

RETHINKING EMOTIONAL INTELLIGENCE IN DIGITAL EDUCATION: A CONCEPTUAL PERSPECTIVE

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Abstract. The rapid growth of digital education has transformed emotional interaction within learning environments. As learning increasingly occurs through digitally mediated platforms, learners and educators face challenges related to reduced social cues, communication ambiguity, digital fatigue, and online isolation. However, traditional Emotional Intelligence (EI) theories were primarily developed in face-to-face contexts and may not adequately explain emotional processes in virtual learning environments. Therefore, this conceptual paper aims to rethink EI in digital education by proposing a conceptual perspective of Digital Emotional Intelligence (DEI). The study adopts a conceptual paper design using narrative literature review and theoretical synthesis. Literature published between 2020 and 2026 was examined to explore the relationship among emotional intelligence, digital competencies, and socio-emotional skills. The analysis highlights the limitations of traditional EI frameworks in digitally mediated interactions and identifies key DEI dimensions, including digital self-awareness, digital emotional regulation, digital empathy, ethical digital behavior, and digital relationship management. The proposed perspective integrates traditional EI, digital competencies, and socio-emotional skills into a unified framework for digital education. The paper contributes to the growing discourse on DEI by proposing an integrated conceptual perspective that synthesises emotional intelligence, digital competencies, and socio-emotional skills into a unified framework for understanding emotional functioning in digital learning environments. The proposed perspective offers practical implications for digital pedagogy, teacher preparation, educational policy, and future research.

Keywords: *emotional intelligence, digital education, Digital Emotional Intelligence (DEI), digital pedagogy, socio-emotional skills*

Introduction

The global educational landscape has undergone a radical transformation through the rapid expansion of Open, Distance, Online, and Digital Education (ODODE), providing unprecedented access to learning for diverse populations (Tuna and Ozkocak, 2026). This shift represents a fundamental reconfiguration of traditional pedagogical models, as educational interaction has moved from physical classrooms to digitally mediated environments (Audrin and Audrin, 2023). The post-pandemic era, in particular, has accelerated this transition, evolving from "Emergency Remote Teaching" into a permanent paradigm shift towards hybrid and fully online models (Stolba et al., 2024; Audrin and Audrin, 2023). These new environments demand a transition from traditional didactic modes to dynamic, flexible and competency-oriented processes (Tuna and Ozkocak, 2026; Stolba et al., 2024). In this digital era, the effectiveness of learning is no longer solely dependent on content delivery but is increasingly shaped by how participants navigate complex, technology-driven social spaces (Prasai, 2025; Stolba et al., 2024). Despite the flexibility offered by digital education, the shift has introduced significant emotional challenges that threaten student success and well-being (Tuna and Ozkocak, 2026). A primary concern is emotional disengagement, often exacerbated by physical isolation and the self-directed nature of online learning (Tuna

and Ozkocak, 2026). Unlike face-to-face settings, digital communication particularly when text-based suffers from a "poverty of cues," lacking the vocal intonations, facial expressions, and body language essential for emotional clarity (Prasai, 2025; Audrin and Audrin, 2024). This leads to communication ambiguity, where unintentional cues like typos or punctuation errors are often misattributed, causing emotional misunderstandings (Prasai, 2025; Audrin and Audrin, 2024).

Furthermore, the phenomenon of "camera-off" learning has been linked to reduced social presence and a diminished sense of community (Stolba et al., 2024). Students in these settings often exhibit passive participation and delayed responses, reflecting a hesitancy to express emotions in writing. The cumulative effect of constant connectivity and prolonged screen time has resulted in widespread digital fatigue and online stress, which further erodes emotional resilience and increases the risk of burnout (Aziz et al., 2026). Traditional Emotional Intelligence (EI) theories, famously conceptualized by Salovey and Mayer and popularized by Goleman, were primarily developed within the context of physical, face-to-face interactions (Audrin and Audrin, 2023). These frameworks focus heavily on the ability to perceive and regulate emotions based on tangible non-verbal cues that are often absent or significantly modified in virtual spaces. Research indicates that traditional EI instruments possess stronger predictive power for collaboration in face-to-face teams than for performance in virtual teams (Audrin and Audrin, 2024). The digital world introduces novel emotional signals, such as emojis, emoticons, and GIFs, which require different cognitive and affective processing mechanisms than those accounted for in conventional EI models (Prasai, 2025; Audrin and Audrin, 2024). Consequently, traditional EI is insufficient to explain digital emotional behavior, as it fails to account for the technological enablers and barriers inherent in digital interactions (Audrin and Audrin, 2024, 2023).

Although several frameworks have explored digital emotional competencies and digital citizenship (e.g., Audrin and Audrin, 2024, 2023; Park, 2019), these frameworks typically address either digital competencies or emotional skills in isolation. The present conceptual perspective advances the field by integrating emotional intelligence, digital competencies, and socio-emotional skills into a unified framework specifically designed for digitally mediated teaching and learning environments. Rather than introducing entirely new constructs, the novelty of this paper lies in reconceptualising and synthesising existing theories into an integrated model of Digital Emotional Intelligence (DEI) that explains how individuals understand, manage, and express emotions ethically and effectively in digital interactions. This integrated perspective addresses gaps in previous models by highlighting the interdependence of emotional, digital, and social dimensions in shaping meaningful and ethically responsible digital learning experiences. Most existing digital competence frameworks (such as DigComp) fail to explicitly consider the role of emotions, while EI theories rarely address the specificities of technological mediation. This has led to a significant gap in the literature concerning Digital Emotional Intelligence (DEI) as a unified construct (Audrin and Audrin, 2023). Furthermore, theoretical discussions on emotional interaction in digital education have been limited, particularly regarding the emotional labor of teachers in virtual spaces (Tuna and Ozkocak, 2026). There is an urgent need for an integrated conceptual perspective that combines traditional EI skills with digital competencies to better prepare learners and educators for the demands of the modern digital workforce and society (Audrin and Audrin, 2023). This paper aims to address these gaps by rethinking the application of EI within the digital educational framework.

Objective of the paper

This paper aims to reconceptualise Emotional Intelligence (EI) in digital education by proposing a conceptual perspective of Digital Emotional Intelligence (DEI) to better explain emotional interaction and socio-emotional competencies within digitally mediated learning environments.

Literature review

Emotional intelligence theory

The concept of Emotional Intelligence (EI) was formally introduced by Salovey and Mayer, who defined it as the subset of social intelligence involving the ability to monitor one's own and others' feelings, discriminate among them, and use this information to guide thinking and action. Their seminal four-branch model categorizes EI into four distinct abilities: perceiving emotions (recognizing emotions in oneself and others), using emotions to facilitate thought (harnessing emotions to enhance cognitive tasks), understanding emotions (comprehending emotional language and complex transitions), and managing emotions (regulating emotions to promote personal and social growth). While recent empirical studies suggest that the "using emotions" branch is sometimes difficult to measure independently, the model remains the theoretical backbone for understanding EI as a cognitive ability (Wang and Qin, 2025; Audrin and Audrin, 2024). Building upon the work of Salovey and Mayer, Goleman popularized EI by framing it as a set of learned competencies that drive professional and personal success. Goleman's model emphasizes five key domains: self-awareness (recognizing one's internal states), self-regulation (managing disruptive impulses), motivation (emotional tendencies that facilitate reaching goals), empathy (awareness of others' feelings) and social skills (adeptness at inducing desirable responses in others). Unlike the purely ability-based perspective, this model integrates personality traits with social competencies, suggesting that EI can be developed through systematic training. Recent studies have continued to demonstrate the relevance of EI in enhancing teacher effectiveness, professional performance, and social integration within educational settings (Vázquez et al., 2025; Verma, 2023).

Digital education and human interaction

The rapid expansion of Open, Distance, Online, and Digital Education (ODODE) has fundamentally transformed educational interactions (Tuna and Ozkocak, 2026). Interaction in digital learning is primarily digitally mediated, occurring through virtual communication cultures that favor asynchronous learning and text-based interactions. These environments introduce unique online social behaviors, such as emotional invisibility and online silence, where the absence of physical cues makes it difficult to perceive others as "real" participants. Furthermore, digital communication barriers often referred to as a "poverty of cues" which limit the availability of vocal intonations and body language, potentially leading to a sense of physical isolation and reduced social presence (Audrin and Audrin, 2024; Stolba et al., 2024).

Limitations of traditional EI in digital contexts

Traditional EI models, developed for face-to-face settings, do not sufficiently explain the complexities of modern digital interactions. According to Audrin and Audrin (2024), the rise of digital interaction requires renewed perspectives on how emotional intelligence is understood and assessed. Digital environments introduce novel emotional signals like emoji-based communication, emoticons, and GIFs, which require different cognitive and affective processing mechanisms. In these spaces, individuals often engage in emotional masking and sophisticated digital self-presentation, where the ability to edit or rehearse messages allows for a high degree of control over emotional displays. Moreover, delayed emotional responses in asynchronous channels can lead to emotional ambiguity, where the lack of immediate feedback causes misattributions and increased stress. Research further suggests that digital environments fundamentally alter how emotions are expressed, interpreted, and managed (Audrin and Audrin, 2023; Leeuw and Joseph, 2023). *Table 1* highlights the fundamental differences between traditional Emotional Intelligence and the emerging construct of Digital Emotional Intelligence (DEI), particularly regarding interaction settings and communication cues. As shown in *Table 1*, Digital Emotional Intelligence extends beyond the scope of traditional Emotional Intelligence by incorporating competencies required for navigating digitally mediated interactions. While traditional EI focuses on interpreting emotions through direct interpersonal cues, DEI encompasses the ability to recognize, interpret, regulate, and express emotions within technology-enabled environments characterized by reduced social cues and increased communication complexity.

Table 1. Comparison between traditional EI and DEI.

Feature	Traditional Emotional Intelligence	Digital Emotional Intelligence (DEI)
Interaction Setting	Primarily physical, face-to-face environments.	Digitally mediated and virtual social spaces.
Emotional Cues	Relies on tangible non-verbal cues such as body language, facial expressions, and vocal intonation.	Characterized by a "poverty of cues"; relies on text-based signals, emojis, emoticons, GIFs, and stickers.
Feedback Mechanism	Generally immediate and occurs in real-time.	Can be synchronous (instant) or asynchronous (delayed), allowing for rehearsed or crafted emotional content.
Self-Presentation	Spontaneous emotional responses based on physical presence.	Involves sophisticated digital self-presentation and emotional masking mediated by the screen.
Required Competencies	Focuses solely on affective and social abilities.	Integrates traditional EI skills with technical digital literacy and knowledge of virtual social norms.
Primary Challenges	Managing physical interpersonal conflicts and personal emotional states.	Managing digital fatigue, online silence, and the risk of emotional misattribution in text.

Emergence of Digital Emotional Intelligence (DEI)

Audrin and Audrin (2023) conceptualized Digital Emotional Intelligence (DEI) as the integration of emotional intelligence and digital competence. DEI is defined as the ability to recognize, navigate, and express emotions in one's digital intra- and interpersonal interactions. It is conceptualized as an integration of traditional EI skills with digital competencies, moving beyond "emotional intelligence online" to a unified construct that accounts for technological mediation. Recent studies have further highlighted DEI as an emerging competency within digital literacy and digital interaction frameworks (Gómez-Vallarta et al., 2025; Leeuw and Joseph, 2023). The Digital Intelligence (DQ) Framework identifies DEI as one of its eight core areas (Park, 2019; DQ Institute, 2017). Within this framework, DEI undergirds various digital competencies such as digital citizenship (safe and ethical technology use), digital identity (building a wholesome online persona) and digital empathy (being sensitive to others' needs online). DEI focuses on responsible digital behavior, guided by the

principle of respect for others and the ability to manage one's digital footprint and privacy effectively. The complementary relationship between digital intelligence and emotional intelligence has also been emphasized in contemporary discussions of digital competence (Yeke, 2023). The core pillars of socio-emotional learning, often associated with the CASEL framework, are explicitly linked to digital competencies within modern literacy models. These include self-awareness (recognizing how digital skills fit into the digital environment), relationship skills (managing online connections through cooperation and conflict resolution), and responsible decision-making (personal and ethical responsibility in the cyber world). Integrating these domains ensures that learners can navigate the psychological demands of constant digital engagement (Audrin and Audrin, 2023; Bujang et al., 2022).

Need for reconceptualisation

The shift towards a digitalized society necessitates a reconceptualization of Emotional Intelligence within educational frameworks. Emerging technologies, AI-driven learning environments, and digitally mediated interactions have transformed the ways emotions are experienced, expressed, and regulated (Keshishi and Hack, 2023). Digital education demands broader emotional competencies that account for technical enablers, such as AI-driven emotional support tools, and barriers like digital fatigue. Furthermore, the growing emphasis on multidimensional teacher evaluation systems has increased the emotional demands placed upon educators. Successfully navigating feedback from multiple stakeholders requires not only professional competence but also advanced emotional capabilities, including self-awareness, empathy, and emotional self-regulation. These developments suggest that traditional understandings of Emotional Intelligence may no longer be sufficient to address the complexities of contemporary educational practice (Hussain and Mohd Matore, 2024). Rethinking EI is essential to address the "always-on" culture and the rising mental health challenges in virtual classrooms, such as anxiety and social polarization. By integrating digital literacy with EI, educators and learners can foster a more supportive, dialogic, and inclusive digital environment that prepares individuals for the demands of the 21st-century workforce (Gómez-Vallarta et al., 2025; Prasai, 2025; Audrin and Audrin, 2023).

Materials and Methods

Research design and data sources

This study adopts a conceptual paper design, primarily utilizing narrative literature review and theoretical synthesis approaches to explore the intersection of Emotional Intelligence (EI) and digital education. Unlike empirical studies that rely on primary data, a conceptual design focuses on providing a renewed perspective on existing constructs to align them with evolving environments in this case, the rapid transition from physical to digitally mediated learning spaces. The study employs a deductive manner, moving from general EI theories to the specificities of digital competencies to produce a robust support structure for the proposed framework (Gómez-Vallarta et al., 2025). This approach allows for the integration of traditional affective theories with modern technological standards to conceptualize Digital Emotional Intelligence (DEI) as a unified construct (Gómez-Vallarta et al., 2025; Audrin and Audrin, 2023; Bujang et al., 2022). To ensure a comprehensive and authoritative collection of scholarly

materials, data for this conceptual analysis were retrieved from three primary global databases: Scopus, Web of Science (WOS) Core Collection and Google Scholar. These platforms were selected for their wide coverage of high-quality peer-reviewed journals, academic monographs, and research reports across the fields of psychology, education, and technology (Wang and Qin, 2025). By aggregating insights from these diverse sources, the study establishes a neutral and impartial platform for synthesizing leading practices and theoretical perspectives related to digital intelligence (Park, 2019; DQ Institute, 2017).

Literature selection criteria

The literature selection followed a structured screening process to ensure relevance and academic quality. The following criteria were applied: Publication Period: Focus was placed on articles published between 2020 and 2026 to capture the most recent research growth and the permanent paradigm shift in education following the COVID-19 pandemic (Tuna and Ozkocak, 2026; Stolba et al., 2024). Language: Only English-language publications were included to ensure standardized terminology and global applicability of the findings. Search Keywords: Keywords used in the search strings included combinations of “emotional intelligence,” “digital education,” “digital behaviour,” “online learning,” and “socio-emotional competence”. Refinement Criteria: Documents were excluded if they were retracted, lacked full-text availability, or if the primary focus was on areas outside of education, such as purely technical software development without a social-emotional component.

Data analysis approach

The study employs a multi-faceted analytical strategy to synthesize the literature and build a cohesive conceptual model. This process involves the following three key components.

Thematic synthesis

The thematic synthesis follows a structured framework to identify core patterns across the selected literature. This begins with a deep immersion in the data to become familiar with emergent concepts related to digital interactions. Relevant concepts and recurring themes related to emotional interaction in digital learning environments were identified, compared, and synthesised across the selected literature. Particular attention was given to themes associated with emotional awareness, emotional regulation, empathy, digital behaviour, and online social interaction. The recurring themes identified across the literature were subsequently synthesised to support the development of the proposed DEI conceptual perspective. This synthesis allows for the categorization of digital intelligence into manageable areas and levels of maturity (Sharma et al., 2025). It is important to note that this study is conceptual in nature and does not aim to conduct a formal systematic review. Rather, the selected literature was synthesised to develop a theoretical perspective on Digital Emotional Intelligence within contemporary digital education contexts.

Conceptual analysis

Conceptual analysis is used to define and operationalize the construct of Digital Emotional Intelligence. This involves a nuanced exploration of how digital triggers (such as text-based communication or camera-off environments) lead to specific emotional interpretations and responses in a virtual setting (Launer and Calimag, 2025; Stolba et al., 2024). The analysis explores how technological features such as emojis, emoticons, and AI-driven feedback shape the way users manifest and regulate their emotions. By examining the dimensions of traditional EI alongside digital citizenship standards, the study defines DEI not merely as "EI online," but as a digital competence that integrates awareness of emotions produced by digital platforms with the ability to manage them for personal and social well-being (Gómez-Vallarta et al., 2025; Audrin and Audrin, 2023).

Comparative theoretical review

A comparative review is conducted to evaluate traditional EI models specifically those of Salovey and Mayer and Daniel Goleman against modern digital competency frameworks like the DQ Global Standards and DigComp (Audrin and Audrin, 2023). This review highlights the limitations of traditional theories, which primarily rely on tangible non-verbal cues that are absent in virtual spaces. By comparing the overlaps and gaps between these two domains, the study identifies ten sub-dimensions of emotional competence that are most applicable to the digital realm, such as digital self-presentation and assertiveness in online discourse (Gómez-Vallarta et al., 2025). This comparative approach ensures that the resulting DEI model is theoretically grounded while remaining relevant to the complexities of the 21st-century digital landscape (Dutta et al., 2025; Sharma et al., 2025).

Results and Discussion

Rethinking emotional intelligence in digital education

The transition from physical classrooms to digitally mediated environments has fundamentally altered the landscape of emotional interaction. Research suggests that digital environments are not neutral conduits but act as "affective technologies" that shape, amplify, and modify the transmission of emotions. Unlike face-to-face interactions where non-verbal cues like body language and vocal intonation are readily available, digital communication particularly when text-based is characterized by a "poverty of cues". This modification of information forces participants to rely on their own emotional states to recognize emotions in written text, often leading to emotional ambiguity and misattributions, such as perceiving typos or punctuation errors as negative emotional signals. Furthermore, digital spaces introduce phenomena such as digital disinhibition, where the presence of a screen and the potential for anonymity make users feel freer to express themselves with less regard for social norms of politeness than in face-to-face settings. This alters emotional processing; for instance, the lack of immediate physical consequences can amplify moral outrage and social polarization. Traditional Emotional Intelligence (EI) models, which were developed based on tangible, face-to-face cues, are insufficient for explaining these dynamics. They fail to account for novel digital signals like emojis, emoticons, and GIFs, which require different cognitive and affective processing mechanisms. Consequently, there is

a pressing need to rethink EI as a construct that is deeply integrated with technological mediation.

Emerging dimensions of digital emotional intelligence

Based on the theoretical synthesis conducted in this study, five dimensions of Digital Emotional Intelligence are proposed for digitally mediated educational environments as shown in *Table 2*. The five dimensions were identified through the synthesis of recurring concepts across the selected literature. These dimensions consistently appeared across Emotional Intelligence, Digital Competence, DQ Framework, and socio-emotional learning literature, indicating their relevance for explaining emotional functioning in digitally mediated educational contexts. Each dimension is critical to the success of digital pedagogy. For example, Digital Self-Awareness and Regulation help learners combat digital fatigue and online stress, which are major barriers to engagement. Digital Empathy and Relationship Management are essential for fostering social presence in Fully Online Learning Communities (FOLC), where perceiving others as "real" participants is a prerequisite for collaborative knowledge construction. These dimensions ensure that the digital environment remains a supportive and inclusive space, moving beyond simple content delivery to a holistic educational experience.

Table 2. *Proposed core dimensions of digital emotional intelligence for digitally mediated education.*

Proposed Dimension	Description
Digital Self-Awareness	The ability to recognize emotions produced by digital platforms and maintain a realistic, authentic self-perception online.
Digital Emotional Regulation	The ability to manage moods and impulses triggered by digital interactions, including managing screen time and resisting digital distractions.
Digital Empathy	The ability to understand and support others' feelings through digital cues (text, emojis, virtual behavior) in both synchronous and asynchronous modes.
Ethical Digital Behavior	Conduct guided by "respect for others," involving safe, responsible, and non-judgmental online communication.
Digital Relationship Management	The capacity to manage online connections through cooperation, conflict resolution, and the building of supportive virtual networks.

Proposed conceptual perspective of DEI

The proposed conceptual framework posits that Digital Emotional Intelligence (DEI) is an emergent educational competency resulting from the integration of three core pillars (*Figure 1*): (a) Traditional Emotional Intelligence: The foundational cognitive and trait-based abilities to perceive and manage emotions. (b) Digital Competencies: The technical knowledge and skills required to operate within digital platforms (DC-Knowledge and DC-Skills). (c) Socio-Emotional Skills: The values-based abilities, such as empathy and respect, adapted for the cyber world.

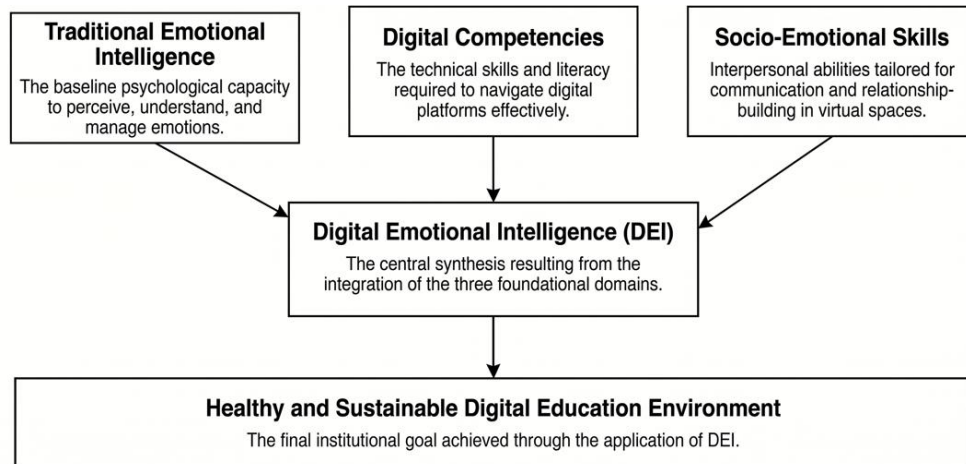


Figure 1. Proposed conceptual framework for Digital Emotional Intelligence (DEI) in digital education.

The relationship among these components is reciprocal and hierarchical. Trait Emotional Intelligence (EI) serves as an antecedent that predicts positive attitudes toward digital competence, while digital knowledge and skills act as enablers that facilitate the application of emotional intelligence within technology-mediated environments. The integration of these three conceptual pillars gives rise to Digital Emotional Intelligence (DEI), which undergirds emotional functioning in digitally mediated learning environments and promotes both individual and societal well-being. The proposed framework conceptualises DEI through five interrelated dimensions: Digital Self-Awareness, Digital Emotional Regulation, Digital Empathy, Ethical Digital Behavior, and Digital Relationship Management. Collectively, these dimensions operationalise the proposed conceptual framework by translating its theoretical foundations into practical competencies that support effective emotional engagement in digitally mediated educational contexts. Ultimately, these competencies contribute to sustainable digital education by fostering emotional resilience, promoting ethical online interactions, and mitigating challenges such as cyberbullying, social isolation, and digital fatigue. The proposed framework contributes theoretically by extending existing DEI discussions beyond digital citizenship and online emotional skills. Unlike previous frameworks that primarily focus on specific dimensions of digital behaviour or emotional competence, the present perspective integrates emotional intelligence, digital competencies, and socio-emotional skills into a holistic educational framework. This integration provides a more comprehensive explanation of emotional functioning within digitally mediated learning environments and establishes a conceptual foundation for future DEI measurement, intervention development, educational policy, and empirical research.

Advancing existing DEI perspectives

The proposed framework extends current understandings of Digital Emotional Intelligence (DEI) by integrating emotional intelligence, digital competencies, and socio-emotional skills within a single conceptual structure. Existing DEI perspectives have primarily emphasised the relationship between emotional intelligence and digital competence as key elements for functioning effectively in technology-mediated environments (Audrin and Audrin, 2023). While this perspective provides an important

foundation, the increasing complexity of digital education suggests that emotional functioning in online environments cannot be fully understood through these two domains alone. In digitally mediated learning environments, individuals are not only required to recognise and regulate emotions or demonstrate technological proficiency, but also to engage ethically, communicate respectfully, and maintain meaningful relationships with others in virtual spaces. These socio-emotional processes play a critical role in shaping the quality of digital interactions, particularly in contexts characterised by reduced social cues, asynchronous communication, and online social presence challenges.

Accordingly, the present framework positions socio-emotional skills as a complementary pillar that strengthens the integration between emotional intelligence and digital competencies. This perspective acknowledges that effective participation in digital education requires a balance between emotional capabilities, technological readiness, and socially responsible behaviour. By bringing these three domains together, the framework offers a more holistic explanation of how learners and educators navigate emotional experiences in contemporary digital learning environments. As such, the proposed perspective contributes to the growing DEI literature by providing an educationally oriented framework that may serve as a foundation for future instrument development, intervention design, and policy initiatives related to digital emotional competence.

Implications for digital education

Implications for educators

Educators must undergo a paradigm shift, moving from being mere transmitters of knowledge to becoming moderators of emotional dynamics in the virtual classroom. This requires emotional readiness and the development of "digital emotional literacy"—the ability to recognize and respond to students' emotional needs through text and digital artifacts. Teachers with high DEI are better equipped to manage virtual classroom behavior, build rapport with remote students, and create a conducive learning atmosphere that overcomes the "online silence" often found in camera-off settings.

Implications for educational institutions

Institutions must recognize DEI as a core 21st-century competency and integrate it into digital learning policies. This includes providing systematic training for both faculty and students on digital well-being and the ethical use of technology. Institutions should also invest in emotionally supportive infrastructure. Technologies such as mood-tracking or real-time feedback tools integrated into Learning Management Systems (LMS) may provide valuable insights to support student well-being and engagement. However, their implementation should be approached cautiously due to important ethical considerations, including privacy, informed consent, data security, potential misuse, and the risk of surveillance. Therefore, any adoption of such technologies should be guided by transparent policies, strong data governance practices, and ethical safeguards that prioritise students' rights and well-being. Future educational preparation must prioritize the creation of equitable and inclusive digital spaces that account for the diverse emotional needs of learners.

Implications for future research

There is an urgent need for the development of specialized DEI instruments that are validated for digital contexts, as traditional EI scales often lack predictive power in virtual teams. Future research should focus on empirical validation of the DEI construct through longitudinal studies to understand the long-term impact of DEI on academic performance and teacher attrition. Additionally, cross-cultural research is essential to determine how different societal norms influence emotional expression and interpretation in digital spaces. Finally, the development of DEI intervention modules and the ethical application of AI-driven emotion recognition software should be prioritized to enhance the support systems available in digital education.

Conclusion

The global transition toward digitally mediated learning environments has fundamentally altered the landscape of human emotional interaction. This study has highlighted that digital education is not a neutral medium, rather, it acts as an affective technology that modifies, amplifies, and sometimes obscures emotional cues. The inherent "poverty of cues" in text-based and asynchronous communication leads to unique challenges such as emotional invisibility and communication ambiguity, which can significantly hinder student engagement and social presence. Consequently, traditional Emotional Intelligence (EI) perspectives require urgent reconsideration. Models developed for physical, face-to-face interactions are increasingly insufficient to explain emotional dynamics in virtual spaces, as they fail to account for technological mediation and the emergence of novel digital signals like emojis and GIFs. This conceptual gap underscores the necessity of moving beyond traditional frameworks to address the realities of the digital era. In this context, Digital Emotional Intelligence (DEI) emerges as a vital 21st century competency. Defined as a unified integration of traditional EI skills and digital competencies, DEI is essential for fostering a healthy and sustainable digital education environment. It provides the necessary tools for learners and educators to manage digital fatigue, navigate social risks like cyberbullying, and build resilient, inclusive online communities.

The proposed conceptual perspective contributes to future educational discourse by providing a theoretical foundation for the intersection of affective and digital domains. By framing DEI as a core educational standard, this paper paves the way for future research into the development of specialized DEI assessment instruments and intervention modules. Ultimately, integrating DEI into educational policy and teacher training is a crucial step toward creating a more humane, supportive, and effective virtual learning landscape for the modern workforce and society. Unlike previous frameworks that treat emotional intelligence and digital competence as separate domains, the proposed DEI perspective offers an integrated theoretical lens for understanding emotional functioning in contemporary digital education. By conceptualising DEI as the integration of emotional intelligence, digital competencies, and socio-emotional skills, this paper extends existing theoretical discussions and provides a more comprehensive perspective on emotional functioning within digitally mediated learning environments. The proposed framework offers a conceptual foundation for future instrument development, educational interventions, policy initiatives, and empirical research that advance Digital Emotional Intelligence research and practice in digital education.

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Conflict of interest

The authors declare that there are no conflicts of interest associated with any parties involved in this research study.

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