Teachers' Perceptions on the Role of Technology in Promoting Intercultural Communicative Competence: A Case Study of Civilisation Courses at Mila University Centre

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Abstract:

This study examines Algerian EFL teachers' perceptions of integrating technology to develop Intercultural Communicative Competence (ICC) in civilisation courses at Mila University Centre. A quantitative survey was administered to 45 teachers purposively selected based on their teaching experience. The questionnaire employed validated scales measuring technology perceptions, ICC teaching beliefs, and implementation challenges. Findings revealed positive attitudes toward the role of technology in ICC development, with digital storytelling and virtual cultural exchanges being rated as the most effective. Statistical analyses, including correlation and regression procedures, revealed significant relationships between teachers' perceptions of technology and their teaching beliefs. However, significant barriers included inadequate technological infrastructure, limited professional training opportunities, and time constraints. The study emphasizes the importance of comprehensive professional development programs, enhanced technological infrastructure, and supportive institutional policies to advance technology-mediated instruction in ICC in Algerian higher education settings.

Keywords: Intercultural Communicative Competence, Technology-enhanced EFL Teaching, Teacher Perceptions, Civilisation Pedagogy, Algerian Higher Education.

1. Introduction

The shift toward globalized communication has profoundly transformed EFL pedagogical models, positioning intercultural communicative competence (ICC) as a central educational objective alongside traditional linguistic competence development (Byram & Wagner, 2018). In Algerian universities, civilisation courses serve as pivotal platforms for building cultural awareness and intercultural

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competence among EFL learners. These courses, typically integrated into undergraduate language curricula, aim to expose students to the historical, social, and cultural dimensions of English-speaking societies. However, conventional pedagogical strategies often fail to provide the authentic intercultural experiences that accurately reflect contemporary global communication patterns, as they tend to rely heavily on textbook materials and lecture-based instruction that present culture as static information rather than dynamic social practice.

Educational technology offers promising opportunities for ICC development through authentic cultural interactions, collaborative learning spaces, and multimodal communication activities (Helm & Guth, 2022). Digital educational technologies enable learners to engage meaningfully with diverse cultural perspectives, participate in virtual intercultural interactions, and develop critical cultural awareness through experiential learning practices that transcend geographical and temporal boundaries. Technologies such as video conferencing platforms, social media tools, virtual reality applications, and collaborative digital spaces have the potential to fundamentally transform how cultural content is taught and learned in civilisation courses, shifting from transmission-based models to interactive, experiential approaches.

Despite these theoretical advantages of technology-based ICC instruction, actual implementation remains contingent on teachers' attitudes, beliefs, and pedagogical perspectives toward technological integration (Chapelle & Sauro, 2017). Teachers' perceptions constitute a critical factor in determining not only the adoption of technology but also the quality of instructional design strategies and ultimately students' learning achievement. Understanding how instructors conceptualize technology's potential for ICC development is therefore essential for formulating effective educational policies, designing targeted professional development programs, and refining instructional practices. Teachers' willingness to integrate technology into their teaching is shaped by multiple interrelated factors, including their perceived usefulness of technological tools, their confidence in using technology pedagogically, the institutional support available to them, and their fundamental beliefs about the role of culture in language education.

The Algerian educational context offers both challenging and promising opportunities for integrating technology into language learning. While recent curricular reforms have emphasized the importance of cultivating intercultural competence among EFL learners, limited empirical research has systematically examined teachers' perspectives on the potential of technology to enhance ICC instruction specifically within civilisation courses. This research bridges a critical knowledge gap by examining EFL teachers' perceptions at Mila University Centre, thereby contributing meaningfully to the growing body of literature on technology-

enhanced ICC teaching in North African higher education environments. The study investigates three primary questions: teachers' perceptions regarding technology's role in promoting ICC, their views on the effectiveness of specific technological tools for ICC development, and the relationships between their perceptions, pedagogical beliefs, and implementation challenges.

2. Literature Review

This review synthesizes theoretical foundations, empirical evidence, and pedagogical frameworks relevant to technology-mediated ICC development. It examines key theoretical models of intercultural competence, explores technology integration frameworks specific to language teaching, reviews empirical studies on teacher perceptions and technology adoption, and discusses the unique role of civilization courses in developing cultural competence.

2.1 Intercultural Communicative Competence Framework

ICC represents a multidimensional construct that extends beyond linguistic proficiency to encompass the knowledge, skills, and attitudes necessary for effective cross-cultural communication. Byram's (1997) seminal model identifies five components: intercultural attitudes (savoir être), knowledge (savoirs), skills of interpreting and relating (savoir comprendre), skills of discovery and interaction (savoir apprendre/faire), and critical cultural awareness (savoir s'engager). As Byram and Wagner (2018, p. 143) assert, ICC development requires 'not only linguistic competence but also the ability to engage with complexity and multiple perspectives in intercultural encounters.' This framework has become foundational in language education as globalization intensifies the need for intercultural understanding.

Deardorff (2006) proposed a process-oriented model that emphasizes ICC's developmental nature, identifying the requisite attitudes, knowledge, and comprehension, as well as internal and external outcomes. This model highlights that ICC development is not a linear progression but a complex, iterative process that requires sustained engagement with cultural differences. Kramsch (2013, p. 62) argues that culture teaching must move beyond 'transmission of factual information' to engage learners in critical reflection on cultural meanings and identities. This perspective emphasizes that effective ICC instruction must facilitate authentic engagement with cultural complexity rather than presenting simplified cultural stereotypes.

2.2 Technology Integration in Language Education

Technology integration has evolved from behaviourist drill-and-practice to constructivist models emphasizing authentic communication. Computer-assisted language learning has developed through various phases, with current approaches emphasizing the social and interactive dimensions of language acquisition (Chapelle,

2001). Contemporary frameworks emphasize pedagogical considerations over technological features.

Mishra and Koehler's (2006) TPACK framework identifies the complex interplay among technological, pedagogical, and content knowledge as essential for effective integration. This framework posits that successful technology use requires the intersection of three knowledge domains: content knowledge, pedagogical knowledge, and technological knowledge. For language teachers implementing ICC instruction, this means developing expertise in cultural content, intercultural pedagogical approaches, and technological tools facilitating intercultural learning experiences.

Chapelle and Sauro (2017) argue 'technology has fundamentally changed what it means to learn and use a second language' (p. 1). They identify several affordances for language learning, including authentic communication opportunities, access to diverse cultural materials, individualized learning pathways, and multimodal engagement. For ICC development, they highlight how telecollaboration and virtual exchange enable learners to engage in sustained intercultural dialogue with speakers from different cultural backgrounds.

Helm and Guth (2022) emphasize that technology-mediated exchanges must be carefully designed to promote deep cultural engagement rather than superficial contact. They argue effective telecollaboration requires 'structured tasks that encourage learners to move beyond stereotypical representations and engage critically with cultural differences' (p. 1823). Their systematic review demonstrates that structured online intercultural interactions can enhance cultural awareness, challenge stereotypes, and foster the development of communication strategies for navigating differences. However, effectiveness depends significantly on teacher facilitation, task design, and institutional support.

Digital storytelling has emerged as another promising approach. Robin (2008) describes digital storytelling as a combination of narrative construction with multimedia elements, enabling learners to share personal experiences and cultural perspectives in engaging formats. In language education, digital storytelling can facilitate intercultural understanding by providing opportunities to create and share stories about one's own cultural identities while engaging with stories from diverse perspectives.

2.3 Teacher Perceptions and Technology Adoption

Understanding teacher perceptions is crucial as teachers serve as key agents in implementing innovations. The Technology Acceptance Model and extensions demonstrate that perceived usefulness and ease of use are fundamental determinants of adoption (Venkatesh & Davis, 2000). In language teaching contexts, additional factors complicate this relationship, including pedagogical beliefs about language

acquisition, cultural factors that influence integration, and organizational factors that support or constrain implementation.

Stockwell (2012) identifies facilitating conditions (pedagogical benefits, organizational support, professional development, technological infrastructure) and constraints (technical problems, time limitations, pedagogical resistance, inadequate training). Al-Mahrooqi and Troudi's (2014) study identified several challenges that influence the willingness to integrate technology, including limited access to resources, insufficient technical support, a lack of training opportunities, and time constraints. Their findings suggest that while teachers acknowledge the potential benefits of technology, practical barriers often prevent its meaningful integration. Teachers receiving adequate training and institutional support were more likely to integrate technology effectively.

Lawrence and Tar (2018) examined the readiness of EFL teachers to integrate technology in Saudi Arabian universities, finding significant relationships between perceived usefulness, ease of use, and integration intentions. However, they identified substantial gaps between intentions and actual implementation, attributed to institutional constraints. Studies in MENA contexts reveal additional challenges, including limited technological infrastructure, insufficient professional development, and institutional policies that fail to support technology integration adequately.

3. Methodology

3.1 Research Design

This quantitative survey investigated EFL teachers' perceptions at Mila University Centre. The study addressed:

- Teachers' perceptions of technology's role in promoting ICC
- Perceived effectiveness of specific technological tools
- Relationships between perceptions, pedagogical beliefs, and implementation challenges

3.2 Participants

Forty-five EFL teachers teaching civilisation courses participated through purposive sampling based on experience. Demographics: 62% female, 38% male; ages 25-55; 73% holding master's degrees; teaching experience 2-20 years (mean=8.3 years).

3.3 Instrumentation

A structured questionnaire (see Appendix A) comprised four scales:

- Demographic Information (7 items)

- Technology Perceptions (15 items, α=0.91)
- ICC Teaching Beliefs (12 items, α=0.88)
- Implementation Challenges (10 items, α=0.85)

Validation included expert review and pilot testing. Data were analyzed using SPSS 26, employing descriptive statistics, Pearson correlation, and multiple regression.

4. Results

4.1 Technology Perceptions for ICC Development

Teachers expressed predominantly positive attitudes (M = 4.12, SD = 0.58). The strongest agreement emerged for technology's capacity to provide authentic cultural materials (M = 4.51, SD = 0.54) and facilitate real-time intercultural interactions (M = 4.47, SD = 0.61). However, teachers reported lower confidence in their own preparedness (M = 3.67, SD = 0.71) and concerns about time requirements (M = 3.42, SD = 0.89). Table 1 presents detailed findings.

Table 1

Teachers' Perceptions of Technology for ICC Development (N = 45)

Item	M	SD
Technology provides access to authentic cultural materials	4.51	0.54
Technology facilitates real-time intercultural interactions	4.47	0.61
Technology enhances students' motivation	4.36	0.65
I feel prepared to use technology for ICC instruction	3.67	0.71
Overall technology perceptions	**4.12**	**0.58**

4.2 Effectiveness of Technological Tools

Digital storytelling tools emerged as most effective (M=4.42, SD=0.68), followed by virtual cultural exchange platforms (M=4.29, SD=0.72) and multimedia presentations (M=4.18, SD=0.69). Social media platforms (M=3.98, SD=0.74) and video conferencing (M=3.89, SD=0.69) received moderate ratings. Learning

management systems received lowest ratings (M=3.24, SD=0.83). Table 2 presents complete rankings.

Table 2

Perceived Effectiveness of Technological Tools (N = 45)

Technological Tool	M	SD
Digital storytelling tools	4.42	0.68
Virtual cultural exchange platforms	4.29	0.72
Multimedia presentation software	4.18	0.69
Social media platforms	3.98	0.74
Video conferencing tools	3.89	0.69
Learning management systems	3.24	0.83

4.3 Relationships Between Variables

Pearson correlation analysis revealed significant positive relationships. Technology perceptions correlated strongly with ICC pedagogical beliefs (r=.67, p<.001) and moderately with perceived institutional support (r=.52, p<.001). ICC beliefs correlated with institutional support (r=.48, p<.01) and negatively with implementation challenges (r=-.41, p<.01). Table 3 presents the correlation matrix.

Table 3

Correlation Matrix for Key Variables (N = 45)

Variable	1	2	3	4
1. Tech perceptions	—			
2. ICC beliefs	.67***	—		
3. Inst. support	.52***	.48**	—	
4. Challenges	-.35*	-.41**	-.58***	—

*Note. *p < .05, **p < .01, ***p < .001*

Multiple regression analysis (R^2=.59, F(4,40)=18.73, p<.001) revealed ICC pedagogical beliefs (β=.41, p<.001) and institutional support (β=.32, p<.01) as significant predictors of technology perceptions, while implementation challenges showed negative effects (β=-.28, p<.05). Teaching experience was not significant (p>.05).

4.4 Implementation Challenges

Institutional and infrastructural barriers emerged as most severe. Inadequate internet connectivity (M=4.38, SD=0.71) and limited technological resources (M=4.29, SD=0.68) rated highest. Professional development gaps included lack of training in technology pedagogy (M=4.16, SD=0.72) and insufficient ICC-specific training (M=4.02, SD=0.79). Time constraints (M=3.91, SD=0.84) and large class sizes (M=3.78, SD=0.88) presented moderate challenges. Table 4 summarizes challenges.

Table 4

Implementation Challenges (N = 45)

Challenge	M	SD
Inadequate internet connectivity	4.38	0.71
Limited technological resources	4.29	0.68
Lack of training in technology pedagogy	4.16	0.72
Insufficient ICC-specific training	4.02	0.79
Time constraints for technology integration	3.91	0.84
Large class sizes	3.78	0.88

Teachers prioritized professional development in ICC pedagogy (93%), improved infrastructure (91%), and pedagogical strategies for technology use (87%). Table 5 presents complete support priorities.

Table 5

Priority Support Needs for Technology-Mediated ICC Instruction (N = 45)

Support Need	% Rating as High Priority

Support Need	% Rating as High Priority
Professional development in ICC pedagogy	93%
Improved technological infrastructure	91%
Pedagogical strategies for using technology for ICC	87%
Access to curated digital cultural resources	84%
Ongoing technical support	82%
Technical skills for specific applications	78%
Assessment strategies for technology-mediated ICC	72%
Opportunities for collaboration with colleagues	67%

These priorities align directly with the most severe challenges identified in Table 4. The strong emphasis on pedagogical strategies (87%) and access to curated resources (84%) reinforces teachers' need for both conceptual understanding and practical tools for implementation. The relatively high priority assigned to assessment strategies (72%) suggests recognition that technology integration requires corresponding changes in evaluation approaches.

4.5 Demographic Influences on Perceptions

Independent samples t-tests and one-way ANOVA were used to examine whether technology perceptions varied across demographic groups. Gender did not significantly influence the measured variables ($t = 1.24$, $p = .22$), suggesting that male and female teachers hold similar views regarding technology's role in ICC instruction. Educational qualifications showed a significant effect only for ICC pedagogical beliefs ($t = 2.09$, $p = .04$), with doctorate holders demonstrating stronger beliefs about ICC's importance compared to those with a master's degree. However, educational qualification did not significantly affect technology perceptions or reported challenges.

Teaching experience was demonstrated to have a significant effect on technology perceptions ($F = 3.21$, $p = .03$). Post-hoc analyses revealed that teachers with 3-5 years of experience reported significantly more positive technology perceptions

compared to those with less than 2 years or more than years of experience. This pattern suggests a curvilinear relationship, with mid-career teachers expressing the most enthusiasm for technology integration. This finding contrasts with linear progression models, which predict an increase in technological proficiency with experience. Early-career teachers may feel overwhelmed by multiple professional demands, while veteran teachers may have established pedagogical routines resistant to change. Mid-career teachers, who have achieved basic teaching competence while retaining pedagogical flexibility, may represent an optimal demographic for technology integration initiatives.

5. Discussion

This section interprets the quantitative findings in relation to the research questions, theoretical frameworks, and existing empirical evidence. It discusses implications for theory, policy, and practice while acknowledging study limitations.

5.1 Positive Perceptions and the Theory-Practice Gap

Teachers' predominantly positive perceptions (M=4.12, SD=0.58) align with Technology Acceptance Model predictions and recent research documenting growing recognition of digital tools' pedagogical potential (Lawrence & Tar, 2018; O'Dowd, 2021). Teachers particularly valued technology's capacity to provide authentic cultural materials, increase engagement, and facilitate intercultural interactions, reflecting contemporary ICC frameworks emphasizing authentic encounters and multimodal engagement (Helm & Guth, 2022).

However, a notable gap emerged between positive perceptions and self-reported confidence. Confidence in implementation (M=3.67) and readiness to design activities received substantially lower ratings than perceptions of general usefulness. This pattern, characterized by high theoretical endorsement alongside low implementation confidence, exemplifies the 'theory-practice gap' in educational technology integration. Similar patterns documented in resource-constrained contexts suggest positive attitudes alone are insufficient without corresponding professional development and institutional support (Al-Mahrooqi & Troudi, 2014).

5.2 Tool Preferences and Pedagogical Alignment

Teachers' identification of digital storytelling (M = 4.42) and virtual exchanges (M = 4.29) as the most effective approaches demonstrates pedagogical sophistication aligned with contemporary ICC theory. Digital storytelling's highest rating reflects recognition of narrative approaches' power to develop cultural empathy and critical awareness (Robin, 2008). Storytelling activities enable learners

to construct and share their cultural identities while engaging with diverse perspectives, fostering skills such as interpreting, relating, and discovering, which are emphasized in Byram's (1997) ICC model.

Virtual exchanges' high rating reflects an understanding of the centrality of authentic intercultural dialogue to the development of ICC. Telecollaboration research consistently demonstrates that structured online interactions enhance intercultural competence more effectively than simulated classroom activities. The lower rating (M=3.24) for learning management systems likely reflects pragmatic concerns about time constraints and assessment challenges rather than theoretical disagreement with the pedagogical value.

5.3 Pedagogical Beliefs as Central Predictors

The strong correlation between technology perceptions and ICC beliefs ($r = .67$, $p < .001$) provides empirical support for theoretical propositions that content-specific pedagogical beliefs shape technology adoption attitudes (Mishra & Koehler, 2006). Regression analysis demonstrated ICC beliefs as the strongest predictor ($\beta = .41$, $p < .001$), accounting for substantial variance even after controlling for self-efficacy, institutional support, and experience.

This pattern suggests teachers who value ICC development view technology positively when it supports that goal. From a TPACK perspective, this underscores the need for effective integration, which requires alignment among content knowledge (cultural competence), pedagogical knowledge (ICC strategies), and technological knowledge. Teachers must recognize the importance of ICC before perceiving technological tools as valuable. Professional development initiatives should address both ICC theoretical foundations and technological applications rather than treating them as separate domains.

5.4 Infrastructure and Professional Development Challenges

Teachers identified two primary challenge categories with comparable severity: infrastructural barriers (inadequate connectivity M=4.38, insufficient equipment M=4.29) and professional development needs (lack of training M=4.16). Infrastructural challenges reflect well-documented constraints in Algerian higher education, where technology integration frequently encounters limited resources and unreliable connectivity. These findings align with broader research in resource-constrained contexts, demonstrating infrastructural limitations constitute significant barriers regardless of teacher motivation or pedagogical sophistication.

Teachers' emphasis on professional development needs, with 93% rating ICC pedagogy training as high priority, resonates with the confidence gap and suggests teachers recognize integrating technology into ICC requires specialized pedagogical knowledge beyond generic technological skills. Teachers need not only technical competencies but also understanding of how to design activities that effectively promote ICC development. Successful implementation requires simultaneous attention to both infrastructural improvements and comprehensive professional development.

5.5 Implications for Policy and Practice

Several implications emerge for educational policy and practice. First, positive teacher perceptions alone are insufficient for successful integration. Policy initiatives must address the complete implementation ecosystem: infrastructural improvements, professional development programming, and institutional support structures. Second, professional development should adopt integrative approaches addressing both ICC theoretical foundations and technology strategies, reflecting the strong relationship between pedagogical beliefs and technology perceptions.

Third, prioritizing digital storytelling and virtual exchange initiatives aligns with both teachers' preferences and contemporary ICC frameworks. Institutions should invest in platforms and partnerships facilitating these high-impact practices. Fourth, curriculum designers should incorporate technology-mediated ICC activities emphasizing authentic intercultural engagement rather than superficial contact. Finally, assessment frameworks must evolve alongside pedagogical innovations, as teachers identified assessment strategies as a significant support need, suggesting uncertainty about evaluating technology-mediated ICC learning appropriately.

5.6 Study Limitations

Several limitations warrant consideration. First, the cross-sectional design captures perceptions at a single time point, limiting understanding of how perceptions evolve with technology integration experience. Second, convenience sampling and single-institution focus limit generalizability to other Algerian or North African contexts. Third, reliance on self-reported perceptions may not accurately reflect actual technology integration practices. Fourth, the study did not examine students' perspectives on technology-mediated ICC instruction. Finally, while quantitative analysis revealed important patterns, qualitative investigation could provide richer understanding of teachers' reasoning and specific implementation challenges.

6. Conclusion

This study examined Algerian EFL teachers' perceptions of technology for ICC development in civilisation courses at Mila University Centre. Quantitative findings reveal a complex picture of opportunity and challenge in technology-mediated ICC instruction. Participating teachers demonstrated predominantly positive attitudes toward technology's potential for ICC development, recognizing its capacity to provide authentic cultural materials, facilitate intercultural interactions, and enhance student engagement. However, these positive perceptions coexist with significant implementation challenges and concerning gaps in preparedness and institutional support.

6.1 Key Findings Synthesis

Several key findings emerged from this investigation. First, teachers expressed strong agreement regarding technology's pedagogical value for ICC development, with digital storytelling and virtual cultural exchanges rated as most effective tools. This preference aligns with contemporary ICC pedagogical frameworks emphasizing narrative approaches and authentic intercultural dialogue. Second, statistical analyses demonstrated significant relationships between technology perceptions, ICC pedagogical beliefs, and institutional support, with ICC beliefs emerging as the strongest predictor of technology perceptions. This finding underscores that effective technology integration requires alignment between pedagogical goals and technological applications.

Third, substantial implementation barriers persist, particularly infrastructural inadequacies (inadequate connectivity, limited technological resources) and professional development gaps (lack of training in technology-mediated ICC pedagogy). These dual challenges require coordinated institutional responses rather than isolated interventions. Fourth, a concerning gap emerged between teachers' positive perceptions of technology's potential and their self-reported preparedness to implement technology-mediated ICC instruction, suggesting professional development initiatives must address both technological skills and pedagogical expertise specific to ICC development.

6.2 Pedagogical and Policy Implications

These findings yield several important implications for educational policy and instructional practice in Algerian higher education contexts. First, professional development programs should adopt integrative approaches that address both ICC theoretical foundations and technology integration strategies simultaneously. Given the strong relationship between ICC pedagogical beliefs and technology perceptions (r=.67), professional development should emphasize how technology can support ICC objectives rather than treating technological skills as separate competencies.

Second, institutions must invest substantially in technological infrastructure, recognizing that inadequate connectivity and limited resources constitute fundamental barriers to implementation. Infrastructure improvements should prioritize reliability and accessibility, ensuring teachers and students have consistent access to necessary technological tools. Third, curriculum designers should incorporate technology-mediated ICC activities emphasizing authentic intercultural engagement through digital storytelling and virtual exchange projects, aligning instructional design with teachers' identified preferences and contemporary pedagogical frameworks.

Fourth, institutional policies should establish supportive structures for technology integration, including technical support services, collaborative planning time, and assessment frameworks appropriate for technology-mediated ICC instruction. The finding that 93% of teachers prioritized professional development in ICC pedagogy demonstrates clear recognition of need for specialized expertise. Finally, mid-career teachers' strongest enthusiasm for technology integration suggests this demographic could serve as change agents in institutional technology adoption efforts, potentially leading pilot initiatives and mentoring colleagues.

6.3 Future Research Directions

Several promising directions emerge for future research. First, longitudinal studies tracking changes in teacher perceptions following professional development interventions would provide valuable insights into how attitudes and practices evolve over time. Such research could identify effective professional development approaches and document implementation challenges as teachers gain experience with technology-mediated ICC instruction.

Second, mixed-methods investigations combining survey data with classroom observations and teacher interviews would offer richer understanding of implementation complexities. Qualitative data could illuminate reasoning behind quantitative patterns, contextual factors shaping technology integration, and specific challenges teachers encounter in actual practice. Third, multi-institutional studies encompassing diverse Algerian and North African contexts would strengthen understanding of how institutional characteristics, regional differences, and cultural factors influence technology integration for ICC development.

Fourth, investigating student perspectives on technology-mediated ICC instruction represents an important complementary line of inquiry. Student engagement, learning experiences, and perceived effectiveness of technology-mediated activities would provide essential feedback for refining instructional approaches. Finally, intervention studies examining outcomes of specific technology-mediated ICC

activities (digital storytelling projects, virtual exchanges) would contribute empirical evidence regarding pedagogical effectiveness and inform evidence-based instructional design.

6.4 Concluding Remarks

Despite methodological limitations including single-institution sample and quantitative focus, this research contributes meaningfully to understanding technology integration for ICC development in North African higher education contexts. Findings highlight the critical need for systemic support encompassing professional development, infrastructure investment, and institutional policies enabling meaningful technology-mediated intercultural learning. The documented gap between positive perceptions and implementation confidence underscores that technological enthusiasm alone is insufficient without corresponding professional preparation and institutional support. Addressing these multifaceted needs is essential for realizing technology's potential to enhance intercultural communicative competence among Algerian EFL learners, ultimately preparing them for effective communication in increasingly interconnected global contexts.

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Appendix A: Research Questionnaire

EFL Teachers' Perceptions of Technology in Promoting ICC in Civilisation Courses

Section A: Demographics

1. Gender: ☐ Male ☐ Female 2. Age: ____ 3. Qualification: ☐ Master's ☐ Doctoral
4. Teaching experience (years): ____ 5. Civilisation teaching (years): ____
6. Formal tech training: ☐ Yes ☐ No 7. Currently use technology: ☐ Yes ☐ No

Section B: Technology Perceptions (1=Strongly Disagree, 4=Strongly Agree)

1. Technology provides access to authentic cultural materials. ☐1 ☐2 ☐3 ☐4

2. Technology increases student engagement with cultural content. 1 2 3 4

3. Technology facilitates intercultural interactions and communication. 1 2 3 4

4. Technology enhances critical cultural awareness and sensitivity. 1 2 3 4

5. I feel confident using technology for ICC instruction. 1 2 3 4

6. Technology helps students develop intercultural competence. 1 2 3 4

7. I intend to use technology more in my civilisation courses. 1 2 3 4

Section C: ICC Teaching Beliefs (1=Strongly Disagree, 4=Strongly Agree)

1. Developing ICC is as important as linguistic competence. 1 2 3 4

2. Students need authentic intercultural interactions to develop ICC. 2 3 4

3. ICC instruction should include diverse cultural perspectives. 1 2 34

4. Students should reflect on their own cultural identities. 1 2 3 4

5. Assessment should evaluate ICC development, not just knowledge. 1 2 3 4

Section D: Implementation Challenges (1=Not Severe, 4=Very Severe)

1. Inadequate internet connectivity and technological resources. 1 2 3 4

2. Lack of training in technology-mediated ICC pedagogy. 1 2 3 4

3. Time constraints for designing technology activities. 1 2 3 4

4. Students' limited digital literacy and access to technology. 1 2 3 4

5. Large class sizes limiting personalized interaction. 1 2 3 4

Section E: Tool Effectiveness (1=Not Effective, 4=Extremely Effective)

1. Digital storytelling & multimedia tools (Adobe Spark, Prezi). 1 2 3 4

2. Virtual exchange platforms (ePals, Soliya). 1 2 3 4

3. Video conferencing (Zoom, Skype) & social media. 1 2 3 4

4. Learning management systems (Moodle, Google Classroom). 1 2 3 4

5. Online cultural databases, podcasts, and VR applications. 1 2 3 4

Section F: Support Needs (1=Low Priority, 4=Very High Priority)

1. Professional development in ICC pedagogy and tech strategies. 1 2 3 4

2. Improved technological infrastructure and ongoing support. 1 2 3 4

3. Access to curated digital cultural resources. 1 2 3 4

4. Assessment strategies for technology-mediated ICC. 1 2 3 4

5. Time allocation and institutional policy support. 1 2 3 4

Thank you for your participation!