hybrid approaches that combine AI instruction with creative, art-based, or cultural activities, which help restore emotional depth and intercultural

awareness in EFL classrooms (Fountoulakis, 2025). However, these innovations still face significant barriers, including algorithmic bias, data privacy, and the lack of clear ethical frameworks for AI implementation (Bai, 2024). Therefore, teachers must now act as facilitators who maintain empathy and moral guidance within AI-mediated learning contexts (Niemi, 2021). Only by balancing technological innovation with emotional intelligence can digital EFL learning truly flourish.

At a broader level, the pursuit of human-centered innovation aligns with Sustainable Development Goal 9 (SDG 9), which emphasizes inclusive and ethical technological progress. To achieve this, collaboration between humans and AI must be guided by empathy, transparency, and respect for human agency (Maadi et al., 2021). In the field of healthcare education, for example, AI proves most effective when it enhances rather than replaces interpersonal relationships and patient-centered care (Reuben et al., 2024). Likewise, ethical innovation requires that AI systems preserve fairness and dignity within decision-making processes (Bankins et al., 2022). In this sense, empathy-driven innovation can prevent technology from becoming dehumanizing, as Johnson (2023) warns in his analysis of human-machine relationships in military contexts (Johnson, 2023). Therefore, advancing SDG 9 requires innovation that is not only intelligent but also profoundly humane.

In practice, however, digital classrooms powered by AI often become transactional environments focused on efficiency rather than empathy. As automated systems dominate learning management, students report a growing sense of emotional detachment and reduced personal connection with teachers (Aly & Setiadi, 2025). Moreover, AI's emphasis on speed and accuracy limits its ability to capture the subtleties of cultural or emotional learning, which are essential in language and humanities education (Fountoulakis, 2025). As a result, human trust and social cohesion often decline when machine interaction replaces human dialogue (European Economic Letters, 2023). Consequently, teachers must intentionally design pedagogical strategies that reintroduce empathy, dialogue, and reflection into AI-mediated spaces (Stockman, 2024). Only through such deliberate efforts can education remain relational in an increasingly automated world. Finally, the use of AI in language learning remains largely superficial, as many learners rely on it primarily for grammar checking rather than for meaningful engagement. Although AI tools improve linguistic accuracy, they rarely promote deeper reflection, cultural understanding, or creative expression (Aly & Setiadi, 2025). Moreover, while AI's automation enhances efficiency, it can discourage students from developing critical thinking skills and independent judgment (Bai, 2024). To overcome this, educators should guide students to use AI as a reflective partner that supports reasoning and idea development rather than as a mechanical corrector (Sari, Nayır, & Bozkurt, 2023). Likewise, creative and art-based EFL tasks can help integrate emotion and culture into AI-assisted writing (Fountoulakis, 2025). Therefore, the key to meaningful digital learning lies not in replacing human thought but in amplifying it through purposeful AI collaboration.

Despite the growing number of studies on artificial intelligence (AI) in language education, there remains a notable lack of conceptual frameworks that integrate empathy, AI, and the humanizing of English as a Foreign Language (EFL) learning. Most existing research focuses primarily on the technological efficiency or ethical implications of AI but rarely explores how empathy can serve as a mediating factor that restores humanity to digital learning environments. Furthermore, there is limited discussion on how teachers can operationalize empathy in AI-mediated classrooms through concrete pedagogical strategies. As a result, the field lacks both a comprehensive conceptual model that unites affective and technological dimensions of EFL learning and a practical framework that guides educators in sustaining human connection amid increasing automation.

The purpose of this paper is to formulate an empathy-based conceptual framework for AI-assisted EFL instruction that promotes humanized digital learning. Specifically, the study seeks to bridge theoretical insights from humanizing pedagogy and affective learning with practical approaches to AI integration. By doing so, it aims to propose a framework that not only enhances linguistic competence through technology but also reinforces empathy, ethical awareness, and relational engagement between teachers and students in virtual environments.

Theoretically, this study contributes to the development of humanizing pedagogy by integrating empathy into the discourse on digital and AI-supported learning. It extends existing literature by emphasizing the emotional and ethical dimensions of technology-enhanced EFL instruction, thereby addressing a key gap in contemporary educational theory. Practically, the proposed framework serves as a guideline for teachers seeking to design EFL learning experiences that maintain human warmth and emotional depth within AI-driven classrooms. Consequently, the study is expected to empower educators with actionable strategies to cultivate empathetic, ethical, and culturally responsive digital learning environments.

Humanizing Education

Paulo Freire's conception of humanizing education is deeply rooted in dialogue, dignity, and agency as the essence of liberation. For Freire, genuine learning occurs not through one-way transmission but through dialogical exchange that values learners as co-creators of knowledge. In this process, dialogue becomes a moral and political act that affirms human equality and collective agency (Medina et al., 2016). Moreover, Freire's emphasis on critical consciousness and praxis transforms education into a space of empowerment, where learners recognize and challenge structures of oppression (Cortina & Winter, 2021). Consequently, this dialogical model not only cultivates intellectual growth but also moral and civic responsibility. In contrast to mechanistic or authoritarian instruction, Freire's pedagogy affirms human dignity and the right of every learner to speak, reflect, and transform their reality through meaningful dialogue (Bilgin, 2020).

Complementing Freire's dialogical approach, Nel Noddings's *ethic of care* offers a moral framework that redefines education as an act of relational responsibility. According to Noddings, caring is not a peripheral virtue but the foundation of ethical and effective pedagogy. Teachers must engage with students' emotional and moral needs through attentiveness, empathy, and mutual respect, thereby transforming classrooms into spaces of connection rather than control (Santos & Sales, 2025). Moreover, this perspective challenges the depersonalized logic of modern education systems that prioritize performance metrics over human relationships. Through caring encounters, students develop a sense of belonging and moral agency, which in turn deepens their motivation and learning engagement. Consequently, Noddings's care ethics situates education as a moral encounter that restores empathy and compassion to the heart of pedagogy.

In harmony with these relational perspectives, Carl Rogers's *humanistic pedagogy* situates education within the psychological growth and emotional safety of the learner. Rogers emphasizes that meaningful learning occurs only when students experience authenticity, empathy, and unconditional positive regard from teachers. Moreover, this approach views learners as active agents capable of self-directed growth when provided with a supportive environment. As Taghinezhad et al. (2022) demonstrate, humanistic care fosters "constructive dynamic interaction," "real presence," and the "preservation of human dignity" in educational relationships (Taghinezhad et al., 2022). Consequently, Rogers's framework challenges the impersonal and hierarchical structures of conventional schooling by promoting psychological well-being as the precondition for intellectual development. In this way, humanistic pedagogy aligns with Freire's and Noddings's visions, advancing a holistic education grounded in empathy, authenticity, and personal agency.

Empathy in Education

Empathy in education begins with the cultivation of emotional presence, which refers to the teacher's ability to communicate genuine attentiveness and emotional attunement in learning interactions. Emotional presence creates a relational atmosphere that fosters trust, openness, and psychological safety among learners. Moreover, it allows teachers to respond meaningfully to students' emotional cues, thereby enhancing engagement and motivation. For instance, research in EFL and distance learning contexts shows that empathy helps bridge emotional distance and humanize virtual classrooms through interactive discussions and personalized communication (Dronova & Kurmangalieva, 2021). Similarly, interventions using visual hermeneutics and narrative-based reflection have been shown to enhance emotional understanding and professional empathy in students by encouraging perspective-taking and reflection on human experiences (Prabhath & Kulkarni, 2025). Consequently, emotional presence not only deepens the affective dimension of learning but also sustains human connection in increasingly digital and mediated educational environments.

Equally significant, social-emotional learning (SEL) integrates empathy as a foundational component of students' holistic development. SEL enables learners to recognize, understand, and manage emotions while fostering interpersonal competence and ethical decision-making. In educational practice, SEL programs that explicitly cultivate empathy have demonstrated improvements in students' social awareness, cooperation, and well-being (Briones, Gallego, & Palomera, 2022). Moreover, creative drama and forum theatre approaches provide embodied experiences that help learners take multiple perspectives, thus transforming empathy into lived understanding. In contrast to purely cognitive models, SEL positions empathy as an emotional skill that underpins collaboration, moral reasoning, and classroom harmony. Empirical findings from educational psychology confirm that embedding SEL within curriculum design fosters both

academic success and emotional resilience (Sugiyanto, Muryani, & Ni'matussyahara, 2024). Therefore, by integrating empathy into SEL frameworks, education becomes not merely intellectual training but a process of cultivating socially responsible and emotionally intelligent individuals.

In addition, compassionate teaching represents the ethical and relational extension of empathy in the classroom. Compassion involves not only understanding another's emotional state but also acting to alleviate distress or enhance well-being. Research across disciplines demonstrates that teachers who model compassion create psychologically safe environments that support student well-being and foster inclusive participation (De Silva & Dempsey, 2022). Moreover, systematic reviews of empathy education reveal that sustained, multimodal interventions such as mindfulness, storytelling, and cultural learning significantly increase students' compassion and prosocial motivation (Menezes, Guraya, & Guraya, 2021). Consequently, compassionate teaching transforms the pedagogical relationship into a space of mutual care and moral responsiveness. In contrast to transactional approaches that prioritize performance metrics, compassionate teaching humanizes education by aligning learning with empathy, kindness, and ethical responsibility values increasingly vital in an era of digital and emotional disconnection.

Finally, empathy as a pedagogical practice moves beyond emotional awareness to intentional, structured action within teaching and learning. Pedagogical empathy involves designing learning experiences that engage students' emotions, perspectives, and identities as integral to cognitive growth. For instance, EFL teachers in the Mekong Delta have used empathetic listening, personal storytelling, and culturally responsive feedback to strengthen rapport and motivation among learners (Le, Pham, & Tran, 2024). Similarly, programs promoting "qualified empathy" train future teachers and social workers to transform emotional reactions into reflective, ethical responses linking feeling with professional action (Raatikainen, Rauhala, & Mäenpää, 2021). Moreover, theatrical and reflective pedagogies demonstrate how empathy can be performed and practiced as an intentional act of perspective-taking and inclusion (O'Grady, 2022). Consequently, empathy becomes not just an interpersonal virtue but a transformative pedagogy that bridges affect, cognition, and social consciousness in the classroom.

Digital Pedagogy

The rapid shift toward digital education has introduced numerous virtual learning challenges that test both pedagogical adaptability and emotional resilience. During the pandemic, educators and students struggled with decreased motivation, limited interaction, and unequal access to technology, revealing deep structural and emotional gaps in online learning systems (Kutsenko, Malatsion, & Saltanaeva, 2021). Moreover, teachers found it increasingly difficult to stimulate curiosity, creativity, and critical thinking in virtual classrooms, prompting a search for innovative pedagogical approaches such as game-based learning to sustain engagement (Toquero, Sonsona, & Talidong, 2021). In addition, socio-emotional barriers such as isolation and lack of immediacy often led to cognitive fatigue and decreased learning satisfaction among students (Markova, 2021). Consequently, digital pedagogy must evolve beyond technical proficiency to address the emotional, social, and ethical complexities of virtual learning environments.

Equally important, **teacher presence in digital environments** has emerged as a critical determinant of learning quality and engagement. Effective virtual teaching depends not only on instructional design but also on how instructors communicate empathy, availability, and attentiveness through digital interfaces (Tyrväinen, Uotinen, & Valkonen, 2021). Moreover, the sense of "social presence" the feeling of being emotionally and cognitively connected with others proves essential for fostering collaboration and motivation in online classes (Don, Rosli, & Senin, 2022). In contrast, when digital instruction lacks visible instructor engagement, students often experience disengagement and cognitive overload. Studies reveal that effective online educators use techniques such as addressing students by name, providing personalized feedback, and expressing gratitude to recreate the immediacy of face-to-face interaction (Rapanta et al., 2020). Consequently, cultivating teacher presence online is not merely about technological competence but about sustaining empathy, authenticity, and human connection in digital spaces.

Finally, ensuring **psychological safety in online classrooms** is vital to the success of digital pedagogy. Psychological safety enables learners to express opinions, make mistakes, and engage in discussion without fear of judgment or exclusion. However, the absence of non-verbal cues and spontaneous feedback in virtual settings often heightens anxiety and reduces students' sense of belonging (Cherushevaa et al., 2024). Moreover, research shows that teachers themselves experience varying levels of psychological security depending on their familiarity with digital teaching;

moderate online exposure tends to generate ambivalence, combining enthusiasm with insecurity (Zhuravlova & Pomytkina, 2025). Consequently, maintaining psychological safety in virtual classrooms requires institutional support, balanced teaching workloads, and the integration of reflective and humanizing communication practices (Brown & Zhang, 2024). Thus, digital pedagogy must extend beyond content delivery to cultivate emotional stability, trust, and community as foundations of effective learning.

AI in EFL Instruction

In contemporary English as a Foreign Language (EFL) classrooms, artificial intelligence (AI) has become a powerful tool for providing **assistance, scaffolding, and feedback** that enhance learning autonomy and engagement. AI-driven applications such as chatbots and intelligent tutoring systems offer immediate feedback, personalized practice, and adaptive language support that simulate authentic communication contexts (Sun, 2025). Moreover, studies have shown that combining AI-based feedback with teacher guidance produces the most significant improvements in students' writing accuracy and coherence, as the two feedback sources complement each other: AI addresses surface-level errors while teachers focus on higher-order concerns (Asadi, Ebadi, & Mohammadi, 2025). Similarly, AI-integrated gamification systems that incorporate teacher scaffolding sustain motivation and foster self-regulated learning more effectively than AI tools alone (Ma & Chen, 2025). Consequently, the most productive use of AI in EFL instruction lies in hybrid approaches where human teachers guide and contextualize AI assistance, ensuring that feedback remains not only efficient but pedagogically meaningful.

However, despite its potential benefits, AI integration in EFL learning also presents critical risks of **depersonalization and overreliance**. As language practice becomes increasingly mediated by algorithms, learners may lose essential opportunities for human interaction and authentic communication (Dijk, 2025). Overdependence on AI-generated corrections and translations can diminish student agency and reduce the development of self-regulated learning strategies (Darvishi et al., 2023). Moreover, instructors express concern that constant AI mediation may lead to emotional detachment and hinder the cultivation of empathy in language education (Parviz, 2024). In contrast, research emphasizes that when AI is positioned as a supplementary tool rather than a replacement for human teaching, it can enrich rather than erode the relational aspects of learning (Moybeka et al., 2023). Consequently, maintaining the human dimension in AI-assisted instruction requires careful pedagogical balance, where teachers cultivate awareness of both the affordances and limitations of AI.

To achieve this balance, developing **AI literacy in English Language Teaching (ELT)** has become an urgent necessity. AI literacy entails not only the ability to use AI tools effectively but also to critically evaluate their ethical, cognitive, and pedagogical implications (Hossain, Çelik, & Hınız, 2025). Moreover, both teachers and learners must understand how AI systems generate feedback, the biases they may reproduce, and how to interpret automated suggestions responsibly. Research on AI literacy frameworks, such as the AI Assessment Scale (AIAS), demonstrates how structured training can equip EFL learners with the skills to use AI transparently and ethically for writing and translation tasks (Roe, Perkins, & Furze, 2025). Furthermore, as AI increasingly reshapes educational roles, EFL teachers must develop new competencies that combine linguistic expertise with data literacy and ethical discernment (Laoha & Chomthong, 2025). Consequently, fostering AI literacy ensures that educators and students remain active, reflective participants in digital language learning empowered by, but not subordinate to, technology.

Discussion

The Need for Empathy-Based AI Integration in EFL

EFL learners frequently face **emotional challenges** that deeply influence their engagement, motivation, and academic success. Many experience language anxiety stemming from fear of judgment, limited linguistic confidence, and cultural distance, all of which can hinder communicative competence and self-expression (Liu et al., 2024). Moreover, digital learning contexts often amplify these feelings due to reduced social presence and the absence of real-time emotional feedback from teachers or peers (Patil & Mahandule, 2025). Consequently, students may disengage or adopt avoidance behaviors, leading to lower participation and limited language retention. To address these barriers, educators are increasingly exploring approaches that integrate emotional intelligence and empathy into EFL pedagogy, ensuring that affective needs are treated as essential rather than peripheral to language acquisition.

In response to these emotional difficulties, **artificial intelligence (AI)** presents promising opportunities to support learners without displacing the human essence of teaching. Intelligent tutoring systems, AI chatbots, and adaptive feedback tools can provide personalized language practice that lowers performance anxiety while enhancing learners' sense of progress and belonging (Song & Song, 2023). Moreover, when AI applications are designed with a focus on empathy and emotional responsiveness, they can simulate social presence, offering encouragement and reassurance that foster learner confidence (Dijk, 2025). However, this potential depends critically on ensuring that AI is not used as a substitute for human relationships but rather as a complement to them. Ethical implementation should prioritize tools that amplify teacher-student interaction rather than automate it entirely (Aly & Setiadi, 2025). Consequently, empathetic AI integration reframes technology as a relational aid one that enhances emotional accessibility and mutual understanding between teachers and learners.

Ultimately, the **need for empathy-based AI integration in EFL instruction** stems from the recognition that effective language learning is both cognitive and emotional. AI has the capacity to personalize instruction and provide instant feedback, yet these benefits reach their full potential only when aligned with human-centered pedagogical values (Keshishi & Hack, 2023). By embedding empathy and social-emotional learning principles into AI design, educators can ensure that technological tools promote connection, care, and student well-being. Moreover, as emotional intelligence becomes an increasingly vital skill in global communication, integrating empathetic AI within EFL education prepares learners not only for linguistic competence but also for intercultural empathy and ethical engagement. Consequently, empathy-based AI integration represents a balanced vision one that harmonizes technological innovation with the enduring human values of compassion, dialogue, and dignity at the heart of language learning.

Principles of Digital Humanizing Pedagogy

Dialogic learning lies at the core of digital humanizing pedagogy because it positions dialogue as both a cognitive and ethical process of co-creation. In virtual classrooms, dialogic learning enables students to express their authentic voices, question assumptions, and engage collaboratively in meaning-making rather than passively receiving information. For example, studies of asynchronous online discussion forums reveal that digital spaces designed for open-ended, reflective dialogue promote emotional connection, critical engagement, and collective learning (Essa et al., 2023). Moreover, dialogical pedagogy transforms technological platforms into spaces of exchange, where students' experiences and contexts become central to learning (Santiago & Mattos, 2023). Consequently, fostering dialogic learning online ensures that education remains participatory, reflective, and rooted in the human encounter even within digital interfaces.

Equally important, **student agency** must be a defining principle of humanized digital pedagogy. Agency empowers learners to make choices, negotiate meanings, and contribute actively to their own learning trajectories. In reimagined online environments, students demonstrate agency when they can personalize learning tasks, select digital resources, and engage in peer feedback that affirms their autonomy (Charteris & Smardon, 2019). Moreover, when learners perceive themselves as co-designers of knowledge rather than consumers of information, their motivation and sense of ownership increase significantly (Kaler-Jones et al., 2022). Consequently, humanizing pedagogy in digital contexts must cultivate conditions for student voice, decision-making, and creative participation, thereby countering the depersonalizing effects of algorithmic and standardized learning systems.

Another key component of digital humanization is **emotional safety**, which ensures that learners feel secure, respected, and supported in virtual spaces. In contrast to transactional modes of online education, emotionally safe environments allow students to take intellectual risks, express vulnerability, and share personal narratives. Research in medical and higher education contexts emphasizes that humanizing digital pedagogy depends on modeling care, empathy, and relational presence to foster trust and belonging (Younie & Adachi, 2024). Moreover, digital care practices such as individualized feedback and relational check-ins contribute to the creation of emotionally sustainable online communities (Porubin, 2024). Consequently, emotional safety in digital pedagogy is not ancillary but foundational to humanizing education, as it directly affects learners' engagement and cognitive openness.

Inclusivity further strengthens the moral and democratic dimension of digital humanizing pedagogy. It entails designing learning environments that respect cultural diversity, accessibility,

and equitable participation. Studies on intercultural and universal digital didactics emphasize that inclusive practices such as collaborative reflection and accessible course design enable all learners to engage meaningfully regardless of linguistic or cultural background (Areskoug Josefsson et al., 2022). Moreover, inclusive pedagogy requires critical awareness of structural inequalities embedded in digital systems and a deliberate effort to create culturally responsive and representative content (Hamed et al., 2024). Therefore, inclusivity transforms digital education from a one-size-fits-all model into a participatory process that honors multiple identities, perspectives, and learning needs.

Finally, **authentic relationships** represent the heart of digital humanizing pedagogy, connecting all previous principles. Authenticity in teacher-student relationships fosters mutual respect, empathy, and trust qualities that humanize digital learning despite physical distance. Research on online higher education highlights that authentic connections between instructors and students significantly improve engagement, satisfaction, and academic performance (Dias & Boulder, 2023). Moreover, relational authenticity arises through practices like dialogue, storytelling, and shared reflection, which allow teachers and students to connect beyond content delivery (Łukaszyk-Spryszak & Sańczyk-Cruz, 2023). Consequently, digital pedagogy that prioritizes authenticity cultivates a sense of community and moral presence that counters the alienation often associated with technology-mediated education.

Proposed Empathy-Based Digital Humanizing Framework Seven Steps Model

In response to the growing tension between technological efficiency and human connection in AI-assisted language learning, this study proposes a Seven Steps Empathy-Based Digital Humanizing Framework designed to integrate emotional intelligence, ethical awareness, and relational pedagogy into digital education. Grounded in Freire's dialogic learning, Noddings's ethic of care, and Rogers's humanistic pedagogy, the framework aims to restore empathy as the central principle of English as a Foreign Language (EFL) instruction in AI-mediated environments. Moreover, it provides a structured pathway for educators to design, implement, and evaluate digital learning experiences that balance automation with emotional presence. Each step of the model from awareness building to ethical innovation emphasizes the interdependence between technology and humanity, ensuring that AI functions not as a replacement for teachers, but as a partner in fostering dignity, inclusion, and authentic learning relationships. Consequently, this framework serves as both a conceptual and practical guide for realizing human-centered education in the digital age.

Awareness Building

The foundation of empathy-based digital humanizing pedagogy begins with **awareness building**, emphasizing teachers' and learners' understanding of emotional needs within digital classrooms. Awareness entails recognizing the psychological dimensions of online communication how tone, response delay, and screen-mediated interactions can affect motivation and belonging. Research shows that digital learning environments often diminish emotional presence, making it essential for educators to intentionally design emotionally attuned spaces (Voicu, 2025). Moreover, emotional awareness allows teachers to identify invisible factors such as cognitive overload and digital fatigue, which can hinder engagement and participation (Yaduvanshi & Yadav, 2025).

Equally, awareness must extend to the relational impact of AI integration. Teachers and students alike should develop critical consciousness of how algorithms shape communication patterns, feedback tone, and perceived empathy. Consequently, training programs that incorporate reflective dialogue on emotional and ethical dimensions of AI can strengthen digital empathy and reinforce the humanizing intent of technology (Siddiqui et al., 2025).

Empathy-Oriented Task Design

The second step focuses on **empathy-oriented task design**, which seeks to ensure psychological safety and emotional engagement in digital activities. Rather than emphasizing performance outcomes, empathetic task design prioritizes student well-being and inclusion. Research on AI-integrated learning shows that emotionally sensitive task design such as adaptive role-plays or collaborative digital storytelling enhances both affective and linguistic outcomes (Tao & Nasri, 2025). Moreover, tasks designed with emotional cues and reflective components allow students to articulate feelings and develop socio-emotional literacy while learning language skills.

In contrast to algorithmic efficiency models, empathy-oriented tasks are intentionally dialogic and inclusive. For instance, activities such as journaling about digital experiences or collaborative podcasts help students co-construct understanding in psychologically safe

environments (Aly & Setiadi, 2025). Consequently, such designs prevent depersonalization and cultivate a culture of care, promoting equity and emotional resilience in virtual EFL classrooms.

Humanized Teacher Digital Presence

A critical element of this framework is the **humanized digital presence** of teachers maintaining empathy, authenticity, and immediacy in mediated interactions. Teachers can humanize digital presence through personalized video or voice feedback, use of names in online discussions, and acknowledgment of students' emotions (Britton & Vallis, 2024). Moreover, studies on AI-enhanced feedback systems reveal that multimodal approaches such as voice-based comments or expressive avatars improve learner engagement and relational satisfaction without eliminating teacher authenticity.

However, establishing digital presence requires balancing automation with human warmth. Teachers must consciously infuse empathy into communication by modeling vulnerability, gratitude, and patience, especially when using AI-generated support tools (Voicu, 2025). Consequently, presence becomes an ethical commitment an assurance that technology does not replace, but amplifies, the human connection fundamental to learning.

AI as a Supportive Partner

In the fourth step, AI is envisioned not as a substitute for teachers but as a **supportive pedagogical partner**. This aligns with the principle that AI's role should be scaffolding rather than judgmental. Empirical evidence from EFL contexts shows that AI-supported learning environments with teacher mediation significantly enhance motivation and proficiency compared to AI-only models (Ma & Chen, 2025). Moreover, framing AI as a dialogic collaborator encourages learners to critically engage with machine feedback instead of passively accepting it. However, AI's scaffolding potential depends on transparency and ethical design. When algorithms communicate with care-oriented phrasing, personalized pacing, and adaptive support, they become co-facilitators in empathetic education (Al-Hamadi & Yousif, 2025). Consequently, human teachers must remain the emotional and ethical interpreters of AI feedback, ensuring that learners experience AI as a relational aid rather than a mechanistic evaluator.

Reflective Social-Emotional Practices

The fifth stage introduces **reflective social-emotional practices**, such as journaling, empathy mapping, and mindfulness activities, to promote self-awareness and interpersonal growth. Reflective practices enable students to internalize empathy as both an emotional and cognitive skill. In digital EFL contexts, guided reflection helps learners examine their affective responses to AI feedback, online collaboration, and linguistic challenges (Grosseck, Bran, & Tîru, 2023).

Moreover, when reflection is embedded as a social practice through shared digital journals or discussion boards it builds collective empathy among peers. This collective reflection fosters community, reduces isolation, and reinforces the humanizing mission of digital pedagogy (Nyaaba, 2024). Consequently, reflective emotional literacy becomes a sustainable means of nurturing empathy and ethical awareness in both learners and teachers.

Dialogic and Compassionate Feedback

This step introduces a **three-step empathy feedback model**: recognition, validation, and empowerment. First, teachers or AI systems recognize the learner's effort or emotion; second, they validate the learner's experience empathetically; and third, they provide constructive suggestions that empower improvement. Such dialogic feedback strengthens emotional safety and engagement in virtual learning (Aperstein & Cohen, 2025).

Moreover, integrating AI tools that deliver compassionate tone and personalized suggestions can amplify teacher empathy while reducing workload. In contrast to punitive grading systems, compassionate AI feedback humanizes digital evaluation and fosters learner motivation (Siddiqui et al., 2025). Consequently, dialogic and compassionate feedback transforms evaluation into a relational and reflective dialogue, reinforcing the pedagogical principle that empathy and accountability are not mutually exclusive.

Ethical AI and Human-Centered Innovation

The final step **Ethical AI and Human-Centered Innovation** ensures that empathy-based frameworks align with academic integrity and digital ethics. Ethical AI integration demands

transparency, fairness, and respect for privacy, particularly in EFL contexts where language data reflects cultural and personal identities (Haroud & Saqri, 2025). Moreover, fostering AI literacy among both teachers and students cultivates critical awareness of bias, consent, and ethical data use (Silagan & Tumapon, 2025).

Consequently, ethical AI becomes a shared responsibility a collective endeavor to balance innovation with human dignity. In the spirit of human-centered innovation, empathy is not an accessory but the guiding principle that ensures AI remains accountable to educational values of care, justice, and respect (Papakostas, 2025). Thus, the empathy-based digital humanizing framework concludes with a vision of AI not as a technological endpoint, but as a means to reassert humanity at the center of education.

Practical Applications for EFL Teachers

In practical terms, EFL teachers can apply the principles of digital humanizing pedagogy through **empathy-based task design** in core language skills such as speaking, writing, and reading. For speaking, AI-powered conversational tools such as *AI-CiciBot* or *SmallTalk2Me* create low-anxiety environments where learners can practice oral communication and receive supportive feedback without fear of judgment (Muthmainnah, 2024); (Farooqi, 2025). Moreover, activities like *digital storytelling* and *intercultural narrative exchange* allow students to integrate emotional expression with linguistic development (Fountoulakis, 2025). For writing, integrating AI feedback tools such as *Writerly*, *Gemini*, or *ChatGPT* alongside teacher guidance enhances both technical accuracy and emotional engagement by balancing automated precision with human empathy (Tran, 2025); (Wale & Kassahun, 2024). Similarly, reading lessons can be humanized through collaborative annotation platforms that encourage emotional and cultural reflection on texts, fostering both comprehension and empathy.

To ensure alignment between instruction and humanized assessment, teachers can utilize an **empathetic rubric** that integrates both linguistic and affective dimensions. Such rubrics go beyond evaluating grammar or vocabulary to include indicators of *emotional expression*, *perspective-taking*, and *collaborative participation*. Studies have shown that rubric-based assessment enhances self-regulation and student ownership of learning when learners participate in peer- or self-evaluation using clearly articulated criteria (Dang & Le, 2023). Moreover, when combined with feedback loops, rubrics can serve as reflective tools that help learners identify both linguistic gaps and emotional strengths. For instance, EFL writing rubrics that integrate communicative clarity, empathy of tone, and cultural awareness promote a more holistic understanding of writing quality (Alghizzi & Alshahrani, 2024). Consequently, empathetic rubrics transform evaluation into a humanizing process that values emotional depth as much as linguistic precision.

In addition, **feedback practices** offer a rich avenue for humanizing AI integration. Combining teacher and AI-generated feedback has been shown to produce the most significant learning gains, with AI offering specific corrective input and teachers adding relational empathy (Alnemrat & Aldamen, 2025); (Tran, 2025). In practice, teachers can adopt a “3-Step Empathy Feedback Model” that begins with *recognition* of the learner’s effort, moves to *validation* of their experience, and concludes with *empowerment* through constructive, non-judgmental suggestions. AI systems like ChatGPT and Gemini can assist by generating initial formative comments, while teachers can personalize these to include affective support and individualized reflection (Fan, Tan, & Lim, 2024). Consequently, feedback becomes a dialogic and compassionate exchange, reinforcing student confidence while preserving teacher authenticity.

Finally, the successful implementation of these practices requires ongoing **teacher professional development** in AI integration and humanistic pedagogy. Training based on the TPACK framework (Technological Pedagogical Content Knowledge) has been shown to enhance teachers’ confidence and ethical competence in using AI tools responsibly (Zulianti et al., 2024). Moreover, incorporating reflective workshops on empathy, digital ethics, and emotional presence can prepare teachers to maintain balance between automation and care. As empathy-based pedagogy increasingly shapes EFL education, professional growth must include both technical fluency and emotional literacy. Consequently, equipping teachers with these competencies ensures that AI remains a *human-supportive* innovation enhancing connection, compassion, and creativity in every aspect of English language instruction (Thuy, Thuy, & Thao, 2024).

Challenges and Considerations

Ethical considerations form the cornerstone of responsible AI integration in EFL education. As artificial intelligence becomes embedded in language learning environments, teachers and institutions must address ethical issues surrounding **privacy, authenticity, data ownership, and academic integrity**. Studies indicate that AI-driven feedback tools can unintentionally compromise student autonomy or blur authorship boundaries, prompting concerns about plagiarism and overreliance (Werdiningsih & Marzuki, 2024). Moreover, ethical frameworks emphasize the importance of teacher competence in navigating AI responsibly, ensuring that learners use digital tools in ways that enhance rather than undermine creative and critical engagement (Abisheva et al., 2024). Consequently, humanistic pedagogy must be coupled with **ethical AI literacy**, allowing teachers and students to understand consent, fairness, and transparency as central dimensions of digital learning ethics.

Beyond ethics, **AI bias** presents another pressing challenge that directly affects equity and representation in education. Algorithmic systems often reflect the cultural, linguistic, and gendered biases of their training data, thereby reinforcing existing inequalities (Farheen & Cheema, 2025). In EFL contexts, this bias can manifest as skewed vocabulary recommendations, cultural insensitivity, or unbalanced proficiency assessment that privileges native-speaker norms. Moreover, without transparency in AI decision-making (“black box” algorithms), both teachers and learners remain unaware of how results are generated, limiting critical evaluation (Jundon & Niyomves, 2025). Consequently, promoting algorithmic fairness requires educators to question AI outputs and integrate cultural diversity into language datasets, ensuring that EFL teaching technologies reflect pluralistic perspectives rather than reinforcing hegemonic norms.

Another concern, **digital inequality**, continues to hinder equitable AI adoption in education worldwide. While AI-driven tools promise personalized and accessible learning, they remain inaccessible to students and teachers in under-resourced contexts due to disparities in connectivity, infrastructure, and digital literacy (Mac Fadden, García-Alonso, & López Meneses, 2024). Moreover, research shows that AI systems designed for advanced digital ecosystems may unintentionally exclude marginalized groups, deepening existing educational gaps (Rasheed et al., 2025). Consequently, ensuring equity in AI-based EFL learning requires not only technological interventions but also systemic reforms in infrastructure and policy such as open-access platforms, localized data design, and teacher support for low-resource contexts.

Finally, **teacher readiness** remains a decisive factor in the ethical and effective implementation of AI in EFL classrooms. Many educators report limited training in digital pedagogy, algorithmic ethics, and AI functionalities, which constrains their ability to integrate these tools meaningfully (Arvin et al., 2023). Moreover, despite increasing enthusiasm for AI-enhanced instruction, studies show that confidence and readiness are significantly shaped by institutional support, access to professional development, and ethical awareness (Fundi et al., 2024). In contrast, when teachers receive structured training and reflective practice opportunities, they become not only technologically proficient but also ethically grounded facilitators of empathetic AI integration (Suello & Alda, 2025). Consequently, fostering teacher readiness is the linchpin of sustainable and human-centered AI pedagogy in EFL education.

Conclusion

This study has explored the intersection of empathy, artificial intelligence, and language pedagogy through the lens of humanizing education. The discussion has shown that as EFL classrooms increasingly adopt digital and AI-driven tools, the need to preserve the emotional, ethical, and relational dimensions of learning becomes more urgent than ever. While AI technologies offer tremendous opportunities for personalization and engagement, they also risk reducing learning to mechanical interaction if not grounded in empathy, care, and human agency. Consequently, the integration of technology in EFL must go beyond functionality to foreground the values of dignity, dialogue, and compassion that define education as a human practice.

Moreover, this paper has argued that **humanizing EFL instruction in the age of AI** is not merely a pedagogical preference but a moral and existential necessity. Freire’s concept of dialogue, Noddings’s ethics of care, and Rogers’s humanistic principles collectively emphasize that meaningful learning arises from connection, not automation. In digital learning contexts, empathy acts as the bridge that restores emotional depth and mutual understanding between learners and teachers. Thus, reimagining EFL pedagogy through a humanizing perspective ensures that

technology becomes a tool for empowerment, not alienation a means of amplifying humanity rather than replacing it.

The proposed **Seven Steps Empathy-Based Digital Humanizing Framework** offers a comprehensive pedagogical roadmap for implementing this vision in practice. Each step from awareness building to ethical innovation provides actionable guidance for educators to design emotionally responsive, ethically grounded, and inclusive digital classrooms. Moreover, the framework highlights the dynamic partnership between teachers and AI, positioning technology as a supportive collaborator that enhances scaffolding, feedback, and reflection. When applied effectively, this model can transform AI-assisted EFL instruction into a space of care, creativity, and critical consciousness, where both language and empathy are learned together.

Finally, future research should continue to examine how empathy-based frameworks can be empirically validated and adapted across diverse linguistic, cultural, and institutional contexts. Studies could explore how emotional analytics, AI literacy programs, and cross-cultural empathy training affect learning outcomes and teacher development in digital EFL settings. Further interdisciplinary collaboration between educators, technologists, and ethicists is also essential to refine human-centered AI design for education. By advancing this dialogue, future scholarship can contribute to a more just, compassionate, and humanized vision of digital learning one where technology and empathy coexist to enrich both language proficiency and the moral imagination of learners.

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