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Intercultural Communicative Competence in Digital and AI-Mediated Communication: A Conceptual Review

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ABSTRACT: *The rapid integration of artificial intelligence (AI) into communication practices has redefined intercultural encounters, challenging traditional models of intercultural communication competence (ICC). While established frameworks such as Byram's (1997) and Deardorff's (2006) emphasize attitudes, knowledge, and skills for effective intercultural interaction, the dynamics of AI-mediated communication demand renewed theoretical attention. This paper considers the reconsideration of ICC based on the critical analysis of the conceptual framework in the foundations and recent research, in respect of digital communication, virtual exchange, multimodal interaction, and AI-mediated communication. The review shows that there are three recurring themes in the research writing landscape today: digital literacy, mediated identity and interaction, and critical thinking about AI-mediated communication. The paper does not develop a new theory but instead provides a conceptual fusion of these developments and explores the implications for developing current conceptions of ICC in digitally mediated situations. The paper adds to the discourse by summarizing new theories and understandings as well as future research and language education in the context of increasingly AI-supported interculturalism.*

KEYWORDS: Intercultural Communicative Competence, ICC, virtual communication, AI-mediated communication.

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1. Introduction

In the context of globalization, language education plays a crucial role in fostering learners' communicative competence, enabling them to engage with people from diverse backgrounds. English, as the global lingua franca, bridges communication barriers across social and cultural boundaries (Deardorff, 2009). However, intercultural interactions often present challenges, as individuals confront cultural differences and varying interpretations of shared concepts. Consequently, intercultural communication competence (ICC) has become an essential component for effective cross-cultural interactions.

Traditional language education often emphasizes grammar and vocabulary through passive learning methods. However, the ultimate goal of communication is mutual understanding. Therefore, language proficiency extends beyond mastering linguistic forms to include recognizing and respecting cultural norms and practices, which significantly shape communicative effectiveness (Byram, 1997, 2021; Deardorff & Jones, 2012; Gong et al., 2022).

Byram's (1997) model of ICC and Deardorff's (2009) process model highlight that successful intercultural communication requires three key elements: linguistic skills, cultural knowledge, and adaptive abilities. Linguistic skills form the foundation for effective communication, enabling learners to decode and construct meaning accurately (Cenoz, 2008). Beyond language, cultural knowledge shapes how individuals interpret messages and respond appropriately within different cultural contexts. Equally important is the ability to adapt behaviors and communication styles when interacting in new cultural environments, which is essential for achieving meaningful and respectful cross-cultural engagement (Deardorff & Jones, 2012).

Despite being equipped with a broad linguistic repertoire, many learners are ill-prepared for real-world intercultural interactions due to a lack of exposure to cultural contexts. This gap often leads learners to make assumptions based solely on their limited linguistic experiences, rather than interpreting meaning through a cultural lens (Nunn & Sivasubramaniam, 2011). The growing integration of artificial intelligence (AI) and virtual communication platforms in education further exacerbates the disparity between language proficiency and intercultural competence (Baimakhan et al., 2024; Dooly & Darvin, 2022). Virtual communication, which has gained prominence in digital learning environments, remains underemphasized in traditional classrooms that primarily focus on face-to-face interactions (Avgousti, 2018). Given the increasing use of digital platforms in language learning, there is a critical need to revisit existing ICC frameworks to address both theoretical and empirical gaps. Specifically, updated frameworks should integrate digital literacy and virtual communication skills to enhance learners' cultural fluency across diverse cultural settings.

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While Byram's (1997, 2021) model remains one of the most influential frameworks for intercultural communicative competence, its original formulation was developed largely in relation to face-to-face intercultural encounters.

This also applies, to different degrees, to other foundational models such as those proposed by Deardorff (2006, 2009) and Fantini (2020). Despite their theoretical value, none of the aforementioned approaches provides answers to the question of how intercultural communication transforms itself under the condition when it takes place via digital technology, multimodal communication, online performative identity, and AI-mediated communication. In the context of digital mediation, not just oral language and bodily gestures are the media of meaning, but text, emoji, timing, interface design, algorithms, and machine-generated language become part of it.

In light of these changes, this paper provides a review of key theoretical contributions concerning intercultural communicative competence (ICC) in order to reconsider the meaning of ICC in the digital age. Instead of offering a definitive new model, the paper provides an overview of the literature and claims that three dimensions of ICC research have gained significance in recent times: digital literacy, identity and interaction through mediation, and critical awareness of AI-assisted communication. In doing so, the paper draws on the fundamental models of ICC alongside contemporary theories of telecollaboration, virtual exchange, digital discourse, and AI-assisted communication. The aim of this paper is to critically explore, analyze, and examine the relevance of the mainstream and basic research on intercultural communicative competence (ICC) in the context of digital and AI-mediated communication. In particular, the review aims to (1) analyse the strengths and weaknesses of prominent ICC models in digitally mediated environments and (2) summarise recent developments in theory on ICC and (3) identify the key dimensions that are increasingly shaping contemporary understandings of ICC.

The method that this study uses is a critical conceptual review. To answer this question, the paper examines relevant theoretical literature, examining how ICC is being rethought in digitally mediated areas rather than through systematic review. These were two criteria for purposely selecting literature: the relevance to the study's aims and objectives, and the suitability for content analysis. Firstly, seminal publications were included because they have contributed to making important ICC proposals more developed, such as those by Byram (1997), Deardorff (2006) and Fantini (2020). Second, peer-reviewed studies were identified since they focused on one or more of the four elements: digital communication, virtual exchange, multimodality, or AI-mediated interaction in relation to intercultural communication and language education explicitly. These works are compared with regard to their assumptions, strengths, and limitations and are examined for common themes that support contemporary theories on ICC. This approach aims to provide conceptual rather than exhaustive coverage of the literature.

This study uses a critical conceptual review method to analyse the reconsideration of intercultural communicative competence (ICC) in digitally mediated situations. Literature was located by conducting searches on SCOPUS, Web of Science, ERIC, and Google Scholar using keywords such as ICC, digital literacy, virtual exchange, telecollaboration, AI-mediated communication, and language education. The review encompasses some fundamental theories as well as peer-reviewed publications dating from the year 1996 until the year 2025. The sources were chosen purposively in consideration of their importance with respect to any major ICC framework, e.g., (Byram, 1997; Deardorff, 2006; Fantini, 2020) and also with respect to their relevance to digital and AI-mediated ICC. The analysis draws on strengths and limitations of each of these studies, as well as on common themes, in order to identify existing theoretical developments and/or assumptions explaining ICC. The idea of such a conceptual review is to give a descriptive rereading of the literature rather than a comprehensive literature review.

2. Foundation models of intercultural communicative competence

2.1. Byram's models of intercultural communicative competence (1997)

In 1997, Michael Byram introduced the model of Intercultural Communicative Competence

(ICC), which has become one of the most significant frameworks in language education and intercultural studies. Byram emphasized that language learning should go beyond linguistic expression, enabling learners to become intercultural speakers who can effectively engage with diverse cultures. His model has been widely applied in language education because it integrates linguistic competence with intercultural awareness and critical thinking skills.

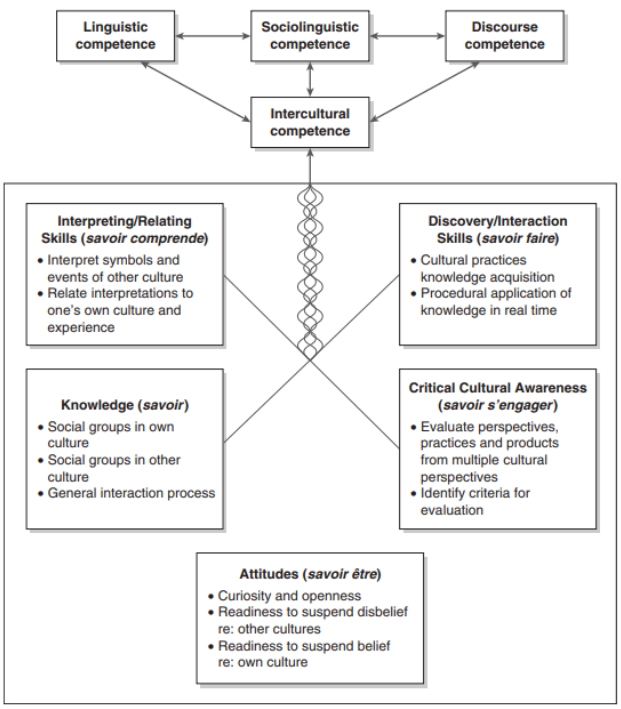


Figure 1. Byram's model of intercultural communicative competence (1997)

Byram defines intercultural communicative competence as the ability to communicate effectively with individuals from different cultural backgrounds, moving beyond mere linguistic proficiency to engage at deeper cultural and communicative levels. To achieve this, he introduces five interrelated components known as the five savoirs, which collectively contribute to effective intercultural communication.

The first of the components is knowledge (savoir). It is related to the knowledge of different social groups, cultural practices, and identities in the culture of the speaker himself/herself and the target culture. This knowledge influences the interpretation of certain behaviors, cultural customs, and communication styles. Byram underlines the fact that intercultural knowledge cannot be limited to only factual knowledge. It includes understanding of the impact of the conventions on the behaviors of people and the role of identity in shaping the ways of communication.

Interpreting and relating skills (savoir comprendre) are the second component in Byram's definition of intercultural competence. With their help, the learners can analyze cultural elements, documents, behaviors, and attitudes from a number of perspectives. According to Byram, the behaviors that are considered appropriate in one culture can be perceived as improper in another culture. For this reason, the intercultural speakers need to possess the skill of comparing their own culture with other cultures.

Skills of discovery and interaction (savoir apprendre/faire) form the third component of Byram's model of intercultural competence. It is defined as the ability to learn new cultural information and use it in practice. In addition, Byram suggests that the learners have to develop strategies of obtaining such cultural information not only from books or any documents, but also from experience and intercultural contacts.

The next component in Byram's list of intercultural competence criteria is attitudes (savoir être). Byram believes that this component is the core of the intercultural competence. It defines the perceptions of cultural differences. In particular, Byram underlines the importance of developing a positive attitude that is characterized by curiosity and open-mindedness in regard to other cultures.

The last element in Byram's definition of intercultural communicative competence is critical cultural awareness (savoir s'engager). It is related to the ability to make an ethical evaluation of cultural practices, values, and beliefs. The aspect of the critical cultural awareness consists in the fact that the learner analyzes cultural differences not passively, but actively, criticizing his/her own judgments about these differences. Critical cultural awareness encourages learners to reflect on issues such as social and cultural inequalities, power relations, racism, and

discrimination within and across cultures. Through this reflection, learners develop a deeper understanding of how culture intersects with societal issues, fostering intercultural sensitivity and ethical responsibility. According to Byram, this component is essential for preparing learners to become responsible global citizens who can navigate intercultural conflicts with fairness and understanding.

In his revision (2021), Byram expanded his model to address the evolving nature of intercultural communication in the digital age. He introduced the concept of digital literacy, recognizing its critical role in intercultural interactions in virtual spaces. Byram emphasized that digital platforms, such as social media, online forums, and virtual learning environments, carry their own cultural norms and communication patterns, which learners must understand to engage effectively across digital cultures. Additionally, Byram introduced the concept of intercultural citizenship, highlighting the importance of applying intercultural competence to address global social issues in both digital and real-world contexts. Intercultural citizenship involves understanding digital communication norms and behaviors on platforms such as social media, where cultural and virtual communication often intersect. Byram argues that digital spaces are not neutral; they reflect cultural values, norms, and power dynamics, which can shape intercultural interactions. Byram's 2021 revision of his framework reflects the changing landscape of intercultural communication in a globalized, digital world. It highlights that modern language education must not only foster traditional intercultural competencies but also equip learners with the skills needed to navigate digital intercultural interactions ethically and effectively.

Byram's model remains one of the most influential frameworks in ICC because it highlights attitudes, knowledge, skills of interpreting and relating, skills of discovery and interaction, and critical cultural awareness as essential dimensions of intercultural communication (Byram, 1997, 2021). Its enduring value lies in the way it links language learning with reflection, mediation, and ethical engagement. However, the model was originally conceptualised in relation to intercultural encounters that were primarily understood as human-to-human interaction. As a result, it does not fully elaborate how intercultural meaning-making is transformed when communication occurs through digital platforms, multimodal texts, online identity performance, or AI-assisted interaction. In this sense, the limitation of Byram's model is not that it has become obsolete, but that it requires reinterpretation in light of contemporary digitally mediated communication.

2.2. Deardorff's process model of intercultural competence (2006)

Deardorff's model of intercultural competence is widely recognized for its process-oriented and cyclical nature, emphasizing that intercultural competence (ICC) develops over time through experience, reflection, and adaptation. Unlike static models, Deardorff conceptualizes ICC as an ongoing, dynamic process rather than a fixed set of skills or knowledge. This model is particularly significant for language education because it highlights that developing intercultural competence requires continuous learning, self-awareness, and engagement with diverse cultural perspectives.

According to Deardorff (2009), the Process Model of Intercultural Competence outlines various interconnected elements that contribute to effective intercultural communication. Deardorff conceptualizes intercultural competence as a cyclical and transformative process, highlighting the progression from internal attitudes to external behaviors and outcomes. The model emphasizes that intercultural competence is not a static skill but an evolving ability developed through experience, reflection, and practice

The first component in Deardorff's model is attitudes, which include openness, respect, and curiosity. According to Deardorff, developing these attitudes requires reflection and appreciation that help a person to realize his or her assumptions and biases as well as foster an interest in others. The second component is knowledge and comprehension, which are very

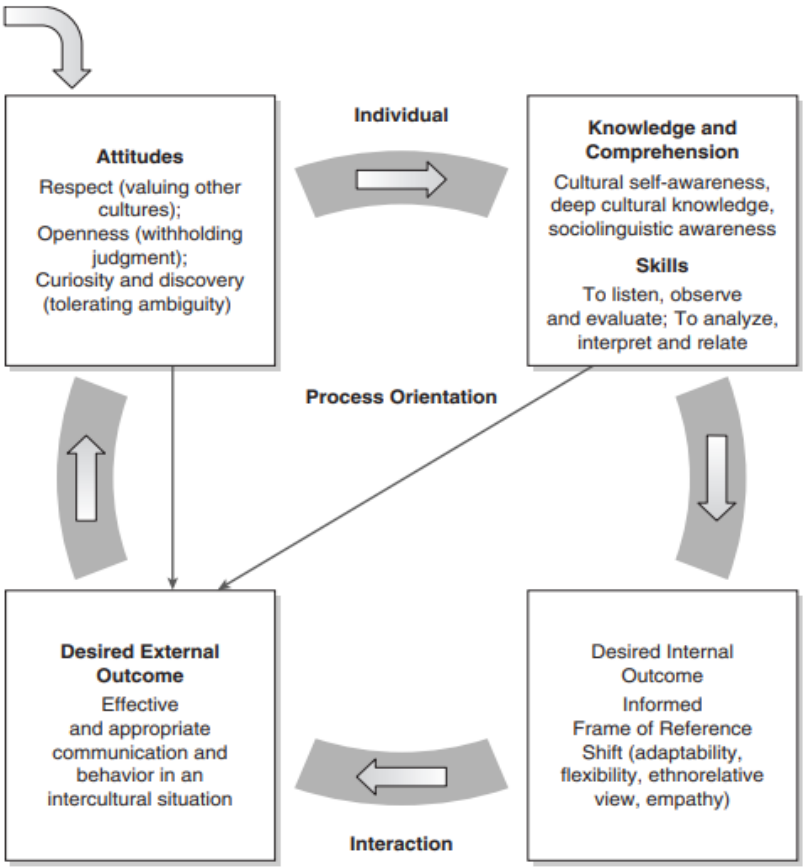


Figure 2. Deardorff's process model of intercultural competence (2009)

important aspects of intercultural competence and deal with an understanding of personal and other cultures' frameworks. It includes cultural self-awareness, sociolinguistic awareness, and global issues awareness. In the first case, the individual is expected to be able to recognize his or her culture's values, biases, and communication style to modify behavior in intercultural situations and interpret the message correctly. As for sociolinguistic awareness, it is about realizing how the language used can vary depending on social factors such as social distance, politeness, and directness.

The third component is skills that are necessary for intercultural communication. They include listening, observing, evaluating, analysing, and interpreting intercultural interactions. Deardorff underlines the importance of listening skills since they imply not just paying attention to words said but also interpreting the message behind the words. Evaluating is the skill that helps a person assess the process of message creation and understand what a person means by saying something from a cultural perspective. Finally, the last skill is interpretation, which allows communicators to comprehend the behaviors of people from other cultures and interpret them correctly.

The next component in Deardorff's model is internal outcomes, which represent the critical transformation in an individual's perspectives and behaviors. Internal outcomes include adaptability, empathy, and an ethnorelative perspective. Adaptability refers to the ability to adjust one's communication style and behavior to fit another person's cultural context. An adaptable communicator can shift their approach based on the social and cultural expectations of their interlocutors, ensuring appropriateness and effectiveness in intercultural interactions. Empathy is the ability to understand, share, and relate to another person's experiences and emotions. Deardorff describes empathy as putting oneself in another person's position to

see the world from their perspective. It involves understanding the feelings and meanings behind their expressions and responding with compassion and understanding.

The last element in Deardorff's process model of intercultural competence is the external outcome, which represents the application of intercultural competence in real-life communication. External outcomes are reflected in an individual's behaviors and communication patterns when engaging in intercultural interactions. This element is characterized by the ability to demonstrate effective and appropriate behavior and communication within a specific cultural context.

Moreover, it is stressed that successful intercultural communication involves strong reliance on context because communicative behavior has to be evaluated in terms of the cultural context of the interlocutor and not according to a universal standard. It becomes obvious that cultural relativism plays an important role in determining success of intercultural communication as it means that success is measured according to how well the communicator lives up to the cultural expectations of the particular interlocutor. In terms of language education, external outcomes can be viewed as the participation of the language learner in intercultural communication. As emphasized by Deardorff, language learners need not only to become linguistically proficient but also to develop intercultural competence which would allow them to communicate successfully. External outcomes include participation of the language learner in interculturally competent communication, adaptation to particular contexts, and taking into account cultural rules in cross-cultural communication.

Deardorff's process model contributes an important developmental perspective to ICC by conceptualising intercultural competence as an ongoing and dynamic process rather than a fixed set of traits (Deardorff, 2006, 2009). This is particularly valuable because it highlights the internal and external outcomes of intercultural development and acknowledges that competence is gradually formed through interaction, reflection, and adaptation. However, although the model is flexible and process-oriented, it does not explicitly address how digital interfaces, algorithmic mediation, or AI-supported communication shape the conditions of intercultural interaction. Consequently, while Deardorff's model remains highly relevant, its application to contemporary online communication requires further conceptual elaboration.

2.3. Fantini's dimensions of intercultural competence (2020)



Figure 3. Fantini's dimensions of intercultural competence (2020)

Fantini (2020) has developed an intercultural competence framework comprising several dimensions such as knowledge, attitudes, skills, and awareness, all working together in creating intercultural communication competence. The multidimensionality in the definition of intercultural competence makes it possible for the interplay between the components to create intercultural communication competence.

Knowledge is the first dimension of intercultural competence. Knowledge refers to the facts, information, and experience required for effective communication. In the definition of Fantini, knowledge involves information about the culture of people, their behavior,

communication styles, and cultural norms and values. Attitude is the second dimension, which plays a key role in the development of perceptions towards intercultural diversity. Skills refer to the ability required for intercultural communication. In defining skills, Fantini says that these skills involve the ability to listen, observe, and interpret communicative behaviors of other people in the process of interaction. This dimension involves personal experiences gained through practice, through which people are able to engage in active participation in intercultural interactions. In addition, interpretative skills help people to make analyses and interpretations of communicative behaviors of people from different cultures, thereby making the communication process easier. It should be noted that skills are learned through experiences such as group discussions, virtual interactions, and collaborative projects involving people from different cultural backgrounds.

The final dimension is awareness, which Fantini considers a critical component of intercultural competence. Awareness involves the ability to reflect on one's own cultural identity and understand how it shapes behavior and communication. Fantini highlights that developing awareness requires individuals to recognize that cultural differences are not about being "right" or "wrong" but rather about variations in perspectives and practices.

Fantini's model introduces several integral components of intercultural competence, highlighting similarities and differences with other frameworks, such as those by Byram (1997) and Deardorff (2009). While Fantini's dimensions align with Byram's five savoirs and Deardorff's process model, his emphasis on awareness as a central element distinguishes his approach. Fantini's model shapes the understanding of intercultural competence by encouraging individuals to observe, recognize, and value cultural differences from multiple perspectives.

In summary, Fantini's model of intercultural competence emphasizes a holistic approach through the dimensions of knowledge, attitude, skill, and awareness. These dimensions collectively contribute to developing an individual's ability to engage effectively in intercultural communication. Fantini's framework highlights that intercultural competence is not merely about language proficiency but about fostering a deep understanding and appreciation of cultural diversity through self-awareness, openness, and experiential learning. Fantini's model makes a significant contribution to ICC research by foregrounding awareness as a central dimension of intercultural competence (Fantini, 2020). This emphasis is important because it draws attention to the reflective and relational nature of intercultural engagement. At the same time, like other foundational ICC models, Fantini's framework was not primarily developed to explain communication in digitally mediated settings. It therefore offers limited guidance on how awareness is exercised when communication is shaped by multimodal cues, platform-specific interactional norms, online identity performance, and AI-assisted discourse. Its value remains substantial, but its theoretical scope needs to be extended in order to address contemporary communicative realities.

Although Byram's (1997, 2021), Deardorff's (2006, 2009), and Fantini's (2020) models differ in emphasis, they share the view that intercultural communicative competence involves more than linguistic proficiency alone. Across these frameworks, attitudes, knowledge, interpretive skills, and reflective awareness are consistently treated as central to meaningful intercultural interaction. However, the models diverge in their conceptual priorities. Byram's framework places particular emphasis on critical cultural awareness and mediation, Deardorff conceptualises intercultural competence as a developmental and process-oriented construct, and Fantini foregrounds awareness as a core dimension of intercultural engagement. These differences are theoretically important because they show that ICC is not a single unified construct, but rather a field of overlapping perspectives.

At the same time, these models were largely developed in relation to intercultural encounters understood as direct human interaction. For that reason, they do not fully theorise how intercultural

communication is reshaped when meaning is mediated by digital platforms, multimodal discourse, asynchronous participation, online self-presentation, and AI-assisted interaction. This does not make the traditional models irrelevant. Rather, it suggests that they remain foundational but require reinterpretation and extension in order to address the communicative conditions of the digital era.

3. Emergent trends in intercultural communicative competence in the digital era

3.1. Telecollaboration and virtual exchange in ICC

Telecollaboration and virtual exchange have become significant developments in contemporary discussions of ICC because they extend intercultural interaction beyond geographically bounded, face-to-face

Table 1. Comparative summary of traditional and emerging dimensions of intercultural communicative competence (ICC)

Framework	Core dimensions	Primary contribution	Limitations in digitally mediated contexts	Emerging extensions identified in this review
Byram (1997)	Knowledge, attitudes, skills of interpreting and relating, skills of discovery and interaction, and critical cultural awareness	Incorporates language learning into developing intercultural competence, mediation and ethical reflection.	Stronger focus on physical space and interaction; limited focus on multimodal communication, online identity, and AI-mediated interaction.	Digital literacy, being intercultural citizens, critical engagement with digital communication, and AI awareness.
Deardorff (2009)	Attitudes, knowledge and comprehension, skills, internal outcomes, and external outcomes	Views ICC as a dynamic and developmental process based on reflection and adaptation.	Does not specifically mention algorithmic mediation, platform-specific communication, or interaction that is assisted by AI.	Awareness of the digital interactional adaptability, online communication tactics, and platform-mediated communication.
Fantini (2020)	Knowledge, attitudes, skills, and awareness	Emphasises awareness and reflective intercultural engagement through experiential learning.	Lack of focus on traces of online identity, multimodal communication, and AI-mediated discourse.	Mediated identity, multimodal literacy, critical awareness of AI-supported communication.
Synthesis of contemporary research	Digital literacy, mediated identity and interaction, and critical awareness of AI-mediated communication	Builds on the traditional ICC, integrating digitally mediated intercultural communication and maintaining key importance of attitudes, knowledge, skills, and reflection.	These dimensions complement rather than replace existing ICC frameworks.	It is essential to combine intercultural competence with AI-related, multimodal, and "digital" communicative competencies in contemporary ICC.

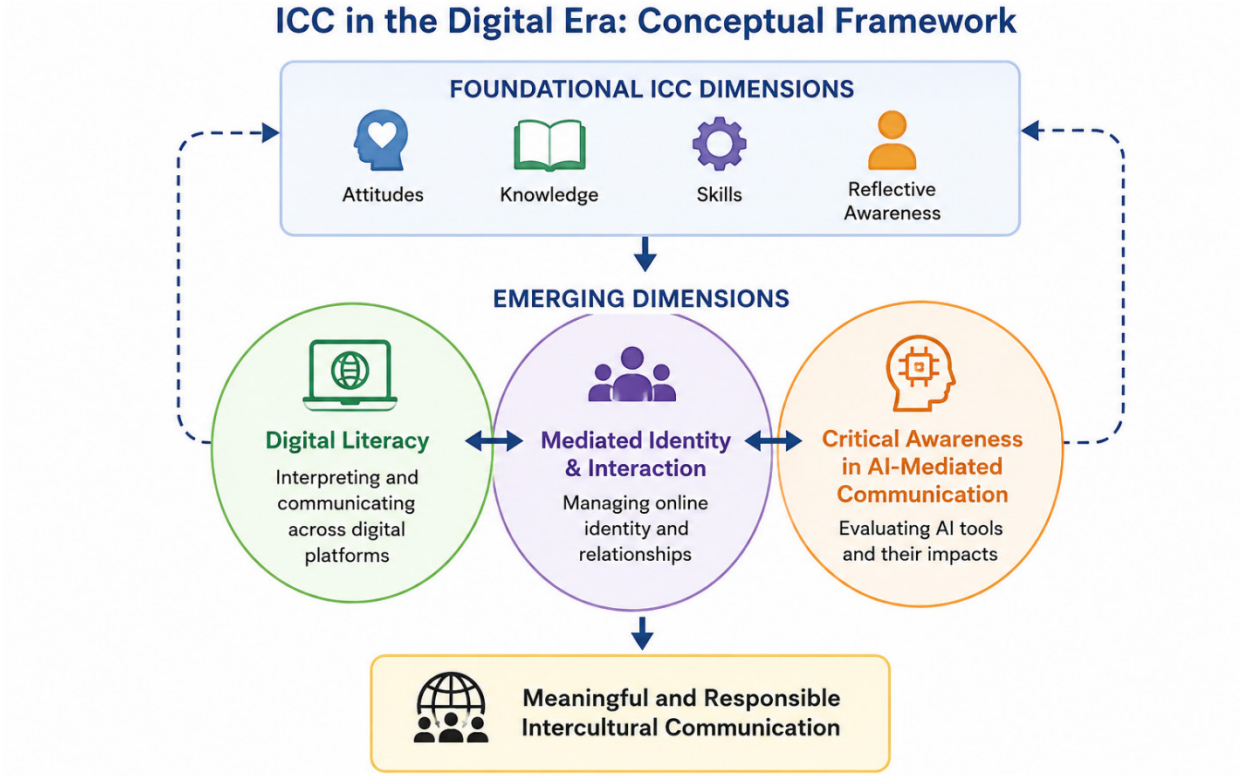


Figure 4. ICC in digital era: conceptual framework (Author's synthesis)

encounters. These online modes allow learners to engage with culturally and linguistically diverse interlocutors in real time or asynchronously, thereby creating opportunities to develop skills of discovery, interaction, interpretation, and reflection (Erdogan & Christina, 2025; Iswandari & Ardi, 2022; Weidlich et al., 2023; Zhai & Wibowo, 2023). In this sense, virtual exchange does not replace traditional intercultural communication, but it changes the environment in which such communication occurs. Unlike face-to-face interaction, online communication often relies on reduced or altered non-verbal cues. Meaning is negotiated through written language, emojis, response timing, visual resources, and other digitally mediated signs. As a result, learners must develop additional strategies for interpreting tone, intention, and relational meaning in contexts where embodied cues are limited. Telecollaboration therefore highlights an important shift in ICC research: intercultural competence now involves not only interaction across cultures, but also interaction across digitally mediated communicative conditions. This suggests that any contemporary understanding of ICC must account for the interpretive demands of virtual exchange as a distinct, though related, domain of intercultural communication.

Despite its advantages, digital ICC development faces challenges. Online communication often lacks non-verbal elements such as gestures and facial expressions, which are crucial for conveying meaning. This presents particular difficulties for high-context cultures, where much of the meaning is inferred from contextual and non-verbal cues rather than explicit language. As a result, digital communication may require additional strategies to help participants accurately interpret intended meanings, reducing misunderstandings in intercultural exchanges.

3.2. Expansion of traditional models

More recent research has sought to extend traditional ICC models by incorporating the communicative demands of digital environments. These developments do not reject foundational frameworks; rather, they reinterpret their core dimensions in response to changes in how intercultural communication now occurs (Azizah

et al., 2026; Wang & Abhakorn, 2026). In this literature, digital literacy is no longer treated as a separate technical skill but as part of intercultural competence itself, since learners increasingly need to interpret meaning across platforms, media types, and online interactional norms.

One important direction in this expansion concerns multimodality. In digital contexts, meaning is produced not only through language but also through images, video, emojis, timing, layout, and other platform-based cues. As a result, intercultural interpretation can no longer be understood solely in relation to spoken or written discourse. Learners must be able to read and respond to multimodal signs that carry culturally situated meanings. In this sense, the interpretive and relational dimensions of ICC are being extended into the semiotics of digital communication.

A second development concerns mediated identity. Recent research suggests that online interaction requires individuals to navigate not only cultural difference but also digitally constructed forms of presence, including usernames, profiles, avatars, and platform-specific self-presentation. These mediated identities shape how participants are perceived and how intercultural relations are negotiated. Consequently, contemporary ICC discussions increasingly emphasise identity construction, telepresence, and intercultural mediation in online environments.

A third development is the recognition that digital communication changes the conditions under which intercultural misunderstandings emerge and are resolved (Deacon et al., 2026; Kiss et al., 2026). In asynchronous or text-based environments, participants often have fewer embodied cues available to support interpretation. This places greater pressure on wording, timing, responsiveness, and discourse management. For that reason, recent expansions of ICC models have begun to place stronger emphasis on digital literacy, multimodal interpretation, and interactional adaptability in online spaces. These developments suggest that contemporary ICC research is moving beyond the assumptions of face-to-face communication toward a broader understanding of intercultural competence in digitally mediated contexts.

3.3. AI-Mediated intercultural communication

The emergence of AI-mediated communication has introduced a further layer of complexity into discussions of ICC. Tools such as machine translation systems, chatbots, and generative AI can support intercultural interaction by reducing linguistic barriers, increasing access to communication, and assisting users in interpreting unfamiliar expressions. In this sense, AI may facilitate participation in intercultural exchange, particularly for language learners who might otherwise struggle to engage across linguistic boundaries (Chang, 2023; Klimova & Chen, 2024).

At the same time, AI also raises important conceptual concerns for ICC. Machine-generated language is often treated as neutral, efficient, or authoritative, yet intercultural communication depends precisely on the kinds of contextual, relational, and culturally embedded meanings that may not be fully captured by automated systems. AI may therefore simplify or standardise culturally nuanced meanings, giving users the impression of mutual understanding without necessarily ensuring cultural depth or interpretive accuracy (Fountoulakis, 2024).

This issue is not only technical but also theoretical. If ICC has traditionally involved the ability to interpret meaning critically, relate perspectives, and reflect on cultural assumptions (Byram, 2021; Deardorff, 2006), then the use of AI changes the conditions under which those abilities are exercised. Users are no longer responding only to another human interlocutor, but also to outputs shaped by datasets, algorithms, and platform design. As a result, critical awareness in the digital era must extend beyond cultural reflection alone to include critical evaluation of AI-supported communication.

From this perspective, AI should not be understood simply as a helpful tool added to existing intercultural practice. Rather, it reshapes intercultural communication itself by mediating expression, interpretation, and access to meaning. Contemporary discussions of ICC therefore

need to account not only for the benefits of AI in supporting communication, but also for the risks of reduced cultural depth, overreliance on automated interpretation, and weakened critical engagement with cultural difference.

Taken together, the literature suggests that the challenge facing ICC in the digital era is not simply the emergence of new communication tools, but a broader shift in the ecology of intercultural interaction. Communication is increasingly shaped by multimodal signs, mediated identities, platform norms, and AI-supported discourse. Under such conditions, the central question is no longer whether traditional ICC models remain valuable, but how their core concepts should be reinterpreted in response to new communicative realities. The review therefore indicates that contemporary ICC research is moving toward a broader understanding of competence in which cultural interpretation must be considered alongside digital mediation, interactional visibility, and technological influence on meaning-making.

Three emerging dimensions that were observed throughout this review are not meant to replace the traditional ICC constructs but rather should be added to them. Digital literacy builds upon the interpretive and interactional abilities found in Byram (1997) and Deardorff (2006) by making the learner proficient in interacting and communicating over multiple digital tools and multimodal spaces. Mediated identity and interaction reframe ideas of interculturalism to acknowledge that self-presentation and interaction on different online platforms are increasingly influencing intercultural communication. Critical awareness in AI-mediated communication extends ideas of critical cultural awareness by adding the metacognition of assessing AI-generated information, algorithmic impacts and moral concerns with regard to AI-mediated communications. These dimensions collectively showed the relevance of the initial principles of ICC and how they should be reinterpreted to meet the needs of intercultural communication in the digitally mediated landscape.

4. Conclusions

This paper has examined the evolution of intercultural communicative competence in relation to the changing conditions of communication in the digital era. Foundational models proposed by Byram, Deardorff, and Fantini remain highly influential because they establish the importance of attitudes, knowledge, skills, reflection, and awareness in intercultural interaction (Byram, 1997, 2021; Deardorff, 2006; Fantini, 2020). However, the review has shown that these models were primarily formulated with face-to-face communication in mind and therefore do not fully address the communicative conditions created by digital platforms, multimodal discourse, online identity performance, and AI-mediated interaction.

Recent research suggests that three interconnected developments are increasingly reshaping ICC: the growing importance of digital literacy in intercultural meaning-making, the role of mediated identity and interaction in online communication, and the need for critical awareness in relation to AI-supported communication. These developments do not invalidate traditional ICC models, but they do indicate that the field is moving toward a broader and more complex understanding of intercultural competence.

This is not a proposed finalized model, but rather a conceptual review that synthesizes descriptive and interpretative elements of the reconsideration of ICC in digitally mediated contexts. It proposes that the basic dimensions of ICC—attitudes, knowledge, skills, and reflective awareness— are further amplified by the additional dimensions of digital literacy, mediated identity and interaction, and critical awareness of AI-mediated communication in the context of an ICC framework. This synthesis serves as a conceptual base for further development of theories and creation of curricula as well as a sense of the need to train learners for intercultural communication in future technology-laden environments.

Limitations and Future Research.

The review is conceptual and does not aim

at summarizing all ICC-related publications. The literature was selected purposively to examine influential theoretical frameworks and recent research on digital and AI-mediated communication, which may have excluded other relevant perspectives. Future studies should challenge the proposed dimensions in different educational and cultural settings, establish valid instruments to measure intercultural competence in communication with AI, and explore the impact of AI-enhanced communication on intercultural learning, identity construction, and ethical considerations in real communication situations.

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AI Declaration

During the preparation of this manuscript, the author used AI-assisted tools, including ChatGPT, ChatPDF, and OtterAI, for limited editorial and language-support purposes. These tools were used to assist with language refinement, improve clarity of expression, support the organisation of ideas, and enhance the overall academic presentation of the manuscript. They were not used to generate the core arguments, conceptual contribution, critical interpretation of the literature, or final scholarly judgments presented in this paper. The author takes full responsibility for the originality, accuracy, citation integrity, and final content of the manuscript.

Conflict of Interest

The author declares no conflict of interest.

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