

TOGETHER... ALONE IN THE DIGITAL TERRAIN: EXPERIENCES OF
INTERCULTURALITY IN ENGLISH AS A LINGUA FRANCA VIRTUAL EXCHANGE
AMONG UNIVERSITY STUDENTS IN CANADA AND JORDAN

HIBA B. IBRAHIM

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Abstract

Virtual exchange (VE) has enabled geographically dispersed learners of English as an Additional/Second Language (EAL/ESL) to collaborate in developing intercultural competence (IC) (O'Dowd, 2011). However, recurring applications of IC constructs that overlook technology-mediated contexts and social practices common in VE restrict exploration of newly emerging practices of IC (Thorne, 2016) and the 'simplicity' of the VE environment (Dervin, 2016). Likewise, continued centering of the "native speaker" in VE problematizes students' essentialist engagement with so-called "authentic cultural representations" (O'Dowd, 2021). There is therefore an urgent need for research exploring how students navigate IC in English as a lingua franca (ELF) VE environment. This study adopts an exploratory qualitative design, combining digital ethnography (Hine, 2015) with a multiple case study approach (Yin, 2014), to examine the interculturality (Dervin, 2016) experiences of EAL/ESL university students in a VE between Canada and Jordan. It investigates what experiences shape students' strategies for engaging with IC in small groups, what factors influence their engagement, and how these experiences contribute to evolving epistemologies of IC in technology-mediated language learning. Data sources included a pre-study survey, semi-structured interviews with stimulated recall (Gass & Mackey, 2022), and observations of participants' multimodal interactions and artifacts. Interpretive thematic analysis (Clarke et al., 2015) and multimodal discourse analysis (Kress, 2010) were used for within- and cross-case analysis. Findings show that students' IC strategies were co-constructed through relational dynamics shaped by the VE context. Participants used storytelling, mentorship, linguistic adaptation, politeness, let-it-pass strategies, and distributed leadership to navigate tasks. These were influenced by pedagogical choices, learner identities and evolving experiences, ELF as a shared communicative ground, and the digital affordances of VE tools. While some intercultural traits aligned with conventional IC models, the findings challenge static views of cultural knowledge. Learners

co-constructed diverse cultures of learning where IC emerged as fluid, emotional, and context dependent. The study contributes to VE scholarship by emphasizing a shift from individual to relational understandings of interculturality in VE and wider TMLL environments. It offers implications for designing equitable, emotionally aware VE experiences and extending IC frameworks to better reflect the complexities of digital intercultural communication.

Dedication

إلى والديّ الحبيبين، بسام وأماني
إلى روح أستاذتي ومرشدتي الحبيبة البروفيسورة رلى قواس
إلى فلسطين... كل فلسطين

To my dear parents, Bassam and Amani

To the soul of my dear teacher and mentor Professor Rula Quawas

To Palestine... All Palestine

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LIST OF ACRONYMS

AI	Artificial Intelligence
C1/C2	Culture 1/ Culture 2
CALL	Computer-assisted Language Learning
CBC	Computer-based Communication
CERF	Common European Framework of Reference for Language
CIC	Critical Intercultural Competence
COIL	Collaborative Online International Learning
CVE	Critical Virtual Exchange
DMIS	Developmental Model of Intercultural Sensitivity
EAL/ESL	English as an Additional/Second Language
ELF	English as a Lingua Franca
FL	Foreign Language
IB	International Baccalaureate
IC/ICC	Intercultural Competence/ Intercultural Communicative Competence
IDI	Intercultural Development Inventory
IVE	Intercultural Virtual Exchange
LINC	Language Instructions for Newcomers to Canada
LMS	Learning Management System
NS-NNS	Native Speaker- Non-Native Speaker
OIE	Online Intercultural Exchange
PBLL	Project-based Language Learning
SLA	Second Language Acquisition
SIG	Special Interest Group

TBLL	Task-based Language Learning
TMLL	Technology-mediated Language Learning
UNESCO	The United Nations Educational, Scientific and Cultural Organization
VE	Virtual Exchange
ZPD	Zone of Proximal Development

Chapter 1

Introduction

Tracing the Uneasy Path of Intercultural Learning

﴿يَا أَيُّهَا النَّاسُ إِنَّا خَلَقْنَاكُمْ مِنْ ذَكَرٍ وَأُنْثَىٰ وَجَعَلْنَاكُمْ شُعُوبًا وَقَبَائِلَ لِتَعَارَفُوا ۚ إِنَّ أَكْرَمَكُمْ عِنْدَ اللَّهِ أَتْقَاكُمْ ۚ إِنَّ اللَّهَ عَلِيمٌ

خَبِيرٌ﴾ (سورة الحجرات:13) [O mankind, indeed We have created you from male and female and made you peoples and tribes that you may know one another. Indeed, the most noble of you in the sight of Allāh is the most righteous of you. Indeed, Allāh is Knowing and Aware.] (The

Qur'an, 2004, 49:13)

This verse captures a central principle that has shaped my personal, academic, and professional curiosity: the idea that the purpose behind the creation of diverse peoples and nations is for us to know one another. From a young age, this verse deeply influenced how I approached the phenomenon of culture and intercultural communication. As a student of English literature and, later, a language educator whose work spans in-person, hybrid, and online settings, I have continuously returned to this question of knowing one another. How do we achieve this, given the diversity of communication affordances available to us today? Can technology, for example, foster deeper understanding and transparency? Can it help us recognize and appreciate our differences and invest in them for the greater good? And what roles do language and communication play in achieving this goal?

Throughout my academic and professional career as an interculturalist, I have invested in exploring these questions by reflecting on my own intercultural experiences as a student engaged in online and in-person dialogues, as a facilitator of intercultural conversations, and as a researcher. These experiences continue to inform my understanding of interculturality as a dynamic and often uneasy process, rich with both potential and contradiction.

Perhaps the most notable experience of mine occurred during my first online intercultural exchange as a BA student in 2008, when I connected with a group of students from

Europe, the US, and other Arab countries in the region. Together, we engaged in conversations about a range of topics, including Palestine under Israeli occupation. I felt vulnerable and marginalized for my views on the topic. Despite my attempts to share historical facts and personal stories from my family, the group facilitators did not do enough to help navigate the differing perspectives. I left the conversation feeling angry and frustrated, and my engagement in the final weeks of the program shifted dramatically, from active participation to silence. I was still unsure how that experience contributed to the idea of “knowing one another.”

With further exposure to literature around intercultural communication, I began to realize that such experiences are not uncommon in online intercultural exchanges. Research has shown that online intercultural interactions often involve tension, discomfort, or miscommunication, especially when political and cultural asymmetries are present (Helm & Baroni, 2020; Lewis & O’Dowd, 2016; O’Dowd & Dooly, 2020). These studies helped me make sense of the emotional and relational processes I had gone through, recognizing that intercultural knowing is not a linear or purely positive experience, but rather one marked by both challenge and transformation. The idea of intercultural knowing as an uneasy process, where people experience both connection and rupture, resonated with my own journey. As Dervin (2016) and Holliday (2018) argue, interculturality is not about arriving at shared understanding, but about negotiating meaning in complex and shifting contexts.

1.1 VE as a Site for Intercultural Learning

Over the past three decades, technology has significantly shaped pedagogical theories and models, particularly in language teaching and learning. Researchers in the field of technology-mediated language learning (TMLL) have extensively explored how the internet and digital tools can serve as catalysts for promoting language learning goals. These goals include connecting learners with members of different speech communities to develop linguistic and intercultural skills, as well as engaging them in collaborative, project-based tasks

(e.g., Hauck, 2007; Lee & Markey, 2014; van der Zwaard & Bannink, 2019; Ware & O'Dowd, 2009).

In this context, pedagogies such as *telecollaboration*, *online intercultural exchange* (OIE), *collaborative online international learning* (COIL), and *virtual exchange* (VE) have emerged as innovative practices that connect language learners across geographically distant classrooms. These exchanges aim to foster language development and intercultural competence (IC) through structured tasks and collaborative work (O'Dowd, 2011). Through such technology-enhanced programs, language educators have created opportunities for learners to engage in linguistic exchanges such as negotiating meaning and providing corrective feedback (e.g., Freschi & Cavalari, 2020; Mahfouz, 2010; van der Zwaard & Bannink, 2018), and intercultural dialogue, allowing them to explore diverse cultural perspectives and reflect on their own (e.g., Helm et al., 2012; Hagley, 2020; O'Dowd, 2007).

As a result, VE has become a prominent area of research interest, particularly in relation to IC. A growing body of literature suggests that VE fosters learners' intercultural knowledge, skills, and attitudes (e.g., Chun, 2011; Hernández Alvarado & Brinckwirth, 2021; Lee & Markey, 2014; Thomé-Williams, 2016). Given the extent to which IC has become inevitable in the language classroom, VE has been explored as a pedagogy that provides learning opportunities to help learners explore the increasing intercultural diversity in their communities, understand other cultures, and navigate the transnational challenges of today's world. With the increasing pervasiveness of the internet, online communications have allowed learners of English as a second/additional Language (ESL/EAL) to connect with the global English language speaking community, develop their language proficiency, and their intercultural awareness. This is evident in VE, the network-based language learning medium that allows geographically separated learners to interact and collaborate with each other for the development of language and intercultural learning (O'Dowd, 2021a). However, these findings

have recently been problematized by scholars who caution against assuming that cross-cultural digital interaction automatically leads to IC development (Helm, 2016; O'Dowd & Dooly, 2020; O'Dowd & Ritter, 2006). These critiques highlight ongoing gaps in how IC is conceptualized, enacted, and assessed in VE contexts.

This debate reflects broader theoretical tensions in the field, especially regarding the enduring challenge of defining IC as a goal in language education. The complexity of IC as a construct and the lack of consensus regarding its dimensions and operationalization continue to complicate its integration into pedagogy (Deardorff, 2006; Spitzberg & Changnon, 2009). Recognizing the fluid and dynamic nature of culture, recent literature has called for alternative approaches that move beyond essentialist notions of cultural difference and challenge dominant assumptions embedded in mainstream IC models (Asante et al., 2014; Dervin & Gross, 2016; Holliday, 2018; Porto et al., 2021). These calls also emphasize the importance of *interculturality*, understood as a situated, emergent, and co-constructed process that unfolds through relational dynamics among interlocutors (Dervin, 2016; Grünfelder & Montecinos, 2023; Grünfelder et al., 2024).

In TMLL settings, scholars have urged a rethinking of IC that accounts for the specific affordances and complexities of digital interaction, particularly how learners present themselves, perceive others, manage communication breakdowns, and navigate online relationality (Guth & Helm, 2011; Hauck & Satar, 2018; Helm, 2013; Thorne, 2003, 2006, 2016). Consequently, questions about how IC is designed, experienced, and evaluated in VE projects have become central to the emerging field of critical VE (CVE). This line of inquiry asks not only whether IC is developed, but *how, for whom, and under what conditions*, calling attention to issues of power, positionality, and global inequities often overlooked in conventional VE practices (Hauck, 2023).

While these theoretical contributions have begun to influence TMLL scholarship, they remain underrepresented in empirical research that centers learners' voices and lived experiences of interculturality in VE (Çiftçi, 2016; Dooly & Vinagre, 2021). Particularly, little is known about how language learners themselves perceive, enact, and make sense of IC during their VE participation, especially when considering the complexity of English as a *lingua franca* (ELF) environment, where meaning-making is shaped not only by linguistic diversity but also by multimodal, emotional, and strategic negotiations.

1.2 The Context of this Research

Research on VE has illustrated how virtual intercultural collaborations can promote students' IC (Avgousti, 2018) and target language skills (Helm & Van der Velden, 2020). However, scant VE studies examine student perspectives and experiences of IC as an approach to understanding the complex phenomenon of IC in TMLL mediums (Çiftçi, 2016; Dooly & Vinagre, 2021). What research has identified as critical moments of learners' self-reflection, comparisons of similarities and differences, and developing positive attitudes toward partners have been mostly referenced from self-reported questionnaires or interviews (e.g., EVOLVE Project Team, 2020; Hagley, 2020; Lee & Markey, 2014) and researchers' or practitioners' judgements about the divergent societal norms that determine learners' communication styles across cultures (e.g., Al-Zubeiry, 2013; He et al., 2017). In this sense, the oversimplification of reporting IC gains in VE studies has mostly reflected a recurrent essentialist approach to understanding IC in VE and the wider TMLL contexts (Dooly & Vinagre, 2021). Similarly, the exclusive application of conventional IC constructs has restricted exploration of "the compelling, problematic, and surprising conditions" (Thorne, 2003, p. 38) of IC created with the use of technological tools, hence minimizing the possibility of exploring the newly proposed practices and understandings of the phenomenon in VE and broader TMLL contexts.

1.3 Focus and Questions of this Research

Due to the growing questioning of the role of ‘the native speaker’ and authentic ‘cultural representations’ in VE (O’Dowd, 2021b), this study particularly aims to center contexts of ELF for investigating the intercultural experiences of university-level ESL/EAL students in Canada and Jordan, who participated in a VE project. In this seven-week exchange, students collaborated on intercultural language tasks co-designed by their course instructors. My research explores how these learners navigate IC throughout the VE and to what extent their lived experiences challenge, extend, or reframe existing understandings of intercultural competence and interculturality in TMLL. By adopting a combination of digital ethnography and case study methodology, the study aims to trace the evolving trajectories of intercultural engagement and meaning-making among learners across multiple VE groups. By examining both group-level dynamics and individual student experiences, the research aims to provide a comprehensive understanding of how intercultural growth is facilitated through VE as a pedagogical tool.

Due to the exploratory nature of the study, I have chosen a qualitative approach to research design, data collection and analysis within a combination of digital ethnographic approaches (Hine, 2015) and case study methodology (Creswell, 2007) to examine cases of intercultural learning trajectories that arise in a VE between two groups of students enrolled in ESL courses in universities in Canada and Jordan.

From this focus, a number of more central questions arose and appeared pivotal in driving this research:

1. What kinds of intercultural interactions and collaborations emerge within VE groups; what strategies do learners use to navigate them; and to what extent do these interactions, collaborations, and strategies evolve over time?

2. What are the dynamic factors that influence the evolving intercultural interactions, collaborations, and strategies of learners across VE groups, and how do learners navigate these dynamics over time?
3. How do learners' experiences and interactions within virtual exchange environments contribute to shaping current epistemological understandings of culture and interculturality in technology-mediated language learning contexts?

By addressing these questions, the research seeks to contribute to a deeper understanding of the pedagogical potential of VE in promoting intercultural competence and fostering meaningful intercultural learning experiences.

Given the critiques about oversimplifying IC gains in VE research, this study adopts a more purposeful and holistic approach to explore the range of factors influencing intercultural competence development in VE environments. This research utilizes multiple data sources, including a pre-study survey, semi-structured interviews, and non-participant observation of VE interactions and collaborations. Additionally, it acknowledges the impact of personal experiences, cultural backgrounds, and the VE tasks themselves. Together, these approaches allow for an examination of the intersection between individual student experiences and the broader pedagogical context.

In addition, the study investigates how IC is not only shaped by participants' engagement in VE but also by the dynamic factors that influence their understanding and practices over time. By employing a comparative case study approach, exploring multiple data points, and focusing on a range of influencing factors, I aim to triangulate findings across diverse VE groups. This approach enhances the understanding of how VE environments contribute to the development of IC and provides a more nuanced view of how such environments mediate intercultural learning.

1.4 Dissertation Focus and Overview

This dissertation contributes to theoretical conversations around IC and interculturality, while also offering practical insights into the design and facilitation of VE. Drawing on empirical data from a VE project between learners in Canada and Jordan, the study explores how intercultural learning unfolds within technology-mediated, multilingual, and culturally diverse environments. It proposes a nuanced understanding of how learners exercise autonomy, adapt communication strategies, and collaboratively construct intercultural learning with limited supervision, an area that has been largely overlooked in both traditional and critical VE literature. In doing so, it highlights how interculturality is experienced not as a fixed outcome but as an emergent, negotiated process shaped by interactional dynamics, multimodal resources, and learners' reflexive practices.

The remainder of this dissertation is structured as follows: Chapter 2 situates the study within the literature on VE and IC, tracing key concepts, evolving perspectives on interculturality, and recent developments in CVE. Chapter 3 describes the research methodology, research questions, and objectives, situating my standpoint as a researcher within current debates on intercultural learning and digital education. Chapter 4 provides a description of participant profiles taken from data they shared in the pre-study survey and their autobiography videos (i.e., Week 1 task). These profiles highlight their cultural background, their English language learning, and any intercultural experiences they had, if any, prior to this VE study. Chapters 5 to 7 present the study's findings aligned with the three research questions, offering a cross-case exploration of intercultural interactions, the dynamic factors influencing VE collaboration, and the epistemological contributions of learner experiences. Chapter 8 discusses the implications of these findings for theory, VE instructional design, facilitation practices, and future research. The dissertation concludes with a reflection on my researcher

positionality, the potential of VE as a space for critical intercultural learning, and the broader sociopolitical dimensions of virtual exchange in today's global context.

Chapter 2

Literature Review

This chapter situates the study within critical debates on the role of VE in promoting learner autonomy and intercultural language learning in TMLL environments. It begins by outlining VE pedagogy, its various models and approaches within applied linguistics, including technology-based language learning (TBLL), multimodality, and the role of technology in shaping VE design. It highlights the significance of learner autonomy and intercultural strategies in shaping participants' experiences and provides a brief overview of emerging CVE approaches that frame VE as critical pedagogy. These approaches position VE as a means of fostering *glocal* (i.e., global and local) communities equipped with problem-solving and intercultural communication skills for social change.

The chapter then examines the evolving conceptualization of culture and IC in additional and second language education. It reviews key models and frameworks used to define and assess IC in VE, alongside critiques in applied linguistics that challenge essentialist or nation-based representations of culture. It highlights a shift toward interculturality, which reconceives IC as a dynamic, dialogic process.

The chapter concludes by highlighting persistent issues in VE research on IC and emphasizes current calls to reframe VE around interculturality as an evolving process rather than a fixed or measurable product.

2.1 Virtual Exchange and Intercultural Learning: Models, Approaches, and Strategies in Technology-Mediated Contexts

2.1.1 Defining Virtual Exchange

VE has recently seen significant growth in pedagogical applications within TMLL. Initially referred to as virtual connections (Warschauer, 1996), the term *telecollaboration*, or learning at a distance, became widely used in language education with the rise of mobile

devices and Web 2.0 tools such as emails, blogs, wikis, and videoconferencing (Belz, 2003; O'Dowd, 2003, 2007). Telecollaboration refers to learning that “involves the use of Internet communication tools by internationally dispersed students of language in institutionalized settings to promote the development of (a) foreign language linguistic competence and (b) intercultural competence” (Belz, 2003, p.1). However, as a novice researcher will quickly notice, the terminology surrounding online intercultural exchanges (OIE) is varied and often inconsistent (Freschi & Cavalari, 2020; O'Dowd, 2021a; Thorne, 2006). While intercultural learning is central to VE, each term describing OIE reflects different pedagogical practices, learning outcomes, learner roles, and technologies (O'Dowd, 2018).

Telecollaboration (Belz, 2003) and Telecollaboration 2.0 (Guth & Helm, 2010), commonly used in North America, emphasize institutionalized, class-to-class exchanges supported by instructor facilitation and technology to enable deep intercultural communication. In contrast, the Tandem, e-Tandem, or Teletandem model (Hauck, 2007; Kramsch & Thorne, 2002; Ware, 2005), prevalent in Europe, promotes autonomous language learning through peer dyads or triads. It centers on learner motivation and self-direction, aligning with European ideals of autonomy (Kramsch, 1993; Thorne, 2006). Though effective in some contexts, the absence of instructor mediation in e-Tandems can limit opportunities for meaningful intercultural learning (Ware, 2005).

More recently, VE has emerged as a broader and more accurate term to describe real-time, extended synchronous exchanges between learners from geographically and culturally distinct contexts (Helm, 2015; O'Dowd, 2021a). Unlike earlier terms, VE encompasses the online nature of interaction while emphasizing the development of multimodal communicative competence and strengthened interpersonal relationships (Freschi & Cavalari, 2020; Hauck, 2007; Satar, 2015). Still, some scholars continue to use terms like e-Tandem even when facilitators are involved, blurring model distinctions (Hauck, 2007; Ware & O'Dowd, 2008).

A widely adopted model within VE is Collaborative Online International Learning (COIL), developed by Jon Rubin in the early 2000s to promote cross-cultural learning between students at distant institutions. Like other VE models, COIL emphasizes co-designed, technology-mediated learning experiences by partner faculty and fosters intercultural communication and knowledge exchange (Rubin, 2010). Its distinctive focus on faculty collaboration and institutional partnerships creates meaningful intercultural learning where students engage with both cultural content and collaborative work (Helm & Guth, 2010). A defining feature of VE, unlike other TMLL forms, is its collaborative nature between instructors and learners. VE projects often involve co-designed intercultural tasks facilitated by multiple instructors, connecting language learners from diverse backgrounds who may never meet face-to-face (Dooly & Vinagre, 2021; Dooly, 2011; O'Dowd, 2021a). For this study, the term VE will be used to refer to these collaborative exchange projects.

2.1.1.1 Controversies and Challenges in the Use of the Term "Virtual Exchange"

Despite its growing popularity, the term “virtual exchange” (VE) has sparked ongoing debates, particularly around its definition and the difficulty of distinguishing it from other online collaborative learning forms such as COIL (Hackett et al., 2024). A central concern in VE literature is its broad and often ambiguous use, which, as O'Dowd (2021a) argues, can obscure the distinct pedagogical practices associated with different models. While VE generally refers to real-time, synchronous interactions promoting intercultural communication and language learning via digital platforms, it is often used interchangeably with terms like telecollaboration and e-Tandem, which differ in participant roles and levels of instructor involvement (O'Dowd, 2021a; Thorne, 2006).

The catch-all use of VE has led to confusion about pedagogical goals, institutional roles, and learning outcomes. COIL, for example, emphasizes faculty collaboration and institutional partnership in course design, unlike more learner-centered models such as e-Tandem or

telecollaboration (Hackett et al., 2024; Helm & Guth, 2010). O'Dowd (2021) warns that using VE as an umbrella term may oversimplify the diversity of practices within virtual exchange, obscuring key factors that shape successful intercultural learning. This lack of definitional clarity complicates model comparisons and hinders efforts to develop standardized frameworks for evaluating the effectiveness of VE (O'Dowd, 2021a).

Practically, VE's broad application creates challenges in both research and implementation. While COIL focuses on faculty-led, structured collaboration, other VE formats may rely on peer-to-peer or instructor-facilitated interactions, which can limit intercultural depth without adequate mediation (Freschi & Cavalari, 2020). Such variation risks the misapplication of VE in research, where different models may be grouped under one label, resulting in imprecise findings and conflicting claims about VE's role in fostering intercultural competence (Hauck, 2010; O'Dowd, 2021a). Thus, while VE holds transformative potential for intercultural education, it is essential for scholars and practitioners to critically engage with its evolving usage, distinguishing between models like COIL and others to better assess their pedagogical contributions and challenges.

2.1.2 Approaches to Virtual Exchange

The VE models discussed above can also be categorized by their design and implementation approaches. Helm (2024) classifies VE models into comparative, challenge-based, and dialogue approaches. Telecollaboration and COIL follow the comparative approach, where instructors from two national institutions co-develop intercultural curricula that prompt students to “[examine] and [evaluate] similarities and differences” (Helm, 2024, p. 24) in cultural documents or intercultural issues as experienced by learners. This approach can foster deep cultural understanding through research and interaction, especially when students are guided to reflect on their own and others' perspectives (Helm, 2024). However, the nation-to-nation framing reinforces national affiliations, casting learners as cultural representatives or

“guardians” expected to defend or positively portray their countries (Helm, 2024). While such exchanges may inspire curiosity and engagement, they risk reinforcing ideological hierarchies and negative evaluations of the “Other.” Thus, research and pedagogy employing this approach must incorporate critical engagement with ideologies such as nationalism, racism, prejudice, and neoliberalism, encouraging reflection on how these shape identity and beliefs (Helm, 2024; O’Dowd, 2019).

Challenge-based approaches center on project- or problem-based learning in which VE participants tackle complex, interdisciplinary challenges that require critical thinking, creativity, and collaboration (Helm, 2024, p. 36). COIL projects often adopt this model to support inquiry-based, student-centered learning (Ktoridou & Doukanari, 2016). Unlike the typically bilateral comparative VE model, challenge-based COIL projects often involve multiple institutions (e.g., X-Culture and NICE) and emphasize interdisciplinary goals beyond language development (Helm, 2024).

These projects promote global responsibility, action-based collaboration, and realistic expectations for intercultural teamwork (Evain et al., 2023; Helm, 2024). However, they can risk minimizing cultural differences in favor of commonality, thereby limiting exploration of values, communication styles, or worldviews (Souza, 2019). Overemphasis on task completion may hinder interpersonal connections and group cohesion. Moreover, the employability-driven framing of “competence” in such contexts has been critiqued for reflecting neoliberal ideals in higher education. As Marginson (as cited in Helm, 2024) notes, “Functional, skills-focused and solution-oriented approaches to interculturality are seen to reflect the neoliberal paradigm characterizing higher education” (p. 46).

The final model is the dialogue-based approach, which can be embedded in most VE types (excluding e-Tandem due to its lack of dialogue facilitation). This model emphasizes sustained, facilitator-led conversations aimed at mutual understanding. Students engage in

synchronous discussions, often via videoconferencing, within a structured, safe environment (Helm, 2024). Dialogue facilitators guide exchanges, helping to manage tensions or conflicts (e.g., in the Soliya Connect Program). These VEs view cultural diversity as a source of enrichment and acknowledge hybrid identities in intercultural learning. Yet, as Helm (2024) warns, challenges include unequal access to participation, facilitators' limited ability to manage power imbalances or emotions, and technical disparities in videoconferencing environments.

2.1.3 Researching Virtual Exchange: From Second Language Acquisition and Sociocultural Theory to Ecological Frameworks

The study of intercultural learning in VE has historically been situated within two foundational paradigms: Second Language Acquisition (SLA) and sociocultural theory. SLA-oriented research has emphasized language development through interaction, focusing on constructs like negotiation for meaning (Long, 1996), comprehensible input (Krashen, 1985), and modified output (Swain, 1985). In VE, this often translates into analyses of learner talk for repair, clarification requests, or confirmation checks, especially in text-based or synchronous tasks (e.g., Belz, 2003; Lee, 2006; Tudini, 2016; Vinagre & Muñoz, 2011). While offering insight into linguistic gains and cognitive processes, such work has been critiqued for overlooking the interpersonal, affective, and contextual dimensions of intercultural meaning-making (Reinhardt, 2012).

Sociocultural approaches, rooted in Vygotskian theory, frame language learning as socially mediated and context-dependent. Studies emphasized scaffolding (e.g., Donato, 1994) and collaborative dialogue (e.g., Swain & Lapkin, 2000). Other studies have focused on learner activity within the Zone of Proximal Development (ZPD) to explore learners' role and agency in building intercultural and communal relationships (e.g., Jin, 2013) and pragmatic perspectives on the potential of VE to promote culturally appropriate language use (e.g., Belz, 2007). In VE, this lens has illuminated how learners navigate identity, develop intercultural

awareness, and engage in distributed cognition across linguistic and cultural boundaries (Thorne, 2003; O'Dowd, 2006; Belz & Müller-Hartmann, 2003). However, this paradigm has also been critiqued for insufficiently addressing the technological and institutional conditions shaping VE interaction. In Hampel & Stickler (2012), while acknowledging the potential of videoconferencing to support interaction, the findings also suggest that sociocultural and SLA paradigms do not always provide a sufficient accounting for the technological and institutional constraints that shape online learning environments, including VE. With TMLL becoming the norm, understanding when and how technology mediates intercultural language interaction can help address learning design and implementation challenges moving forward (van Compernelle, 2017).

Reinhardt (2012) addresses this gap by arguing that these paradigms provide partial insights when applied in isolation. He calls for a more ecological approach that captures the emergent, contextual, and multilayered nature of digital interaction in VE. Learner discourse, he argues, is shaped not only by language proficiency but also by platform norms, group dynamics, task design, and institutional ideologies. He explains that ecological approaches situate VE within sociotechnical ecosystems where tools are appropriated based on users' histories, identities, and needs. Thus, he advocates for conducting analytical pluralism, integrating cognitive, social, pragmatic, and technological frameworks, to address the semiotic and relational complexity of VE. This reconceptualization resonates with recent calls in VE research on multimodal meaning-making, critical engagement, critical digital literacy, and emergent interculturality (Dervin et al., 2024; Hauck, 2020; Vinagre, 2016; Satar et al., 2023).

2.1.4 From Virtual Exchange to Critical Virtual Exchange

The concept of Critical Virtual Exchange (CVE) was first formalized by Sarah Kastler and Tara Harvey Lewis through their work with the Stevens Initiative. As Hauck (2023) notes, their efforts integrated critical pedagogy into VE design, emphasizing equity, inclusion, and

social justice. CVE shifts focus from intercultural competence to transformative dialogue, power-conscious pedagogy, and structural reflexivity. Rooted in Freirean critical pedagogy (Freire, 1970), it reframes VE as an ethical and political endeavor requiring reflection on positionality, power, and inequality.

Since the introduction of CVE, scholars have sought to define its ‘critical’ dimensions in both pedagogy and research, especially in light of current sociopolitical crises. Most definitions emphasize CVE as a transformative alternative to conventional, often superficial, cultural comparisons (Kilmanova & Hellmich, 2021). Helm (2015, 2020, 2024) describes critical telecollaboration as a socially and pedagogically aware practice involving “constant questioning of our practice” (2020, 8:38), aimed at challenging dominant ideologies. CVE, she argues, contests four assumptions: that VE always promotes understanding and quality participation, that the native speaker (NS) is the ideal interlocutor, that VE's primary goal is sociocultural competence, and that technology is neutral. Hauck (2023) outlines CVE features, including low-bandwidth tools, the inclusion of underrepresented participants (e.g., from the Global South), and multimodal practices such as translanguaging, which challenge English's dominance in VE. CVE fosters critical inquiry, reflexivity, and re-learning, and holds potential for learner autonomy, glocal awareness, and “thinking otherwise” (p. 10).

CVE-oriented projects have experienced significant growth in recent years. In Golubeva (2025), international student teams used digital humanities and artistic media to explore campus inclusivity. They co-designed research, selected artistic materials, and collaboratively managed projects, supporting learner autonomy through peer-led, self-directed learning. In Porto et al. (2021), students from Argentina and the US used arts-based methods and pedagogies of discomfort to examine COVID-19 representations, co-creating multimodal artworks that reflected shared trauma and resilience.

Several EFL VE projects (e.g., Kohn & Hoffstaedter, 2017; Nicolaou & Sevilla-Pavón, 2023; Porto, 2018) employed a transnational framework (O'Dowd, 2019), which decouples VE from national paradigms and fixed links between language and culture. Nicolaou & Sevilla-Pavón (2023) reported increased confidence among Cypriot and Spanish students engaging with diverse English varieties. In Lindner (2016), German and Slovenian undergraduates employed negotiation strategies like paraphrasing and confirmation checks. Without relying on native-speaker models, students co-constructed meaning, self-corrected, and directed their learning, supporting inclusive and egalitarian interaction through ELF. Such use of ELF in VE fosters a collaborative communicative space where all participants contribute meaningfully, regardless of linguistic background. The issue of nativeness in VE and its role in IC development will be revisited later in this chapter.

2.1.5 Task-based Language Learning and Teaching in Virtual Exchange

Since the 1980s, there has been a growing shift toward task-based language learning and teaching (TBLLT), which situates language learning in communicative contexts and emphasizes meaning-making (Lai & Li, 2011; Ziegler, 2016). With the rise of computer-mediated communication (CMC), research has reconceptualized TBLLT in digital spaces, integrating computer-assisted language learning (CALL) to support intercultural development. Hampel (2010), for example, proposes a three-level model for CALL task design: *approach*, which considers how theories of language learning align with technological tools; *design*, involving task types, learner roles, and pedagogy; and *procedure*, the actual implementation and learner interpretation of tasks. Psycholinguistic tasks focus on negotiation of meaning, while sociolinguistic tasks emphasize intercultural learning as social practice (Hampel, 2010; O'Dowd & Waire, 2009). Scholars argue that TMLL tasks should mirror real-world communication, integrate meaning and form, and foster intercultural and multimodal competence (Hauck, 2007; Müller-Hartmann, 2000; Ziegler, 2016).

In VE, aligning task sequencing and content across institutions presents challenges. Müller-Hartmann's (2000) three-phase model outlines how learners move from introductory identity work to project setup to intensive task negotiation. O'Dowd & Ware's (2009) typology of information exchange, comparison/analysis, and collaborative tasks has significantly influenced VE research and design. Yet, many VE projects still encounter mismatches in learner/instructor expectations and tensions around 'native' and 'non-native speaker' (NS-NNS) roles¹ (Dooly, 2011; Helm et al., 2012; O'Dowd & Ritter, 2006).

One key factor affecting VE task design is learners' need to build strong intra- and inter-group relationships (Kear, 2010; Satar, 2015; Syahrin & Salih, 2020). Drawing on Tuckman's (as cited in Dörnyei & Malderez, 1997) group development stages —forming, storming, norming, performing, and adjourning— research suggests that VE learners, given their cultural and linguistic diversity, do not naturally progress without establishing trust and group norms. However, learners often report that the introductory phase is rushed, hindering group cohesion (Müller-Hartmann, 2000).

Role assignments in NS-NNS pairings also impact task dynamics. In many e-Tandem or telecollaboration projects, NS participants are assigned the 'tutor' role, providing corrective feedback (Freschi & Cavalari, 2020; Ware & O'Dowd, 2008). While this can support language learning, it also creates power asymmetries, leaving NNS participants feeling hesitant or incompetent (Belz, 2005; Hauck, 2007; van der Zwaard & Bannink, 2018). Learners positioned as 'linguacultural experts' (Belz, 2005) or 'ambassadors' (Helm et al., 2012) often find this role empowering, but others experience it as limiting. For example, in Helm et al. (2012), a Palestinian student felt overwhelmed by peer questions about the sociopolitical situation in

¹ In this study, I intentionally avoid using the terms "native" and "non-native" speakers as fixed or hierarchical categories. These labels are socially constructed and often perpetuate deficit ideologies in language education (Holliday, 2005; Kubota & Lin, 2006). If such terms appear in this chapter, it is solely because they were used in the original studies being cited.

Palestine and was frustrated by the lack of reciprocal engagement. Italian students in the same project were misrepresented as a homogenous "Western" group, despite expressing diverse perspectives. To address these asymmetries, van der Zwaard & Bannink (2018) propose rotating expert-learner roles. In their study, Australian and Dutch participants rotated the cultural expert role to negotiate cultural humor by sharing cultural jokes in English. Excerpts from these interactions reveal that power relations became more symmetrical as learners exhibited similar behavior when taking on the expert role. Furthermore, assigning the multiple roles of 'learner' and 'expert' to NNS participants enriched their discursive practices and encouraged them to take linguistic moves, both in the chat and during the videoconferencing session. These practices equalized power dynamics and enriched discursive practices as NNS participants took more initiative in both chat and video sessions.

The reciprocity between TBLLT and CALL supports an ecological view of language learning as an activity-based process, shaped by learners' goals, motivations, and available tools (Thorne, 2016). Learning emerges within these activities as learners use both language and digital tools to achieve context-specific goals (Jeon-Ellis et al., as cited in Lai & Li, 2011). Consequently, learners may interpret tasks differently than instructors intended (Dooly, 2011; O'Dowd & Waire, 2009), based on their interests, comprehension, or technological cultures-of-use (Thorne, 2003).

Yet, these learner modifications are often misread as task misinterpretations. Dooly (2011) highlights this issue through a VE project in which Spanish-speaking learners developed metalinguistic knowledge by improvising topic shifts and humor. Their instructor, however, dismissed these moments as "off-task" because they deviated from the original assignment structure. This highlights the ongoing issue of task-as-workplan vs. task-as-process. Examining tasks as processes reveals how learners scaffold intercultural and linguistic learning, negotiate

meaning, and shape group dynamics, areas that require sensitive instructor facilitation (Arasaratnam-Smith & Northcote, 2017; Lomicka, 2020).

2.1.6 Multimodality and Technological Use in Virtual Exchange

VE increasingly uses both synchronous and asynchronous tools to support intercultural dialogue. Research shows that these tools influence task development, identity construction, and intercultural engagement (Guth & Helm, 2010; Dooly & O'Dowd, 2012). Synchronous platforms (e.g., Zoom, Skype) offer real-time communication, promoting immediacy, feedback, and social presence (O'Dowd & Ritter, 2006; Garrison, 2007). However, they pose scheduling and accessibility challenges (Hauck, 2007). Asynchronous tools (e.g., forums, blogs, Padlet, Google Docs) support deeper reflection and reduce anxiety, particularly for learners with lower proficiency (Belz, 2003; Lai & Li, 2011; Ziegler, 2016).

Both formats offer distinct affordances. Asynchronous interaction enables thoughtful engagement and expansive strategies (Di Sarno-García & Gimeno-Sanz, 2022) but can feel impersonal or lead to delayed responses and miscommunication (Kear, 2010; Bassani & Buchem, 2019). Synchronous tools build connections but may be limited by sociocultural factors, such as gender norms or digital access (Kramsch & Thorne, 2002; Lee, 2012; Mahfouz & Ihmeideh, 2009). Integrating both modalities supports learner motivation and participation across diverse needs (Arasaratnam-Smith & Northcote, 2017).

Effective VE design requires aligning tools with pedagogical aims. Blogs encourage reflection and critical thinking (Hauck, 2007; Lee & Markey, 2014), while instant chat tools like WhatsApp foster informal peer interaction and meaning negotiation (Freschi & Cavalari, 2020; van der Zwaard & Bannink, 2019). Thorne's (2003, 2006, 2016) cultures-of-use framework highlights how sociocultural identities shape digital engagement. Learners may switch from formal tools, such as email, to informal ones, like instant messaging, to foster connections. Hewitt (2005) found that discussion forum design affected participation: learners

often replied only to new threads, ending older discussions. Ala-Kortesmaa & Muñoz (2023) report that differences in social media preferences (e.g., Snapchat vs. WhatsApp) between Finnish and American students affected team communication and motivation.

These findings underscore that tools are not neutral; they shape participation, communication, and power dynamics. While some learners use them strategically, others remain unaware of their impact. As this area continues to evolve in CALL (Thorne, 2016), VE pedagogy should foster learner reflection on tool use. Encouraging students to see tools as “participants in, rather than merely mediators of cognition” (Thorne, 2016, p. 189) can enhance awareness of communication styles, identity expression, and group interdependence, which are core dimensions of meaningful VE interaction.

2.1.7 Multimodality and Critical Digital Literacy in Virtual Exchange

With the growing complexity of communication in digital environments, scholars have called for a stronger integration of multimodality in VE projects to reflect how meaning is constructed through a range of semiotic resources beyond language alone. Multimodality refers to the use of multiple communicative modes, visual, textual, auditory, spatial, and gestural, to make meaning, and it plays a critical role in how learners navigate cultural differences in online interactions (Kress, 2010; Thorne, 2003). Recent studies have argued that the incorporation of multimodal tasks and artifacts in VE can enhance learners' ability to interpret, negotiate, and represent intercultural meanings through diverse semiotic forms (Guichon & Wigham, 2016; Hauck, 2019).

In this context, the concept of critical multimodal competence has emerged as an essential component of intercultural learning, requiring learners not only to interpret multimodal texts but also to critically evaluate how these texts construct identities, positions, and cultural meanings (Dooly & Vinagre, 2021; Liddicoat & Scarino, 2013). Building on this, Satar et al. (2023) employ a social semiotic lens to show how learners in VE settings mobilize

multimodal resources not just to convey meaning, but also to position themselves critically in intercultural dialogue. Their study demonstrates that tasks designed to promote critical awareness of visual and textual framing help learners recognize and interrogate underlying ideologies and cultural assumptions embedded in digital communication.

Closely related is the notion of critical digital literacy, which emphasizes learners' capacity to critically engage with digital tools, question dominant ideologies encoded in online communication, and reflect on issues of power, representation, and inclusion in VE contexts (Buckingham, 2007; Darvin, 2017; Helm, 2013). Bilki et al. (2023) expand this idea in the context of ELT teacher education, highlighting how critical digital literacy can be fostered through reflexive engagement with platform affordances, peer interaction, and the analysis of digital texts. Similarly, Hauck (2020) underscores the importance of explicitly designed VE tasks that engage learners in critically deconstructing online communication modes, encouraging them to become both analytical readers and ethical producers of digital content.

The reported findings in the previous section on the role of the culture of use of technology across VE contexts also situate a need for a critical stance on how technological affordances intersect with socioeconomic and sociopolitical conditions. To do so, VE research should not only examine how digital tools are used but also critically reflect on the ideologies, power dynamics, and inequalities embedded in those uses (Cappellini, 2024). This perspective aligns with critical digital literacy, aiming to move beyond functional or instrumental uses of technology to reflect on whose norms are being centered and challenge dominant discourses around participation, time management, and communication. By doing so, research can critically examine issues such as digital infrastructure and institutional constraints that are likely to impact autonomy and equity among VE participants and therefore, explore alternative epistemologies with potential opportunities to create space for student autonomy and intercultural equity (Cappellini, 2024).

Together, these frameworks advocate for pedagogical designs that move beyond surface-level cultural exchange to promote deeper engagement with interculturality as a process of critical meaning-making in digitally mediated environments. Integrating multimodality, critical multimodal competence, and critical digital literacy enables VE practitioners to support learners in becoming more aware of the sociocultural, ideological, and technological dynamics that shape their online intercultural encounters.

2.1.8 Learner Autonomy in Virtual Exchange Environments

Over several decades, the concept of learner autonomy has played a central role in additional/second language education. Contemporary scholarship reflects a shift from viewing autonomy as individual control to understanding it as socially and contextually embedded, particularly in Web 2.0 environments. Early definitions, such as Holec's (1981), framed autonomy as an individual capacity: "the ability to take charge of one's own learning" (pp. 3–4), where learners determine the purpose, content, rhythm, and method of their learning. This perspective emphasized internal autonomy, planning, and self-monitoring.

Later scholars expanded this view. Benson (2001) described autonomy as "a multidimensional capacity" shaped by context and time (p. 47), while Little (2004) reframed it as a psychological relationship to the processes and content of learning, emphasizing learners' cognitive and affective engagement with tasks and others. Peeters & Ludwig (2017) summarize autonomy models that trace a progression from teacher-scaffolded to socially negotiated practices. Nunan's (1997) five-level model guides learners from awareness to transcendence; Trebbi (1990) highlights curricular negotiation; Kohonen (1992) links autonomy to cooperative, experiential learning; and Dam (1994) offers a classroom-based model with structured routines for goal setting and self-assessment. Collectively, these models position autonomy as socially mediated and co-constructed.

Suvorov & Cabello (2017) identify three elements of autonomy: independence (individual responsibility), interdependence (learning shaped by interactions), and a digital element (navigating TMLL environments through digital literacy).

Autonomy, then, exists in a “relational ecology that [includes] identity, autonomy, and motivation” (Little & Thorne, 2017, p. 13). In that sense, learners are not isolated agents but participate in intersubjective spaces that require alignment and collaboration (p. 14). This means that understanding and researching learner autonomy should resemble attempts to understand and research human development, as people are not “individual monadic entities or beings, rather [they] live through the cultivation and maintenance of spaces that involve intersubjectivity and mutual alignment” (p.14). Therefore, understanding learner autonomy should never be isolated from the relational dynamics of learning goals and processes.

As TMLL and online learning communities evolve, scholars have called for “re-wildening” autonomy by linking it to digital affordances and self-organizing ecosystems (Little & Thorne, 2017). Social presence, “the ability of learners to project themselves socially and emotionally as ‘real’ people into a community of learners” (Garrison et al., as cited in Lomicka, 2020, p. 7) is central to this development. In TMLL, social presence includes affective, interactive, and cohesive indicators (Lomicka, 2020). Affective indicators (e.g., emotion, humor, self-disclosure) foster emotional connection; interactive behaviors (e.g., responding, questioning, agreeing) support dialogue and reflection; cohesive indicators (e.g., greetings, inclusive language) promote group identity. These aspects of social presence cultivate psychological safety, promote metacognitive engagement, and support shared responsibility and are essential for learner autonomy.

Alongside social presence, emotional regulation (e.g., regulation of anxiety) and metacognition play key roles in understanding learner autonomy in TMLL. In their exploration of students’ strategies in a collective blog in a teletandem, de Moraes Garcia et al. (2017)

analyzed blogger interactions and identified planning, monitoring, and evaluative thinking in learners' posts and comments as metacognitive behaviors that contribute to VE interactions. The authors then argue that metacognition, which consists of 'metacognitive knowledge', "knowledge about the strengths and weaknesses of one's own knowledge" (p. 71), and 'metacognitive awareness', "the feelings and experiences we have when engaged in cognitive processes" (p. 71), through which autonomy is nourished. More precisely, metacognition is a means of developing autonomy, "a component of autonomization, since it is a way for learners to acquire better knowledge about themselves and in the end to improve their learning" (de Moraes Garcia et al., 2017, p. 71).

Peeters & Ludwig (2017), examining Facebook-based language groups, observed peer scaffolding, affective alignment, and collaborative content creation, reinforcing autonomy as relational. They emphasize that guiding learners to reflect on social presence and compare experiences with peers supports self-awareness and autonomy development.

Zourou et al. (2017) extend to informal learning on platforms such as Instagram and YouTube. They identify learner roles as curators, commentators, and creators, showing that autonomy evolves through platform choice, reflective peer engagement, and public content production. This supports Little & Thorne's (2017) call to approach autonomy as a framework, where learners, instructors, and designers can be transparent about pedagogical and methodological aims. Such transparency allows for reimagining what it means to be engaged and to be "a learner in the process of development" (Little & Thorne, p. 14).

Examining learner autonomy in ELF VE through a socially situated lens reveals it as a dynamic, co-constructed process shaped by interaction, emotion, and group cohesion. In ELF contexts, where no native norm is imposed, autonomy emerges through collaborative meaning-making, empathy, and mutual support. This approach calls for ethnographic and ecological

methods to examine autonomy as relational and context-dependent, offering deeper insights into learner autonomy in intercultural digital settings.

2.1.9 Intercultural and Negotiation Strategies in Virtual Exchange

Intercultural strategies refer to the communicative approaches and behaviors individuals employ to navigate interactions between people from different cultural backgrounds (e.g., Di Sarno-García & Gimeno-Sanz, 2022; Lindner, 2016). These strategies are "intercultural" because they are specifically employed to bridge cultural differences, facilitate mutual understanding, and manage the complexities inherent in cross-cultural communication. In VE environments, strategies are essential for overcoming linguistic barriers, addressing cultural misunderstandings, and fostering collaborative relationships among participants from diverse cultural contexts. A number of those strategies, employed by learners, emerge in ELF VE.

Linguistic Accommodation. In ELF VE, learners frequently employ linguistic accommodation strategies to bridge gaps in understanding and facilitate communicative cooperation. These strategies include translanguaging and code-switching, where learners fluidly shift or blend languages to ensure clarity and express culturally nuanced ideas. Translanguaging, as demonstrated by Helm & Hauck (2022) and Guo & Xu (2023), is when learners switch or blend languages to ensure comprehension and express complex cultural ideas. This includes the use of learners' multilingual resources and the incorporation of multimodalities to facilitate comprehension and enable richer intercultural exchanges, allowing learners to express complex ideas more fully and authentically. Findings in Guo and Xu (2023) suggest that learners use translanguaging not only to overcome linguistic barriers but also to negotiate cultural meanings and express cultural nuances that may not be easily conveyed in a single language. It is argued that translanguaging in VE provides a more inclusive environment

where linguistic diversity is valued and can contribute to deeper cultural understanding (Dooly & Vinagre, 2021; Helm & Hauck, 2022).

Additional strategies include simplifying and adapting language (e.g., Helm, 2020), particularly in ELF interactions. These include paraphrasing, repetition, utterance completion, and clarification or confirmation requests, either indirect (e.g., “Sorry?”, “Again?”) or direct (e.g., “Do you mean...?”) (Konakahara, 2023). Learners also clarify meaning through exemplification, description, comparison, and asking for confirmation (e.g., “You understand? OK?”). Turn-taking and pausing help manage conversational flow and prevent overlap, giving speakers time to process or respond, which is key to reducing conflict (Gutiérrez et al., 2021). Mitigation strategies, such as hedging, apologizing, or using indirect speech, serve to soften disagreement and preserve face (Konakahara, 2023).

Non-verbal cues, such as gestures, facial expressions, and body language, alongside backchannels like nodding, “mhm,” “I see,” or laughter, signal empathy, solidarity, and active listening. These strategies foster trust and emotional alignment. However, their effectiveness is context-dependent. Konakahara (2023) notes that overuse of simplification or reformulation may be perceived as patronizing, especially if learners feel their proficiency is underestimated. Similarly, excessive mitigation may obscure speaker’s intention, leading to miscommunication. Non-verbal cues, though helpful, can also fail if interlocutors come from cultures with different norms for expression (Bjørge, 2016).

Bjørge (2016) and Konakahara (2023) also highlight less successful strategies, such as let-it-pass, where learners pretend to understand and respond with backchannels in the hope that the meaning will become clear later. Defined as “pretending to understand by producing a backchannel on the assumption that an unknown or unclear action, word, or utterance, will be clear or redundant as the talk progresses” (Konakahara, 2023, p. 55), this tactic can mask confusion and hinder deeper engagement. Another example is the make-it-normal strategy,

which involves downplaying disagreement or difference by framing it as routine or unproblematic (e.g., “It’s not really a big deal,” “It’s all normal, right?”). While this can defuse tension, it can also prevent critical intercultural reflection.

As these examples suggest, the appropriateness and success of accommodation strategies depend heavily on contextual and cultural awareness. Konakahara (2023) emphasizes that what works in one ELF interaction may not be suitable in another, highlighting the need for flexibility and sensitivity in managing intercultural communication in VE.

Relational and Empathy-building Strategies. These types of strategies involve engaging in active listening and attempting to take a perspective. O’Dowd and Ritter (2006) highlight that these practices help learners navigate cultural differences and build empathy in online intercultural settings. Additionally, the use of humor and informal language and communication styles, for instance, can ease tensions and build rapport among VE participants. Ware and Kramsch (2005) found that such strategies contribute to creating a comfortable environment conducive to intercultural learning. Some learners also invest in building interpersonal relationships beyond academic tasks. Learners often use VE platforms to establish personal connections, sometimes extending interactions through social media. This approach enhances mutual understanding and trust, as noted by Helm (2021).

Cultural Exploration and Negotiation. Learners can use a variety of strategies, such as asking culturally sensitive questions in which learners demonstrate curiosity about their partners' cultures. Basharina (2007) observes that such inquiries facilitate deeper cultural understanding and dialogue in VE contexts. Additionally, the use of storytelling can lead to reflective dialogue, which helps learners navigate conflicting values. These approaches can also help clarify misunderstandings, prevent stereotyping, and foster a more accurate understanding of cultural differences. These also include strategies for conflict management and face-saving, such as in the strategic use of silence to avoid embarrassment or loss of face.

Learners may employ indirect communication or silence. Ware and Kramsch (2005) note that such strategies are prevalent in VE interactions, reflecting cultural norms around face-saving. Some learners use diplomatic negotiation to address and resolve disagreements, such as through private conversations, to maintain harmony and respect.

Digital Platform Adaptation. As discussed earlier, learners tend to select digital tools they perceive as suitable for their communication needs and supportive of their social presence, such as WhatsApp or Instagram. These technologies enable multimodal expression and have the potential to enhance intercultural interactions. Learners also make decisions and demonstrate preferences to manage their digital identities. Studies explored learners' approaches to curating online profiles, video presence, and multimodal communication to express comfort and authenticity, which can positively influence intercultural communication. Fondo (2021) reports that learners who used video and other visual communication strategies were able to express cultural nuances more clearly, which facilitated rapport-building and reduced misunderstandings.

Furthermore, Machwate et al. (2021) observe that the ability to curate their digital profiles positively influenced learners' engagement in the VE, as it enabled them to establish trust and manage cultural differences more effectively. Finally, Heymans et al. (2024) found that healthcare students' management of their online identities, particularly through video presence, contributed to their IC by allowing them to engage in authentic, culturally sensitive interactions. These findings collectively underscore the critical role that digital identity curation plays in facilitating authentic and effective intercultural communication in VE environments.

In VE, it is noticeable that learners convey multiple intercultural negotiation strategies to navigate their VE interactions and collaborations. Scholars have emphasized the importance of training and mentoring students to effectively use these strategies to co-construct intercultural meanings and navigate challenging experiences (i.e., tension, misunderstanding).

Such experiences can potentially be transformed into rich opportunities for intercultural learning (O'Dowd and Ritter, 2006; Ware, 2005).

2.2 Conceptualizing Culture and Intercultural Competence in Language Teaching and Learning

2.2.1 What is Culture?

Since the 1950s, the concept of culture has puzzled scholars and practitioners across disciplines. Defining culture in a way that captures its multifaceted nature remains complex. However, outlining foundational definitions provides a useful basis for both language education and intercultural practice. Disciplinary perspectives offer varied insights: anthropology frames culture as a symbolic system shaped by history, power, and context (Geertz, 1973; Said, 1978); sociolinguistics focuses on how language use, through code-switching, pragmatics, and style-shifting, reflects identity and cultural positioning (Gumperz, 1982; Scollon & Scollon, 2001); psychology explores how culture informs cognition, emotion, and self-construal, including processes such as acculturation, IC, and bias (Berry, 1997; Deardorff, 2006; Markus & Kitayama, 1991). Together, these perspectives affirm that culture is dynamic and socially mediated, shaped through language, interaction, and lived experience.

These definitions have significantly influenced intercultural language education and applied linguistics, often guiding the design of research. One early definition, by Tylor (as cited in Germain & Barbara, 2008), describes culture as “that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society” (p. 66). Cortazzi and Jin (1999) see culture as a framework of assumptions and beliefs that shape interpretation and behavior. Hall’s (1989) iceberg metaphor distinguishes surface-level cultural practices from deeper, implicit values and thought patterns. Kroeber and Kluckhohn (1952) similarly describe culture as a system of explicit and implicit behavior patterns transmitted symbolically and shaped by collective tradition. These

perspectives advocate a holistic understanding of culture that recognizes its embeddedness and dynamism.

In foreign language education (FL), culture has long been central (Alptekin, 2002; Byram, 1997, 2009; Byram et al., 2002; Kramsch, 1993). Yet, the role of cultural conceptualizations within language curricula has not received adequate critical attention (Liddicoat, 2004; Liddicoat & Scarino, 2013). Dominant interpretations often reduce culture to ‘national attributes’ or ‘societal norms’. The former ties culture to geographic boundaries, marginalizing ethnic minorities as deviating from the “national” norm; the latter typifies group behaviors through dichotomies (e.g., direct–indirect, individualistic–collectivistic), which reinforce static, monolithic views and promote stereotypes. In contrast, language education should frame culture as *practice*, a process through which learners critically interpret meaning, construct identities, and engage actively in local and global communities.

Recent research extends the conceptualization of culture to digital environments, recognizing that virtual spaces give rise to fluid cultural practices and identity negotiation. Thorne (2010) and Belz and Thorne (2006) argue that culture in online intercultural exchanges is emergent, shaped through interaction, technological affordances, and diverse linguistic repertoires. Hua and Kramsch (2016) similarly highlight how virtual communication foregrounds hybridity, translingual practices, and symbolic power. This aligns with the view of culture as ‘emergent’ (Dooly, 2016; Helm, 2024), discursively constructed’, and ‘co-constructed’ through language in situated and multimodal interactions (Liddicoat & Scarino, 2013; Dervin, 2016). Thus, in VE contexts, culture should be approached not as a fixed set of national traits, but as emergent, relational, and shaped by multilingual, multimodal, and transnational exchanges.

2.2.2 Intercultural Competence: Emergence and Definitions

The emergence of IC as a field can be traced to the post-World War II establishment of the U.S. Foreign Service Institute, which trained American diplomats not only in language but also in cultural communication. Cultural anthropologists were hired to design and deliver this training, laying the foundation for IC theory and practice, particularly in the Global North (Nakayama & Martin, 2007).

IC has been defined across multiple disciplines, including communication, business, sociology, psychology, and education, leading to a proliferation of related terms: *intercultural competence*, *intercultural communication*, *intercultural communicative competence*, *cross-cultural competence*, *global competence*, and *interculturality* (Belz & Thorne, 2006; Deardorff, 2011; Dervin, 2012; Liddicoat & Scarino, 2010). Though often used interchangeably, some scholars stress key distinctions. For instance, “intercultural” typically refers to interaction between individuals from different cultures, while “cross-cultural” refers to comparative analysis of cultural practices (Belz & Thorne, 2006; Hua, 2014).

Spitzberg and Changnon (2009) note that the conceptual difficulty lies in both “culture” and “competence”. Competence is often linked to cognitive skills and aptitude (Lantz-Deaton & Golubeva, 2020). However, educational frameworks emphasize knowledge, skills, and attitudes (Green, 2014; Deardorff, 2006), as well as relationship-building, adaptation, and mutual understanding (Spitzberg & Changnon, 2009). Borghetti (2013) defines IC as “an integral whole of cognitive, affective and behavioural factors” that support interaction with diversity and can be developed through education or experience (p. 255). She later emphasizes (in 2017) the importance of positioning, how individuals perceive themselves and are perceived by others, in negotiating meaning and cultural identity. Byram (1997) distinguishes IC from ICC, associating the former with native-language interaction and the latter with lingua franca contexts. Fantini (2000) defines ICC as “the complex of abilities needed to perform effectively

and appropriately when interacting with others who are linguistically and culturally different from oneself” (p. 1). Kramsch (1993) proposed a constructivist view, where learners navigate shifting perceptions of home (C1) and target (C2) cultures, influenced by media, education, and institutions. Her concept of third *place* encourages learners to take both insider and outsider perspectives. Later, she expanded this to include IC’s *symbolic dimension*, where learners interpret and manipulate semiotic signs and systems of power (Kramsch, 2011).

In TMLL, these definitional debates continue, as evolving digital communication blurs traditional boundaries and raises questions about how IC is taught, enacted, and assessed (Lomicka, 2020; Satar, 2020).

2.2.2.1 Intercultural Competence Models and Frameworks

Since the emergence of IC, numerous theories and models have been developed to capture its various dimensions and illustrate pathways for IC development. Several models have also been revisited and revised to address critiques and ongoing debates regarding the conceptualization and measurement of IC (e.g., Bennett, 1993, 2004, 2017; Byram, 2021; Oetzel & Ting-Toomey, 2013).

Spitzberg and Changnon (2009) categorize IC models into five overarching types: compositional, developmental, co-orientational, adaptational, and causal process models. Compositional models describe sets of IC traits but do not explain their interrelation (e.g., Deardorff, 2006). Developmental models frame IC as evolving over time through personal growth (e.g., Bennett, 1993). Co-orientational models, such as Byram’s (1997), focus on the processes involved in successful intercultural interaction. Adaptational models (e.g., Navas et al., 2005) synthesize elements from multiple model types to explain how individuals adapt to a new cultural context. Finally, causal process models (e.g., Ting-Toomey, 1999) consider internal and external variables, such as anxiety, cultural knowledge, and situational factors, when analyzing or predicting IC outcomes.

Given the scope and context of this dissertation, the remaining discussion will focus on three models that have significantly influenced VE research and practice since the emergence of the field. These models are: Byram's model of intercultural communicative competence (ICC) (1997), Bennett's Developmental Model of Intercultural Sensitivity (DMIS) (1993, 2013). Deardorff's Process model of IC (2006, 2009) will also be discussed for its recent attention in designing VE research.

Byram's (1997) Model of Intercultural Communicative Competence

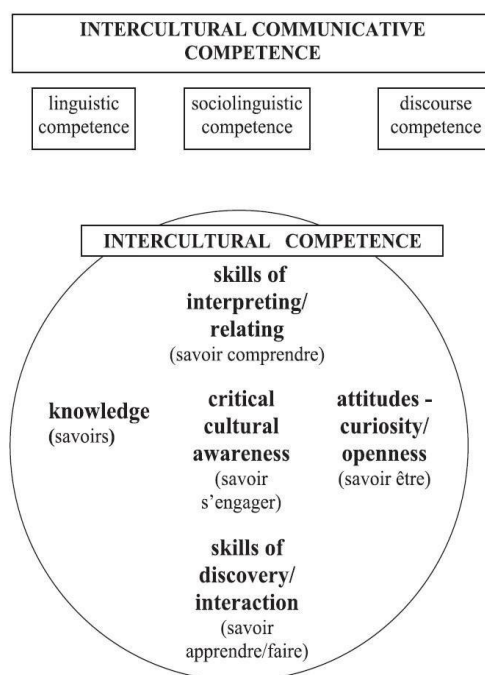
Byram's (1997) ICC model is widely used in VE research design to prepare learners for intercultural interaction and assess their IC development (e.g., Golubeva & Guntersdorfer, 2020; Li, 2019; Pérez-Núñez, 2024; Tutunea, 2021). At its core is critical cultural awareness, which integrates knowledge, skills, and attitudes. Knowledge encompasses not just facts about a target culture's history and geography but also insights into social groups, stereotypes, and interaction dynamics. Learners are encouraged to adopt curiosity, openness, and a readiness to "suspend disbelief about other cultures and belief about one's own" (Byram et al., 2002, p. 7). Skills include interpreting and comparing texts, events, and experiences across cultures to foster critical reflection. Notably, Byram originally developed the model for language education policies and practices to support language teachers across Europe in integrating ICC into their language teaching and learning design (e.g., Byram et al., 2002).

In 2021, Byram updated the model while retaining its core (Figure 1). He clarified the meanings of the five *savoirs*: *savoir* (cultural knowledge), *savoir-apprendre/faire* (discovery and interaction skills), *savoir-être* (attitudes), and *savoir-s'engager* (critical cultural awareness), now framed within broader concepts such as global competence and ethical responsibility. The updated visual model introduces both visual and conceptual shifts from the original 1997 version. While the earlier model presents the five *savoirs* in a static, category-based layout, the newer model adopts a more dynamic visual, emphasizing the interconnected

and evolving nature of intercultural competence, with critical cultural awareness placed centrally, reflecting its elevated conceptual importance. Unlike the earlier diagram (1997), this version is sparser, visually, but more conceptually integrated, signaling a tighter embedding of the five *savoirs* within intercultural competence (Byram, 2021). The updated model also reflects a shift toward socially engaged intercultural learning, moving beyond individual competence to include ethical engagement and political awareness. Figure 1 below shows the revised version of the model, as introduced by Byram (2021).

Figure 1

Byram's Model of ICC (2021)



Note. This visual is extracted from page 62 in Byram (2021)

In the past decade, Byram invested further in critical cultural awareness (*savoir-s'engager*) and developed his frameworks for democratic and intercultural citizenship (Byram, 2008, 2012, 2021; Byram & Wagner, 2018; Council of Europe, 2017). Intercultural citizenship education values democracy and human rights as ideals to battle racism and discrimination in society, and it positions language learning as a means for civic engagement, expanding critical cultural awareness beyond the evaluation of C1 and C2 to include reflection on learners' own

societies. In this way, Byram's work in intercultural and democratic citizenship builds on his ICC framework by emphasizing the political dimension of IC and intercultural education (Hoff, 2020).

Both of Byram's models faced critiques. Some argue his ICC model inadequately captures the complexity of Self–Other relations, often privileging the Other's expectations and potentially reinforcing power imbalances while overlooking the speaker's stance (Hoff, 2014; Matsuo, 2012, 2014). It has also been criticized for framing culture in national terms, linking it to countries rather than viewing communities as fluid and transnational (Baker, 2012, 2022; Dervin, 2012; Hoff, 2014; Matsuo, 2012, 2014). Byram (2021) acknowledges these limitations, calling for a more dialogic, reflexive, and context-sensitive approach that interrogates learners' positionalities and embraces diverse epistemologies.

In VE contexts, Byram's models have received both support and critique. Guth and Helm (2010) highlight the value of critical cultural awareness for reflective engagement yet point out that the model falls short in addressing digital dimensions, such as online identity, multimodal literacy, and platform affordances that are central to technology-mediated intercultural learning. This reframing of IC as intercultural/global citizenship has been recognized as a pioneering contribution to IC as critical pedagogy, with its invitation to action based on developing critical awareness of intercultural diversities within a society (Council of Europe, 2017). O'Dowd (2019) acknowledges the contribution of Byram's intercultural citizenship framework and advocates for its incorporation into VE to foster learners' democratic engagement and social responsibility. However, critiques persist. Firstly, the very concept of democracy has been subject to a global challenge. There is a pervasive sense of disillusionment surrounding the principles of democracy and the efficacy of its fundamental components, as evidenced by the substantial decline in satisfaction with democratic practices in recent years (Pew Research Center, 2019, 2024). This suggests that when examining the

ideological framing of IC/ICC and the language education policies it was originally created to serve, such as the Common European Framework of Reference for Languages (CEFR) or intercultural citizenship (e.g., Byram et al., 2002), one should always raise questions about how IC is constructed and the procedural outcomes it is expected to serve and develop. In consideration of the aforementioned points, Byram's models of ICC and Intercultural Citizenship have been observed to promote a Eurocentric perspective on citizenship that may not adequately "encompass the complexities that govern 21st-century intercultural communication" (Hoff, 2020, p. 57) nor accurately reflect the diverse sociopolitical contexts or epistemologies of VE participants (O'Dowd, 2019). As VE expands globally, there is an urgent need to revisit these frameworks and adapt them to more pluralistic, decolonial, and digitally grounded approaches to intercultural engagement.

Bennett's (1993, 2013, 2017) Developmental Model of Intercultural Sensitivity

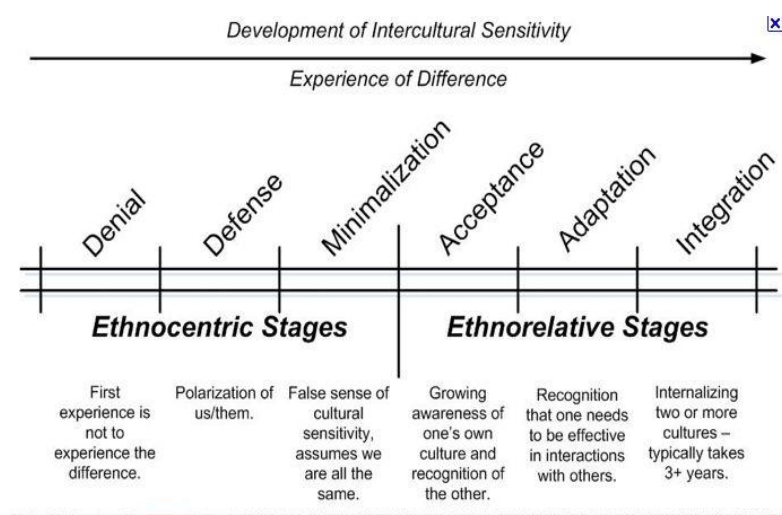
Bennett's (1993, 2013) model conceptualizes IC development as a progression from ethnocentric to ethnorelative worldviews. IC, he argues, is incomplete without understanding individual behaviors toward cultural differences. Ethnocentrism, the belief that one's cultural norms are central, contrasts with ethnorelativism, which holds that individuals recognize all cultures as equally valid (Bennett, 1993, 2013).

The ethnocentric stages —*denial*, *defense*, and *minimization*—represent an increasing awareness of cultural differences. In *denial*, individuals often fail to recognize cultural diversity due to limited exposure, frequently forming naïve and stereotypical views. In *defense*, difference is acknowledged but perceived as a threat, often leading to prejudice or racism. *Minimization*, a transitional phase, downplays differences by emphasizing universal values. This perspective, Bennett argues, overlooks internal cultural diversity and obscures systemic inequities (1993, 2013). The ethnorelative stages, *acceptance*, *adaptation*, and *integration*, reflect deeper cultural engagement. *Acceptance* involves recognizing diverse behaviors and

communication styles. *Adaptation* goes further, enabling individuals to shift perspectives and empathize. In *integration*, individuals negotiate their identities across multiple cultural contexts, developing empathy as “a readiness to give up temporarily one’s own worldview to imaginatively participate in the Other’s” (Bennett, 1993, p. 53). Figure 2 visualizes these linear ethnocentric and ethnorelative stages of Bennett’s model.

Figure 2

Bennett’s (1993, 2013) Developmental Model of Intercultural Sensitivity



Note. Model adapted from Figure 6.1 on page 147 in Bennett and Bennett (2004)

Although Bennett later described the model as a heuristic, not a strict sequence (Bennett, 2013; Bennett & Bennett, 2004), the visual model was not updated. In 2017, Bennett updated his model to reference ‘cultural diversity’ instead of ‘cultural difference’. This change can be seen as an attempt to respond to the critique the model received, especially in the light of the ongoing debate on internal diversities in culture and the need to deviate from the national affiliation of culture in IC research and practice (Dervin, 2011; Dervin & Jacobsson, 2021; Matsuo, 2014).

However, the model still faced substantial critique on several fronts. One major concern is its linear and teleological structure, which assumes that individuals universally progress toward a fixed endpoint of IC. Scholars such as Dervin (2011, 2016) and Holliday (2011)

challenge this assumption, arguing that intercultural engagement is non-linear, fluid, and context-dependent, and should not be conceptualized as a universal developmental path. Bennett et al. (1999) proposed a structured IC teaching program aligned with the DMIS, suggesting that FL learners progress through specific stages over three academic years, addressing *denial and defense* in Year 1, *minimization* in Year 2, and *acceptance and adaptation* in Year 3. However, Durocher Jr (2008) challenges this progression. Using the Intercultural Development Inventory (IDI), which was designed based on the model, with first-year French students, he found learners entered and exited the program at varying stages of the DMIS despite engaging in identical intercultural tasks. Some even regressed to earlier stages (i.e., *reversal*). These findings indicate that IC development is highly individualized and context-dependent, casting doubt on the feasibility of a uniform developmental trajectory.

Like critiques of Byram's (1997) model, the DMIS has been problematized for its essentialist view of culture, portraying cultures as fixed rather than dynamic and co-constructed (Dervin, 2012; Holliday et al., 2010; Piller, 2011). Additionally, the DMIS largely overlooks power relations and systemic inequalities in intercultural encounters, which are central to critical intercultural pedagogy (Andreotti, 2010; Byram, 2008). Its Western-centric orientation, rooted in U.S.-based corporate and educational training contexts, further limits its applicability across global settings, as highlighted by Kubota (2004) and Holliday (2011). These critiques point to the need for more context-sensitive, dialogic, and critical approaches to understanding intercultural development in diverse and evolving contexts.

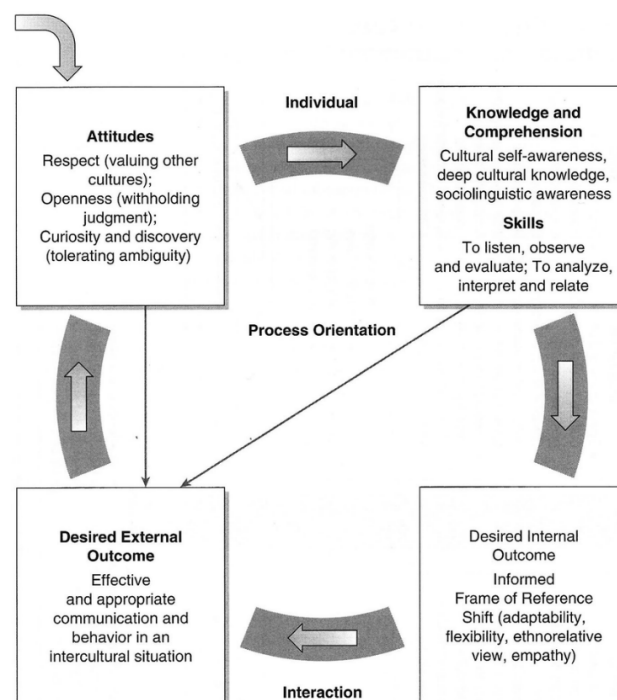
Deardorff's (2006, 2009) Process Model of IC

Deardorff's (2006, 2009) Process Model of IC offers a dynamic, cyclical approach emphasizing ongoing development rather than fixed outcomes. It begins with foundational attitudes (respect, openness, curiosity), which support knowledge (e.g., cultural self-awareness, understanding others' worldviews) and skills (e.g., observation, interpretation, relational

thinking). These lead to internal outcomes, such as empathy and adaptability, which manifest as external outcomes, including effective and appropriate intercultural communication. The model's recursive design, as illustrated in Figure 3, emphasizes continuous reflection and learning, providing a holistic framework that is adaptable across various educational and professional contexts. According to Deardorff (2006), individuals may directly move from attitudes and/or skills to external outcomes such as appropriate communication and behavior. However, the more components one develops along the way, the more likely these internal and external outcomes will be experienced as appropriate and effective. Martínez Celis (2024) emphasizes that attitudes and values are inherently changeable, aligning directly with Deardorff's concept of intercultural development as a process. This underscores the idea that IC is not a fixed trait but a fluid, evolving orientation shaped over time through reflection, interaction, and experience. Figure 3 illustrates this cyclic developmental process.

Figure 3

Deardorff's (2006, 2009) Process Model of Intercultural Competence



Note. This visual is extracted from page 245 in Deardorff 2006

Although Deardorff's (2006, 2009) Process Model of IC has been widely adopted across educational contexts for its flexibility and emphasis on internal attitudes such as respect, openness, and empathy, both its author and other scholars have noted important limitations. Deardorff herself (2006, 2017, 2020) has acknowledged that the framework should be applied in a context-specific manner, taking into account historical, economic, political, and sociocultural conditions, including power relations. Similar concerns are echoed in Dervin's (2016) critique, which warns that such descriptors, if uncritically applied, risk reinforcing normative assumptions about intercultural interaction. Dervin (2016) argues that values such as empathy, respect, and openness, although central to the model, reflect Western liberal humanist ideals that may not align with all worldviews, particularly those from the Global South or other non-Western epistemologies. Such critiques highlight the importance of situating the model within specific cultural contexts. For example, Huang's (2015) document analysis and interviews with school staff in three Taiwanese schools found that although the model's process is applicable and valuable, it omits culturally integral aspects of Confucian traditions, such as maintaining interpersonal harmony, adhering to social etiquette, and sustaining context-sensitive relationships.

One of Dervin's other theoretical critiques of the model is that it does not directly address structural dimensions such as power, ideology, and historical inequalities (Dervin, 2021; Dervin et al., 2023), focusing mainly on individual attitudes and behaviors while giving limited attention to systemic issues such as racism or linguistic imperialism. In Dervin et al. (2023), he also argues that although designed as a cyclical process, the model's application often becomes linear in practice, resulting in developmentalist interpretations that position some learners, especially from the Global South, as less interculturally competent. These critiques suggest that while Deardorff's model offers a valuable foundation, it may benefit from

further adaptation to engage more closely with broader sociopolitical dynamics in intercultural learning.

Though not dominant in VE research, the model has been influential in evaluating IC outcomes. Zheng et al. (2022) utilized it to design and analyze pre- and post-surveys in a U.S.-China VE study abroad course, reporting gains in self-reported intercultural effectiveness. Similarly, Carvajal Yepez (2024) applied the model to study shifts in attitudes and knowledge in a VE between U.S. and Colombian students, using pre-/post- surveys and reflective journals.

In a later collaboration with the United Nations Educational, Scientific, and Cultural Organization (UNESCO), Deardorff (2020) developed *UNESCO Story Circles*. They are a facilitated dialogue method designed to foster intercultural competence through the sharing of stories in small groups. The process is rooted in practicing key IC concepts such as listening for understanding, respect, and reflection, and is particularly aimed at diverse educational, community, and professional contexts (Deardorff, 2017, 2020). The core values of the UNESCO Story Circles are openness, humility, and deep listening, echoing the foundational attitudes in Deardorff's Process Model (2006, 2009).

Deardorff (2023) suggests that UNESCO Story Circles can be used in COIL projects as a scaffolding reflection tool, inviting learners to critically engage with misunderstandings, reflect on how their cultural perspective shaped the interaction, and encourage openness and empathy through emotional engagement. Orton et al. (2023) is an example of using story circles in a COIL VE between university students in the US, Venezuela, Mexico, and South Africa. Compared to pre-study survey responses, post-surveys show some IC development.

Echoing Reinhardt's (2012) proposal that rather than privileging one framework over another, a persistent issue when researching IC is how IC frameworks and models have been adopted uncritically in COIL and VE contexts (Dervin et al., 2023; Guth & Helm, 2010). As has

been argued, relying on such models without adapting them to the complexities of virtual, multilingual, and power-laden interactions flattens the nuanced nature of intercultural learning.

2.3 Critical Intercultural Competence: A critical shift for Research and Practice

Despite the various definitions of culture, IC, frameworks, and models, VE researchers continue to face the methodological challenge of lacking a clear definition or analytical framework for IC in TMLL environments (Çiftci & Savaş, 2018). This gap underscores the need for further exploration of IC in digital contexts (Avgonsti, 2018; Çiftci & Savaş, 2018; Dooly & Vinagre, 2020; O'Dowd & Lewis, 2016), especially in light of emerging perspectives that conceptualize culture and IC as evolving non-linear processes rather than products (Baker, 2022; Dervin, 2016, Dervin et al., 2023, 2024). The urgency of this exploration is heightened in today's world, where evolving ideologies of power and sociopolitical change shape intercultural encounters. A recent systematic review of IC research published between 2000 and 2018 reveals that the field remains dominated by the Global North (Peng et al., 2020), highlighting the need for broader, more inclusive theoretical directions.

As highlighted in critiques of current models of IC, there is a growing need to propose theoretical paradigms that challenge the dominance of Western national frameworks (e.g., Asante, 2014; Miike, 2014), emphasize the internal diversities within cultural contexts (e.g., Feghali, 1997; Zaharna, 2009), and account for divergent communication styles and practices across cultures (e.g., Chen, 2014; Fujio, 2004; Karenga, 2014). Other scholars also call for attention to the role of religion in shaping intercultural communication (e.g., Dissanayake, 2014; Mowlana, 2014).

In response, the field of Critical Intercultural Communication (CIC) emerged, addressing these epistemological limitations (e.g., Dervin, 2011, 2016; Nakayama & Halualani, 2024). Baker (2022) further introduces “transcultural competence,” which shifts focus from intercultural to transcultural communication by highlighting the negotiation of multiple

linguistic and cultural resources in real-time. This perspective moves beyond surface-level cultural content to foster deeper reflection on identity, power, and communicative practice. CIC critiques traditional IC frameworks for reducing culture to observable behaviors while ignoring structures of power, identity, and justice. As Nakayama and Halualani (2024) argue, mainstream intercultural communication tends to prioritize dominant (often Western) perspectives while marginalizing non-dominant voices and histories, thus simplifying complex interactions. CIC pushes back by advocating for a critical and reflexive stance that addresses systemic inequality, challenges hegemonic cultural narratives, and fosters equitable exchanges.

In parallel, the concepts of interculturality and simplicity (Dervin, 2011, 2016) have gained prominence as a more dynamic and relational framework for understanding intercultural communication in both physical and digital contexts. Interculturality is a key concept that shifts understanding of IC from a static prescriptive set of competencies or behaviors to a dynamic, relational process that is context-dependent and subject to continuous negotiation (Dervin et al., 2023). By adopting a ‘simplex’ approach to practicing and researching interculturality, Dervin (2016) proposes navigating the simple and complex ideas and opinions interlocutors hold and share with others in intercultural interactions. An example of a simple opinion is I think all Muslim women are oppressed, while a ‘complex’ one can be saying that all Muslim women are oppressed is stereotypical.

This approach involves navigating contradictions, ambiguities, and uncertainty in one's discourse (Dervin, 2016), allowing these tensions to “emerge” in both interactions and research settings (p. 8). In practice, this means designing learning environments that embrace personal experiences and facilitate the flexible negotiation of worldviews. Simplexity also encourages critical self-reflection, prompting learners and educators to question their assumptions, historical positioning, and the power dynamics they navigate daily (Ferri, 2023). Thus, IC

becomes a dialogic, ongoing process of engagement rather than a set of pre-defined competencies (Dervin et al., 2023).

Dervin's (2016) view of interculturality resonates with Holliday's (2011) critique of static, nation-bound definitions of culture. Both advocate for a context-sensitive understanding of IC and highlight the need to address power asymmetries while resisting essentialist assumptions. Their work promotes a more flexible model of IC, one that acknowledges the multiplicity of identities and realities that learners bring into intercultural exchanges.

More recently, the concept of transculturality has offered a critical and relational alternative to traditional intercultural competence frameworks by emphasizing culture as dynamically co-constructed through interaction, negotiation, and shared meaning-making processes. Grünfelder et al. (2024) propose a comprehensive transcultural education framework that supports learners in navigating cultural complexity through a three-stage process: recognizing cultural diversity and complexity, identifying commonalities, and collaboratively developing new shared understandings within communities of practice. This approach centers on experiential, dialogic, and social learning processes as foundational to the development of transcultural competence.

Complementing this, the Delphi study on transcultural competence (Grünfelder & Montecinos, 2023) synthesizes expert perspectives to argue for a relational approach to transcultural competence that moves beyond individual cognitive skills toward relational capacities. These include the ability to engage in mutual vulnerability, co-create meaning in interaction, and navigate power dynamics embedded within cultural exchanges. The study emphasizes that transcultural competence is not a fixed trait but a dynamic, context-sensitive process that unfolds in social relationships.

In VE contexts, where learners engage asynchronously or synchronously across geographical and cultural boundaries, the relational focus of transculturality is especially

pertinent. VE environments naturally facilitate dialogic encounters where culture is enacted and reshaped collaboratively rather than inherited as static identity markers. This supports findings from IC research highlighting the importance of emotional labor (e.g., Helm & Baroni, 2020), collective negotiation, and co-constructed group cultures (e.g., this study). Thus, transculturality offers a powerful conceptual lens for understanding IC as an emergent, negotiated, and deeply embedded phenomenon in relational and contextual factors.

By reframing the relationship between culture and competence, transculturality challenges normative assumptions about “appropriate” or “effective” intercultural behavior, emphasizing instead the ongoing co-construction of meaning that accounts for cultural complexity, power relations, and evolving identities. This approach aligns closely with calls to critically reimagine IC beyond static models and to situate it firmly within the context of lived social processes.

This evolving view of interculturality extends to digital practices such as critical digital literacy, translanguaging, and CVE. In these contexts, learners use digital tools and multilingual resources to negotiate meaning, challenging traditional notions of static cultural identity. These frameworks, aligned with the formerly mentioned CIC views, highlight the need to interrogate power and ideology in VE and intercultural exchanges. Dervin et al. (2024) also draw attention to the multimodal nature of interculturality, encouraging the analysis of technological tools, visual aids, and non-verbal cues in meaning-making.

Similarly, IC in TMLL must attend to the ideologies embedded in digital interactions, such as those occurring in telecollaboration and VE classrooms. As Dervin et al. (2024) note, studying online interculturality requires examining how platforms influence identity construction and communication, urging researchers to explore the ideological underpinnings of these interactions. This perspective advocates for more inclusive, reflexive, and power-aware approaches to intercultural education.

Ultimately, interculturality emphasizes co-construction of meaning, emotional engagement, and identity negotiation, moving beyond static views of culture. Paired with CIC, it foregrounds reflexivity, power dynamics, and ethical interaction, all of which are critical in VE contexts where learners navigate difference through mediated, often uneven, channels. Together, interculturality and CIC offer a robust foundation for studying VE and broader TMLL environments.

2.4 Critical Issues in Researching Culture and Intercultural Competence in Virtual Exchange

2.4.1 Oversimplification of Intercultural Competence Gains in Virtual Exchange Research

Over the past three decades, research on VE has presented quantitative, qualitative, and, more recently, mixed-methods data on the intercultural learning that language learners gain from participating in VE projects, as well as what instructors can do to support this learning (Avgousti, 2018; Çiftçi, 2016; O'Dowd, 2021a). Given the complexity of IC, projects have employed various technological tools and assessment approaches to evaluate learners' development in intercultural language learning. Common communication mediums used in VE discussions include blogs, wikis, online chats, email messages, videoconferencing, and discussion boards (Avgousti, 2018; Çiftçi, 2016). In the past five years, however, there has been a significant shift toward multimodal approaches, incorporating audio, video, and 3D environments into the design of intercultural language learning experiences in VE and the assessment of IC development (Avgousti, 2018; Lewis & O'Dowd, 2016).

Qualitative research has employed e-portfolios, journal entries, reflective essays, transcripts of discussions and exchanged messages, and learner interviews to track IC development (e.g., Chun, 2011; Hauck, 2007; Helm & Baroni, 2020; Helm et al., 2012; Lee & Markey, 2014; O'Dowd, 2007; Ware, 2005). Quantitative methods have generally included self-

reported pre- and post-study surveys, including adaptations of IC inventory tools (e.g., Balçıkanlı, 2012; Hagley, 2020; Mahfouz & Ihmeideh, 2009), or quantitative analysis of qualitative IC data (e.g., Flowers et al., 2019; Helm & Baroni, 2020; Oskoz & Gimeno-Sanz, 2019) to examine transformations in learners' IC following VE participation. Recently, studies have increasingly adopted mixed-methods approaches, either in data collection or analysis, to provide a fuller picture of IC development (Avgousti, 2018; O'Dowd & Lewis, 2016). This growing interest in mixed methods responds to critiques cautioning against premature conclusions about VE outcomes unless studies are longitudinal or methodologically diverse (Rienties et al., 2020; Thomas & Yamazaki, 2021).

Many VE studies report that learners increase their knowledge of both their own and the target culture(s). This includes acquiring factual information about the target culture, as well as its speaking communities and engaging with critical issues such as religious practices, gender roles, and sociopolitical crises (e.g., EVOLVE Project Team, 2020; Helm et al., 2012; Hernández Alvarado & Brinckwirth, 2021; Vinagre, 2016). Intercultural language tasks have sparked learners' interest in learning about their partners, reflecting on similarities and differences, developing positive attitudes toward the other culture, and becoming more aware of cultural diversity in their partners' contexts (e.g., Angelova & Zhao, 2016; Lee & Markey, 2014; Schenker, 2012; Thomé-Williams, 2016).

Studies using various modalities (e.g., text, audio, video, and 3D environments) and communication modes (e.g., synchronous videoconferencing and asynchronous chat messaging, blogs, and discussion forums) have demonstrated that these approaches significantly impact learners' IC skills. Synchronous discussions, for instance, are particularly effective for addressing cultural issues and challenging stereotypes (e.g., Dooly, 2011; O'Dowd, 2007), while asynchronous communication allows greater flexibility for extending intercultural

discussions, collaborating on tasks, and building community (e.g., Angelova & Zhao, 2016; Lee, 2012).

Despite these positive findings, many studies continue to offer limited descriptions of the processes involved in learners' IC development and the analytical approaches used to evaluate it, often minimizing the challenges of measuring IC in VE (Çiftçi, 2016; Dooly & Vinagre, 2021; Godwin-Jones, 2019). The oversimplification of IC remains a recurring gap in VE research (Dooly & Vinagre, 2021; Helm, 2013; O'Dowd, 2007). This issue is partly due to the lack of diverse approaches to deconstructing IC in TMLL contexts. As noted earlier, IC's dynamic and multilayered nature make its assessment particularly challenging for researchers and practitioners. An essential part of this challenge is that the 'competencies' learners are expected to develop in VE are not static or uniformly applicable across all contexts. They are shaped by the dynamic, and often unpredictable conditions, of technology-mediated interaction (Dooly, 2016). Learners, especially those new to VE, may struggle to enact intercultural attitudes, skills, or knowledge in ways that align with the demands of a particular virtual encounter. Even those who demonstrate intercultural sensitivity in face-to-face settings may find that these traits do not easily translate into online exchanges, where interaction is often fragmented, asynchronous, and shaped by digital affordances, constraints, and unfamiliar norms (Dooly, 2016; Dooly & O'Dowd, 2018; O'Dowd & Ritter, 2006). What might be an effective communicative strategy in one context may be ineffective, or even counterproductive, in another, underscoring the 'episodic' nature of IC (Dooly, 2016). That is, certain dispositions may facilitate interaction at one moment but prove irrelevant or even disruptive at another, depending on the sociotechnical, linguistic, and affective conditions of the exchange (Belz, 2003; Liaw & Bunn-Le Master, 2010).

Thus, one approach to address these evolving competencies is not to rely solely on a single theoretical framework as this can potentially restrict the exploration of emerging

understandings of the phenomenon (e.g., Dervin, 2016; Dervin & Gross, 2016; Holliday, 2016; Kramsch, 2011, 2014). For instance, Byram's (1997, 2020) model is widely regarded as a useful starting point for VE design, but it has also been criticized for overlooking the social practices afforded by TMLL environments (Guth & Helm, 2010) and for failing to address the disconnection between language, place, and community in globalized contexts (Kern, as cited in O'Dowd, 2021b). As asserted by Spitzberg and Changnon (2009), "models are necessarily simplified versions of the reality they seek to represent and therefore need to provide parsimonious guidance to theoretical and investigative pursuits" (p. 45). These simplified representations, such as static models of IC, often fall short of capturing the complex, situated, and co-constructed processes that characterize intercultural learning in VE (Dooly, 2016). Thus, using more comprehensive approaches, such as using multiple IC models and frameworks in the analysis of VE interactions and tasks, is thought to result in deeper insights into IC and its development in VE (Abrams, 2020; Dooly & Vinagre, 2021).

Nevertheless, such challenges offer learners the possibility to develop emergent, adaptive ways of negotiating meaning, building relationships, and cultivating interculturality in digital contexts (Hauck, 2019). By reflecting on how their competencies intersect and evolve over time, learners may move beyond essentialist frameworks to co-construct more fluid and situated intercultural practices that are responsive to the dynamic realities of VE environments (Dervin, 2016; Müller-Hartmann & Kurek, 2016). Therefore, new analytical approaches that attend to the fluid and emergent nature of interculturality, as well as learners' lived experiences of it in VE, are needed to generate deeper insights into its dynamic processes (Dervin et al., 2023; Dooly & Vinagre, 2021).

Reported IC gains in VE studies often reflect an essentialist approach to IC (Dooly & Vinagre, 2021). Learners' reflections on similarities and differences, as well as the development of positive attitudes toward partners, typically rely on factual knowledge and on researchers' or

instructors' interpretations of divergent societal norms that shape communication styles (e.g., Al-Zubeiry, 2013; He et al., 2017). While recent research has emphasized the need to move beyond fixed categories of 'Self' and 'Other' and expand beyond local and national boundaries (Norton & Toohey, 2011), this has not been fully reflected in VE research through the adoption of multiple IC models or alternative understandings of interculturality. Only a few studies provide comprehensive analyses of learners' IC trajectories, including shifts in empathy and attitude, which are more challenging to track than knowledge or skills (e.g., Helm & Baroni, 2020; Vinagre & Oskoz, 2020). Most VE research still relies heavily on content analysis of learner-produced texts and discussions, making it difficult to capture emotional and attitudinal change (Dooly & Vinagre, 2021). To assess these elements, many researchers rely on self-reported questionnaires administered before and after the exchange (e.g., Balcikanli, 2012; Chun, 2011; Lee, 2012; Lee & Markey, 2014; Schenker, 2012; Stevens Initiative, 2019, 2020; Thomé-Williams, 2016). However, these surveys often show little change in participants' attitudes, as learners tend to report high levels of empathy and openness from the outset (e.g., Schenker, 2012; Stevens Initiative, 2019, 2020). Others have pointed out that social desirability bias and self-censorship present further challenges in interpreting such data, both in VE and face-to-face contexts (Griffith et al., 2016; O'Dowd, 2021a). As such, future VE research must explore alternative methods of data collection and analysis to better capture the evolving attitudinal dimensions of IC (Dooly & Vinagre, 2021).

Another common issue in VE studies is the tendency to downplay or omit instances of miscommunication or failed interaction (O'Dowd & Ritter, 2006). Ironically, learners often experience the reinforcement of stereotypes, which leads to communication breakdowns (e.g., Belz, 2003; O'Dowd, 2007, 2013; Rienties et al., 2020; Ryder & Yamagata-Lynch, 2014; Thorne & Black, 2007). Yet VE interactions are frequently portrayed as smooth, with failed moments simplified or underreported (e.g., Lee & Markey, 2014; Schenker, 2012; Thomé-

Williams, 2016). This tendency to gloss over tensions and miscommunication, rather than recognizing them as learning opportunities, has led to superficial interpretations of IC (Helm, 2015; O'Dowd & Ritter, 2006). Given the dynamic nature of intercultural interaction and TMLL practices, a deeper understanding of IC gains should account for the evolving and situated nature of IC learning (Baker, 2022; Dervin et al., 2024).

2.4.2 The Native vs. Non-native Speaker Dichotomy in Virtual Exchange

The dilemma of the NS as a model for learning the target language and culture has long been debated and criticized in language education and research. As Kramsch (1993) argues, it reinforces a “single-voiced discourse” in the language classroom, in which the voices and personal agendas of the NNS are ignored and suppressed. Similarly, aiming for native-like competence does not reflect the reality of language-speaking communities, where speakers from diverse linguistic and cultural backgrounds use the target language as a *lingua franca* in their interactions (Byram, 1997, 2012, 2020). Thus, if VE projects aim to foster IC engagement, they should prepare learners to navigate the complexities of human identity, develop a critical awareness of their own beliefs and values, as well as those of people from other cultures, and actively negotiate cultural meanings with their partners (Helm, 2024).

Although ESL and English as a ‘foreign’ language are the most reported settings for VE studies, the NS–NNS interface has dominated VE interactions (Avgousti, 2018; Çiftçi, 2016). In most of these interactions, typically structured as NS–NNS dyads, learners from Western Europe and the USA are expected to use both English and the target language (i.e., their partner’s language) to complete VE tasks (e.g., Belz, 2005; Dooly, 2011; Hauck, 2007; Helm et al., 2012; Kramsch & Thorne, 2002). Although the noticeable increase in research funding aimed at connecting learners in the Global North with others in Eastern cultures has promoted diversity in the intercultural contexts of these VE projects (O’Dowd, 2021a), it may not yield rich intercultural learning experiences. This is because it often promotes a national affiliation

of culture, especially when learners are divided into homogenous groups. This approach has led to positioning learners as providers of either Western or Arab/Muslim perspectives in the exchange, thereby limiting their exposure to internal diversities within their partners' cultures (Helm et al., 2012).

This essentialist approach to IC and intercultural awareness is also evident in many popular analyses of IC in VE interactions (e.g., Al-Zubeiry, 2013; He et al., 2017; Mahfouz & Ihmeidan, 2009), which emphasize the influence of individualistic cultures (e.g., Canada, Germany, USA), whose members are portrayed as assertive and fact-oriented, and collectivistic cultures (e.g., China, Japan, Saudi Arabia), whose members are considered interpersonal and relationship-based, on learners' behavior, including their use of direct or indirect communication norms (Ting-Toomey, 2009). While this framework can help identify cultural patterns at the macro level of VE communication, efforts to draw omnipresent references to 'differences' and 'similarities' in studies where participants come from different national cultures can appear ethnocentric. Such assumptions suggest that learners from similar cultural backgrounds tend to hold identical viewpoints or communicate in similar ways, thereby downplaying individual variation in how intercultural behavior is expressed and explored in VE environments.

The NS-NNS dichotomy continues to shape power relations in VE, especially when English serves as the default medium of intercultural exchange. Although ELF has been positioned as a neutral or democratic mode of communication, decolonial scholars challenge this framing. Matsumoto and Kubota (2023) critique ELF's often celebratory stance on linguistic fluidity for its neglect of the structural inequalities embedded in English use. They argue that ELF scholarship tends to erase colonial histories and hierarchies that frame certain varieties of English and speaker identities as more legitimate than others. Similarly, Canagarajah (2023) highlights that discourses of linguistic inclusion often fail to account for

epistemic injustice, where not only language use but the kinds of knowledge associated with speakers from the Global South are marginalized or deemed less credible. These critiques are particularly relevant in VE contexts where English is assumed to be a shared resource. In practice, such assumptions may reproduce asymmetries in participation and authority, often favoring students who align more closely with dominant (often Western, native-speaker-like) norms. Kubota (2024) further emphasizes that even well-intentioned EIL (English as an International Language) pedagogies may inadvertently reinforce global power hierarchies if they do not actively interrogate how racialization, nativeness, and English dominance intersect in classrooms. Within VE, these dynamics surface in subtle ways, such as whose cultural perspectives are centered, who feels entitled to lead conversations, and how linguistic “competence” is implicitly defined and rewarded.

In short, conducting more ELF VE studies, where learners engage with partners who are not necessarily NSs of English, can create valuable opportunities not only for developing critical intercultural awareness but also for disrupting dominant paradigms of IC. Lingua franca approaches in VE are often designed to facilitate collaboration on themes “beyond explicit bicultural comparisons” (O’Dowd, 2021b, p. 3), encouraging learners to negotiate hybrid identities and build shared cultural understandings. These encounters have the potential to foster pedagogies that “move cultural pedagogy in language education away from a simplistic focus on national identities, by incorporating local, regional, national, and global perspectives on cultural practices” (Menard–Warwick et al., as cited in O’Dowd, 2021b, p. 11).

However, this study acknowledges that ELF is not a neutral communicative tool. From a decolonial perspective, English, especially in VE contexts, can function as a site of epistemic and cultural hierarchy. As acknowledged earlier, decolonial scholars have cautioned that ELF settings may inadvertently reproduce linguistic imperialism, where English continues to be privileged as the default medium of intercultural engagement. While ELF VE can create space

for diverse voices, it also risks marginalizing those who do not conform to dominant communicative norms, particularly when intelligibility is narrowly defined or interaction styles reflect Western-centric expectations.

In response, this study adopts a critical stance toward the intersection of language, identity, and power in VE. Rather than framing English merely as a means of access or understanding, it considers how English use in these interactions mediates participation, how authority is constructed through language, and how learners' voices may be differentially heard, resisted, or legitimized. It aligns with calls to de-center native speakerism and foreground plurilingual, locally situated communicative practices (Canagarajah, 2023). By analyzing how learners navigated and sometimes challenged dominant norms, the study contributes to a more nuanced, decolonially informed understanding of ELF in intercultural learning spaces.

Identifying IC and its gains remains a major challenge in VE research, implementation, and evaluation. On the one hand, the complexity of IC itself has prompted longstanding debates about its meaning, with calls to “unthink and rethink” (Dervin, 2021) the hidden ideologies that have shaped current discourses of culture, thereby complicating the verification of IC gains in VE. On the other hand, the recurring reliance on familiar IC frameworks and approaches in VE research has limited a deeper understanding of learners' experiences and conceptualizations of IC in these TMLL environments. Although VE research has expanded the scope of intercultural encounters by using technology to connect geographically distant EAL/ESL learners for cultural discussions and collaborative projects, it has not necessarily proposed new ways to construct IC, specifically, how IC is distinct in VE compared to other settings, and how learners' VE experiences might contribute to rethinking and interpreting IC in today's globalized world. Furthermore, because ELF VE settings offer the potential to explore multiple ‘Other’ perspectives in an increasingly polarized (i.e., Eastern vs. Western) world, they enable

critical investigations into both telecollaboration (Helm, 2015) and the broader paradigms of IC.

2.5 Chapter Summary

This chapter explored key areas within the literature on VE, beginning with its conceptualization, models, and commonly applied research methodologies. It then addressed the definitional challenges surrounding culture and IC, emphasizing calls for CIC and interculturality, which view IC as a fluid, evolving process rather than a fixed set of competencies. The chapter also highlighted the methodological challenges in researching IC in VE studies, pointing to the complexities and ambiguities involved in examining intercultural interactions and group dynamics in virtual contexts. The literature increasingly recognizes IC as a dynamic, context-dependent process shaped by sociocultural, political, and historical factors.

To situate the study within this literature, the study adopts interculturality as a central framework through which to examine intercultural interactions and collaborations in VE. The exploratory design aligns with critical approaches that remain open to what the data reveals about the meanings of culture and interculturality as experienced by participants. Moreover, the research practices draw on calls for critical reflexivity, particularly regarding my researcher's positionality, relationships with participants, and approaches to analyzing learners' intercultural experiences.

The next chapter presents the research questions and methodology, designed in accordance with the critical frameworks discussed here. It builds on the notion of re-wildening interculturality in VE to support a flexible and responsive exploration of intercultural dynamics.

Chapter 3

Research Methodology

This doctoral study investigates the experiences of EAL/ESL university learners as they engage with culture and interculturality in a VE context. It focuses on the types of intercultural interactions and collaborations among VE groups, the intercultural strategies participants employed to form and evolve their VE experiences, factors that shape these experiences, and the ways in which they contribute to current epistemological understandings of culture and interculturality in TMLL. This chapter begins by outlining my researcher positionality, followed by a rationale for the study design. It then details the research methods, participant profiles, study contexts, and the procedures for implementing the VE.

The subsequent sections describe the tools and processes used for data collection and analysis, as well as the challenges encountered during participant recruitment and VE implementation. Specific attention is given to how these challenges were addressed to maintain the credibility and trustworthiness of the research. These include transparency in data handling, reflexive journaling, triangulation across data sources, and continuous validation of findings against participant perspectives. The chapter concludes with a discussion of the study's limitations and the researcher's efforts to acknowledge and account for them throughout the research process. As previously outlined, the study is guided by the following research questions:

RQ1: What kinds of intercultural interactions and collaborations emerge within VE groups, what strategies do learners use to navigate them, and to what extent do these interactions, collaborations, and strategies evolve over time?

RQ2: What are the dynamic factors that influence the evolving intercultural interactions, collaborations, and strategies of learners across VE groups, and how do they navigate these dynamics over time?

RQ3: How do learners' experiences and interactions within VE environments contribute to shaping current epistemological understandings of culture and interculturality in technology-mediated language learning contexts?

3.1 Researcher Positionality

I approach this study as a community insider, having spent more than a decade as a practitioner and researcher in language and intercultural education in TMLL instruction and design, and in VE coordination and evaluation in the Middle East and North Africa region and in North America. During this time, I have worked with instructors and their students in these contexts to establish intercultural partnerships and facilitate task implementation and intercultural dialogue, thereby developing language and intercultural skills. I became increasingly interested in exploring learners' perceptions and experiences of intercultural learning, as this area lacked deep examinations in VE implementation and evaluation as well. Hence, I started this research from a position that supports learner-informed approaches to IC, deconstructing what has been widely accepted as 'positive' and 'successful' intercultural learning in VE (Dooly & Vinagre, 2021; O'Dowd, 2025). These dominant framings often equate success with harmony, cultural knowledge acquisition, or task completion, overlooking the complexities, discomforts, and relational tensions that learners navigate as part of their intercultural engagement.

Recognizing that "we are all many things" (Holliday, 2021, slide 4), I bring my own positionality as a Muslim, Palestinian Jordanian, female, late-30s, speaker of English as an additional language, educator to the fore in developing a critical intercultural perspective (Helm, 2018; Holliday, 2021; Liddicoat, 2014) to interrogate the normative approaches to identifying and tracking learners' IC gains in ELF VE and to explore IC from a learner's perspective. Throughout my postsecondary education and teaching career, I have actively engaged in academic and professional intercultural education projects, where my views of the

world were questioned and sometimes rejected because of what I stand for. These contexts encouraged me to practice and reflect on epistemologies of the phenomenon with various perspectives in mind, including the ones I grew up developing as a young practicing Muslim woman and a resident of Jordan, a country that belongs to the so-called ‘Global South’ region. Similarly, I have developed mentorship and dialogue facilitation skills, which enabled me to manage my interference with teachers and students’ VE work as a mentor and observer of their progress.

This also includes developing skills that allow me to know when to be involve myself and when to separate from the VE implementation process. Thus, given my extensive experience in intercultural education, my dialogue facilitation skills, and my interest in researching critical approaches to intercultural language learning through VE, my positionality sensitizes me to the benefits of adopting IC constructs and approaches to IC in examining learners’ VE experiences, considering that participants will have different personalities, cultural backgrounds, and IC profiles. By adopting this critical perspective, I aim to contribute to discussions about culture and dimensions of interculturality in language education, TMLL contexts, and critical approaches to VE, where EAL/ESL learners’ experiences of intercultural growth are maximized.

Because my academic and professional background is grounded in IC and VE research, I am well-versed in the common challenges EAL/ESL learners face in such contexts. At the same time, I am aware that my deep engagement with these topics could shape how I interpret the data. For this reason, I chose to adopt a non-participant observer role throughout the VE. This role allowed me to engage with the data: group collaborations, digital artifacts, and participant interviews while intentionally minimizing my involvement in the learning process itself. Rather than facilitating tasks or offering input, I observed from the periphery to preserve the authenticity of learners’ interactions and their organically formed group cultures.

I recognize that my insider status offered both advantages and limitations. While it gave me contextual insight into VE structures and dynamics, I remained critically aware of the need to bracket assumptions and foreground participants' voices. The non-participant observer role was therefore a deliberate methodological choice that enabled me to view participants' meaning-making and intercultural engagement with a fresh eye, an approach well suited to the interpretive goals and research questions of this study.

With these methodological and positional considerations in mind, I now outline the study's design, participants, data collection, and analysis procedures.

3.2 Rationale of Research Design and Methods

To answer the research questions guiding this study, I needed to understand the phenomenon of interculturality with minimal manipulation of the VE environment. My goal was not to measure outcomes but to explore how participants experienced and navigated intercultural communication in real-time, situated interactions. This necessitated a qualitative approach, as it allowed me to collect rich, descriptive data from VE participants and co-construct an interpretation of their experiences through multiple forms of evidence (Merriam, 2009; Yin, 2014).

I used a combination of a pre-study survey, semi-structured interviews with stimulated recall questions, and observation of participants' multimodal interactions and digital artifacts. These methods were selected not only for their alignment with naturalistic inquiry but also for how they complement one another. The survey helped me establish initial intercultural language learning portfolios and identify possible focal cases. The interviews offered deeper insights into participants' evolving understandings, relationships, and experiences during the VE. Observations of both synchronous and asynchronous interactions, alongside digital artifacts, served to triangulate the interview data, enabling me to trace participants' intercultural practices and their collaborative engagement.

As a qualitative researcher, I allowed the research questions to guide my methodology. Understanding participants' experiences required careful attention to the meanings they themselves ascribed to intercultural encounters, a central feature of qualitative design (Creswell, 2007). My questions were exploratory in nature, and I chose a hybrid design combining digital ethnography and case study, both grounded in naturalistic and interpretive inquiry. This approach allowed me to examine multiple cases in depth and to document a complex, situated understanding of learners' engagement with IC in VE. While digital ethnographic elements have occasionally appeared in VE studies, very few have used this methodology explicitly to explore interculturality and TMLL together. My study helps address that gap.

I also applied an inductive approach to both data collection and analysis, systematically working with raw data to derive concepts, themes, and insights (Bingham & Witkowsky, 2021; Thomas, 2006). This approach enabled important issues to emerge organically from participants' narratives and collaborative work. As I engaged with the data, my understanding of intercultural learning evolved, enriched by the interview responses, participants' use of digital tools, their written and spoken contributions, and the co-designed VE tasks. Through this multidimensional qualitative inquiry, I sought to generate new understandings of IC as it is lived, negotiated, and co-constructed in the context of ELF VE.

3.2.1 Digital Ethnography Methodology

The study used digital ethnographic approaches that provide deeper insights into the complex day-to-day experiences and cultural realities of participants in a digital medium, aiming to maximize “understandings of meanings, and how they come to be assigned to technology and the cultural experiences that enable and are enabled by the digital medium” (Kaur-Gill & Dutta, 2017, p. 2). In this sense, digital ethnography shares the ‘iterative’ nature of conventional ethnography, “drawing on a family of methods... that acknowledges the role

of theory as well as the researcher's own role and that views humans as part object/part subject" (O'Reilly as cited in Pink et al., 2016, p. 21). It lies within the ethnographic tradition in that it "seeks to provide a detailed, in-depth description... of a sociocultural context and the interactions that take place within it" (Helm, 2017, p. 40). As new technologies offer novel ways to engage with research environments, digital ethnography, in principle, acknowledges the impact of technology-mediated contact with research participants by suggesting that researchers:

might be in conversation with people throughout their everyday lives. [They] might be watching what people do by digitally tracking them or asking them to invite [them] into their social media practices. Listening may involve reading, or it might involve sensing and communicating in other ways. Ethnographic writing might be replaced by video, photography, or blogging. (Pink et al., 2016, p. 21).

This description of digital ethnography aligns with the argument that, to better conceptualize culture and interculturality in TMLL environments, we must explore "the compelling, problematic, and surprising conditions" (Thorne, 2003, p. 38) created by the use of technological tools, which also mediate everyday social and communicative practices among participants (Guth & Helm, 2010; Thorne, 2003, 2006). In consideration of the context and exploratory objectives of this study, it was necessary to examine the experiences of language learners in relation to interculturality and their capacity to enhance emerging IC paradigms within TMLL. The approach adopted was one that would facilitate maximum learning from participants and identify "the hidden principles of their way of life" (Spradley, 1979, p. 4) online. Digital ethnography can "grasp the native's point of view, his relation to life, to realize his vision of his world" (Malinowski, as cited in Spradley, 1979, p. 3), and its four principles (Pink et al., 2016) make it particularly well-suited to this research.

The first principle, *multiplicity*, refers to the existence of more than one way for both participants and researchers to work with the 'digital.' For participants, this means that their use of technology, or their cultures of use (Thorne, 2003), can differ between individuals and

across contexts. These cultures of use influence participants' semiotic choices and multimodal communication within the VE medium, helping them mediate cultural meanings around various topics and collaboratively construct intercultural learning (Abrams, 2020; Thorne, 2003). For researchers, technological tools and the multimodal affordances they offer become integral to the research process and must therefore be documented and critically reflected upon. Participants' unique approaches to working with the digital environment enable the researcher to trace how meanings of culture and interculturality are created and practiced in context.

The second principle, *non-digital-centric-ness*, emphasizes exploring non-digital aspects such as human relationships, participants' beliefs, and their everyday activities. This broadens the focus beyond digital media alone to better understand how technology intersects with the lived realities of participants (Pink et al., 2016). In VE contexts, this principle is reflected in examining both online and offline cultural practices and experiences of participating learners, which influence the formation and evolution of their intercultural collaboration and relationships throughout the exchange (Dooly, 2011).

The last two principles, *openness and reflexivity*, are fundamental concepts in approaching IC, viewing research as 'processual' (i.e., an open-ended and evolving process) that can involve digital forms of collaboration with participants to co-produce knowledge and better understand the phenomenon under investigation (Pink et al., 2016). To be reflexive in digital ethnography is defined as "the way in which we, as ethnographers, produce knowledge through our encounters with other people and things" (p. 31). It is an ethical practice that enables researchers to engage with their relationship to the digital, their collaborations in producing knowledge, and their own positionality within the research process (Pink et al., 2016). It is also important for researchers to realize the different roles (i.e., observer and participant) they play in the research and critically engage with how their participation may impact the research process (Mackey & Gass, 2022). This includes careful planning on how

data will be triangulated for a more comprehensive understanding of participants' cultural realities, their practices, experiences, emotions, and more (Kaur-Gill & Dutta, 2017; Mackey & Gass, 2022).

Certainly, employing digital ethnographic approaches comes with challenges. Given the key role of the researcher in this methodological approach, and the fact that “the digital medium allows for the researcher to remain anonymous, unobtrusive, and sometimes a completely inconspicuous observer” (Kaur-Gill & Dutta, 2017, p. 5), the negotiation of the researcher's proximity and role in the research has sparked ongoing debates about how digital ethnography should be conducted. However, there is growing agreement that the researcher's positional choices in ethnography can guide decision-making about their level of engagement and proximity to the research community (Kaur-Gill & Dutta, 2017). This includes considering the extent to which the researcher brings experiences they regard as “relevant and meaningful” (p. 6), which in turn shapes their involvement.

Since the goal of this study was to explore participants' intercultural experiences within the VE groups, I took on the roles of non-participant observer and interviewer in VE². While the VE instructors were primarily responsible for managing, supporting, and assessing students through VE task completion, my role as a non-participant observer and interviewer focused on seeking clarification, explanation, or elaboration from student participants on IC- related matters that emerged in their multimodal interactions and artifacts during the exchange.

Although VE research has been widely conducted and published by instructor-researchers, fewer studies have adopted the approach where the researcher is not the VE instructor (e.g., EVOLVE Project Team, 2020; Helm, 2018; Helm & Baroni, 2020; Vinagre, 2016). As discussed in Chapter 2, adopting the teacher-researcher approach has provided

² See the observation section under data collection methods for more details on my role as a non- participant observer and how it is distinct from the VE instructors.

valuable pedagogical insights into designing and implementing VE projects; however it does not always offer a comprehensive understanding of the complexity of IC and its dimensions within these projects. Therefore, by taking this insider-outsider approach, I was able to explore the research questions with greater criticality (Helm, 2018), prioritizing learners' perspectives over the dominant 'instructor' and 'evaluator' viewpoints typically used to assess learners' IC gains in VE contexts.

To manage my identity as a non-participant observer (Kaur-Gill & Dutta, 2017) while engaging with participants' interactions, I made them aware of my presence as a researcher and clarified my role as a non-participant observer in the study. Given the dynamic nature of intercultural interactions and collaborations in VE, this approach to negotiating the researcher's role helped preserve the natural flow of intercultural discussion and collaboration among participants, as well as their evolving relationships with their VE partners (Helm & Baroni, 2020)

Although I am aware of the impact my presence may have had on participants and their interactions, I addressed this by employing strategies such as dialogue facilitation, note-taking, and reflexivity practices (e.g., O'Dowd, 2007; The EVALUATE Group, 2019) to monitor my dual role as both an 'insider', observing the VE process from a participant-informed perspective, and an 'outsider', observing VE events with an objective, value-free lens (Kaur-Gill & Dutta, 2017). To manage these dual roles, some researchers have adopted a combined approach: observing learners' linguistic and intercultural practices through their multimodal artifacts, while also engaging them in reflective intercultural discussions after each VE task (e.g., The EVALUATE Group, 2019; Golubeva & Guntersdorfer, 2020; Hauck & Satar, 2018; Helm & Baroni, 2020; Porto et al., 2021; O'Dowd, 2007). These strategies can facilitate a deeper understanding of learners' IC patterns and help researchers recognize when shifts occur in practice with open objectivity.

To minimize the potential insider–outsider researcher effect, I also engaged in continuous reflexivity by critically examining my assumptions and actions throughout both data collection and analysis (Helm, 2018). Additionally, I conducted interviews with participants as a strategy to avoid missing subtle yet significant insights, reduce bias in interpreting participant experiences, and remain attuned to moments that might otherwise be overlooked as familiar or expected (Bonner & Tolhurst, 2002; Kaur-Gill & Dutta, 2017).

I anticipate that employing these multi-layered strategies for participant observation helped mitigate the ‘insider’ effect and supported the objectivity of my role as a non-participant observer³.

3.2.2 Case Study Methodology

This study also employed case study methodology to examine intercultural interactions and collaborations within VE participant groups in the VE project. Case study methodology is defined as “a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection... and reports a case description and case-based themes” (Creswell, 2007, p. 73). Case studies are inherently qualitative as they emphasize the significance of context in shaping social realities (Yin, 2014) that emerge within a “bounded system” (Merriam, 2009, p. 38). A bounded system may refer to an individual, an organization, a group, or a single program. According to Yin (2009), a case must involve a limited number of individuals, groups, or organizations to qualify, as the goal is to generate a multifaceted understanding of the phenomenon under investigation. In this sense, case study design is concerned with identifying how and why a social phenomenon exists (Yin, 2014).

³ Since most VE studies have been conducted by teacher researchers, discussions of the insider and outsider roles of the VE researchers are still limited.

Merriam (2009) outlines three defining features of case study research: it is particularistic (i.e., focused in-depth on a specific phenomenon, group, or event); descriptive, as it seeks to provide a detailed understanding; and heuristic, offering insights that can confirm, challenge, or reveal new understandings of the phenomenon. Case studies may be single or multiple (Yin, 2014); a single case study focuses on one site or case, while a multiple or collective case study involves analyzing several subunits or cases within the overall study. Both designs can be holistic (analyzed as a whole) or embedded (analyzing identifiable subunits separately) (Merriam, 2009; Yin, 2014).

The purpose of this study is to explore EAL/ESL learners' experiences of culture and interculturality in an ELF VE. To achieve this aim, it was essential to examine interculturality as a dynamic and context-dependent phenomenon shaped by interaction. The case study design provided the necessary methodological flexibility to explore these interactions in depth. Based on the structure of the VE and the nature of my research questions, choosing multiple cases resonated with the study's purposes. Instead of choosing individual participants as my case studies, I chose to explore VE groups as case studies. A VE group includes students from both institutions and is usually formed by the VE instructors. These groups are expected to interact and collaborate over the period of the VE to complete their VE tasks.

The integration of Reinhardt's (2012) ecological, multi-framework perspective aligns closely with this study's methodological approach, which combines digital ethnography with a multiple case study design. Reinhardt critiques the dominance of SLA paradigms that prioritize discrete features such as negotiation for meaning, arguing that they often overlook the relational, identity-related, and socio-pragmatic dimensions of interaction in VE. His advocacy for a socio-cognitive and interactional pragmatics lens, focusing on politeness, face, and relational discourse, resonates with digital ethnography's attention to contextual, multimodal learner practices. The case study method further reflects Reinhardt's call for methodological

pluralism by enabling the examination of situated learner interactions while allowing for cross-case comparison. His emphasis on ecological analysis supports this study's longitudinal and comparative focus, helping to situate learner discourse within wider digital, institutional, and interpersonal contexts. Ultimately, this convergence highlights the importance of triangulating methods not only for validation but also as a crucial strategy for capturing the dynamic complexity of intercultural engagement in lingua franca VE environments.

3.2.2.1 Choosing Multiple Cases

I chose student groups over individual participants as study cases for three main reasons. First, as discussed in Chapter 2, much of the existing VE research treats IC as an outcome or endpoint, rather than as an ongoing process. This is reflected in the common practice of reporting individual students' gains through interviews, questionnaires, or a combination of both. In contrast, examining interculturality within student groups allows for a deeper understanding of the phenomenon as a dynamic process that naturally evolves through interaction and collaboration. Since the study design explicitly required students to work in groups from the outset, this structure naturally aligned with my approach to understanding IC within group interactions.

Second, as demonstrated in VE research, participants' perceptions of themselves and others, as well as their multimodal communication choices and verbal and non-verbal reactions, are heavily influenced by the words and actions of others. Observing group interactions and collaborations provides a more comprehensive understanding of VE experiences by highlighting group dynamics and the intercultural resources that each group member brings to the collaboration and discussion. This approach aligns with the broader goals of my research, which aims to investigate how IC develops within the collaborative context of VE. As meta-analyses of VE suggest, evaluating IC gains based solely on individual student outcomes offers limited insight into the broader phenomenon of IC in VE (Avgousti, 2018; Çiftçi, 2016; Dooly

& Vinagre, 2021). Group-level analysis, on the other hand, offers more robust insights into intercultural engagement by attending to dynamics such as group relationships and co-constructed cultures within TMLL environments. With this aim, I hope to contribute to a growing body of research that approaches student experiences in VE not just as isolated instances but as embedded in the broader social and technological dynamics of their groups (e.g., Kramsch & Thorne, 2002; Thorne, 2003).

Finally, a thorough review of the literature revealed that this study is one of the few to provide detailed descriptions of the phenomenon at the group level. As discussed in the section on the oversimplification of IC gains, there is a need for further exploration of small group interactions, students' experiences in relation to their group activities, and their relationships with group members in VE research. This rich data on IC dynamics within the contextualized VE culture of each group has significant potential to provide valuable insights for answering my third research question, which focuses on emerging epistemologies in TMLL.

The exploratory nature of the research questions, along with my role as a non-participant observer, further justified the selection of a case study approach in tandem with digital ethnography. Prior VE research has demonstrated that intercultural learning experiences vary considerably across contexts, and that IC gains are not uniform for all participants (Alaa-Kortesmaa & Muñoz, 2023; O'Dowd, 2023; Dooly & Vinagre, 2020). In this light, a multiple case study design offered a more robust framework than a single case study, as it enabled in-depth analysis across several VE groups and allowed for the replication of findings, thereby supporting more compelling and transferable conclusions (Yin, 2014). While case study methodology has been used in VE research to explore IC (Avgousti, 2018; Çiftçi, 2016; Dooly & Vinagre, 2021; Lewis & O'Dowd, 2016; O'Dowd, 2021a, 2021b; Thomas & Yamazaki, 2021), many studies have adopted a single-case design that primarily relies on self-reported data such as surveys and interviews. By contrast, this study integrates observation and artifact

analysis to build a more holistic and situated understanding of learners' IC trajectories within and across VE groups.

While I recognize the uniqueness of learners' VE experiences and cultural backgrounds, participants in this study shared some commonalities, such as learning English as an additional language, experiencing VE for the first time, and collaborating with peers from Jordan and China. Given these shared and diverse educational and sociocultural contexts, I adopted a multiple case study design to offer a nuanced synthesis of the variety of IC experiences among participants. The cases in this study consisted of small groups of students formed by VE instructors. Each case provides insight into the evolving VE experiences of interculturality, highlighting key factors that influenced learners' intercultural language learning during the exchange.

Moreover, adopting this approach enhanced the validity and reliability of the study, as I was able to draw conclusions based on a variety of learner experiences (Yin, 2014). I conducted an embedded multiple-case study design, replicating the analysis process across groups, which also enabled meaningful comparison of IC experiences within and across VE groups. As I will explain in the data analysis section, I carried out a multiple-case analysis to synthesize shared intercultural communication experiences within the selected groups, where applicable.

Although findings from case studies cannot be generalized to broader TMLL populations or research communities, that is not the aim of this study. Rather, my objective is to offer in-depth insights into learners' VE experiences of interculturality within a unique ELF VE context; insights that can inform and enrich the expanding body of research on ELF VE worldwide.

3.3 Research Context

After obtaining Institutional Review Board (IRB) approval, I approached a Canadian university in central Toronto and a few universities in Jordan to conduct this research. In the summer of 2022, a private Jordanian university and a public university in Toronto agreed to take part in the study. After emailing each department chair to explain the research project and request permission to recruit participating instructors (see Appendix A), I contacted the instructors recommended by the chairs with an email and a consent form (see Appendix B for the instructor consent form). After receiving responses from an instructor at each institution, I met with them separately to further discuss the study's objectives and address any questions or concerns they may have had. This process resulted in both instructors consenting to participate in the study, using one of the English language courses they taught in 2022. The course instructor in Canada was an associate professor of ESL, and the instructor in Jordan was a full-time lecturer. Both instructors had limited experience with VE, but they were eager to offer their students the opportunity to meet and collaborate with other ESL students in the partner country.

The VE was therefore integrated into two university-level English language credit courses, one ESL course in Canada and one English communication course in Jordan. Through the VE, students were expected to complete several intercultural language tasks as part of their course requirements. These courses appeared to be ideal VE partners for this study. Each course served an average of 15–20 students, typically undergraduate students aged 18–25 from across disciplines, who enrolled to develop advanced English language skills and gain exposure to English-speaking cultures. Both courses also included intercultural or cultural components in their English language instruction and followed a project-based learning approach. It is also worth noting that both courses were delivered in a hybrid mode, incorporating technological tools with which students in both contexts were, to some extent, already familiar, such as Zoom,

Google Docs, and Google Spreadsheets. Thus, the study aligned with both institutions' commitment to advancing global and intercultural learning for faculty and students.

There were, however, a few noticeable differences between the two courses. As is common in VE projects, the academic calendars at each institution differed. Another difference was that most students in the ESL course in Canada were in their third or fourth year of undergraduate studies, while most students in the English language communication course in Jordan were first-year undergraduates. Additionally, course evaluation varied between the two institutions. While the course in Canada ESL followed a grading scheme, the course in Jordan was Pass/Fail. These contextual differences played a dynamic role in the instructor's implementation of the VE and, therefore, in students' perceptions and navigation of their VE experiences. This dynamic role will be discussed in more detail in the following chapters.

3.3.1 Planning for the VE Implementation with Participating Instructors

The study was conducted between October and December 2022. The VE implementation was planned for 7 weeks, during which all data collection took place. To help the VE instructors plan the VE in alignment with the study's objectives and timeline, I took on the role of mentor. I facilitated five Zoom meetings (two per month after the initial introduction meeting) and a WhatsApp chat over the course of two months. During these meetings, the instructors finalized their joint design of the VE tasks with my support (see Appendix C for co-developed VE tasks), developed their separate assessment tools, and planned implementation processes to ensure alignment of task deadlines, student support, and communication channels during the study implementation. The instructors planned a task-based VE through which they seemed to aim for a dialogue approach to designing the VE experience. To ensure the instructors understood the study's goals and my expectations of their role in the VE, I participated in their meetings and a WhatsApp channel during the preparation period prior to the study.

I introduced the study project, research questions, focus of inquiry, and VE timeline, and answered any questions to facilitate task planning and provide support as needed. To maximize the validity of the VE study, my mentorship of the VE instructors ended by the VE start date. I left the joint WhatsApp group with instructors to make it a private space for their communication during the VE and whenever instructors reached out to me asking for support with issues related to VE implementation, I refrained from making decisions and encouraged both instructors to negotiate further and make adjustments that worked for them and their students.

The support I provided included sharing resources and relevant literature on facilitating VE communication among students, including frameworks for developing VE tasks, common challenges students face in VE interactions and collaborations, and guidelines for turning these challenges into intercultural learning opportunities (see Appendix D for examples of instructor support and partnership facilitation provided by the researcher). Before concluding the VE preparation period, I encouraged both instructors to sustain an active partnership and coordinate facilitation of tasks and dialogue to support their students throughout the VE. I emphasized the importance of consulting the resources I shared with them, as well as revisiting our discussions from the preparation phase, to ensure they were equipped to lead intercultural facilitation autonomously.

As for the technological tools, instructors decided to use Zoom for synchronous tasks (e.g., group interviews and scenario meetings) and Padlet for asynchronous tasks (e.g., Week 3 Padlet discussions) and for posting group-completed activities with the VE instructors and other students as well. Both instructors shared that Zoom had become a popular tool among students in both institutions during the COVID-19 pandemic, and they anticipated no challenges in using it for the VE purposes. Although both instructors were familiar with Padlet and had frequently used it in their teaching over the years, they anticipated that students were

not. However, they both decided to use it because of its user-friendly and multimodal interface, as well as the fact that it is accessible for free via smartphones and personal computers.

To help orient their students to Padlet, I supported the VE instructors in creating short Padlet tutorials to share on their course LMS. Moreover, the VE instructors created and posted the first two tasks on Padlet to further showcase Padlet's multimodal options and guide students on how their posts would look on it. To ensure full access to the Padlet data during and after the study for observation and analysis purposes, I created the Padlet walls and shared their links with the instructors to make them available to students. After instructors finished assessing the tasks and the study was over, participants and instructors had no access to the Padlet walls.

3.3.2 Recruiting Student Participants in Canada and Jordan

Because I was in Canada at the time of conducting the study, I employed two different approaches to recruit participants in each institution. To recruit student participants in the ESL course in Canada, I emailed the students two weeks before the planned VE start date to introduce them to the research and collected the consent forms during the recruitment session I conducted with them in-person in coordination with the instructor (see Appendices E-G for the student participant consent forms). On the other hand, I shared a recorded video with the course instructor in Jordan to share with students via the Learning Management System (LMS) of the course a week before the VE started. The video aimed to orient students on the research and provide guidance on how to sign and email the consent forms. I also joined the course instructor virtually via Zoom to answer students' questions and address any concerns they had about the study, as well as recruit study participants. After completing the recruitment of participants, I uploaded digital copies of all the consent forms to the restricted Google Drive folder that I created for this purpose.

Although recruitment was well-coordinated with both course instructors, the distance between me and students in Jordan, and the fact that they were introduced to the VE research

on their first day of classes made the participant recruitment process more complicated. The process of accessing, signing, and sharing multiple consent forms online was more time-consuming than originally planned due to technological issues students faced. Another challenge was the lower number of students who attended the recruitment session in Jordan compared to those in Canada. As a result, I had to rely on the hopes that students in Jordan would watch the study introduction video on their own and email me their consent forms within a constrained timeframe. These circumstances resulted in the recruitment of 15 students in Jordan and 20 students in Canada. There was a noticeable difference in the response rates for each of the three components of the study, which will be described later in this chapter.

Participants in Canada were international students originally from various national cultures, mostly from China, while most participants in Jordan identified as Arab Jordanian. I granted the student participants the option to choose their own pseudonyms to maintain their anonymity and confidentiality. All participants in Canada chose Anglo names, and those in Jordan chose Arabic names. I followed this pattern by assigning pseudonyms for participants who did not choose their own. The VE instructors divided the students into 12 small groups by randomly assigning 3-4 students to each group to complete the VE tasks. Table 1 summarizes information on participants in each of these VE groups. Detailed participant profiles in the VE groups I chose for analysis in the dissertation are reported in Chapter 4.

Table 1

Study Participants in the VE Groups

VE Context	Total Number of Group Members in Each Country (Jordan:19/Canada:25)	Number of Study Participants (Jordan:15/Canada:20)
Group 1	4 (2/2)	3 (1/2)
Group 2	3 (1/2)	3 (1/2)
Group 3	4 (2/2)	2 (0/2)
Group 4	4 (2/2)	3 (1/2)
Group 5	3 (1/2)	3 (1/2)
Group 6	3 (1/2)	2 (1/1)
Group 7	4 (2/2)	3 (1/2)
Group 8	3 (1/2)	3 (1/2)

Group 9	4 (2/2)	3 (2/1)
Group 10	4 (2/2)	4 (2/2)
Group 11	4 (2/2)	3 (2/1)
Group 12	4 (1/3)	3 (1/2)

3.3.3 Selection of Study Groups

The selection process for the study cases began in Week 1 of the exchange, as it was essential to choose VE groups that demonstrate variety in participants' intercultural learning experiences and approaches to navigating challenges and opportunities encountered in their VE interactions and collaborations. Therefore, I started the selection process without a specific number of groups in mind, leaving it to the data to reveal itself organically about these aspects of the VE groups. In line with the study's exploratory qualitative design and its aim to examine IC as a socially constructed and context-dependent phenomenon, purposeful sampling was used to select four focal groups from the twelve initially formed VE groups. The selection process was informed by both theoretical and practical considerations, aligned with qualitative case study methodology (Yin, 2014) and digital ethnography (Hine, 2015). The primary goal was to capture a diverse range of intercultural dynamics, strategies, and group development patterns across the VE. To this end, I conducted an initial ethnographic scan of all 12 groups' interactions during the first half of the VE (weeks 1–3), drawing on observational notes, early collaborative artifacts, and preliminary participation indicators across the multimodal platforms used (i.e., individual autobiography videos, Padlet posts and discussions, groups' Zoom interviews). This early engagement allowed for an inductive identification of groups that exemplified variation in:

- Communication and collaboration styles (e.g., frequency and modality of interaction),
- Emerging leadership and agency (the capacity to act and make a difference) roles (e.g., how individual and group decisions and intercultural strategies informed one another)
- Types of tensions or challenges faced (e.g., miscommunication, silence, participation asymmetry),

- Depth of intercultural engagement and critical reflection.

From this preliminary analysis, four groups were selected to represent a heterogeneous sample of VE experiences. The groups selected for analysis were numbered according to the chronological order in which they first posted their tasks, with those posting earlier assigned lower numbers and analyzed first. The selection process ensured that the cases reflected not only successful collaboration but also critical incidents, unresolved conflicts, and varying degrees of intercultural development, essential for capturing the relational, emergent, and non-linear nature of interculturality as theorized in this study. By selecting these four groups, the study offers a rich, comparative foundation for cross-case analysis and contributes nuanced insights into the micro-level processes through which learners navigate intercultural learning in technology-mediated environments.

3.4 Data Collection Methods

Guided by the approaches developed in qualitative research, the data collection process took place over a period of seven weeks, from October to December of 2022. A Pre-study survey (see Appendix H), multiple semi-structured interviews (see Appendix I), and observation of multimodal interactions and collaborative artifacts were used as data collection methods. All participants signed informed consent forms (Appendices E-G) prior to taking part in the study and had the right to participate in various components of the research (i.e., survey, interviews, observation of multimodal interactions and collaborative artifacts) or withdraw from the study at any point during the data collection procedure, which is in accordance with my institution's ethics protocol. The data collection tools and methods are summarized in Table 2.

Table 2*Phases of Data Collection Methods*

Weeks 1-3	● Collect pre-study survey ● Identify students to reach out to for interviews
Weeks 3-4	● Conduct student interview 1
Weeks 6-7	● Conduct student interview 2
Weeks 1-7	● Conduct observation of student participants' interactions and collaborative artifacts.

3.4.1 Pre-Study Survey

A short online survey was distributed among participating students in each country 1-2 weeks prior to the VE implementation. The survey was designed to be between 15-20 minutes long, and it included closed- and open-ended questions to gather demographic information about the participants, their intercultural profiles (e.g., cultural background and experiences with intercultural learning prior to this study), and their expectations for their intercultural language learning in exchange. Some of these questions were adopted from other VE studies that used survey methods to investigate learners' IC development (e.g., EVOLVE Project Team, 2020; Helm & Van der Velden, 2019; Helm & Baroni, 2020). The questions were further revised prior to the survey pilot (described below). The purpose of this survey was to familiarize myself with the participants' intercultural profiles, serving as a useful precursor to the interviews and potential student groups to be explored in the study. In this way, the survey responses helped identify initial IC-related themes or issues to be further explored during the study.

3.4.1.1 Survey Pilot

Piloting survey questions can help ensure the feasibility of the method design and participants' understanding of the survey questions (Willis, 2005). Given the fact that English was not the first language of any of the study participants, it was important to assess the appropriateness of the wording choices and the effectiveness of the survey in relation to the

research questions. By effectiveness of the survey, I refer to the extent to which the questions would generate data relevant to the research questions of the study. The pilot participants were Year 1-3 university and college-level students in Jordan and Canada, majoring in different disciplines.

During the pilot, I evaluated the responses and how survey takers seemed to understand each question. Revisions primarily included simplifying the wording of the questions or rephrasing them to minimize misunderstandings and complexity in the survey as much as possible. With these factors in mind, I conducted a survey pilot by reaching out, virtually, to university-level students in Jordan and Ontario, Canada through my professional networks in each country. A total of 22 out of 27 participants shared similar age, educational, and ethnic backgrounds as the study participants. In addition to completing the survey questions, the participants of the pilot were asked to complete a short form to provide feedback on their level of understanding of the survey questions and the structure of the survey, with the option to provide examples on each comment they left. Having studied the responses of the survey and the feedback form and consulting the experienced opinions of the committee members, I made further modifications to some of the survey questions, in which I simplified the wording and added further explanation on the open-ended questions that required a description of past experiences with VE and intercultural learning.

3.4.2 Observation of Multimodal Interactions and Collaborative Artifacts

This phase of the research involved two rounds (during and after the VE) of observing VE multimodal interactions, including both synchronous and asynchronous intercultural dialogue between participants, as well as interactions relevant to task completion, such as negotiation and decision-making. Additionally, the group artifacts created during the VE were observed (details to follow in the data analysis section).

These interactions were multimodal because they included using different modalities for communication (i.e., audio, video, image, and text). Observing and analyzing participants' interactions and collaborative products enriched exploration of IC throughout the exchange because it allowed me to provide an 'insider point of view' of IC components as co-constructed by participants in the study, rather than forcing pre-existing models of IC. Furthermore, this data complemented and challenged the findings from the interviews, helping to capture different dimensions of learners' IC experiences and supporting the validation of my findings as well.

To observe synchronous interactions (i.e., Week 2 group interviews and Week 5 scenario planning meetings), VE groups were asked to record and share their Zoom meetings on Padlet as part of their VE task completion. All groups successfully shared their Zoom recordings, except for Group 2, which missed recording their Week 5 meeting. To compensate for the missing data from this week's tasks, I reached out to the group members via email with questions about their scenario planning meeting, aiming to better understand their collaborative strategies in completing the scenario script and engaging with one another.

In his description of ethnographic 'holism', Hines (2015) encourages ethnographers to openly make connections between the micro-level of local cultures and the macro-level of world systems, rather than seeing them as 'distinct'. In that sense, the ethnographer's goal would not be to seek full comprehension of a local culture but rather to invest in 'contextualizing and embedding' by "[seeing] activities on a micro level as manifestations of macro-level phenomena" (p. 24). With this concept in mind, I conducted an observation of the student participants' VE interactions and artifacts with the purpose of learning from their intercultural learning dynamics and firsthand VE experiences of navigating cultural differences and intercultural collaborations.

Hines (2015) additionally invites digital ethnographers to be ‘agnostic’ about the assumption that individuals’ participation in the ‘virtual’ world is merely distinct from their ‘real’ one, hence challenging pre-existing assumptions about aspects such as *setting*, *full participation*, and *relevance* of unanticipated events arising in the setting of an ethnography. Although my aim with the survey was to learn about the participants to identify interviewees in the later stage of the study, analyzing the survey responses multiple times during the first weeks of the VE enriched the observation stage with attempts to ‘unthink’ and ‘rethink’ (Dervin, 2021) meanings of their intercultural realities in the VE. Thus, observation notes included possible connections between the pre-VE intercultural experiences that participants shared in their survey and the ways they had developed interactions and conducted collaborations with their partners. They also included participants’ references to the VE when discussing notions of their intercultural reality beyond the VE learning medium.

One of the ethical concerns in conducting digital ethnography is the emergence of the ‘ethics of care’ (Kubanyiova, as cited in Tagg et al., 2017) in the researcher-researched relationship. In this context, the comfort and trust of both parties, with the aim of causing no harm, can influence the researcher’s decisions, potentially leading to choices that differ from those approved by the research institution. Given the possibility that my longitudinal experience in facilitating intercultural VE dialogue could disrupt the flow of participants’ interactions and influence power dynamics, I decided to defer the task of facilitating the VE tasks on Padlet to be fully planned and executed by the course instructors. Taking a ‘backseat’ approach allowed me to maintain my role as a non-participant observer and facilitated my engagement with participants’ interactions and collaborations on the VE platform. This also supported my decision-making process regarding data collection and analysis. For instance, I took detailed notes on key multimodal semiotics that impacted LF interactions, such as participants’ communication styles, body language, and techniques they used to deepen

discussions, ask for elaboration, cope with partners' varying language proficiency, and manage miscommunication (Chen & Sevilla-Pavón, 2023; Konakahara, 2023).

By adopting this approach, I remained attuned to the key aspects of interculturality that were significant in the context of VE work, specifically focusing on how participants navigated cultural differences, developed communication strategies, and adapted to varying language proficiencies. Distancing myself from the facilitation process helped me maintain accurate notes on critical aspects of intercultural communication, ensuring as much transparency as possible during data analysis and reporting of findings. This position enabled me to focus on the intercultural dynamics that unfolded naturally within the VE groups, documenting participants' communication styles, negotiation strategies, and responses to miscommunications, as well as how they adjusted to each other's language proficiency and cultural sensitivities. It also allowed me to observe the emergence of intercultural dynamics in real time, capturing how learners co-constructed meaning, solved problems, and overcame communication barriers. By paying close attention to communication styles, body language, and techniques for deepening discussions, I was able to analyze the evolution of participants' intercultural experiences within the collaborative environment. Making this role shift further enabled me to reflect critically on how my researcher role influenced both the data collection process and my interpretations, which was crucial for highlighting how these factors shaped the overall intercultural experience and informed my analytic decisions.

Before signing the consent forms, I ensured that the students understood my role as an observer of their VE tasks, explaining that my presence was not for the purpose of judging or evaluating their contributions but rather to learn from their interactions and collaborations with their VE partners. I emphasized that my observations were aimed at better understanding of their intercultural communication and collaboration, which aligned with the research objectives. This clarification aimed at maximizing participants' comfort with my role and

making them aware of the ethical boundaries guiding my presence in the VE environment. By establishing this understanding early on, I aimed to foster trust and facilitate a more open and honest exchange between participants, which is essential when researching sensitive areas such as intercultural communication.

3.4.3 Semi-structured Student Interviews

Semi-structured interviews were conducted with selected participants to gain a deeper understanding of their experiences in the VE groups and explore issues related to intercultural communication. The interviews were designed to capture rich, detailed perspectives on participants' attitudes toward their VE experience, the intercultural dynamics within their groups, and the strategies they employed in navigating cultural differences.

The criteria for selecting interviewees were based on their completion of the pre-study survey, and their consent to participate in the interview process, and their observed collaborations and interactions within their VE groups. Interviewees were selected from four specific VE groups, which were purposefully identified for their divergent and rich VE experiences (to be further explained in the data analysis section). The aim was to choose interviewees whose experiences represented a broad range of perspectives, facilitating a diverse and comprehensive exploration of intercultural dynamics in VE.

The interviews were conducted in two rounds. The first round took place in Week 3 after the groups had completed the tasks for Weeks 1–3. A total of 15 interviews were conducted in the first round. The second round took place in Week 7 after the VE tasks were completed. A total of 14 interviews were conducted in the second round. One participant in Jordan did not participate in the second round of interviews. Although unplanned in the initial stages of data collection, Week 7 also included five longer interviews with five participants in Canada. These additional interviews were conducted to fulfill the case selection criteria, which are explained further in the data analysis section. Interviewing these five participants was essential for

observing and analyzing their VE group cultures. This decision was made in response to the inductive process of observing and analyzing relevant data for the research questions. All interviews were conducted in English, except for Rana's, which included both Arabic and English at her request.

Pre- and/or post-VE interviews are commonly used in qualitative VE research to explore students' attitudes toward their VE experience, their partners, and other IC gains (e.g., Izmaylova, 2022; Jin, 2015; Kohen & Hoffstaedter, 2017; Lee & Markey, 2014; Luo & Yang, 2021; O'Dowd, 2007; Thomas & Yamazaki, 2021). However, conducting interviews during the VE process enables us to capture evolving experiences and perceptions of intercultural communication. This approach helps to maximize the underlying discourse on culture and interculturality. Such discourse includes aspects such as negotiation, co-construction of meaning, and, in some cases, resistance and manipulation during interactions (Dervin, 2011, 2016).

By incorporating individual perspectives, these interviews provided deeper insights into how each participant experienced and navigated intercultural communication within their group. While the group-level observations allowed for an analysis of the overall dynamics and collaborative strategies of the VE groups, the individual interviews enabled me to capture the personal reflections, challenges, and strategies each participant used. This added dimension helped to reveal the ways in which participants individually interpreted and responded to intercultural issues such as communication breakdowns, cultural misunderstandings, or power dynamics. As a result, the interviews contributed a more detailed and nuanced understanding of the specific factors influencing intercultural interaction, shedding light on how these factors were perceived and managed on an individual level, and how they ultimately shaped the group's overall intercultural dynamics.

Recent literature has problematized the concept of quality interviewing in applied linguistics and how researchers position themselves within the interviewing process (Block, 2000; Byrd Clark & Dervin, 2014; Cortazi & Jin, 2020; Holliday, 2021). To keep the interview experience as authentic as possible for participants and myself, it was crucial to think about how we (i.e., the interviewees and I) viewed the process of the interview, considering our taken-for-granted beliefs and our educational and sociocultural backgrounds as well (Cortazi & Jin, 2020). In that sense, and before starting our first interview, I asked each interviewee what they believed an interview was and the role they expected themselves and me, the researcher, to take in it. By following this procedure, I aimed to make interviewees feel more relaxed and show more trust in me, the researcher. Instead of playing our roles within a ‘folks ideology’ (Cortazi & Jin, 2020), where researchers behave as ‘interviewers’ and participants respond as ‘interviewees’, I approached the interview as a ‘tool of inquiry’ (Cortazi & Jin, 2020, Holliday, 2021), in which both parties explore “the possibility of unexpected thoughts arising from reverie between the analyst and the analyzed” (Holliday, 2021, slide 7.)

What helped me adapt to such an approach is reflecting on my interviewing views and practices before, during, and after the interview (Byrd Clark & Dervin, 2014). Among the changes of practice among interviewees, for instance, was their tendency to verbalize their uncertainty towards the end of the interview. During the first interview, there were many attempts from interviewees to ascertain whether they answered the question correctly or if their answer was good enough. However, their uncertainty about their comprehension and responses to the questions during the second interview decreased vividly. As Cortazi and Jin (2020) argue, this behavior can emerge when ‘unspoken purposes’ of the interview are openly discussed between the researcher and the interviewee.

3.4.3.1 Stimulated Recalls

Interviews also integrated stimulated recall questions (Mackey & Gass, 2022) (see Appendix I). Stimulated recall is an introspective procedure through which participants are invited “to recall their concurrent thinking during an event” (Fox-Turnbull, 2009, p. 204) when prompted by visuals, written products, or transcripts of interactions (Mackey & Gass, 2022). Integrating stimulated recalls facilitated discussions of specific intercultural interactions and artifacts, prompting a deeper understanding of the participants’ cognitive processes, perceptions, and experiences with IC during the VE. Thus, each interview included a section where students reflected on and discussed 3-4 segments from their multimodal interactions and collaborative artifacts they engaged with and produced before the interview day. For example, participants watched clips from their Week 2 interview with their partners and written excerpts of the intercultural interactions they had with their partners during Week 3, and they were asked to describe, reflect on, and explain the IC practices and communication decisions shown (what participants were thinking and why).

In selecting the excerpts for simulated recalls, I focused on moments in the VE interactions and collaborations that were particularly rich in intercultural significance. These included instances where participants reflected on their communication strategies, attempted to manage tensions or miscommunications, or navigated cultural differences during the VE tasks. The selected excerpts were drawn from all VE task interactions and artifacts completed by participants both individually (e.g., autoethnography videos, Week 3 Padlet posts) and collectively (e.g., Week 2 group interviews, intercultural scenarios). Importantly, these excerpts did not always involve the interviewee directly. Some of them included moments where the interviewee interacted with others, while others highlighted exchanges in which the interviewee was not actively present or a participant. These excerpts were selected because they represent key components of the intercultural dynamics in each group, highlighting crucial

decision-making moments and communication strategies. The rationale for this approach was to gain a comprehensive understanding of group dynamics rather than limiting reflections to only an individual's direct participation. By including excerpts where participants were not directly involved, I was able to capture key intercultural moments that shaped the trajectory of group interactions, for example, decision-making sequences, strategies of silence or code-switching, or moments of misalignment that influenced the group culture as a whole.

This method also helped avoid a narrow, self-centered view of intercultural experiences and instead encouraged participants to recall the broader relational and strategic processes at play in their groups. In doing so, it complemented my non-participant observer role and supported the study's goal of situating interculturality as emergent, co-constructed, and relational, rather than only as individual competence.

Stimulated recall questions can provide a deeper understanding of participants' perceptions and understanding of culture and interculturality in TMLL. Thus, participants engaged with follow-up questions, which also prompted them to reflect on the factors that influenced their practices and decisions during the episodes shown. These questions were introduced halfway through each interview, after a comfortable conversational environment had been established. Segment types included discussion forum interactions and student-produced collaborative multimodal products completed as part of the VE tasks. The selected segments featured sections of group dialogue or exchanges of Padlet posts among participants, highlighting their communication and decision-making strategies that shaped their IC experiences while collaborating on the VE tasks. Integrating stimulated recall into the interviews aligned with the research aims by focusing on participant perspectives and the intercultural strategies they employed to construct their VE experiences, rather than relying solely on my judgment of participants' interviews and the meanings in their interactions.

Adjusting interview questions primarily depended on observing the VE interactions as the VE tasks and discussions developed in the study. The questions in each round aimed to capture participants' intercultural experiences as well as their cognitive processes working with VE events. Due to time constraints, I was not able to pilot the interview questions. Instead, I actively kept reflective notes on my performance during each interview, the effectiveness and complexity of the questions, as well as the time frame of the interviews to adjust the interviewing process in the second round. Adjustments were made to guarantee that the interview experience was more of a social phenomenon, in which the co-constructed interaction between the researcher and the interviewees generated more reliable data (Block, 2000).

Before moving to data analysis, Table 3 provides a summary of the data collected through these three methods used in this study.

Table 3

Summary of Data Collection

VE Context	Number of Observed Participants	Number of Collected Surveys	Number of Collected Interview Consents	Number of Week 3 Interviews	Number of Week 7 interviews	Number of Merged Interviews	Interviews Total
Jordan	15	12	9	7	6	0	13
Canada	20	15	19	8	8	5	21

3.5 Data Analysis

In keeping with the digital ethnographic approach, data transcription and initial analysis were conducted in parallel with data collection. The survey responses, interviews, and VE multimodal interactions and artifacts were analyzed qualitatively using interpretative thematic analysis (Clarke et al., 2015) to generate cases of divergent intercultural practices within student VE groups. Given the extensive data collection process in case study methodology

(Creswell, 2007), I employed an iterative inductive approach, starting by familiarizing myself with the data and preparing it for coding.

The analysis began with simultaneous examination of study interview responses and observation notes taken during the VE. During the VE, I conducted an initial round of observations of VE group interactions and collaborations. The purpose of this initial observation was not only to gain a preliminary understanding of the group dynamics but also to help prepare for the study interviews, particularly in selecting segments for the stimulated recall questions. This phase aimed at establishing an initial understanding of the data. It included reviewing and editing the interview transcripts, which were automatically generated by Zoom, and cleaning and reorganizing my observation notes taken during the seven weeks of the exchange. To prepare the interview data for initial coding, I compiled all data organized by task in a running Google spreadsheet (see sample in Appendix J) to better track the evolving VE experiences throughout the study (e.g., participants' intercultural learning, their strategies for interaction and collaboration within their groups, emotional management, and non-verbal language).

After the VE was completed, I conducted multiple additional rounds of observation to examine intercultural communication practices and behaviors within the student groups in more depth. I specifically focused on their communication strategies, such as initiating cultural topics, responding to partners' questions and comments, interpreting body language, and managing disagreements, miscommunication, or frustration. I also observed a range of emotions, particularly during synchronous tasks, including nervousness, embarrassment, satisfaction, frustration, confidence, anger, happiness, and pride. These emotional cues, conveyed through facial expressions, body language, tone, and language use, provided further insight into the intercultural dynamics of the VE interactions. To capture these emotions and participants' strategies for managing them, I paid close attention to silence, laughter, intonation,

stuttered speech, changes in speech speed, and emphasized words. Many of these emotional cues were later confirmed and elaborated upon by interviewees during the simulated recall interview questions.

Multiple rounds of observation also included selecting quotes and lengthy excerpts from transcribed Padlet and Zoom group interactions. These rounds provided a deeper, more refined understanding of the data, allowing me to identify emerging themes and patterns more effectively. This iterative process is essential in qualitative research, as it facilitates the refinement of initial codes and categories, ensuring that they are grounded in the data and reflective of participants' lived experiences (Charmaz, 2014). By revisiting and expanding my observations, I was able to capture the evolving nature of intercultural communication in the VE groups, thus enhancing the validity and depth of my analysis (Denzin, 1978). These repeated observations not only allowed for a more accurate interpretation of participants' strategies and behaviors but also laid the foundation for the coding process.

By taking notes on the different semiotic resources used simultaneously by participants in their interaction practices, body language, and emotions, I also made use of multimodal discourse analysis techniques (Kress, 2010) to unpack multimodality in student groups' interaction and the possible impact it had on constructing and re-constructing IC meanings among group members. Since "talk itself contains multiple sign systems with alternative properties" (Goodwin, 2000, p. 1489), it was important at this stage to make note of participants' diverse resources to better assemble and understand participants' "action within the interaction" (p. 1490) and the underlying meanings of it. It is worth noting, however, that to help maintain the focus of the study and ensure relevance across data sets, I excluded synchronous sections that involved troubleshooting technological issues or silence accompanying collaborative and individual writing of tasks. Table 4 highlights the semiotics that were found to be significantly analytical across groups.

Table 4*Semiotics with Analytical Significance*

Semiotic	Analytical Significance	Interpretation
Facial Expressions and Gaze (in Zoom interactions)	• Facial expressions (smiles, frowns, eye contact, raised eyebrows) served as affective signs of engagement, discomfort, agreement, or confusion. • Gaze direction and screen presence (looking at camera vs. looking away) shaped perceptions of attentiveness and sincerity.	These non-verbal signs contributed to relational alignment or misalignment, signaling openness, withdrawal, or empathy in ways that words could not.
Gestures and Body Language	• Hand gestures (e.g., nodding, open palms, shrugging) operated as embodied cues of affirmation, hesitation, or emphasis. • Posture and physical distance from the screen (leaning in vs. leaning back) indicated levels of comfort, control, or disengagement.	Such elements helped co-construct interpersonal warmth or distance, especially in moments of tension or cross-cultural interpretation.
Silence, Pauses	• Silence and pauses (short and long) during live sessions were not neutral; it was often interpreted as disagreement, discomfort, uncertainty between turns (especially in intercultural moments) were semiotically loaded, revealing struggle, thoughtfulness, or face-saving.	Silence functioned as a powerful absence, shaping turn-taking dynamics and how authority or inclusion was negotiated.
Voice Pitch and Tone	• High pitch can indicate excitement, nervousness, or a desire to be perceived as friendly. • Low or flattened pitch can suggest disinterest, hesitation, or emotional withdrawal.	changes in pitch often indexed emotional states (e.g., anxiety in turn-taking, hesitation in disagreement). A rising pitch at sentence endings sometimes signaled seeking approval or softening disagreement, especially where participants felt uncertain about offense.

Speech Rate (Slow/Fast Speech)	• Fast speech may reflect enthusiasm or anxiety but can overwhelm lower-proficiency listeners. • Slow speech may indicate carefulness, accommodation, or sometimes awkwardness.	Participants who slowed their speech intentionally during collaboration were often performing strategic accommodation, especially when aware of partners' language proficiency. This emerged as a relational semiotic strategy, tied to empathy and inclusion.
Laughter	• Laughter in VE interactions functioned as a social lubricant, signaling comfort, alignment, or relief from tension. • In some cases, nervous laughter indicates discomfort or uncertainty.	Laughter often emerged during humor, storytelling, or moments of tension management. It served as an <i>emotional bridge</i> , softening miscommunication or inviting relational warmth. Its presence often coincided with showing agreement, backchanneling, or emotional management.
Multimodal Video Design Choices	• In autobiography videos: choices related to presence (appeared on camera or not, sharing of photos or pictures). Content: Reading from a script or speaking naturally in front of the camera, topics covered, addressing partners in talk • These design elements conveyed tone, intentionality, and cultural positioning (e.g., choice of traditional symbols, voiceover vs. text narration).	Multimodal design became a semiotic space of identity performance, allowing learners to mediate culture creatively and signal belonging, respect, or innovation.
Visual Turn-Taking and Screen-Sharing Practices	• Who shared screen, when, and how transitions occurred (e.g., explicitly inviting vs. abruptly switching) reflected leadership, participation equity, or control. • Visual cues such as name labels, profile pictures, or Zoom background and digital settings choices.	These practices shaped power dynamics and group visibility, especially in groups with uneven participation.

Symbolic Use of Cultural Artifacts	• In group tasks: speaker or gallery view on Zoom • Sharing photos, flags, quotes, or religious/cultural references were used symbolically to represent one's cultural identity. • The inclusion or absence of these elements reflected comfort, pride, or caution in presenting one's background.	These signs acted as cultural indexes rich, intentional semiotic resources that negotiated representation and cultural meaning.
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In line with the goal of improving the credibility and transferability of interview responses (Creswell, 2007), participants were given the option to contact me after conducting interviews to make any relevant changes or provide clarifications to their answers, if they so desired. However, none of them did so. I also followed up with several students via email after their interviews, asking for further explanation and clarification on their interview responses.

3.5.1 Case Selection for In-Depth Analysis

While all 12 small groups in the VE were observed throughout the seven-week collaboration, four groups were selected for in-depth case analysis. These groups served as the focal units for both within-case and cross-case analysis, providing insight into how group-level dynamics, learner agency, and intercultural strategies unfolded over time. The case selection followed a purposeful sampling strategy based on emergent patterns observed during the early phases of the VE. During Weeks 1 to 3, I engaged in ongoing ethnographic observation across multiple platforms (Zoom, Padlet, and collaborative documents), maintaining detailed fieldnotes and interaction logs. The goal was to identify groups that exhibited diverse and illustrative intercultural phenomena relevant to the research questions.

The following criteria were used to guide the selection:

- Variation in communicative and interactional styles, including modality preferences (e.g., individual and collective multimodal choices, groups' utilization of synchronous and asynchronous digital tools), linguistic strategies (e.g., code-switching), and emotional expressions (e.g., humor, frustration, empathy);
- Emerging group cultures and intercultural strategies, evidenced by patterns of bonding, leadership, silence, and interpersonal alignment or dissonance;
- Instances of conflict, discomfort, or negotiation, including cultural misunderstanding, miscommunication, participation asymmetry, and moments of intercultural tension or critical reflection;
- Differentiated strategic autonomy (specifically on the group-level), and learner agency where learners showed capacity to adopt varying roles (e.g., peer mentors, cultural mediators, silent observers) or reinterpreted the task based on group needs;
- Evidence of reflexivity and transformation, as captured in Week 1 videos, Week 2 group interviews, and later in the semi-structured interviews and stimulated recalls.

Using this matrix, the following four groups were selected:

- **Group 1:** Notable for using Instagram as a bonding tool, personal intercultural connection, curiosity and compassion, and strategically navigating silent participation and humor (Layla, Eric, Lubna, Michael);
- **Group 2:** Exhibited flexible leadership and task ownership, and emotional responsiveness, with code-switching and negotiation strategies shaped by task-based relationality (Nancy, Dania, Ruba);
- **Group 3:** Characterized by task-oriented and formal leadership, limited accommodation strategies and uncertainty of dealing with differences (Bella, Holly, Kamal);

- **Group 4:** Revealed intercultural discomfort and face-saving approaches to resilience, disengagement, and emotional withdrawal (Tamara, Catherine, Tom).

These groups represented a heterogeneous sample that collectively illustrated diverse learner profiles, varying VE trajectories, and critical incidents essential for understanding interculturality as a dynamic process.

3.5.2 Thematic Coding

The coding process was grounded in a combination of deductive and inductive approaches, utilizing MAXQDA 24.9.1 (see examples of coding using the software in Appendix K) to generate recurring and salient themes and connections across the dataset. I began by organizing the interview questions into thematic sections based on the structure of the interviews, such as early intercultural experiences, challenges and benefits, mid-exchange developments, task and tool reflections, and final reflections. These sections formed the basis for initial top-level codes. From there, I derived sub-codes directly from the survey data, observed VE interactions, collaborations, artifacts, and interview questions, and expanded them using an inductive analysis of the data.

As I proceeded with rounds of coding and re-coding the datasets, I employed multiple coding methods to assign initial codes that fit together into categories and eventually narrowed them down to concrete themes. Line-by-line structural coding was mainly used to code survey and interview data. This method enabled me to assign additional codes and refine initial ones, and it helped get below the surface of participants' responses to obtain a deeper understanding of their experiences. To work with the larger non-text data (i.e., recorded meetings), I conducted descriptive and process coding, in which I assigned short phrases to encapsulate qualitative data in these data sources. This method helped me manage the analysis of the large set of video content.

Additionally, based on patterns in participant responses and drawing on the literature around intercultural communication strategies, I developed detailed sub-codes for ‘intercultural strategy’. These included specific communicative acts such as code-switching, paraphrasing, clarification requests, and emotional management, among others. I also added context-specific codes that emerged from the data, such as ‘tension’ and ‘miscommunication/understanding’, to better capture the nuanced dynamics of online intercultural collaboration.

I also employed value coding to code excerpts from participant interviews and some relevant VE tasks (particularly Week 2’s group interview and Week 6’s reflection video) that pertain to the participants’ values, beliefs, attitudes, interpersonal, and intrapersonal experiences in the VE. For example, I used codes such as ‘feelings about self’, feelings about others’, beliefs’, and ‘evaluations’ to capture participants’ affective and reflective stances. Given the fact that what is observed of a participant’s behavior might not harmonize with what they say they value or believe in, value coding helped complement the extent to which participants’ actions and practices during the VE aligned with what they shared with me during the interviews. All codes and sub-codes were documented in a coding manual with definitions (Appendix L), which I used consistently during rounds of coding. This allowed for both consistency and flexibility to capture emergent insights grounded in the group encounters.

3.5.3 Within-Case and Cross-Case Analysis

As recommended for thematic analysis strategies in multiple-case study design, the researcher should conduct an analysis of each emerging case separately to generate a better understanding of the complexity of each case within the collective case study (Creswell, 2007; Yin, 2014). This stage is referred to as *within-case analysis* (Creswell, 2007). Following this, a *cross-case synthesis* can be conducted to identify patterns, similarities, and differences across the cases (Yin, 2014).

Because I conducted an exploratory multiple-case study, I employed this technique to interpret the meaning of each case and provide a detailed description of the themes in each. Each selected group was analyzed as an individual bounded case (Yin, 2014), with the aim of exploring its evolving culture and relational dynamics over time. Within-case analysis involved constructing detailed case narratives based on complementary data sources: interaction transcripts, group artifacts, visual/multimodal materials, and interview data. Thematic patterns were generated using interpretive thematic analysis (Clarke et al., 2015), informed by inductive coding (emerging from the data) and deductive coding, as explained earlier. These themes were first examined within each group to trace changes, fluctuations, or continuities in IC strategies and group dynamics.

Afterwards, I conducted cross-case analysis, which is a thematic analysis across the cases, to identify similarities, differences, and connections between, within, and across each case of the selected student groups. Individual participants' data were further contextualized in their VE group experiences, illustrating the potential factors that shaped those experiences. This analysis strategy helped to identify points of convergence and divergence across the four cases. This comparative stage helped me to navigate the complexity of IC and generate potential IC paradigms across reported cases. For instance, it revealed how similar challenges (e.g., silence, conflict, leadership) were navigated differently depending on contextual factors such as personalities, cultural histories, technological affordances, and instructor implementation choices. It also enabled the identification of group-specific cultures that mediated learners' engagement with interculturality, highlighting the value of group-level analysis over essentialist national culture framings.

Given the theoretical nature of RQ3, I brought themes from the student interviews and VE interactions and artifacts highlighting learners' experiences and practices of interculturality and its components together with understandings and theoretical frameworks that are widely

disseminated when exploring IC gains in VE (e.g., Bennett, 2013, 2017; Byram, 1997; Deardorff, 2006,2009; Dervin, 2016). This process was followed to investigate and share the ways in which findings affirmed, challenged, and extended current approaches to IC in TMLL mediums. Acknowledging the complexity of the phenomenon, this comparison did not necessarily aim to promote certain models or epistemologies of IC over others when conducting VE, but rather it attempted to better understand IC as a dynamic dimension of EAL/ESL learners' interactions in ELF VE, re-visit widely accepted models of IC, and explore how adopting them uncritically can potentially obscure interculturality in TMLL.

3.6 Ensuring Research Quality

Yin (2009) posits that to ensure the quality of social sciences research, which includes case study research design, the researcher should conduct validity and a reliability test to ensure the credibility, trustworthiness, and data dependability of the study throughout the different phases of research. Yin (2009) also recommends a few tactics to be employed at different phases of the case study research, particularly when addressing various types of validity. The following section focuses on measures taken to maximize validity and reliability of this research.

3.6.1 Validity

In research, construct validity refers to "the degree to which the research adequately captures the construct of interest" (Mackey & Gass, 2022). In the context of case study research, this type of validity is often considered complex and problematic (Yin, 2014) because many of the variables investigated cannot be easily or directly defined or measured by the researcher (Mackey & Gass, 2022; Yin, 2014). Similarly, validity challenges are present when using digital ethnography (Murthy, 2011). To address these challenges and increase construct validity in this research, I used multiple complementary sources of evidence, including

interviews, non-participant observation, and VE interactions and artifacts, to explore my primary research questions. As noted earlier, data collected through non-participant observation triangulated the data gathered from surveys and interviews, providing a more robust analysis. This approach also helped prevent subjective judgment from influencing the interpretation of participants' experiences during the study. Furthermore, by including multiple cases to explore participants' IC experiences within their VE groups, I increased the validity of the research through comparison across cases (Yin, 2014). To further reduce bias as a non-participant observer, I also engaged in email interactions with interviewees when necessary to ensure that my interpretations of their responses were accurate and reliable.

Maintaining ecological validity is crucial to exploring the phenomenon under investigation. However, combining online and offline observation in digital ethnography has sparked some controversy (Murthy, 2011). Hine (2015) argues that offline observation may undermine the authenticity of the inquiry by distorting participants' virtual experiences. On the other hand, Murthy (2011) contends that excluding offline aspects of participants' lives can limit the study's completeness. Given that "digital technology is now deeply enriched in contemporary human life" (Bhatt, 2023, p. 3), it is nearly impossible to disregard the online-offline nature of VE interactions (Dooly, 2011). To address this, I employed multiple tactics to present a more holistic view of participants' VE experiences. Following Hine's (2015) approach, I conducted all observations and interviews virtually, immersing myself in the social world participants inhabited online, to understand how they constructed their relationships with each other in the VE. To capture their offline experiences, I included responses in the interviews where participants shared interactions and events that occurred offline, such as classroom discussions. Additionally, I included survey and interview questions that addressed non-VE aspects of participants' lives, including personality traits, daily life, and any prior intercultural experiences.

3.6.2 Reliability

Reliability in qualitative research is not only about replicability in the positivist sense (Mackey & Gass, 2022); it also encompasses the concept of trustworthiness demonstrated through transparency, reflexivity, triangulation, and rich description (Lincoln & Guba, 1985). Due to the exploratory nature of this study and the uniqueness of the research construct, including the VE context, its planning, and implementation, it is impossible to guarantee identical results. However, using a dependable protocol that thoroughly documents the research process is crucial to enhancing reliability (Creswell & Poth 2018; Merriam & Tisdell, 2016). Since this multiple case study involved digital ethnography approaches, my study protocol included a detailed description of my positioning and participation role within the observed VE community, the study informants and the data they provided, the definition of IC constructs and theoretical premises informing the research, and the methodology protocol, from participant recruitment to data collection methods, coding, and analysis (LeCompte & Goetz, 1982; Yin, 2014).

Transferability is also key in qualitative research (Yin, 2014). The multiple-case design employed in this study enhances its transferability by providing rich descriptions of the study cases through within-case analysis, followed by case comparisons, which demonstrate how IC patterns recur or differ across cases. In this sense, transferability is supported by providing thick descriptions and cross-case comparisons, allowing readers to assess applicability to other contexts (Yin, 2014).

It is also worth noting that I employed both structured and unstructured interview questions, adapted to the evolving implementation of the VE and participants' IC experiences. While I used identical questions for all interviewees (except for the simulated recall questions), individual interviews included follow-up questions tailored to participants' responses. Additionally, I adjusted interview questions according to the developments observed in the VE.

As a result, while the format of all interviews was consistent, they remained adaptable to the specific context of each participant's experience.

3.7 Chapter Summary

This chapter outlined the research design, methodology, and data collection process employed in the study, emphasizing the integration of digital ethnography and case study approaches. This methodological combination enabled a rich, multi-layered exploration of IC in VE environments. The case study approach facilitated an in-depth analysis of student experiences across multiple VE groups, offering insight into the evolving nature of IC in collaborative contexts. Digital ethnography complemented this by capturing not only verbal interactions but also non-verbal communication and emotional responses, contributing to a more holistic understanding of intercultural dynamics.

The study adopted an insider-outsider stance, whereby I collaborated with VE instructors to support the exchange without directly participating in its facilitation. This position allowed for neutral observation, minimizing researcher bias while enabling the collection of diverse qualitative data from interviews, non-participant observations, and VE interactions.

Reflexivity was a central aspect throughout the data collection and analysis process. My engagement with participants enriched my understanding of how VE fosters intercultural learning and prompted reflection on how my own positionality shaped the research process. These methodological choices laid the groundwork for analyzing the intercultural communication practices within VE settings. The next chapter offers a detailed profile of the study participants, providing further context for the findings.

Chapter 4

Introducing the Participants: Setting the Stage for the Virtual Exchange

This chapter provides an overview of the profiles of each of the 13 study participants who formed the four VE case study groups presented in this research. The individual participant profiles include details of their personal, educational, and sociocultural backgrounds, as well as any intercultural learning experiences they had prior to this VE project. Furthermore, it summarizes each participant's expectations for intercultural language learning and the challenges and opportunities they anticipated in their VE experience. The information presented in this chapter was obtained from participants' responses to the following data: the pre-study survey, the autobiography videos (Week 1), and the ice-breaker questions in the study interviews (third and seventh weeks of the VE). It is noteworthy that the profile descriptions vary in terms of both detail and length, and this is due to several factors. Initially, it should be noted that two participants (Michael from Group 1 and Tamara from Group 4) did not participate in the study interviews. Furthermore, it was observed that the participants' survey and interview responses differed in complexity and elaboration. Some (e.g., Layla, Dania, Nancy, Lubna) voluntarily shared details about their cultural identity, life challenges, and opportunities, while others (e.g., Tom, Michael, Catherine, Kamal) kept more concise responses and shared minimal information about themselves.

As described in Chapter 3, I followed a set of criteria to select these four groups as cases for the study. These criteria were the study components that each participant completed (i.e., the survey, the study interviews, and the observation consent), as well as the VE group cultures and intercultural strategies that created distinctive group dynamics during the VE project. As previously mentioned, these intercultural practices encompass the strategies and decisions that participants employed to express their viewpoints and address situations that appeared to be interculturally challenging situations.

This chapter provides an overview of the group participants to help readers develop a foundational understanding before engaging in the research analysis in the following chapters. Familiarity with the participants sheds light on how their personalities, communication styles, learning experiences, and backgrounds influenced their group dynamics. It also clarifies how individuals contributed to the collective relational practices that underpinned their intercultural collaborations during the VE. These profiles also acknowledge the internal cultural diversity within each group, supporting a non-essentialist (i.e., non-nationalist or ethnic) approach to understanding their evolving intercultural experiences (Guth & Helm, 2019). While most participants were Jordanian or Chinese, each had a distinct cultural profile and demonstrated unique behaviors and strategies that influenced relationship-building and collaboration. Table 5 summarizes the group participants, whose real names were replaced with pseudonyms. Participants from Canada selected Anglo pseudonyms, while those in Jordan chose Arabic ones.

Table 5

Group Participant Profiles

Group	Total Members	Study Participants	Interviewed Participants	Names of Participants	First Languages of Participants
1	4 (2 Ca: 2 Jo)	4	3	Eric; Michael Layla, Lubna	Chinese Arabic
2	4 (2 Ca: 2 Jo)	3	3	Nancy Dania; Rana	Cantonese and Mandarin Arabic
3	4 (2 Ca: 2 Jo)	3	3	Bella Holly Kamal	Cantonese and Mandarin Cantonese Arabic
4	3 (2 Ca: 1 Jo)	3	2	Tamara Tom Catherine	Arabic Cantonese Chinese

Note. Ca is an abbreviation for Canada, and Jo is for Jordan.

The following sections provide a thorough description of each participant and the VE groups. As clarified, all this information was reported by participants themselves in their survey and interview responses in addition to what they shared in their Week autobiography videos.

4.1 Group 1

4.1.1 Eric

Eric was a 24-year-old international student from China in his fourth year of studying financial and business economics in Canada when he participated in the VE. He had been learning the English language for at least 18 years. The Chinese government granted him a scholarship to study in Canada for six years. In one of his study interviews, Eric explained that what sets him apart from other international students from China is his family's challenging financial situation, which necessitated him working part-time to make ends meet in a city like Toronto. Since the age of 17, he had held various part-time jobs, initially working as a waiter in a Chinese restaurant while in high school, and subsequently in a Japanese restaurant after starting university. Unlike his first workplace, most of the customers he served at the Japanese restaurant came from a variety of cultural backgrounds, including white Canadians, with whom he enjoyed exchanging short conversations.

He appreciated his current job because it enabled him to learn and practice English more comfortably, and to engage with people from different Asian and other cultural backgrounds. Since his workplace was close to his university campus, many of his customers were young people, which gave him the courage to start casual conversations with others. Eric had also developed an interest in observing the behavior of Asian people of different generations, such as their eating habits and ordering styles, and how these differ between Asian parents and their children born in Canada. He said, "... even though for some customers I might not understand their language, but I can still observe them by eyes, like look at them... I found out so many new things."

As a Hui Chinese from Xinjiang⁴, or a “Chinese-speaking Muslim”, as he described himself, Eric grew up appreciating his Muslim heritage, learning about and following his community’s practices of Islam. As much as he was proud to be Hui Muslim, he struggled with validating his Chineseness in his home country and Canada as well. Surrounded by stereotypes about Islam and Muslim Chinese communities, one of his motivations to participate in the VE was to raise awareness among his Chinese peers about his Muslim Chinese culture and community. This opportunity, as he described, would give him a chance to clarify any misunderstanding about people in Xinjiang, to answer questions about his city, and share his culture with everyone. Similarly, Eric was curious about Jordan and his partners in Jordan, and hoped to learn more about the Jordanian culture and improve his English-speaking skills by working with Layla and Lubna. Although he seemed confident about communicating his thoughts and viewpoints in English to others, he felt nervous about his fluency and hoped that partners from Jordan “could accept” his English.

4.1.2 Layla

During the VE, Layla was 18 years old and a first-year pharmacy student in Jordan. Before settling in Jordan, she lived for several years in Ukraine with her family, as she was born to a Jordanian father and a Ukrainian mother. She later moved to Dubai, United Arab Emirates, before eventually relocating to Amman, Jordan. For her pre-secondary education, Layla attended a private school in Amman and graduated from the International Baccalaureate (IB) program. As she explained, international education helped her develop advanced English skills, which she frequently used in conversations with family and friends, as well as for researching topics of interest.

⁴ Xinjiang is a region in the northwest of China and is a home to many Hui and Uyghur Muslims in the country. (Pew Research Center, 2023).

Born and raised primarily in Amman, Layla was accustomed to an urban lifestyle. As she described, Jordanians in urban areas tend to receive a higher quality of education compared to those in rural regions and have more opportunities to practice English. The fast-paced and neoliberal nature of city life influenced her goals as a university student and aspiring professional. In her autobiographical video, she described herself as a “pragmatic person”, constantly seeking opportunities to connect with others and learn about the world.

Before participating in this VE, Layla had the opportunity to travel to the United States on a short-term exchange program in 2019. Studying alongside classmates from diverse cultural backgrounds was, in her words, a “memorable” and “eye-opening” experience, providing her with the chance to develop new skills. In her interview, she explained that this study abroad experience taught her to be more “adaptive” to cultural contexts that were “very different from the one [she was] used to.” She also reflected:

I also learned how to communicate better, pay attention to microaggressions, and become more aware of the social and racial issues my classmates faced. Overall, the experience made me realize the importance of respecting other people’s identities, thoughts, and beliefs, regardless of how I felt about them. I also learned to communicate appropriately and precisely to avoid offending others.

Having grown up speaking both Arabic and Russian at home, Layla’s multicultural environment had “significantly” shaped her identity and worldview, which she described as “different” from those raised in monocultural families. While she recognized that Jordan is home to diverse cultural communities, she felt that her exposure to other local communities in the country had been somewhat limited due to her family’s Palestinian background. This background, she explained, has mainly surrounded her by Palestinian Jordanians and immersed her in Palestinian Jordanian traditions. This belief had left Layla uncertain about how people from more “conservative” or tribal communities in Jordan might perceive her values and beliefs, particularly given the influence of international education and multiculturalism on her personality and thinking.

Although she wanted to share Jordan's cultural diversity with her VE partners, Layla was concerned about her limited knowledge of certain segments of Jordanian society, such as tribal regions, and her ability to engage meaningfully if such topics came up in conversation.

In this VE, Layla hoped to build friendships with her new partners, have meaningful conversations, and gain new perspectives by learning about their experiences and viewpoints. She believed that doing so would help her feel more confident in conversations and broaden her horizons on intercultural issues. At the same time, she was slightly anxious about potential silences in conversations and whether she would be able to ask questions that her partners felt comfortable and interested in answering.

4.1.3 Lubna

Lubna was 18 years old and a first-year student majoring in human resource management when she participated in the VE. She temporarily moved from Ramallah, Palestine, to pursue her university degree in Jordan. Unlike many Palestinian youth her age, Lubna considered herself "fortunate" to have access to quality education in both Palestine and Jordan, which had helped her develop more advanced English language skills compared to many of her peers back home. Before joining her university in Jordan, she completed her secondary education in the only Catholic IB school in the West Bank. During that time, she was also involved in sports activities, where she formed lasting friendships with both Palestinian and international peers. Being part of her basketball team gave her the opportunity to practice English with her British coach and teammates as well. However, when comparing her English abilities to those of her partners in Jordan, she felt she lacked the confidence to speak her mind freely. One of her goals in joining the VE project was therefore to express her ideas in English with less hesitation.

Despite appreciating the educational opportunities that had shaped her English skills and social life in Ramallah, Lubna described the secular atmosphere of her school years as

“heartbreaking.” Since her school did not offer Islamic studies, she and her siblings had to attend after-school classes to earn the religious credits required for university enrollment. As she shared:

I would never get to know my religion and get in depth about its rules if my parents didn't play a role of teaching me what's haram, what's halal, how things are done right in the Islamic way. So, my goal is to cover the gap the school didn't fill with the knowledge my parents gave me and my own research that I started.

For Lubna, learning about Islam was not an “academic” matter; it was a “meaningful” way to develop a “sense of belonging” to her extended family and broader community in Palestine. Her desire to feel that she was a member of her extended family was her main motivation to embrace religion as a way of life, not just a school subject.

Another “disadvantage” of receiving an international education, as Lubna perceived it, is being associated with the elite. She expressed how others in her neighborhood often stereotype her as the *ابنت الـ* [daughter of] the IB school⁵, students commonly labeled as *فأفيات* [spoiled]. For a while, Lubna felt distanced from her community due to these assumptions, which painted a distorted image of who she was and the communal values she deeply appreciated. To “break these stereotypes” and reconnect with her community, she volunteered as a summer camp supervisor for children, “... I got to meet many special kids and learn from them, as well as meeting their parents and improving my communication skills with different types of personalities and mentalities.”

Like many young Palestinians, Lubna had lived her entire life under occupation in Ramallah. As a student, she had to cross checkpoints and cope with the imprisonment of several teenage friends. Her education was also frequently interrupted by school strikes protesting the detention of teachers and students in Israeli jails. These challenges had not only shaped her daily life but had also become a formative part of her Palestinian identity, an identity she was

⁵ When the word daughter in Arabic is followed by identified nouns, especially names of places or individuals, it creates a phrase that implies authority or a special status that place/individual has over that person.

eager to share with her VE partners. This included showcasing “the beautiful aspects of living in Palestine,” which she believed her partners may not have had the opportunity to learn about before. Through the VE, Lubna hoped to form new friendships and find inspiration in her partners’ perspectives and ideas. One concern she had, however, was how to navigate misunderstandings that might arise during their conversations.

4.1.4 Michael

Michael is a third-year undergraduate student from Suju, China, specializing in statistics during his participation in the study. Prior to enrolling in high school, Michael had acquired fundamental English vocabulary and grammar skills, yet his conversational repertoire remained limited to a few phrases. Michael's decision to travel to Canada for high school and university was motivated by his awareness of the pivotal role that English would play in his future academic and professional pursuits. It was in this environment that Michael's English communication skills underwent a systematic enhancement. However, his inclination to utilize English was confined to the classroom environment with his Canadian instructors and peers.

Outside of class, he continued to express himself in Chinese, his first language, when engaging with his Chinese classmates. As he clarified in his autobiography video, he perceived it as anomalous and exhausting for individuals who share a common first language to employ a second language for communication.

4.2 Group 2

4.2.1 Nancy

After spending most of her life in Kaiping, China, Nancy immigrated to Canada with her parents at the age of 18 in 2014, and she was keen to start her higher education studies upon her arrival. Before completing a diploma in marketing from a college in Toronto, she was interested in pursuing a career as an artist, as she is fond of painting and design. However,

everyone in her family persuaded her to obtain a degree in business so that she could maintain a “decent life” in Canada. Therefore, she first completed a college diploma in marketing and was in her fourth year as an undergraduate majoring in the same field.

Nancy’s first few months in Canada were very challenging as she had a hard time with her English skills. To join college, she needed to be at a certain level of English proficiency that she was not at when she applied to college. The program administration back then advised her to join a Language Instruction for Newcomers to Canada (LINC) program if she was not willing to spend money on ESL courses. However, the LINC class did not provide her with the English language learning experience she was hoping for, as she was the youngest student in her class, and she lacked the language practice she needed since her classmates spoke only Chinese and Mandarin before and after class. With the help of her LINC teacher, she was then able to join another ESL program in an adult high school, where she could learn alongside other students her age and work on the English language skills that she needed for college. As she reflected in her interview, this learning experience made her realize that one’s learning environment is pivotal for learning growth and language development.

In addition to improving her English, Nancy had to navigate the cultural adjustments that came with moving to a “Western country” after spending most of her life in China. In her interview, she reflected on the cultural differences that struck her early on, particularly in terms of communication styles. “Chinese culture is more reserved ... we won’t say no directly,” she noted. “But in Canadian culture, if you don’t like something or you’re uncomfortable, you just say it.”

Despite these initial challenges, Nancy adapted relatively smoothly to life in Canada, especially given her young age at the time of migration. She came to view cultural differences not as barriers, but as “opportunities for growth and learning”. She described how interacting with people from diverse backgrounds helped broaden her perspectives and made her feel more

connected to the multicultural fabric of Canadian society. Furthermore, her frequent family visits to China have motivated her to intentionally learn and reflect more about her Chinese identity and culture; now that she is not as immersed in it as before, as she described.

At the time of the VE, Nancy was a small mortgage business owner. As she stated in her study interview, her life experiences in “multicultural Canada” had helped her work with clients from different cultures. Similarly, her business had exposed her to opportunities to navigate different communication styles than hers. These experiences had constantly helped her develop the communication skills she believed young people need in the global market.

However, meeting and working with partners from Jordan in the VE program included a new experience for Nancy, and she hoped to learn about the Jordanian culture and her partners’ life routines as well. With “[her] age and wide intercultural professional experience”, she said that she had no concerns about connecting and working with her VE partners for the next few weeks.

4.2.2 Dania

Dania was a 19-year-old first-year student in Jordan, majoring in data science and artificial intelligence (AI), when she participated in the VE. Born to a Jordanian family, Dania had never left Jordan to study abroad, nor lived in another country. However, she developed a great passion for learning languages. Besides speaking English, which she had learned for almost 14 years, Dania taught herself Korean, and she started teaching herself German right before the VE. To Dania, learning different languages was not just a leisure activity, but rather a unique opportunity to immerse herself in the cultures of these languages. In her study interview, she illustrated this by saying:

For example, *mansaf* [Jordan’s national dish], when you explain it in English, it does not sound as appetizing as you say it in Arabic. Like you explain it, you say it is like yogurt with meat and stuff, but only in the Jordanian culture, you express it with a word it is only for this thing, so it is culture... Like every tradition in every country, has their

own names and their own words. When you translate them, they do not sound as good as in their original language.

It was at a very young age and during her first conversations in English with her cousins, who were visiting from the US, that Dania first realized the beauty and uniqueness of each language, the thing that motivated her to learn English well and other languages as well:

I used to think that... when you say something in another language, you translate it in your head in Arabic and then you speak it... But when I first had my first conversation with my cousins, I only like thought about it in English. So I was like: Wow!! Languages actually exist!

This experience, as she described, had changed the way she looked at languages as she started to view them as “different ways of communicating thoughts and ideas”. She believed that this understanding of language learning played a major role in developing her speaking fluency. Through her motivation and passion for learning languages, Dania was able to develop her proficiency in multiple languages and in this VE, she hoped that, along with practicing English she could learn new things about new cultures, make new friendships, and get motivated to learn a new language that her VE partners speak.

First-time experiences played a crucial role in Dania’s recognition of linguistic and cultural diversity around her. She was 12 years old when she participated in a robotics competition that included regional and international teams from schools worldwide. For the first time, she met Arab Muslim and non-Arab non-Muslim students from different countries. This experience made her realize that cultural differences exist, even among Arab countries:

I don't remember this much, because I was in sixth grade, but I remember that I was more open to other cultures ... I only knew that we're all Arabs, and that most of us are Muslims in these countries so this is what connects us. But then I figured out, no, every country is different in a way.

Dania sounded excited about the VE, and her main concern, as she had communicated in her survey, was the time difference between Jordan and Canada and its potential impact on the quality of their group meetings.

4.2.3 Rana

Rana was 20 years old and in her second year of biotechnology studies in Jordan. She was born in northern Jordan and had never left the country. However, Rana hoped to seek opportunities for graduate studies or work abroad at some point in her life. This goal had been her biggest motivation to work hard on improving her English and connect with people from other countries as well. As she clarified in her study interview, "... one of my goals is to go to other countries like Canada or America, so I want to know about other cultures to help me communicate with people in English." In addition to improving her English communication skills, Rana was aware that learning about other cultures and how to communicate with people from cultural backgrounds different from hers was key to living or working smoothly in an international environment. For that reason, one of the key topics she was planning to discuss with her partners in Canada was their life experiences as immigrants in Canada, so she could learn from the opportunities and challenges she navigated after their arrival. As she explained, discussing such a topic could help her be mindful of challenges she might face if she moved abroad in the future.

Even though she had spent 15 years learning English, Rana was not as fluent as she had hoped. After watching her VE partners' autobiography videos in Week 1, she realized that her English was not as good as theirs. Addressing her partners in her Week 1 video, she said that because of the proficiency gap between her and them, she hoped to get their help to practice speaking English more during their VE time together. Since she received her public education in Jordan, her teachers followed a grammar-translation approach in teaching the language, which she mainly blamed for her lack of English proficiency:

هلا قوية بالgrammar يعني هلا لما آجي أحل English grammar بحلها بسهولة، بس لما آجي أحكي أو أسمع
 حدا بيحكي مش بسهولة بفهم صراحة أو بحكي... المفروض يكون فيه مراعاة إنه يكون في مثلا combination
 بين العربي والإنجليش

[All my teachers used to focus on grammar, so I'm good at grammar and I can easily answer grammar questions but when I speak or listen to others, this is when it gets

tricky and to be honest, I don't comprehend much. Teaching should focus more on English since we will need it in university or for instance, they could develop the English curricula more.]

Thus, what excited Rana about the VE experience was the opportunity it would give her to practice English with other students in Canada, especially since her opportunities for speaking English in her community were limited to her biotechnology classes. At the same time, she was nervous about not being able to comprehend much in their meetings and work together during the exchange.

Despite these learning challenges, Rana managed to develop a positive attitude towards her English learning. Since high school, she has joined English language activities and courses at the British Council, where she has been able to practice her language skills, in addition to reading books and magazines on a variety of topics. These efforts to improve her English have helped her develop her ability to communicate in daily English. However, she “still [needed] more time and practice”, as she said, to get to the proficiency level she desired. Using English as the main means of communication in the VE, Rana was excited to share more about her Jordanian culture with others during the VE. As a “proud Jordanian”, she perceived the VE as a great opportunity to “teach” others about her home country and clarify any stereotypes or misinformation her partners in Canada might have about Jordan.

4.3 Group 3

4.3.1 Holly

Holly was 23 years old and a fourth-year international student finishing her accounting degree in Canada. Born and raised in Guangdong, China, she grew up speaking Cantonese as her first language and Chinese as her second. Holly began learning English in elementary school, and her parents enrolled her in an after-school English program, where she continued to learn English language skills. Growing up, learning English was an extra pressure on Holly, especially since she never found it fun. As she made her feelings clear in her autobiography

video, she stated, "... To be honest, back then me learning English was to meet my parents' expectations. I knew English was a global language and maybe important to me in the future, but I do not think learning English was enjoyable." Since her school education relied heavily on testing and grammar instruction, Holly lacked confidence to communicate with others in English, especially when she arrived in Canada. She did not have the courage to reach out to others:

I often feel that I do not have enough vocabulary and worried about making mistakes in grammar when I speak. I also worried that when I am correcting, people will laugh at me. These thoughts made me completely afraid to speak English with people.

As she explained, it was only later that she got used to the idea of being a "non-native speaker" of English because many people in Canada are immigrants and "probably face similar challenges to [her]". This has made Holly see the English language differently. It used to be a school subject "that [she] had to pass, but later it became a way to communicate with other people and share ideas.

Although she had enjoyed meeting people from different cultural backgrounds in Canada for the past four years, Holly was still nervous about engaging with people of other cultures or when finding herself in a cultural environment unfamiliar to her. In her survey, "personality clashes and accidentally offending someone" were among the concerns Holly had prior to the VE experience. When asked about that concern in the study interview, she clarified it by saying:

When I first came to Canada, that was a new environment for me, so I feel nervous and frightened, and that was the key to my emotional (status), so that is how I describe me when I am meeting for another new culture from Jordan or the new students there

In the pre-study survey, Holly shared that she did not follow any religion. This made her feel "unsure" about how she might approach what she described as "sensitive topics". She was also unsure how to discuss such topics if her partners brought them up. During her study interview, she expressed uncertainty about how to engage in conversations on topics related to

religion and cultural symbols, particularly those unfamiliar in her own cultural context. Comparing her background with that of her VE partners, she reflected on the differences in cultural awareness:

In Jordan, people have a different racial belief, that they wear... umm what was that called? [pointing to her head to refer to the headscarf] ...The environment [in China] is not used to or have much knowledge about that religion. So, I am just very afraid that I like offend someone, because I do not know how to communicate with them.

However, she clarified that feeling nervous about meeting her VE partners did not diminish her excitement about meeting and working with them over the next few weeks.

4.3.2 Bella

Bella was an international student from Guangdong, China, who moved to Canada right after finishing high school in her home country. She spoke both Mandarin and Cantonese as her first languages. Although she grew up speaking Mandarin at home, she never studied it formally. As a result, she only spoke Cantonese casually with her parents. Since Mandarin is the official language in China, Bella learned it in school and primarily used it to communicate with her Chinese friends, who joined her school from different parts of the country. At the time of the VE, she was 21 years old and studying accounting in Canada.

During the time of the VE, Bella was also working as a financial analyst in an industrial company near her university, through which she practiced English more frequently and learned how to work with others in an international work environment. She appreciated her workplace for its cultural diversity, welcoming atmosphere, and the way it helped her improve both her professional skills and language proficiency:

I don't just work on a computer on my own, I need to coordinate with my colleagues and supervisors, also attend meetings with the team every week ... The workplace needs social contact when I sit with co-workers in the same office. Although I am not an outgoing person, it motivates me to join their conversation.

Bella's work environment was "very different" from the other environments she was used to (i.e. her friends and local community in Canada). She said that her work environment

provided her with the opportunity to meet and collaborate with people from countries such as Vietnam, Sri Lanka, and India. As she described in her autobiography video, this experience shaped her perception of English as a global language, one she believed was essential for communication and professional purposes worldwide. Developing an awareness of English as “a medium for communication between people from different cultural backgrounds” was a key factor that motivated Bella to seek interactions with other English speakers. This included her VE partners in Jordan, with whom she hoped to build friendships, learn about Jordanian culture, and share her own. Since she had never connected with peers from the Middle East prior to this VE, Bella expressed some concern about encountering cultural differences that might affect the flow of their interactions.

4.3.3 Kamal

Kamal identified himself as a Palestinian Jordanian who was born and raised in Amman, Jordan. He grew up speaking Arabic and also learned English and basic French in school. At the time of the VE, he was 18 years old and beginning a degree in pharmacy, a field he described as something he was “passionate” about. He received both his primary and secondary education entirely in Arabic (i.e., the national curriculum of Jordan). As part of the curriculum, Kamal had studied English for most of his life, and he continued to hope for opportunities to improve his language skills by practicing with more people.

This VE experience marked Kamal’s first intercultural encounter, as he had never studied or lived abroad, nor had he interacted with individuals from different cultural backgrounds. His primary goal in joining the VE was to connect with students in Canada to improve his English-speaking skills and communicate more confidently and fluently. However, as he noted in his survey, he was concerned about possible language gaps during communication with his VE partners, which could lead to interaction difficulties.

In both his video and study interviews, Kamal commented on his tendency to speak noticeably fast in both Arabic and English, providing very brief responses. He stated that speaking quickly and in short utterances is part of his usual communication style with others.

4.4 Group 4

4.4.1 Tamara

Tamara was a medical laboratory student in Jordan, where she was born and raised. Her first language was Arabic, and she had never had the chance to study or live abroad. Although she began learning English at a young age, she described her English proficiency as novice because she had rarely had opportunities to practice it within her local community.

As she shared in her autobiography video, she casually took online English courses with her sister and some friends to stay motivated and continue improving her language skills. Tamara also noted that her English education had focused more on grammar and vocabulary than on listening and speaking, which contributed to her lack of confidence in speaking the language.

Since starting university, she has made more effort to practice English speaking with her siblings and friends. By participating in the VE, Tamara hoped to learn more about her partners and exchange information about their countries and cultures.

4.4.2 Tom

When he participated in the VE, Tom was 18 years old and a first-year student from Hong Kong. He was majoring in information technology in Canada, and his first language was Cantonese. He also spoke Mandarin since it was part of his school education. Tom traveled to Canada after he finished high school and started university. Although he started learning English in elementary school, Tom faced a lot of difficulties adjusting to life in Canada and using English daily:

... When I moved to Canada, I didn't know how to order food in English, and also the traffic... first time I moved to Canada, the wait time for the bus, I have to wait too long compared to my home country... I did not understand what my classmates are talking about, what my teacher is talking about. It was very hard... Honestly, I want to give up the first time I come to Canada.

To help him improve his English, Tom started a part-time job to communicate with more people and use English with more confidence.

Although he participated in plenty of intercultural activities in his high school, where he got to learn about and discuss some of his peers' religious practices and nation cultures, Tom had never heard of Jordan. Thus, his primary goal in participating in this VE was to learn more about the culture in Jordan, especially the traditional dishes Jordanians make. His biggest concern, however, was managing the time zone difference between Canada and Jordan.

4.4.3 Catherine

Catherine was 22 years old and a third-year student of economics. Her first language was Chinese, and she had been learning English for 12 years. Catherine immigrated to Canada with her parents when she was 17, and she faced many challenges adjusting to life in Canada and coping with homesickness:

I have my family members there [China]... I had to force myself to speak English... In China, we, students stay in the same classroom and then the teacher move around each classroom but here in Canada, students move around each classroom. That is a totally different learning environment to me.” (Catherine, study interview)

However, living in Canada after those years had helped Catherine become “more independent”. As she said in her autobiography video, she had always found herself dealing with problems by herself because she did not have the same support network (such as her family and friends) she had back home.

Catherine was fond of travel, and she visited many countries around the world. She shared plenty of her travel photos in her autobiography video with her VE partners. However, connecting with her VE partners in Jordan marked the first interaction experience she had with

people from the Middle East region. She hoped that time zone differences would not be an obstacle to maintaining her connection with her partners there.

4.5 Chapter Summary

This chapter introduced the student participants involved in the VE project, organized into four groups, and offered a contextual foundation for understanding their VE interactions and collaborations within these groups. Through descriptions of their linguistic, educational, cultural, and social backgrounds, the chapter sheds light on the diverse life experiences that potentially shaped their goals, expectations, and initial approaches to VE collaboration. These portraits reveal participants' hybrid identities as bilingual and multilingual individuals, whose perspectives were formed at the intersections of local and global influences, migration experiences, and varying degrees of access to English language education.

As EAL learners, participants entered the VE with differing levels of confidence and communicative ability, often shaped by their exposure to intercultural environments. For instance, while some participants viewed VE as a unique opportunity to practice English and meet peers from unfamiliar cultural backgrounds, those with prior multicultural experiences approached the exchange as a means to explore identity and cultural understanding more deeply. These differing orientations suggest that participants' personal histories would likely influence how they perceived one another, navigated language and cultural differences, and contributed to shaping their group dynamics.

By providing insight into participants' backgrounds, this chapter sets the stage for Chapter 5, which answers RQ1 by examining the kinds of intercultural collaborations, referred to as group cultures, and the intercultural strategies that emerged across the VE groups and how these evolved over time.

Chapter 5

Types of Intercultural Collaborations and Intercultural Strategies Within the Virtual

Exchange Groups

This chapter presents findings related to the first research question: what kinds of intercultural interactions and collaborations emerge within VE groups, what strategies do learners use to navigate them, and to what extent do these interactions, collaborations, and strategies evolve over time? As outlined in Chapter 3, the VE project was originally designed to include instructor facilitation of groups' work to encourage dialogue on certain intercultural issues during Weeks 1–3, followed by student-led simulations and reflections in Weeks 4–7. However, instructors' differing approaches to implementation shaped distinct interactional and collaborative dynamics among the student groups.

These patterns of engagement, referred to here as *emerging cultures*, were formed by group members who, through their autonomy, established shared values and norms that influenced how they interacted. These emerging group cultures were not static; rather, they evolved as learners organically employed intercultural strategies in response to the demands of their interactions. These strategies, whether verbal, behavioral, or technological, were shaped by individual agencies and, over time, coalesced into collective patterns of engagement. In each group, the strategies adopted by individuals influenced and were influenced by others, gradually forming a shared repertoire that guided how members communicated, collaborated, and navigated intercultural complexities. As such, the evolution of group cultures was inseparable from the strategic choices learners made and adapted in real time, highlighting the fluid, co-constructed nature of intercultural collaboration in the VE setting.

The chapter begins by examining these emerging cultures as the evolving process of learners' autonomy, highlighting how participants in each group, collectively and individually, contributed to forming unique intercultural environments. It also explores the intercultural

strategies learners employed, both collaboratively and independently, to navigate and shape their interactions and collaborations within these group cultures. As highlighted in Chapter 2, these strategies are understood as the verbal, behavioral, and cognitive tactics used to interpret, negotiate, and co-construct meaning across linguistic and cultural differences. Strategies such as linguistic accommodation (e.g., paraphrasing, repetition, translation, code-switching), technological choices (e.g., preferred platforms or modalities), and interpersonal approaches (e.g., storytelling, humor, task orientation, and role-taking) were found to be mechanisms through which group intercultural collaboration was enacted and evolved.

Descriptions and analyses shared in this chapter were mainly driven from observations of students' interactions and collaborations in their autobiography videos (Week 1), group interviews (Week 2), Padlet discussions (Weeks 3–4), and scenario planning and scripting meetings/asynchronous collaborations (Weeks 4–5) because these tasks reflect the divergent group cultures and strategies in action, in addition to study interviews from weeks 3 and 7.

To align with the ethnographic orientation of this exploratory study and to capture the fluid, lived experiences of the learners, the cultural descriptions were written using narrative elements. This approach made it possible to trace how each group's collaborative and interactional culture developed over time, highlighting both the subtle changes and key turning points that shaped their evolving group dynamics. During the analysis process, I decided to give each of these cultures a name to amplify participants' autonomy in the process and reflect the focal values and the interactional and collaborative dynamics that helped shape them. The chapter concludes with a comprehensive summary of each group's emerging culture and the collective and individual strategies that shaped their evolving intercultural interactions and collaborations throughout the exchange.

5.1 Emerging Cultures within the Virtual Exchange Groups

Before diving into the emerging cultures in this VE, it is important to clarify that culture in the context of this VE is not understood as a fixed set of national or ethnic characteristics, but as emergent, situated, and shaped through the lived experiences of participants within the VE context. Instead of viewing participants as representatives of specific cultures, the data showed that culture was shaped within each group through the norms they created, how they communicated and interacted, and the values they used, both implicitly and explicitly, to guide their intercultural learning. As explained in Chapter 1, this study adopts the approach to culture as a process, not a product (Baker, 2022; Dervin, 2016), which means that culture is not something people “have” (i.e., a set of traditions or norms), but something people do; it is performed, negotiated, and reshaped through communication and interaction. This approach directly informs the study’s understanding of interculturality as a dynamic, dialogic process where meaning is co-constructed across differences through contextualized interaction rather than through essentialist comparisons between cultures.

Although students were not directly instructed to discuss culture, and instructors did not facilitate basic cultural discussions that emerged among them (as further detailed in Chapter 6), the data largely reflected how learners navigated and co-constructed intercultural meanings organically through their interactions. Drawing on the processual view of culture. This analysis focuses on how group cultures emerged relationally, through learners’ positionalities, communication practices, and affective choices, rather than seeing participants as representatives of fixed cultural groups. These cultures were ‘intercultural’ in that they involved active negotiation of difference, shared meaning-making, and evolving relational dynamics, as seen in practices such as storytelling, code-switching, and humor across tasks. Additionally, analysis entailed understanding how participants positioned themselves and others, how they, implicitly and explicitly, negotiated meaning, and how power dynamics played out in real time

rather than attributing certain behaviors or communication practices to national or ethnic backgrounds.

These evolving group-specific cultures were not imposed or inherited but emerged over time as learners engaged with one another, navigated challenges, and responded to the dynamic factors shaping their interactions. These group cultures were intercultural in that they were formed across differences in language proficiency, experience, and expectations, and were shaped through ongoing meaning negotiation in a digitally mediated, multilingual setting. The data showed that these cultures did not arise from shared backgrounds, but from participants' sustained efforts to understand, adapt to, and collaborate with one another in ways that responded to their positionalities and emergent group norms.

5.2 Emerging Virtual Exchange Cultures and Intercultural Strategies: Within-Case Analysis

I now turn to examine each VE group in more depth before making comparisons across the four VE groups. Table 6 below is a reference to summarized information on these four VE groups including information, such as pseudonyms and locations at the time of the exchange, and group members' participation in data collection.

Table 6

Summary of Study Groups

Group	Number of Members	Participants in Jordan	Participants in Canada	Interviewed Participants
Group 1 “I see you, I feel you	4	2 Layla; Lubna	2 Eric; Michael	Layla, Lubna, and Eric
Group 2 “ After all, I’ve got your back”	4	3 Dania; Rana	1 Nancy	Dania, Rana, and Nancy
Group 3 “Which comes first, language or culture?”	4	1 Kamal	2 Bella; Holly	Kamal, Bella, and Holly

Group 4	3	1	2	Catherine and Tom
"I dislike working with you, but I couldn't say it"		Tamara	Catherine; Tom	

5.2.1 Eric, Layla, Lubna, and Michael (Group 1): '*I see you, I feel you*': A Culture of Curiosity and Compassion

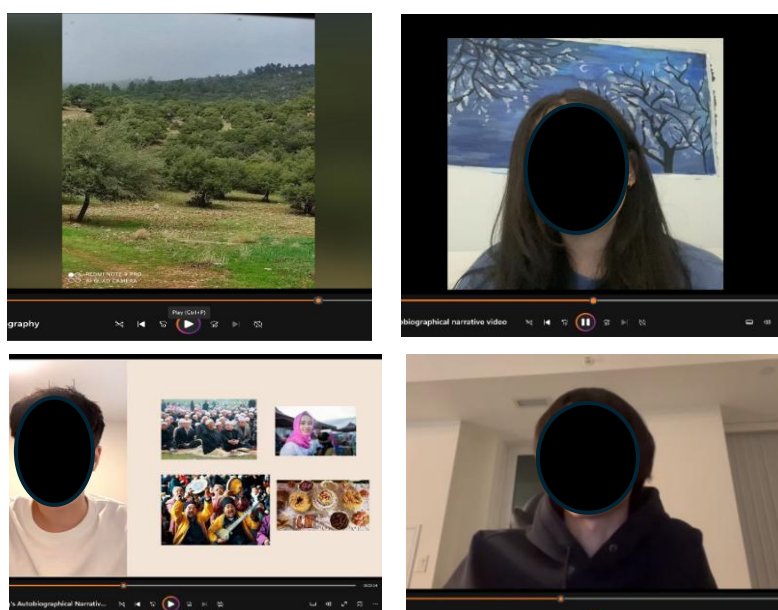
Group 1 demonstrated a highly collaborative and relational approach, shaped by both collective and individual strategies that deepened their intercultural engagement. Members consistently used empathy as a layered, evolving practice, adapting language, tone, and questions to create space for vulnerability and shared understanding. They relied on open-ended storytelling, humor, and cultural references to connect, while also drawing on strategic tools such as paraphrasing, linguistic support, and multimodal expression. These strategies fostered trust and allowed the group to navigate cultural differences with care, forming a group culture grounded in openness, emotional attentiveness, and mutual learning. However, a noticeable gap emerged between the close-knit interactions of Layla, Lubna, and Eric and Michael, whose initial active participation gradually lessened, resulting in a more peripheral presence in the group.

For Layla, Lubna, and Eric, the VE was an opportunity to learn beyond the graded task, as they all described. Alongside sharing their English language learning journeys and schooling experiences, they regularly discussed their cultural upbringing and how it shaped their identities. Their group culture began forming as early as Week 1 through the exchange of autobiography videos. Each shared personal insights into their language learning and cultural identity. Lubna and Eric, for example, included photos of their families and communities in Palestine and China, using them to illustrate local settings and sociopolitical challenges. Lubna emphasized that she did not need "a written script to talk about [herself]," and wanted to show "the beauty of Palestine" that "nobody knows." Layla spoke informally and at length about her

multilingual upbringing and its influence on her worldview. In contrast, Michael presented his video more formally, reading from a script, which focused on his English learning without referencing his cultural background. Figure 4 showcases screenshots taken from the group's Week 1 videos: Eric shared pictures from the internet on his community and their Muslim traditions in China, while Lubna shared photos she took of their farms and family members in Palestine. Layla and Michael, as shown, appeared on camera with a casual Zoom background.

Figure 4

Group 1's Multimodal Choices in Week 1 Autobiography Videos



As Layla, Lubna, and Eric indicated in their study interviews, all the choices they made when making the video, whether it is the content or the multimodalities of sharing it, communicated their “real” and “authentic” selves and the communities they come from and they reflect their “story” and matters that “shape [their] identity”. These narratives became a recurring pattern in their interactions, positioning personal experience as a shared space for intercultural learning. Eric frequently spoke about his isolation in Canada as a Hui Muslim Chinese, Lubna recounted life under occupation and political resistance, and Layla reflected on her multilingual identity shaped by travel and relocation. Towards the end of their videos,

Layla, Lubna, and Eric shared their interest in learning about each other's cultures. Eric, particularly, sounded excited as he addressed his partners in Jordan by saying "I hope through this virtual exchange that I can learn about the Jordanian culture and share with you the difficulties and some of the interesting stories I encountered in the process of learning English".

Instead of focusing strictly on the assigned task of preparing questions about their English language learning experiences, the group's VE discussion in the Week 2 interview expanded to include topics that had emerged in Week 1. These included Muslim life in China, life under occupation in Palestine, and the opportunities and challenges of growing up multilingual in a monolingual society. Michael started the meeting with a question on how the group prefers to ask the questions. Instead of having each member ask all their questions to one member at a time, the group decided to take turns to ask their first question to all members and go for another round. As Layla described, this strategy allowed them to "have equal turns and get to know about each other." This strategy sparked their curiosity to learn more about their partners' life events and how they have shaped their realities and learning experiences. This attitude was mostly evident in the open-ended format questions most members used with one another such as *you mentioned in your video..., can you share your experience on...?* or *can you tell us more about...?*

The other technique Lubna, Layla, and Eric used was to answer their partners' questions in a narrative format, the thing that encouraged elaboration and follow-up questions on the matters discussed. For example, responding to Michael's question on difficulties she has faced learning English, Layla started by saying, "I've been learning English since pre-school, and I lived in Dubai for quite some time and in Dubai...". In her study interview, Layla shared that her elaborated responses, whether to partners' questions or proposing ideas or solutions during task planning, helped her communicate her ideas clearly, "I overexplain everything. That is just something in my personality".

Students frequently followed up on each other's answers, often connecting them to personal experiences. Michael asked Eric about returning to China post-graduation, based on friends who made similar decisions. Layla asked Lubna about education in Palestine, linking it to stories shared by her family friends. Layla and Lubna also asked about schooling in China and Canada, while Eric showed interest in Lubna's life in Palestine and Layla's multilingualism, extending a conversation on her use of Arabic, English, and Russian as in the following excerpt from their interview interaction:

- 0:14:51 Layla (smiling): OK. This is a very interesting question (smiling).
 0:14:53 Eric (smiling): Yeah
 0:14:55 Layla (smiling): I never actually thought about maintaining the balance between these languages ... So, I guess English and Arabic have always been native languages to me, like have always spoke in them together ... So, I guess Russian has always been secondary to me but something I tried to learn and improve on my own, while English and Arabic were more constant, you know?
 0:17:20 Eric (nodding): Yeah
 0:17:23 Layla: Yeah. And did I ever forget about one language when learning another?
 0:17:27 Eric: Yeah yeah
 0:17:30 Layla: I think I do sometimes, like I wanna say something in Arabic or English or Russian but I have the word in another language
 0:17:40 Eric (laughing): Yeah yeah
 0:17:40 Layla (smiling and overlapping): but I don't know how to translate it to the other
 0:17:43 Eric (laughing and overlapping): I know
 0:17:44 Layla: so sometimes I say an alternative word to it ... So yeah.
 0:18:00 Eric (raising his index finger with a smile): um I have one more question.
 0:18:02 Layla: Yeah
 0:18:03 Eric: So, which language are you prefer to speak?

It is notable that members of this group displayed shared comfort in seeking clarification and confirming mutual understanding during discussions. A key communicative strategy was the use of polite clarification questions, such as *do you mind if I ask you*, alongside more direct forms such as *do you mean...?* or *“you mean... right?”* Indirect cues, including requests for repetition such as *again, please?* were also used during the group interview to ensure comprehension. The following exchange between Michael and Layla illustrates how such clarification practices supported interactional clarity and demonstrated a willingness to bridge linguistic or interpretive gaps:

- 0:56:36 Layla: Do you think that learning English or staying in another country could affect your identity as a Chinese person?
- 0:56:46 Michael: uhh actually I don't think it will affect my identity uhh you mean, you mean whether I'm still Chinese, right?
- 0:56:59 Layla: No, no. I mean like, basically I have an uncle who moved to Germany from Jordan, and he felt that this affected his audacity a lot, like he started living and thinking and acting as German people instead of being just Arab. So, do you think that living in another country could affect your actions, your thinking, and your way of living as a Chinese person or is it going to stay the same?

Another collective strategy observed in this group was the use of content summaries and discourse markers to manage and structure communication, particularly during extended responses. Eric, for instance, occasionally concluded his elaborations with summarizing statements such as, “...so to answer your question,” to signal a shift from narrative to point. Similarly, members frequently employed phrases such as *“as I mentioned before”* and *“as I said earlier”* to maintain coherence across conversations and draw connections between previously shared experiences and new insights. Clarifying statements were also embedded naturally in the group's interaction, serving both to reduce ambiguity and reinforce mutual understanding. Layla, for example, apologized for a delayed response by explaining that she had muted her microphone during the *athan* (call to prayer), while Lubna pre-emptively

clarified her potential lag due to an unstable internet connection. Eric also used metacommunicative cues such as “I ask because...” when inquiring about politically sensitive topics such as the situation in Palestine, signaling both genuine interest and cultural sensitivity. As the group leader, Michael provided support for different parts of the interview, preparing the group to transition between question rounds and individual reflections.

All group members also produced a variety of backchannels that demonstrated their active listenership and maintained the flow of the conversation such as with weak agreement tokens (e.g., *mmm*, *mm*), neutral agreement tokens (e.g., *yeah*, *aha*), in addition to strong agreement tokens (e.g., *I know*, *right*, *Okay*, *I totally agree with you*, *of course*), which frequently led to some elaboration between those speaking. The following excerpt is an example of strong agreement tokens used by Eric when interacting with Michael on the importance of improving vocabulary over grammar:

0:13:44 Michael: ... like when you talk with people in their day life you express something with wrong grammar, but they still understand what you mean and what you want to express if you use some key word

0:14:07 Eric (smiling): Okay. I totally agree with you, you know

0:14:11 Michael (interrupting): I have so many situations like that

0:14:06 Eric: Yeah. So I do have the issue of grammar too, you know, but I just want to talk to people, you know, I can show my body language for them to understand (laughing)

0:14:28: Michael (laughing): Yeah Yeah

The group also produced head nods and supportive laughter, creating a friendly and cooperative atmosphere and maintaining the flow of their discussions. During her study interviews, Lubna indicated that jokes and laughs between members of the group helped them to be closer and connect with one another.

Furthermore, Week 2 interview interactions included moments where participants showed emotional support to one another when discussing sensitive topics. This was mostly evident when Layla and Eric asked Lubna about her educational experience as a Palestinian and how occupation affects it. The change of Lubna's voice pitch, her body language, and her struggle to find English words to describe certain events seemed to her peers to be a sign for Lubna's attempts to communicate her difficult emotions. The following exertion showcases one of Layla's several attempts to step in for Arabic-English translation when Lubna sounded emotional. Layla organically supported with Arabic-English translation by initiating code-switching and comments to make her questions less daunting for Lubna:

- 0:22:52 Lubna (speaking with short pauses due to bad internet): So, living in Palestine doesn't really affect us unless there is like problems or you know the Israeli borders ... and if someone dies the whole country closes... we call this إضراب [iDraab]
- 0:23:26 Layla: Yeah, yeah strike ...
- 0:23:27 Lubna elaborates
- 0:24:29 Layla: I was also gonna ask: besides affecting you physically, does it affect you mentally as well? If this affects you in any way or if this opens bad memories, it is OK you can skip this question.
- 0:24:44 Lubna: No no it is fine (slight smile). This, I mean, affects us all. Like right now, one of my friends in my school, the Israeli forces took him ... They keep postponing his ahh his محكمة [maHkameh].
- 0:25:19 Layla: Yeah, court sessions

Appreciating Layla's language support, Lubna said, "I was so happy she did that because without her stepping in, Michael and Eric would not understand a single thing from what I said." Layla explained she was trying to be "compassionate towards them [her partners] by being careful about the questions that [she was] asking" and "the wounds that [she was] opening," aiming to create a comfortable environment. Lubna confirmed this helped her feel more at ease, saying, "she was very kind to ask the question the way she did... it made me more

relaxed to share the story of my friend who was imprisoned.” Layla’s natural attempt to support Lubna’s English needs fostered mutual understanding and solidarity as bilinguals. Arabic use was normalized among Layla, Eric, and Lubna through scenario scripts and casual phrases such as *masa’ elkhair* (good evening) and *marHaba* (hello), reinforcing a shared sense of community.

Participants in the group demonstrated varying degrees of relational atonement in navigating empathy during their interactions. While many interactions across the group ended with expressions of solidarity or support, some sequences concluded less smoothly. In these cases, participants attempted to express empathy or maintain positive rapport, but the comments did not always elicit a reciprocal response. In the following exchange, Eric was answering Michael’s question about celebrating Chinese and Canadian festivals while in Canada. However, by situating himself as ‘different’ from Michael because of his Muslim faith, Michael seemed unsure of how to respond to his partner’s experience and ended with a more apologetic comment:

0:41:39 Eric:	to be honest I don’t have many friends who have the same background as me. As I mentioned before, you guys are all Han people, right? Although we speak the same language, we have a different cultures. When I used to go with my friends to a restaurant, for example, I always avoided pork, because I’m Muslim. Same situation here ... So that is why I celebrate Eid with my family in a remote way, I think.
0:42:32 Michael (smiling):	ohhh sorry for the question. It is a bad question.
0:42:35 Eric (raising his voice with a smile):	No no, it fine. It is totally fine.
0:42:39 Michael (with a slight smile):	umm OK.

Recalling this exchange, Eric mentioned that he was concerned about Michael misunderstanding his answer because of his extensive comments on religion:

Religion is a sensitive topic in China. Religion is the most dangerous, like the most sensitive topic in China, so that he feel like he offense me, but it's totally not ... People have the misunderstanding about uh my hometown of a uh about Xinjiang, so I need to explain them.

Other moments discussing similar “sensitive” topics showcase members’ use of neutral agreement tokens (*I see, yeah*) when they were unsure of how to follow up with their partners but still wanted to express compassion. For instance, the encounter between Eric and Lubna on the challenges of living in occupied Palestine and crossing borders elicited mixed feelings in Lubna’s recall of the moment when Eric ended their conversation with:

0:21:59 Eric: I see. I see. But but but that is fine, things turn good right now right? Things turned better right now; you are in Jordan (nodding). Yeah, everything will be OK

Acknowledging that Eric’s comment was to comfort her and show care, Lubna refused to be “felt sorry for”, “... I shared these stories because I want you [Eric] to know about what is happening not to tell me that I will be OK.” By not following up on his comment, Lubna chose to end the conversation “without an argument” because she did not want to be “rude” or explain further facts that might make Eric feel “more sorry for her”. Eric’s recall confirmed that he was not sure how to adequately respond to Lubna’s sufferings, especially after sharing many stories about himself and his life in Canada:

...maybe she feels bad and you know we won’t get close again... We are together in this program and we have to respect each other. After sharing her bad memories, I thought that I should find something to comfort her, to tell her she will be OK

Concluding his comments with a steadier tone regarding this issue in this exchange with Lubna, Eric said, “I’m sure she will understand.”

After Week 2, Eric, Lubna, and Layla grew closer through responsive exchanges and casual Zoom chats that extended beyond task requirements, discussing hobbies, culture, and personal interests. Eric noted how they shifted from “strangers” to “close friends.” They also frequently used their Instagram group for communication, bonding, and follow-ups on topics

from their Week 2 interviews. Eric often initiated these interactions, sharing about life in Canada, posting photos, and expressing interest in Arabic and his partners' cultures.

Lubna, who created the Instagram group, described it as fostering a “sharing and caring” culture. They used it to share stories, learn about each other, and explore interests, such as Eric wanting to learn Arabic and meet their families, or Layla and Lubna wanting to study abroad, prompting Eric to send campus vlogs. Michael, in contrast, only contributed to organizing meetings and sharing links early on when he was briefly the group leader. Instagram also seemed to support follow-up discussions from Padlet during Week 3 on some sensitive topics. For instance, Eric and Layla continued a conversation about censorship in China privately to avoid risks, “... if Chinese students read this comment... and send it to the Chinese government, I will be in serious trouble.”

Multimodal choices supported their relational dynamics as all group members maintained a casual atmosphere by appearing with a casual Zoom background in all of their meetings. Informal settings, hometown photos, and personal stories maintained a warm tone. Lubna, for instance, involved her mother in curating photos that reflected daily life in Palestine. During their scenario, all three acted, modified their voices, and used cultural items, such as Arabic desserts and the *keffiyeh* (a traditional headdress and a national symbol in Palestine and Jordan) enhancing both creativity and cultural exchange. In her study interview, Lubna reflected that this performance showed how comfortable and cohesive they were compared to other groups:

I felt some of the groups like the group that I did the feedback for their scenario was a little bit awkward, like they didn't know what, you know, they weren't interacting with each other. There was no facial expressions, they just acted. They just read their lines. I felt that they didn't really couldn't get along

The group members' individual communication styles and sense of communication were also somewhat evident in their Week 3 Padlet engagement with one another and other VE participants. Eric and Layla's posts were elaborate, highlighting specific examples from their

cultural experiences and they replied to most of the comments and questions they received. Figure 5 shows some of the group members' Weeks 3-4 Padlet posts. The first three Padlet posts on the left exemplify Eric's posts and engagement with his VE partners. Layla personalized her posts by sharing stories and using a narrative approach to share about cultural matters such as "... If you're invited to an Arab household, do not be surprised if you find your plate full right after you just finished it ..." and "... you will hear loud music, lots of singing and dancing, fancy big dresses and probably even a buffet full of food. This is how we show to our guests that we are grateful for their presence in such a happy celebration." (Figure 5 only includes Layla's replies to Eric and is missing her posts because they were too long to include).

Figure 5

Screenshots of Padlet Week 3-4 Discussion Posts by Group 1 Members



The featured discussion between Eric and Layla in Figure 5 is noteworthy as it is the one they relocated to their Instagram group for elaboration. Lubna also kept a story-like tone

in her posts, in which she shared information with her partners based on her experiences with other foreign friends and her appreciation of “the little things that keep shocking [her] in [her] own culture” (check one of her posts in white on the right side in Figure 5). Michael’s posts were more task-like and he did not engage in discussion with others (check an example of his posts in purple in Figure 5). Lubna also mentioned that she did read many of her partners’ posts and the comments she received, yet due to her tendency to “forget a lot” she never managed to reply.

The sense of “friendship” and mutual understanding they managed to develop, as all three confirmed, was also apparent in the structure of their intercultural scenario they scripted in which two Jordanian and two Chinese students studying abroad in Jordan become friends, eager to know about each other’s cultures and engage in discussions that clarify stereotypes they had about one another. Their first encounter, after which the group spends more time together, involves moments of unfamiliarity of Ramadan when Eric’s character starts eating lunch in front of his classmates. The characters Lubna and Layla play try to be as mindful as possible in handling the situation (note that the script was performed later by students):

Lubna (raising her voice):	What are you doing? You’re being so disrespectful to our culture! Don’t you know you’re not supposed to eat in front of us at this time of the month?
Michael:	This time of the month? What do you mean?
Lubna:	I mean, it’s Ramadan. You’re not supposed to be eating in front of us because we’re fasting.
Eric:	Oh! I’m so sorry, I did not know.
Layla:	Lubna, chill. I think they might be new to Islamic culture. Are you guys from Japan?
Michael:	No, we are from China, we were the only two Asian students at school, so we were often mistaken for Korean or Japanese. Sorry for offending you guys.
Lubna (with a sigh):	It’s okay. I’m sorry. I feel like I had a bit of an attitude while talking. I’m just letting you know.
Michael:	Not at all, we thank you for letting us know.
Eric:	It’s okay, I don’t understand though. What is Ramadan?

A shared religious affiliation among Eric, Layla, and Lubna, despite national and ethnic differences, strengthened their interpersonal bond. After the Week 2 interview, Lubna researched Hui Muslims and asked Eric questions on Instagram, finding it “interesting to learn how religion is practiced differently among cultures.” This shared interest carried into their scenario planning, where they included discussions of Islam to reflect personal and communal values. They addressed stereotypes such as “all Arabs are Muslim” as “teaching moments” to deepen intercultural understanding.

Their scenario development reflected their growing rapport, from task-focused to more emotionally connected interactions they described as “friendship.” They intentionally staged character relationships to show this shift, choosing to move from a formal classroom setting to a more relaxed coffee shop scene. This transition, from “consultative style to casual style,” helped surface cultural differences more naturally and allowed characters to share “values, beliefs, and differences... in a more relaxed environment.”

During trouble sources (i.e., moments of miscommunication of information or misunderstanding), the group employed open-ended clarification strategies to navigate and resolve uncertainty. These included direct questions, elaborations, and indirect prompts to surface and negotiate meanings. In one scenario planning exchange, Layla clarified her view directly and asked Eric specific questions, while Eric responded with indirect clarification strategies such as rephrasing and probing implied meanings.

0:06:57 Eric:	I think Lubna can be the teacher, right?
0:07:00 Layla:	What teacher?
0:07:03 Eric:	The teacher like the narrator
0:07:05 Layla (with a hesitant tone):	So like the teacher is going to introduce the students and say why the students are stereotyped against?
0:07:16 Eric:	Yyyes. I think Lubna can be the teacher and the narrator.
0:07:22 Layla:	OK but will the teacher do? I thought we were doing.. So the kind of plot I had in mind is that we are all four characters and we all had our different stories... and we

start feeling empathetic for one another and start respecting each other's differences, you know?

0:08:39 Eric:

Yeah

0:08:41 Layla:

But what kind of plot do you have in mind?

Upon agreeing on the plot, Layla started typing the descriptive summary of the scenario and they both used cooperative overlaps (i.e. adding to each other's lines and finishing some of each other's sentences) while she was doing so. This practice seemed to demonstrate their active listenership and mutual support to complete the task. This interactional sequence illustrates how the group collaboratively addressed ambiguities through reciprocal clarification efforts, contributing to a shared understanding of the scenario's direction and cultural framing. Although she missed the scenario planning meeting due to being stuck at the Jordan-Palestine border, Lubna actively sought ways to remain involved. She connected with Layla afterward to catch up, co-wrote the script asynchronously, and followed up with the group via Instagram, showing adaptability and responsibility:

... I was in touch with them, while they were in the meeting. I talked to Layla, and I told her about my ideas like to include them in the meeting. I think she did... Even if I wasn't there, I still brought some things to the discussion.

Role assignment in the scenario, however, reflected underlying group tensions. Eric initially proposed that Michael play a non-Muslim Chinese student who unintentionally eats in public during Ramadan, an idea Eric felt would spotlight his own identity as a Chinese Muslim alongside Layla and Lubna's Arab Muslim backgrounds. "Eric really holds his Muslim identity close to his heart," Layla commented, acknowledging his motivation. Yet, given Michael's silence during the planning meeting and his weaker connection with the group, the others moved forward with Eric's idea without much input from Michael. Eventually, roles were adjusted so that both Eric and Michael portrayed non-Muslims. Eric later explained that this decision was intentionally revised to include Michael and create space for all to explore both

Jordanian and Chinese cultures. In his interview, Eric shared that he privately checked on Michael after the meeting:

I asked, 'did you feel uncomfortable? Were you sick?' He said, 'I understand what you guys said, but I cannot join the conversation.' So, I asked, 'is it just because we are from a similar religion and you're not? Is that why you couldn't join?' and he said, 'maybe'

This response points to the subtle exclusion Michael may have felt, despite the group's efforts toward including him in their scenario meeting. While he initially showed leadership, guiding early discussions and planning, his strategy shifted to minimal engagement and emotional distance. Though active early on, his concise communication style contrasted with his peers' storytelling and reflective sharing. Still, in the beginning, he stayed responsive and helped the group progress with tasks. However, over time, Michael's engagement declined and maintained a distance strategy from other members. He became less vocal in meetings, kept his camera off, and adopted a more neutral stance in group conversations. His growing silence, especially during the scenario planning meeting, stood out against the increasingly collaborative and relational dynamic among the other three. Michael did not take part in writing the scenario and offered little input during key decisions. This change was noted by his peers. Layla, for instance, commented:

He tended to be more reserved, and he wasn't as open as Eric. So, I guess that was challenging, because sometimes we would want Michael's perspective as well and he wouldn't give us a clear answer or he wouldn't be enthusiastic to learn or to, you know, participate as much.

Eric also sensed his distance, speculating that Michael, as the only non-Muslim in the group, may have felt singled out during discussions of shared faith. Although the group occasionally tried to involve him, their efforts did not lead to stronger engagement. Michael's gradual disengagement, especially during the more relational and culturally reflective stages of the project, challenged the group's cohesion and highlighted the uneven participation patterns that shaped their collaborative experience. Since Michael did not take part in the VE interviews, it was not possible to obtain his direct personal reflections on this change of dynamics between

him and the rest of the group. During the group's VE reflections with one another in Week 7, however, Michael shared a few factors that seemed to make him distant from his VE partners. He mentioned that he was nervous to connect with intercultural partners in a virtual medium, especially that they were expected to work in small groups. Additionally, the fact that his partners' level of English was higher than his added to his nervousness. However, he shared that this experience helped him "become a better intercultural communicator and that "connecting with people from other cultures in the future will be easier."

The overall dynamic suggests developing intercultural collaboration cultivated through a range of collaborative practices and intercultural strategies. Learners frequently asked and answered questions with openness, shared personal stories and experiences, explored topics further outside the VE space, and engaged in both synchronous and asynchronous discussions. These practices not only deepened their interpersonal connections but also sustained the momentum of their intercultural engagement over time. Nevertheless, their intercultural collaboration was characterized by selective emotional atonement, where relational bonds were stronger among some members than others. Despite this unevenness, the group largely formed and navigated a culture grounded in empathy, curiosity, and compassion, which shaped their interactions and contributed to a sense of shared understanding among the more actively engaged participants.

5.2.2 Nancy, Dania, and Rana (Group 2): '*After all, I've got your back*': A Culture of Mutual Support

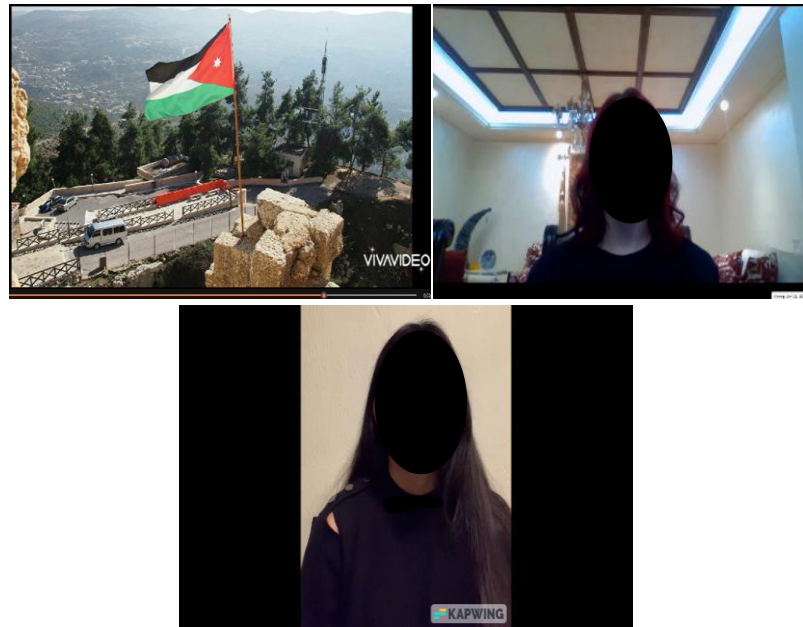
Group 2 (Nancy, Dania, and Rana) developed a supportive, harmony-oriented culture characterized by flexibility and a strong emphasis on encouragement and consensus. In addition to approaching tasks with a structured or efficiency-driven mindset, the group prioritized maintaining positive rapport and mutual respect. This was reflected in their collective strategies, which often involved affirming one another's contributions, avoiding disagreement,

and providing mutual support to one another. Their collaborations were shaped more by relational comfort than by critical engagement, and although cultural sharing did occur, particularly through personal anecdotes, it tended to stay at a surface level. The group's preference for emotional alignment over challenge or debate ultimately defined both the tone of their interactions and the approach they took to completing the VE assignments. The development of a culture of mutual support within Group 2 was not immediate but emerged gradually as learners worked through several initial challenges. Early interactions were shaped by a shared sense of nervousness, uncertainty around how to structure their question-led discussions, and the need to navigate differing levels of English proficiency. These early hurdles created moments of hesitation and misalignment yet also opened spaces for learners to engage in subtle forms of negotiation and accommodation. Over time, through these collaborative adjustments, a dynamic of mutual encouragement and responsiveness began to take shape, laying the groundwork for the group's evolving culture of support and shared learning.

This mix of excitement and nervousness about meeting their VE partners was evident early on. For their Week 1 autobiography videos, all three participants appeared to be reading pre-prepared scripts in their videos. Figure 6 captures some of the virtual presence choices Group 2 members made for their Week 1 videos. Dania and Nancy chose to appear on camera in a casual setting, Nancy with a wall background and Dania joining from what appeared as her living room. Rana, in contrast, opted to record her voice over scripted responses accompanied by downloaded images (e.g., the Jordanian flag and visuals related to English learning). She shared her experience as an English learner along with a few facts about Jordan.

Figure 6

Multimodal Choices of Group 2 Members in Week 1 Autobiography Videos



In their videos, they shared about themselves, their hobbies, and briefly touched on their English language learning journeys. Dania highlighted her passion for learning foreign languages, while Nancy spoke about her immigration experience from China to Canada and the initial challenges she faced with language and culture.

Rana explained in her study interview that her decision not to appear on camera stemmed from her nervousness about speaking in front of people she had never met. Her plan was to show herself in later meetings, once she had “broken [her] fear from speaking,” since she did not feel “ready” in Week 1. Dania also described feeling uneasy, noting that she typically “avoids eye contact” and was doing something like this “for the first time.” She added that she often gets distracted and struggles to finish her thoughts, which led her to write a script to help express herself clearly. Still, she wanted to “challenge [herself] and not appear as an insecure girl,” and decided to go on camera to “break [her] fear” and ensure her partners could see and get to know her before the Week 2 interview. Nancy, meanwhile, shared that she

preferred appearing on camera because it felt “a bit more natural” than using other materials in her video.

Week 2 marked a turning point for this group as they began building on what they had learned about one another and established early forms of support. All group members appeared somewhat nervous at the beginning, hesitating as they negotiated how to start the conversation and how they would ask their questions. At the start of their group interview, Nancy, the group leader, was setting up Zoom when Rana mentioned she couldn’t hear the others. Nancy immediately responded with concern, her eyes widened, her mouth dropped slightly, and she repeatedly checked if everyone could hear her. Once Rana’s audio issue was resolved, the group proceeded with brief introductions. All three members, Rana, Dania, and Nancy smiled and introduced themselves in short sentences. Nancy maintained direct eye contact with the camera, using more focused facial expressions, signaling her attentiveness to her partners. To help move the conversation forward, Nancy asked who would like to begin with their questions:

0:03:44 Nancy:	OK. So now we start the question? (slight pause) so who would like to go for the first question? (smile with mouth slightly open)
0:03:55 Rana (light laugh)	
0:03:58 Nancy:	If not, I can go first.
0:04: 02 Dania:	How are we gonna ask? Like each will ask two questions or like we ask one question to each? Like turn..
0:04:11 Nancy (interrupting):	Yeah it is turn around. Like if you want to start it and then you start like.. uh.. ask three questions and then the next person and then.. yeah.. Something like that.. If you are OK.
0:04: 25 Dania:	Yeah
0: 04: 26 Nancy:	So, you want to start?
0: 04: 29 Dania (with a big smile):	Asking or being asked?
(Nancy, Dania, and Rana laugh)	
0: 04: 36 Nancy:	So, Rana you want to go first?

Despite feeling nervous, Dania's natural humor asking the question seemed to help the group relax and eventually decide on how to move their interaction forward. When asked about the motive behind what she said, Dania explained that she was only trying to understand what they are doing next, "I didn't mind going first being asked, but asking questions I didn't want to do because I didn't get it... We looked very stressed. I remember that my face was like a tomato". Nancy, on the other hand, said that by asking her partners in Jordan to start, she was trying to be respectful, "in my culture you always give people a special treatment". She continued, "and because [Dania] asked the other question [asking or being asked?], I thought she was ready to start the questions." When the group sensed a delay in their decision, and since Nancy volunteered to go first, the group suggested she start the process. She did so by asking each member her questions at once. The other members followed her lead.

A few minutes after that encounter, conversations between members gradually became more relaxed and exchanged questions on topics such as Nancy's life experiences in Canada, Dania's passion about learning foreign languages, and Rana's and everyone's efforts in advancing their English language skills. All group members used open-ended questions to learn more about the topics they shared in their Week 1 videos and the group started bonding over sharing similarities and differences in their lives as university students and the education systems in their home countries. Frequently in encounters with their partners, Nancy tended to share elaborated responses to her partners' questions including details, for instance, about the education system in China and Canada and her life challenges in Canada. Reflecting on how she was shy at the beginning of their encounter, she said that she felt more "comfortable and natural" with her partners, the thing that encouraged to share her experiences in length and compare between hers and others in the group. Similarly, Dania attempted to share personal stories of how she became interested in learning Korean and other languages, in addition to casually sharing examples to further explain some of her views. An example of that is when

she talked about the uniqueness of each language in response to a group question on whether speaking one language makes communication easier between people:

0:35:19 Dania: I totally disagree with that because every language has its own beauty. Like for example in Arabic. I learned Korean and English and I'm still on my journey of learning, but in Arabic you could express yourself or you can use words about feelings and stuff that you can't get them in these languages... so it has its own beauty, and English has its own beauty and Korean too.

In her study interview, Dania emphasized that her strategy of sharing examples “[clarifies] points”, “when you really don’t focus on the point or you don’t get it, you might get it from the example after.”

While exchanging questions with one another, all group members produced backchannels such as mutual smiles and head nods, in addition to neutral agreement tokens (mostly *mhm, aha, yeah, I see, okay, that is nice*) that seemed to reflect basic understanding and attentiveness to speaking partners. Additionally, they used strong agreement tokens (mostly *that is so true, I totally agree with you, I can relate to that, exactly, I know*), indicating attentiveness, listenership, and solidarity. Producing these backchannels gradually established group harmony and encouraged personal alignment between members. Some of the group’s conversations included follow-up questions while others were more straightforward. This was notably the case between Dania and Nancy when they discussed Dania’s learning of Korean. In their encounters, Nancy seemed enthusiastic about Dania’s self-taught approaches to learning it. Dania’s presence, on the other hand, played a key role in gradually making her partners less nervous and tense in their exchange with one another. She demonstrated active engagement with her partners’ questions especially after sharing about her passion for languages and her ability to speak Korean. While doing so, Dania showed excitement through her body language, casual laughs, and frequently threw phrases in Korean every now and then. This attitude motivated the group members in Canada to have longer conversations with Dania.

The following excerpt is taken from the interaction between Nancy and Dania on the latter's interest in Korean drama:

00:08:43 Nancy (with a light smile):	... my first question to you: so why so what motivate you to learn Korean? Why did you pick Korean as your other language?
00:08:49 Dania (smiling):	Actually, a very fun reason but very different. So, in 2016 a drama called "Goblin" came out so I used to watch this drama and like in some scenes, they talked fast, and stuff and I don't like the idea of pausing in the middle to read the subtitles.
00:09:12 Nancy (with a light laugh):	Yeah
00:09:13 Dania:	Like the whole scene doesn't make sense anymore.
00:09:15 Nancy (laughing):	I know
00: 09: 16 Dania:	and as a person, I don't like reading (smiling). Actually, I hate reading. Soooo I was like maybe I just can learn the language (laughs) so I learned the language not to read subtitles (giggles).
00: 09: 32 Nancy:	Oh, so you learned Korean so you could watch Korean drama.
00:09:37 Dania:	Yeah, I don't want to read subtitles (laughs).
00:09:39 Nancy:	So you continued to watch Korean drama after that?
00:09:43 Dania:	Yeah, I finished it. It was really worth it.
00:09:47 Nancy (with a wide smile):	So can you speak Korean now?
00:09:49 Dania:	I can actually. I can still speak Korean
00:09:53 Nancy (with a light laugh):	good for you!
00:09:54 Dania:	Thank you!

As for the group's encounter with Rana during the interview, they seemed to be briefer without many follow-ups. As Rana shared in the study interview, her nervousness due to meeting partners from another culture for the first time and her limited proficiency in English were barriers to extending her conversations with them. Therefore, she tried to avoid follow-

up questions to keep her interactions with her partners manageable. Follow-up questions, as she described, meant exchanging more information or deepening the topics, which she did not feel capable of doing. Despite her “plans” to share about Jordan and her culture during the interview, she found herself more focused on following the group’s conversation and comprehending her partners’ responses to her questions, limiting her opportunities to share what she intended to share about herself, her culture, and ask her partners further questions. The following excerpt is an example of the limited exchanges between Rana and Nancy on the latter’s experience with English when she first moved to Canada:

0:15:48 Rana (with a light smile):	Nancy! Can I ask you?
0:15:49 Nancy (smiling):	Yes
0:15:53 Rana (smiling):	To Nancy
0:15:55 Nancy (with a wide smile):	Yeah Nancy. Go ahead
0:15:59 Rana (reading her question):	In the video, you mentioned that you moved to live in Canada and to study there.
0:16:05 Nancy:	Yeah
0:16:06 Rana:	What are the reasons that prompted you to study in Canada?
0:16:11 Nancy:	Can you repeat the last sentence again please?
0:16:16 Rana:	As you mentioned in your video
0:16:19 Nancy:	Yeah
0:16:19 Rana:	that you moved to live in Canada and study there.
0:16:21 Nancy:	Yeah
0:16:23 Rana:	What are the reasons that prompted you to study in Canada?
0:16:25 Nancy:	Ah the reasons
0:16:27 Rana:	o! [yes] what are the reasons to study in Canada and live there?
0:16:32 Nancy:	Because my parents we immigrated here like when I was small, and my parents have always had this dream to leave China... I don’t know how to say (light laugh) but yeah because my parents decided to move here so I started to study here and yeah (light laugh)
0:17:12 Rana (with a big smile):	OK, that is nice. Next question

Rana's concise responses and follow-ups were noted by Nancy when she commented on her partners' English ability:

... some people got talent on languages and some people have different talents on other areas. Like the other student, [Rana], maybe because of the language issue, a little, and she didn't speak much in the meeting, or maybe it is me (laughs). We didn't know each other in the beginning

Nevertheless, Rana appreciated learning about her partners' journey with learning English as it made her reflect on her own experiences of learning the language. Despite her limited proficiency, compared to her partners', she was determent to participate in the group's conversations. Although her English was "weak", as she described, she still enjoyed the interview and the encounters she had with her partners. A few collective and individual strategies seemed to help accommodate these linguistics gaps between Rana and her partners and balance the power dynamics between them. For instance, Rana constantly used paraphrasing requests such as *can you please repeat?* and *again?* when she struggled with her partners' questions. Although this mostly took time, the group seemed to be collaborative by paraphrasing their questions, using body language, and using simplified language to make interaction with Rana smoother.

Furthermore, Dania stepped in a few times to support Rana with her English in her conversations with their partners as she organically offered her help to express her ideas in English. This type of linguistic support normalized code-switching between Arabic and English later in the group as both partners in Canada kept referring to Dania when they felt Rana can use some help through translation. In the following excerpt, for instance, Rana struggled to respond to Nancy's question and Nancy's voice started to change as she was unsure of what to do until Dania stepped in to offer help:

0:05:01 Nancy:

My question is for Rana. You mentioned in your video that you had a little difficulty when you entered your university after you graduated from high school. So, how do you handle this language challenge when you

entered university? Can you share some tips with us?

00:05:20 Rana: The question is to me yeah?

00:05:25 Dania: Yes

00:05:37 Rana (with head looking down): OK, just a minute

00:05:47 Nancy: You want me to repeat the question?

00:05:48 Rana (overlapping with Nancy and looking at the camera): OK.Yeah. I listen to music

00:05:53 Nancy: Aha

00: 05: 55 Rana: I watch some films.

00:06:04 Nancy (holding a pen, looking at the camera): Mhmm

00:06:06 Rana: Ahhh ahhh I entered to Cambridge and learn eh you ask after I graduated from high school?

00:06:10 Nancy: Yes as you mentioned in your video you have challenge when you entered university and you watched TV.

00:06: 24 Rana: I watched a YouTube channel. Just يعنيIt is called "English for You". I love it, it is ahhhh (slight laugh) يعني كيف بدي أحكي [how can I say this?]

00:06: 44 Dania: Rana I can help you. إيش الكلمة؟ [what is the word you are looking for?]

Rana looks down

00: 06: 46 Nancy: Did you use

00: 06: 47 Rana (interrupting, looking back at the camera, speaking in a louder voice and a faster pace): In my spare time, in my spare time, I watched to this channel, and it is very useful to learn English. Just that is it. After I graduated from school (looks down and up) بس [that's it]

00: 07: 07 Nancy: But you use English in your university to communicate?

00: 07:16 Rana: Eh again?

00: 07: 18 Nancy: Umm are you using English in your university to communicate with others?

00: 07: 25 Rana: No not all people speak English

00: 07: 27 Nancy: Ah OK. Yeah

00: 07: 29 Rana: Yeah

Although Rana's facial expressions and voice gave the impression that she was not comfortable with such help, she explained in the interview that she was happy with Dania's help and that due to nervousness and stress, she was still trying to rephrase her sentences, hence feeling uncomfortable and lost:

هلا لما حكّت I can help you صراحة أنا كثير انبسطت. آه يعني عادي هي زميلتي وبنفس المكان وبنفس الموضوع وبنفس الوضع يعني والحياة. فلما حكّتي I can help you لا اطمنت هيكي زي أخذت نفس ورجعت كملت بعدين حكيت. It's [To be honest, I was very happy when she said, 'I can help you'. It's only natural, she's my peer and we're in the same position, discussing things together. We share similar life experiences. So when she said that I felt reassured, took a deep breath, and resumed my response]

During that encounter, Dania recalled sensing Rana's discomfort and related that to possibly feeling "surprised" or "stressed" by the "spontaneous questions" they were asking one another during the interview, "I have been through this. I know, it is actually very stressful. I asked her if she wanted help, but Nancy told her in.. like she explained the question more like it is fine, you can take your time, no rush". Nancy appreciated Dania's interference to help make it easier for Rana to respond, "... when Rana answered the question, I know she has a little difficulty and when Rana tried to help her, I feel that is quite nice because sometimes it is hard for her to continue so maybe that made it easier for her."

After Week 2 of their VE interactions, Nancy demonstrated more confidence and comfort in fulfilling her tasks as a leader of the group. She tried to keep her facilitation of the interaction casual and flexible during the following VE tasks. Commenting on her facilitation approach, Nancy said that, at first, she was not sure how to approach the conversation with all her partners given the fact that she is not much familiar with their cultural backgrounds and how "open" they are. One of the moments that made her realize her partners' responsibility to contribute to the group, as she explained, was when she struggled with uploading their recorded interview to Padlet and Rana and Dania voluntarily stayed 30 minutes after their interview to help her do so successfully.

Following their Week 2 interview, the group appeared to grow more supportive of one another, with signs of increased encouragement and responsiveness emerging across both their synchronous meetings and asynchronous exchanges, especially in Weeks 4 and 5 when planning and scripting their intercultural scenario. Nancy appeared to be mostly responsible for guiding the group to collaborate on the VE tasks and ensure they responded to each other's inquiries without delay. She also appreciated her partners' responsiveness to her WhatsApp messages even in late hours. Her guidance, as Dania and Rana described, was key to keep them on track and to have everything they needed in time to prepare for their work together. One of the facilitation strategies Nancy said she adopted was to encourage her partners to share their opinions about how they should complete tasks. Learning from what they encountered in their Week 2 interview, she realized that "sometimes others need an example on what they should do... So, this why, every time [she] ask their opinion, [she] put [her] opinion first and then [she] asks them: what do you think?".

Furthermore, she tried to create a casual and "friendly" atmosphere, as she described in her study interview, by starting all the group meetings and WhatsApp chats with casual check-ins, "I don't want everyone to feel that we are here to finish the project and that is it". As she described her group members to be "all easy to work with", her flexibility and open-mindedness was one other strategy she said she used to help everyone collaborate effectively.

This casual and friendly atmosphere the group established with Nancy's leadership seemed to help the group be openly supportive to each other is the fact that, with time, they felt more comfortable with one another, asking questions and exchanging more about each other's cultures. As Rana explained in the study interview, these moments helped them clarify stereotypes about one another and realize the importance of connection with one another:

في البداية كنت مآخذة فكرة إنهم حياتهم جدية وإنه ما عندهم كثير هيك مزح أو ضحك بس خلال ال virtual exchange اكتشفت إنه عادي يعني زينا زيهم بيدرسوا وبيضحكوا. عن طريق نقاشنا معهم، يعني لما كنا نتناقش معهم كانوا بيتقبلوا إحنا إيش بنحكي، مش إنهم هيك خلص يعني جديين وما بضحكوا، لأ، عادي بضحكوا وبمزحوا معنا، وحتى إنهم هم بيبادروا مرّات

[At first, I thought that their lives in Canada were too serious, and that they didn't laugh or joke much. However, later in the virtual exchange, I realized that this idea was wrong; they are like us: they study and work hard, but they also have fun. Through our interaction, they accepted our suggestions, and they weren't always too serious and straightforward and never joked. In fact, we laughed and joked with one another, and sometimes they even started it]

Their interactions appeared to reinforce a culture of support, where all members were open to negotiating ideas and receptive to feedback, particularly during their Week 5 scenario planning meeting as they refined their scripted roles. To achieve that, the group strategically bridged communication by using Google Docs, WhatsApp, and Zoom to complete their intercultural scenario. After brainstorming on WhatsApp and completing the scenario template in detail, the group completed the script together on Zoom. As Dania illustrated, all group members contributed to writing the script and provided feedback openly with one another:

...when somebody writes something, but like it's grammatically wrong, when one comes and fix it, and they say like, "oh, thank you I did not realize that", or like if I didn't know how to write this word, so somebody comes "Oh, I can write it for you". When we added more ideas on the scenario we're like oh, this is not good, we should change it. The person who wrote it would be like "yes, okay. I agree. What should we change about it?" And like he [the student suggesting the change] would be telling us more. This is better, because of this and he explains.

The supportive dynamic that had gradually developed among the group was clearly infused into the scenario they co-constructed, which emphasized mutual understanding, encouragement, and inclusive participation. When performing their scenario, the group demonstrated engagement by modulating their voice tones, using expressive facial gestures, and embodying their roles with a sense of realism. Rather than simply reading from a script, their delivery resembled actual acting, suggesting both preparation and investment in the task. The spirit of the group's emerging support culture was clearly woven into their co-created scenario, which addressed stereotype clarification through a storyline centered on students helping one another succeed in a collaborative math project. The following excerpt is taken from the encounter that preceded this collaboration in the scenario:

Rana: About the assignment, did you get what the professor just said?

Nancy: Of course, He explained everything very clearly. Which part you don't understand? I can help you.

Dania: How to calculate the future value

Rana: and the question about annuity

Dania: you know what, since you are good at math, how about you help us with the whole thing

Nancy: Oh, I thought you guys just don't understand what the professor said, but I am not good at math as well, I also need help with the assignment, if you guys know anyone good at math, please let me know.

Dania & Rana: NOT GOOD AT MATH!!

Rana: What do you mean you're not good at math you're Asian

Dania: Yeah, all Asians are good at math. You just don't want to help us.

Nancy: WHAT? Who told you all Asians are good at math? I am really not good at math. I didn't even pass the midterm exam.

Dania: Oh my god, what are we going to do now?

Nancy: Maybe we should team up together for this assignment, and we should look for someone who is good at math and willing to help us.

Rana: That is a great idea!

Nancy demonstrated flexibility and openness to her partners' contributions, and both Dania and Rana were generally collaborative and responsive. However, the group also appeared to rely on Nancy to make final decisions and guide their progress, reflecting a somewhat task-oriented dynamic. This was particularly evident in their negotiation over the scenario topic. While Nancy and Dania initially suggested culture shock, the other two members preferred cultural stereotypes. Aiming to "avoid making the situation difficult," Nancy opted for the latter, explaining, "it is easier for everyone," and assuming Dania and Rana had no personal experiences with culture shock. The group accepted this decision without objection. Reflecting on the moment, Nancy remarked with a smile, "to be honest, for them maybe they just want to finish the task."

Due to their busy academic schedules, they noted they only skimmed others' posts to identify common stereotypes for their scenario, ultimately selecting just one: the notion that all Asian students are good at math. No additional stereotypes were included or addressed in their final scenario. It is also notable that Rana had no Padlet posts during Week 3. When asked about it in her study interview, she shared that she did not realize they had such a task in their exchange.

The intercultural collaboration within this group gradually fostered a culture of mutual support shaped by both individual autonomy and shared practices. Early on, Nancy and Dania modeled openness and encouragement, which helped ease initial nervousness and built a foundation for more confident exchanges. Over time, members became more comfortable engaging with one another through open-ended questions that often led to storytelling and elaborate responses, deepening both interpersonal connections and understanding of each other's experiences.

Overall, this group's VE interactions included limited exchange of cultural information in its traditional sense and focused more on task completion. Their collaboration was marked by frequent use of supportive linguistic strategies such as paraphrasing, repetition, backchanneling, and clarification checks. Members often confirmed understanding through simple affirmations or follow-up questions and occasionally code-switched between Arabic and English to clarify meanings or express culturally specific ideas. WhatsApp was mainly utilized to maintain the group's communication regarding the meetings, negotiating workflow, and exchanging task-related resources. These practices enabled smoother communication and fostered a more inclusive environment. Nancy's flexible leadership helped guide the group's workflow, though decisions often fell to her, reflecting a somewhat task-oriented dynamic. Dania's humor and storytelling contributed to a more relaxed tone, while Rana grew more engaged over time as her comfort increased. Despite the group's task-focused communication,

evident in their Padlet posts, limited scenario scope, and other VE interactions, their consistent use of collaborative and linguistic strategies helped sustain a respectful, functional, and increasingly supportive group culture.

5.2.3 Holly, Bella, and Kamal (Group 3): ‘Which comes first language or culture?’ A Culture of Confusion and Dissonance

The members of this group cultivated a task-oriented culture aimed primarily at completing the VE assignments as efficiently as possible. Their collaboration was marked by a shared focus on improving their English language skills, which often took precedence over deeper intercultural exploration. While there were occasional gestures toward learning about one another’s backgrounds, these remained limited. A general sense of caution in asking follow-up questions or engaging with potentially sensitive or critical topics further constrained opportunities for intercultural engagement. The students also maintained a formal tone throughout their interactions, building relationships shaped more by the motivation to complete tasks than by personal connection or curiosity, which reinforced a sense of distance between them.

The group’s task-oriented approach to their interaction was apparent in their multimodal and topic choices throughout the exchange. From early on, their focus on their English language journey and their goal to improve their English speaking was a common topic they briefly discussed in their Week 1 videos. In addition, they shared some aspects of their undergraduate majors and their cultural background as well. While Kamal appeared to speak naturally in his video, his speech was marked by a fast pace, short sentences, and occasional struggles with vocabulary and grammar. Bella, on the other hand, presented herself more formally, using a blurred background and reading from a script in which she emphasized her experience working in an international environment that enabled her to make friends from diverse cultural

backgrounds in Toronto. Holly also appeared with a blurred background and recited a script, which highlighted her ongoing challenges with speaking English in Canada.

When asked about these choices, Bella clarified that her instructor's guidelines were to "speak with [their] camera on." Given that the VE environment is "confidential", she did not fear to appear on camera and record her Week 1 video with her camera on. Similarly, both Kamal and Holly indicated that they did not use photos from their life or community because "it was not a mandatory requirement" in the task. Figure 8 exemplifies the multimodal choices of the group members during the VE. During their interview and scenario meetings, Bella and Holly kept a blurred Zoom background and Kamal appeared in a casual setting that was reflected in his Zoom background as well.

Figure 8

Multimodal Choices of Group 3 Members in their Week 2 interview



The interaction between Kamal, Bella, and Holly was largely shaped by a one-on-one question-and-answer (Q&A) format, with each member taking turns asking questions to each member at once and offering limited follow-up. Even when some members, such as Bella, attempted to share more personal experiences, such as navigating three languages or working in Canada, the group maintained the same direct Q&A pattern, which constrained deeper communication and reinforced a formal tone in their VE exchanges. For instance, during their

Week 2 interview, Bella shared a work-related story to make her cultural experiences more visible, but the group moved on without responding or commenting. Reflecting on this moment in her interview, Bella attributed the lack of engagement to her partners' limited experience, "I think because they are both [her partners in Jordan] are first year students or don't have a work experience or culture shock." Although Holly also did not follow up on Bella's story, Bella still felt that Holly "understands [her] because [they] both have the singular cultural background."

This taken-for-granted understanding between Bella and Holly, rooted in their shared cultural and newcomer experiences, reveals a subtle alliance that influenced the group's dynamics, reinforcing their closeness while positioning Kamal on the periphery. This dynamic was evident during the group interview, as Holly and Bella occasionally commented on each other's experiences in Canada. They acknowledged in their interviews that their shared regional origins in China and linguistic background helped foster a stronger connection between them.

They frequently followed up on each other's responses and showed mutual interest more than with their other partners. For instance, they used several strong agreement tokens (e.g., *I know what you mean, I had the same experience, yeah same with me*) when interacting with each other while using weak and neutral ones (e.g., *mhm, yeah, I see, okay*) when interacting with Kamal. Similarly, they frequently smiled to one another and produced more head nods when the other was speaking, compared to when Kamal was.

As Holly explained, "we are from the same country, so I just want to know more about how she is, that we have for similar feelings or something different as experience coming to Canada". When asked about why such follow-ups did not occur as frequently with her partners in Jordan, Holly reflected on the relevance between her and Bella, "... (light laugh) I don't know. Maybe I just want to sharing that. Yes, so I have said, "it's very similar with you, too". So that's why I just follow up from my experience." Commenting on this format of their interaction, Kamal attributed it to the lack of knowing each other and the limited time they had

to prepare their answers to each other's questions as they shared their group questions only two hours before the interview time.

Nevertheless, when the discussed topic was English language learning, opportunities and/or challenges of practicing it, the interaction was occasionally more elaborative, and it mostly included asking each other for further advice on improving their language skills. All three also seemed to confirm and validate each other's responses by smiles, head nods and neutral agreement tokens when English is the central topic of the interaction. The following excerpt, for instance, is from Kamal and Bella's exchange of questions in the interview where she asks him a follow-up question on how he has learned English:

- 0:16:12 Bella: You also learn French as a third language, which is very similar as with the English, but have the different pronunciation. Do you have any challenges to learn both of these languages? And how did you handle these challenges?
- 0:16:29 Kamal: Okay Ah, to be honest, Umm, I know a little knowledge about ah French language, because I learned it in school, when.. with a young age. I don't speak it every time a French language. But my second language, which is English, that I, you speak with with ah more people, and communicate with with him...That will make me better in this language.
- 0:17:14 Bella: Yeah, I think that the more you practice, the more we get to familiar with this language. And I also think you speak language very fluently. Um, I'm very curious how you how you make it. And could you share something about your English learning methods?
- 0:17:34 Kamal (light laugh): I don't think I speak I don't think I speak it very fluently
- Bella and Holly smile
- 0:17:37 Kamal (light laugh): And I want to and I try to be more better in this language, by communicate with people every time...I want, and I try to be better, very good in English, and communicate continuously in a confidentially way. And then this virtual exchange. I want to be, focusing more in the English language.
- 0:18:12 Bella: Yeah. Thanks for sharing

Bella attempted to foster a connection with Kamal by complimenting his English proficiency and inviting him to share his learning strategies. This move reflected an intercultural strategy of affirmation and curiosity, as Bella sought to validate Kamal's competence while opening a space for him to elaborate on his language journey. Kamal, however, resisted the compliment with a modest laugh and a self-effacing response: "I don't think I speak it very fluently... I want to and I try to be more better in this language". His laughter and self-deprecation functioned as an emotional management strategy, allowing him to downplay expectations and protect face when placed in the spotlight. Rather than building on Bella's invitation to narrate his experiences, Kamal emphasized his struggles and aspirations in general terms, which constrained the potential for a richer exchange.

The rarity and limited investment in this type of follow-up reveal important features of Group 3's dynamics. Although Bella positioned herself as supportive and encouraging, Kamal's reluctance to expand left her with little scope to sustain the thread. Members rarely built on each other's prompts, even when curiosity was expressed, which contributed to interactions remaining surface-level and fragmented. This aligns with the group's broader tendency to rely on "let-it-pass" strategies, allowing potentially rich threads to fade rather than pursuing clarification or elaboration. In this case, Kamal's modesty and Bella's minimal closure reflected both uncertainty about how to manage interpersonal initiatives and a group culture where sustaining dialogue was not strongly prioritized.

In both his survey responses and throughout the VE, Kamal clearly expressed that his primary goal was to connect with his partners to practice and improve his English. Similarly, Bella and Holly emphasized language improvement as a key objective, though they also indicated an interest in learning about their partners' cultures in their survey responses. However, both expressed concerns about engaging with partners from unfamiliar cultural contexts, fearing such interactions might result in "tension" or "shock."

The group discussions demonstrated greater ease and fluency when addressing cultural topics with clearly identifiable contrasts or commonalities, such as tipping customs in China and Jordan, working during university studies, and national celebrations. In contrast, their interactions revealed uncertainty and hesitation when approaching more complex or sensitive topics, including the Syrian conflict, refugee experiences in Jordan, Palestinian Jordanian relations, and aspects of student life in both Jordan and Canada.

Bella and Holly frequently described these cultural topics as “not in the process,” “not requested of us,” or “unrelated” to the “language” tasks they were expected to complete. For Kamal, as reflected in both his VE interactions and interview responses, speaking practice was the most important aspect of the exchange.

When discussing what Holly and Bella described as “sensitive” issues, the group showed a noticeable tendency to avoid elaboration or to signal understanding even when confusion remained unresolved. This distancing was evident in their use of the let-it-pass strategy, where the group moved on to other topics, leaving previous points unclear or unaddressed. Similarly, smiling and light laughter in such moments functioned not as indicators of engagement or agreement but as mechanisms to mask confusion and maintain politeness. For instance, in his autobiography video, Kamal mentioned that he is Jordanian of Palestinian descent. During the following exchange in Week 2 interview, Holly attempted to better understand this dual identity, leading to the following exchange with Kamal, whose response seemed to confuse her:

0:13:51 Holly (coughing then smiling):	So, may I ask a few questions to you?
0:13:53 Kamal (smiling back, playing with his beard):	Yes, yes
0:13:57 Holly:	I noticed from your video that you are from Pala Pali (struggles with pronunciation)
0:13:57 Kamal:	Palestine, yes

0:14:02 Holly: Palestine, and that now you live in Jordan. Do you think

0:14:03 Kamal: No no I... Yes, yes

0:14:05 Holly (smiling): Ehh Is this Jordan? (eyes looking up away from camera)

0:14:09 Kamal: Ehh Palestine it is near Jordan (narrowing the space between his hands, but for my whole life I live in Jordan. I'm from Palestine, my roots from Palestine

0:14:17 Holly (in a louder voice): oooooh

0:14:18 Kamal: But my whole life in Jordan, I live.

0:14:20 Holly (smiling in excitement): Oh cool! I didn't know that.

0:14:21 Kamal: Yes, yes.

0:14:23 Holly: Do you know some culture about Palestine or?

0:14:26 Kamal: We have some cultures eh the same cultures between Jordan and Palestine, like some foods, some opportunities. We have the same culture and, in our country, in Jordan, we are one country with Palestine not two countries

0:14:47 Holly (in a surprised tone): Aaaaah

0:14:50 Kamal: Yeah, and we love each other (laughs).

0:14:55 Holly: Oh! That is cool! (with a smile in excitement) Thank you for your introduction! I know more about this two

0:14:51 Kamal: Yeah

0:14:52 Holly: Yeah. Now my next question will be...

When she recalled that encounter in the study interview, Holly did confirm that when she searched online, she found that Jordan and Palestine are two countries and that she was “surprised” when Kamal said that they are one. When following up with her on the reason behind not asking Kamal to clarify this to her, she appeared to be unsure about the extent to which her partner would be willing to discuss a “political” matter:

I think.. I just kind of want to avoid it. Because I think it's the policy thing or the government thing. Yeah.. I know there's a lot of fight there, I don't know which country is below which, so I'm just not sure is that is that okay to ask that question? So I decided to give a comment that okay, I got it. I got what you're talking about. But I'm just.. yeah.

Recalling the same encounter in her study interview, Bella was “still confused” about what Kamal mentioned about Jordan and Palestine being one country. Like Holly, she did not want to elaborate on a political topic that could have made her partners “uncomfortable”. Comparing such a situation with an example from her context as a Chinese she commented, “It just like a question that you ask the Chinese, whether the Hong Kong is a country or a city of China. And yeah, it is also a little bit sensitive.” Kamal, however, appeared confident that he had conveyed new information about both countries to his partners, though he remained unsure whether they had fully understood him.

Due to the limited and cautious engagement with such cultural topics, some group members appeared to develop incomplete or occasionally inaccurate understandings of the sociocultural and geopolitical contexts their peers came from. Kamal, for example, said that he did not learn much about his partner’s cultures or cultural views but rather “the tasks [they] [were] discussing”. When asked about what she has learned from her interaction with her partners during the VE, Holly said:

Kamal and [fourth member], they both come from very close to Jordan, and I think they are in Middle East, and there in my.. I don't know.. from the news on the newspaper, that I know that Middle East is always have to war, and fighting something like that. But from the virtual exchange, after the virtual exchange. Oh, not really that. Not really is not true.

She elaborated by saying, “We didn’t talk much about their stereotype thing on culture thing, I asked them about the culture thing and things that because I think most of them. Their hometown in Jordan have similar beliefs. So most of.. most of their festival are very similar”. During the study interview, Bella mentioned that she now knows that internet connection is a “luxury” in Jordan and that people there are hospitable and have big families, as she read in a few posts on Padlet during Weeks 3-4. In discussing the issue of internet accessibility in Jordan, she noted that, based on what she read on Padlet, limited access may have hindered frequent

communication with their VE partners, “I think because one problem for them [was] to connect with us.”

For Padlet discussions during Weeks 3-4, the group maintained a task-oriented atmosphere by largely limiting their Padlet interactions to fulfilling task requirements. Unlike Kamal, Bella and Holly engaged somewhat with their VE partners on the Padlet discussion board. However, most of these one-time interactions were with their peers in Canada centered on familiar cultural topics. Holly typically expressed agreement with her peers' points, while Bella was more active, occasionally building on others' ideas and responding to questions addressed to her. When asked why she only followed up on questions and not comments, Bella explained that “it was not necessary” to respond to comments, but questions required an answer. Holly mainly commented on Bella's posts but did not reply to any comments she received on her own. Kamal, for his part, posted only what was required and did not follow up with anyone. Both Holly and Kamal noted they did not have time to regularly check Padlet or engage further with others' posts. Figure 9 presents some of the group's Padlet posts in Weeks 3 and 4 and it captures some of these dynamics. The left post in white is one of Bella's where she replied to a VE partner out of her group. The post in green belonged to Holly and the one on the right was Kamal's. As shown, both Kamal and Holly did not receive follow-up comments on their posts, limiting their interaction with other VE partners in those weeks.

Figure 9

Screenshots of Padlet Week 3-4 Discussion Posts by Group 3 Members



Holly created a WhatsApp group in Week 1, as her partners in Jordan suggested, which was mainly used to schedule meetings, share messages and documents, and occasionally brainstorm ideas. Although members became more flexible and engaged after Week 2, collaboration remained leader-driven, first by Holly then Bella, whose planning largely followed their own direction. During the second meeting, meant for joint scenario planning, Kamal's input was acknowledged but not fully integrated. The final scenario reflected Holly and Bella's preferences, with Kamal's contributions noted but not deeply incorporated.

The flow of the group's Week 5 scenario meeting was slow, suggesting that Holly, Bella, and Kamal had not brainstormed plot ideas beforehand. The meeting began with all three members present on Zoom, during which Holly shared the scenario template link in the chat,

took the lead by sharing her screen, and typed the group's responses to selected prompts. The group began collaboratively developing the storyline initially suggested by Kamal, which gradually took shape around four international students attending a summer school abroad, who become friends and share their intercultural experiences with one another. In this interaction, all three started open collaboration with comfort as they seemed more relaxed than they were during their Week 2 interview. Kamal demonstrated active engagement by initiating group conversations and sharing his opinions about the script. As Holly typed, he contributed by suggesting sentences and offering wording ideas, supporting the writing process in real time. Bella and Holly seemed to be receptive and in agreement with Kamal during the first 30 minutes of the meeting, in which they casually attempted to ask for their fourth partner's ideas and following up on Kamal's suggestions with questions. Both Bella and Holly used clarification requests such as *I don't know what this means, can you explain?* or *how is this relevant to...?* mostly when attempting to better understand Kamal's suggestions.

However, the dynamics of the conversation began to shift when Bella proposed changes to the scenario. Following her suggestion, all three members casually spoke over one another, trying to communicate their individual ideas, resulting in competitive overlaps, particularly from Kamal, who repeatedly attempted to communicate his ideas for the plot. Bella suggested setting the story in Canada and revising the characters accordingly. In response, Kamal recommended that the characters directly address the issue of culture shock, rather than simply sharing personal experiences related to it. As the group began drafting the script's opening, Kamal continued to promote this idea by offering several examples of how it could be incorporated. Although Bella and Holly appeared confused and uncertain about how to integrate his suggestions, they ultimately included one of them, with Holly adjusting the script description to reflect the change. Despite this, their reactions, marked by facial expressions, incomplete sentences, and nervous laughter, signaled continued hesitation as they subtly

pushed for their original scenario direction. The following excerpt captures one of their negotiation moments over the scenario plot:

1:05:43 Bella:	Maybe for Student C, I will say that English grammar learning is quite different from my home country
1:05:53 Kamal:	Yes
1:05:54 Bella:	I will talk about in my home country
1:05:54 Kamal:	mm
1:05:55 Bella:	We just focus on grammar and here we need to practice more speaking
1:05:56 Kamal:	Yes
1:05:57 Bella:	After that, I
1:05:57 Kamal (interrupting):	I ask you why the reason you came for this summer school
1:06:18 Bella (covering her mouth with the back of her hand, moving her head to the right):	The reason? Ahhh maybe the reason for the summer school is not quite related to the culture shock?
1:06:35 Kamal:	Yes. Or I can talk that I hear about culture shock what do you know about it? I can ask about this.
1:06:42 Bella:	Ehhh
1:06: 43 Kamal:	That I learn about culture shock, what do you know about it?
1:06:57 Bella:	Ehhh could you, could you write your question here?
1:07:07 Kamal:	Can you put the link in the WhatsApp? Because I can't write
1:07: 17 Holly:	Sure, if you want
1:07: 18 Kamal:	Yeah. The link in the WhatsApp please

Although it was unclear whether Holly or Bella shared the link to the script Google Document with Kamal, he neither typed his question as requested nor was it typed on his behalf. Appearing to disagree with Kamal's proposal, Bella suggested a minute later that the dialogue between characters focus on their challenges with speaking English in Canada, and Kamal did not object.

The group's response to Kamal's input reflected a pattern similar to the one observed in Week 2, where moments of miscommunication or confusion were met with limited follow-up or clarification. Rather than probing further or seeking clarification, the group continued to adopt a let-it-pass strategy, acknowledging Kamal's suggestion without directly addressing the confusion it caused. This approach reinforced a sense of distance within the group and limited deeper engagement with culturally significant themes. Reflecting on this moment during her second interview, Bella noted her continued uncertainty, "He just raised up a topic, but he didn't elaborate what we can share, like he didn't share some experience about culture shock. He just insisted on this topic. But I... I don't know how to (pause followed by a smile). Yeah." The group then progressed slowly with the task and after spending two hours in the meeting, they eventually decided to end the conversation with the agreement that each member would write their own lines asynchronously and use WhatsApp to coordinate and ensure timely completion.

However, the final version of the script deviated from the group's initial plan; instead of portraying three international students and one teacher, the story evolved to feature two "peer mentors", played by Bella and Holly, supporting two international students, including Kamal, as they adjusted to their new academic life in Canada. The following section is taken from the group scenario:

Student B: Hi Bella, Holly. Here are my friend Kamal. He feels so helpless in the new environment here, do you have any suggestions?

Bella: Sorry to hear that you have some difficulties adapting to the new environment. Can I know more about your frustrations Kamal?

Kamal: Well, I feel so upset about the cold weather here, it is quite different from our home country. The transportation also makes me feel bad. I am sick of waiting for a bus for a long time on a snowy, windy day.

Holly: Oh I really understand your anxious feeling now. That's a common difficulty that many international students will face after they come to Canada, especially when they are exposed to a totally strange environment without enough preparation.

This behavior appeared to reflect the top-down collaboration dynamic that had gradually formed a passive alignment and a unilateral decision making in the group, where Bella and Holly took on more directive roles during shaping the scenario and guiding group decisions. Contextualizing the change made, Holly clarified that she came up with a new idea after the group's planning meeting, in which she integrated Kamal's, and wrote the script together with Bella:

... We have like a teacher or peer manager that is like, they [peer mentors] have more experience about the culture shock or can talk about or asking questions that Kamal mentioned on that video [the scenario planning meeting].

Similarly, Bella mentioned that since their instructor expected them to include more than one communication style in their scenario, she and Holly selected and balanced the formal and informal styles by having them distribute the roles the way they did. Nevertheless, she indicated that since there were multiple options and opinions available to complete this task, they both had to "choose the better one that meets the requirements". As a result of this private conversation between Bella and Holly, they decided to write the script the same day and update their partners about how they concluded the task via their WhatsApp group. In their message, Bella confirmed that they invited their partners to share any final suggestions to edit the script before they acted it the week after. The script outline, however, shows input marked by Holly and Bella only as each individually highlighted how they processed the scenario. Their general comments, for instance, on how they benefited from the Weeks 3-4 Padlet discussion in preparing their scenario did not reflect the choices and examples of culture shock experiences they used in their scenario as they ended up discussing their own experiences of culture shock (e.g., the cold weather in Canada, using public transportation). As a result, the scenario the group produced reflected Holly and Bella's preferences for the task.

When asked about his reaction to receiving the revised script from his partners, Kamal confirmed that he had not participated in rewriting it nor had he suggested any changes. He

explained, “They [Holly and Bella] have made the script and discussed it in the WhatsApp chat, the rules for everyone.” Reflecting on why Bella and Holly may have decided to rewrite the scenario, Kamal speculated that the lack of participation from their fourth group member could have influenced their decision. He concluded the discussion by stating that he felt “nothing” about being reassigned a new role in the revised version.

When recording their scenario, Bella mistakenly pinned only Holly and Kamal on screen, which prevented the other members from being visible while speaking. Each participant read their scripted lines with limited facial expression and a steady, unvaried tone. This lack of visual engagement and expressive delivery reflected the group's overall task-focused dynamic, where performance was oriented more toward fulfilling requirements than fostering collaborative or creative interaction.

Group 3's collaboration was centered on language development, with limited and often unclear strategies for engaging with culture, especially when not explicitly required by the task. Their interaction was largely structured around practicing English and completing assignments, creating a formal, task-driven environment. The co-leadership of Holly and Bella, combined with limited input from Kamal, led to minimal collective negotiation and a culture of surface-level collaboration. Their collective strategies included a rigid Q&A format with few follow-ups, and clarification requests used mainly for task completion. Holly and Bella often used backchannels such as laughter to convey agreement and maintain alignment, while distancing themselves from more complex intercultural topics. The group frequently employed the let-it-pass strategy as a face-saving tool, moving on from unclear moments without elaboration. Individually, Kamal contributed consistently but often with brief, fast-paced, and unelaborated responses, which may have added to group confusion. While tasks were completed, these patterns, formal distance, minimal exploration of culture, and cautious communication, limited deeper intercultural engagement.

5.2.4 Tamara, Tom, and Catherine (Group 4): *‘I dislike working with you, but I couldn’t say it’*: A Culture of Face Saving

Tamara, Tom, and Catherine developed a polite, task-oriented interactional culture marked by a strong emphasis on maintaining harmony and avoiding confrontation. Their collaboration relied on face-saving strategies such as softening disagreement, steering away from direct negotiation, and using encouraging agreement to support group cohesion. Linguistically, they frequently employed paraphrasing, simplified language, and positive backchanneling to scaffold understanding and show empathy, particularly in response to Tamara’s lower English proficiency and irregular presence. WhatsApp became their primary communication tool, through which they coordinated their task completion and attempted to bridge participation gaps. The group also frequently sought assistance from their instructors to maintain communication and task progress, especially when facing technical or linguistic challenges. Due to these persistent communication difficulties and a strong focus on completing the required tasks, there was very limited exchange about one another’s national cultures, with intercultural engagement remaining largely implicit and surface-level.

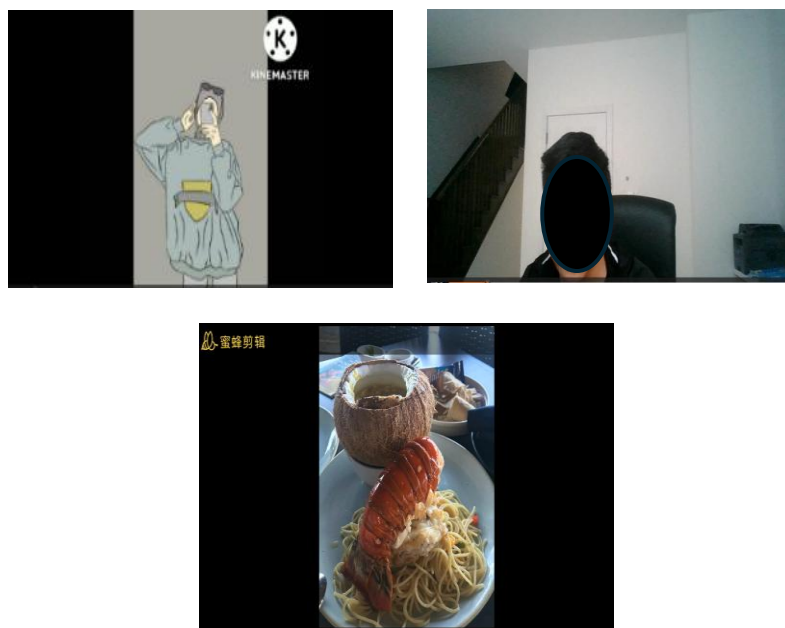
Although they managed to eventually connect and complete their VE tasks, this group struggled with their communication throughout the VE. Due to a response delay from Tamara’s side and the withdrawal of the other student in Jordan from the English class, the group was one week late when they connected for their interview. The group’s Week 2 group interview scenario was marked by mutual acceptance, growing familiarity, and a friendly connection despite challenges. However, Tom and Catherine’s individual interviews revealed a contrasting reality shaped by persistent frustration and unspoken tensions. These tensions were not immediately visible, as interactions remained polite and the group generally appeared cooperative in completing their tasks. Yet, the data from Tom and Catherine’s interviews

pointed to underlying issues, including communication difficulties and imbalances in participation that influenced their personal experiences of the exchange.

The group members shared their autobiography videos with a focus on their English language journeys. Tom was the only one to appear on camera, while Tamara narrated over a static image sourced from the internet, and Catherine's voiceover was accompanied by a series of photos from her travels around the world. Figure 10 shows their multimodal choices in their Week 1 videos as it captures the members' Zoom screens while recording their task. Tom appeared in a casual setting and Catherine shared multiple photos of historical scenes and food from her travels. Tamara, on the other hand, showed this single picture from the internet while narrating her video script. During their Zoom meetings, however, Tom and Catherine both appeared with a Zoom background featuring the Golden Gate Bridge, while Tamara had a casual Zoom background and she seemed to join from her home.

Figure 10

Multimodal Choices of Group 4 Members in Week 1 Autobiography Videos



In their videos, they introduced themselves by discussing their backgrounds, introducing their first languages, university majors, and experiences with learning English,

including some of the challenges they faced. Catherine emphasized her love of travel and the global importance of English, while Tom shared his interest in video games, swimming, and technology and his first challenges with English in Canada especially with using public transportation and ordering meals. When asked about why they chose to cover such topics in their Week 1 videos, both Tom and Catherine emphasized their interest in comparing their experiences with English use with their Partners in Jordan as they were looking forward to exchanging ideas, practices, and challenges in learning the language. All three members expressed excitement about meeting and interacting with one another, noting that this was their first time engaging with individuals from their partners' countries.

However, the distance between all three members seemed to be created early on in their VE. Clarifying a habit of learning about cultures of her interest, Catherine indicated that she is only interested in learning about cultures and countries she plans to travel to, which excluded Jordan:

I heard about the Jordan country but I never been there, and I don't think I will be there. If I were going to travel, I will go some place warm, a well development country. Yeah. So that's why I didn't choose Jordan to search their back around their culture. It was no interest (laughs).

Hinting at the fact that Jordan is an underdeveloped country, Catherine's selective cultural interest seemed to limit her intercultural engagement with Tamara during their VE time together. What seemed to make this interest in learning about Jordan less, as she shared in her study interview, is Tamara's limited involvement in the VE project:

I think I didn't get much information about the Jordan culture because in our group we was supposed to have a 4 group members and the one of the Jordan member dropped the course. So we only have 3 members and the other member is kind of not responsible not active in our group of project.

Despite their cooperative and polite interactional style, a sense of interpersonal and cultural distance persisted within the group. In their study interviews, Tom and Catherine consistently referred to Tamara with detached language, using phrases such as "Jordan partner,"

“Jordan partner’s university,” and “her Jordanian city”, which subtly reflected a lack of closeness or mutual familiarity. More explicitly, both described Tamara as “lazy,” “irresponsible,” and “irresponsive,” casting her as a passive and disengaged participant. These judgments, which were not evident during the VE interactions themselves, suggest a layer of unspoken frustration that the group members managed through indirect, face-saving strategies. Rather than addressing issues openly, Catherine and Tom appeared to rely on a collective strategy of maintaining outward harmony while privately evaluating Tamara’s performance, thereby reinforcing the group’s cohesion and sense of investment in contrast to her perceived lack of contribution.

As a strategy to maintain connection between them, the group used their instructors’ support to reach Tamara and scheduled for their Week 2 interview after multiple failing attempts to do so via email. As Tom explained, “I emailed my professor to forward the message to the Jordan supervisor [Jordanian instructor]”. Throughout the VE, instructors’ support became essential for this group especially with Tamara’s recurring habit of canceling at the last minute or missing scheduled meetings by “giving excuses”, as Catherine explained. This behavior left both feeling “overwhelmed,” as they often had to complete multiple VE assignments right before the deadline due to Tamara’s delayed participation. Comparing their situation with their peers in their class made Catherine and Tom realize that, unlike other students in Jordan, who were “hard working and responsive”, as Tom described, Tamara was not the type of partner they expected to end up with.

Reflecting on Tamara’s engagement during the Week 2 interview, both Catherine and Tom remarked that she “did not focus or pay attention,” as Catherine put it. Tom added that her level of interaction on the WhatsApp group he had created was similar, “she would just answer some questions,” which ultimately led him and Catherine to take on most of the group’s decision-making and task completion. Tamara appeared to indirectly signal her low English

proficiency by occasionally using Arabic when communicating with her partners. As clarified by Tom, this occurred especially in their WhatsApp chats, as, where she sometimes responded to questions or participated in brainstorming ideas for their intercultural scenario. However, this habit was not well received by Tom. In his interview, he expressed frustration with Tamara's frequent use of "her first language" (i.e., Arabic), suggesting that it made collaboration more difficult for him. When asked about whether he tried to translate her Arabic WhatsApp messages before responding, he said that he tried to translate them to Chinese, but he experienced meaning gaps because "reading in Chinese is different". Yet, he casually responded to Tamara with phrases such as "sounds good".

The group's interview recording starts with Tom starting with questions directly. During their interview, all three members exchanged questions about the topics they introduced in their autobiography video by taking turns to ask their questions to each member at once. Tom and Catherine showed attentiveness by addressing all questions with adequate detail and following up on each other's responses. On the other hand, Tamara's responses were concise with limited examples. Throughout her interactions with Tom and Catherine, she tended to occasionally nod her head, keep a smile, and share how happy she was to connect with and learn about her partners. The only time she followed up on her partners' responses to questions was when she interpreted Catherine's description of the challenges she first faced with speaking English in Canada, saying, "It was difficult for you." Catherine also maintained an equally positive attitude with both Tom and Tamara. Her excessive production of strong agreement tokens such as *I like your point, I totally agree with you, exactly, I know what you mean* when responding to her partners suggest her attempts to demonstrate active listenership and solidarity. In several moments during Tamara and Tom's interactions, however, she seemed to look away from her camera, looking at another screen and smiling. When asked about her behavior then, she

confirmed that she checked her phone a few times, chatting with another friend and that she “didn’t want to interrupt them [Tom and Tamara]”.

In his encounters with Tamara, Tom mainly followed a Q&A format, moving from one question to another without following up with her. When asked about the reason behind it, he noted that did so because “[he] was not sure if she [would] understand every question he [asked]”. However, and as shown in the following expert from an encounter between him and Catherine on the latter’s efforts to communicate in English in Canada, he engaged more casually and shared his personal experiences on the matter. Nevertheless, the group appeared attentive to one another’s contributions and maintained a casual, engaging tone, often incorporating humor into their exchanges.

0:06:08 Tom: OK, so when you come to Canada did you try to find ways to learn English just like maybe you tried to listen to video, listen to TV show to learn after you arrived to Canada?

Catherine and Tamara nod

0:06:33 Catherine: Mhmm. So, after I arrived for Canada I tried to improve my speaking skills because in China I had no chance to practice my oral speaking since everyone is speaking Mandarin but when I arrive Canada ... so kind of push myself to improve my oral speaking (light laugh)

Tamara moves her head and smiles

0:07:11 Tom: So, when you arrive in Canada, what is big challenge for you if someone they don’t understand what you are talking about?

0:07:27 Catherine: Yeah, so

0:07:29 Tom: Yeah, yeah go ahead

0:07:30 Catherine: So, if someone don’t understand me, I will write it down on paper in English because my pronunciation maybe is not perfect ... If they don’t understand I will

use my phone, type it out and translate. I find that

the phone is a good tool for us to translate when we need extra help.

0:08:11 Tom: Yeah, I agree. For me, I will use my phone to Google and find some pictures (laughs) to show them what I mean

All laugh

0:08:32 Catherine: Yes, exactly. I'm in the same situation with you
 ... I will look up pictures and show them and they
 say: "oh I know this, I understand"

All laugh

In their interview interaction, it became clear that there was a noticeable difference in English language proficiency between Tamara and her partners, as she seemed to struggle to elaborate on her responses or follow-up on her partners' answers for much of the conversation. She did, however, feel comfortable requesting clarification by asking direct questions such as *please again?* a few times in their interactions. Catherine demonstrated greater flexibility and patience in her interactions with Tamara, whereas Tom, when asked to repeat his questions, often redirected her to the typed version in the chat. However, he attempted to establish some follow-up when, for instance, he agreed with Tamara that "[he] would also be mostly speaking [his] first language in [his] home country" if he were to study in Hong Kong when Tamara shared that her opportunities to speak English with others are limited and when made reference to his own language struggles when he moved from Hong Kong to Canada. Like in the excerpt shared below, Catherine tended to rephrase her questions when she sensed Tamara's delayed answers:

0:33:36 Catherine:	So, in your lectures, do professors speak in English or your own language?
0:33:46 Tamara:	Yeah, professor is speaking English all the time
0:33:51 Catherine (nodding):	Oh.. OK I see. So, how did you practice your English with your friend and sisters? Like how?
0:34:08 Tamara:	Sorry, again?
0:34:10 Catherine:	In which way do you practice your English? Like you are having a conversation? Or like you are watching movie? How do you practice your English?
0:34:31 Tamara:	umm
0:34:33 Catherine:	Like you watch a movie or...
0:34:35 Tamara (interrupting and pointing her finger to her ear):	The first part, I don't listening. The first part of your question, please again.
0:34:43 Catherine:	OK, OK. So how did you practice your English? Like you are watching a movie

- or reading a book? Or like you are having an English listening exercise? In which way?
- 0:35:05 Tamara: umm the first umm listening to music and umm watching movie. Because in school just grammar and vocabulary
- 0:35:24 Catherine: Mhmm (nodding). Similar to us. We are more focused on
- 0:35:33 Tamara (interrupting): and attend by workshop, English language with my friend and sister
- 0:35:43 Catherine: OK. Very good to know

However, the group seemed to gradually value integrating Zoom chat during their interview as a strategy to accommodate Tamara's constant need for paraphrasing and clarification of their questions. As Tom shared in his interview, Tamara occasionally used WhatsApp to communicate her ideas during the Zoom interview. He assumed that she possibly did so because of her limited proficiency in English. As a result, all members often used the Zoom chat function to type out questions while also asking them verbally as a way of accommodating Tamara's language needs and facilitating understanding. While this strategy provided Tamara with alternative entry points into the discussions, it was not always driven by a desire for deeper engagement. As Tom had expressed earlier, he did not necessarily feel inclined to adapt in this way, and the use of chat was often oriented toward completing the tasks more smoothly rather than fostering extended dialogue. This pragmatic use of technology shaped the nature of the group's communication: interactions became more task-focused and transactional, leaving fewer opportunities for spontaneous cultural exploration or personal connection. Within this pattern, Tom tended to rely mostly on the chat for basic exchanges with Tamara, while Catherine showed comparatively more investment by simplifying her questions, giving examples, and using supportive language to facilitate understanding.

Like in their study interviews, Catherine and Tom constantly used phrases such as "your city", "your country", and "your own language" when interacting with Tamara during the Week 2 interview. They also seemed to struggle with pronouncing her name (during the study

interviews they mainly referred to her as “our partner in/from Jordan”). At first, they both tended to avoid repeating her name when she corrected them but despite the initial mispronunciation of their partner’s name, both participants later attempted to use it during the interview. In his interview, Tom was bothered about the fact that Tamara kept correcting their pronunciation of her name. He elaborated that he and Catherine had suggested giving her an English name to simplify pronunciation, but she declined the suggestion.

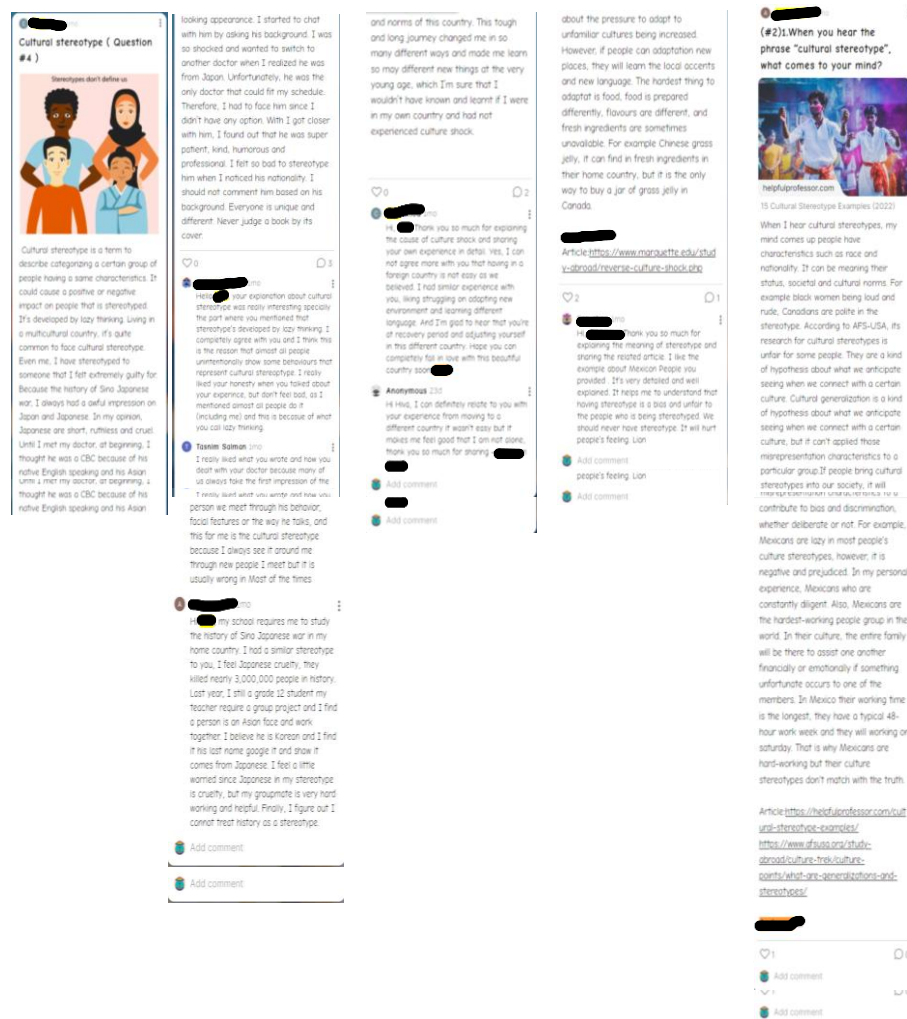
When concluding their Week 2 interview interaction, the group addressed the challenges that they encountered to schedule their virtual meeting. Catherine and Tom confirmed that they had more in common with each other than with Tamara because they were both Chinese students studying in Canada. However, they emphasized that they three shared experiences as English learners and normalized mistakes as part of the learning process. Tamara was thankful for the opportunity to connect in a “first of a kind” type of experience, which allowed her to improve her interview skills, as she noted. Catherine thanked both of her partners as she “learned so much” from them “especially Tamara” for giving her “new perspectives on a new culture.” However, despite acknowledging scheduling difficulties, the group avoided addressing how future communication, such as scheduling meetings, could be made easier or how delays in responding to one another might negatively impact their progress. They also did not agree on a more effective or reliable communication method, even though it had taken considerable time and effort to coordinate their Week 2 interview.

Figure 11 shows examples of the group members’ Padlet posts from Weeks 3-4. Observation of the group’s activity shows limited interaction between the group members and minimal engagement with other participants in the VE, further restricting opportunities for broader intercultural exchange. Tamara did not post at all those weeks, and both Tom and Catherine commented only on each other’s posts. They explained their choice, noting that they could relate to each other's perspectives. Particularly, they referenced Catherine's post about

stereotypes that many Chinese people have about Japanese people. Catherine's posts received comments from other VE participants, but she didn't respond to any of them. In her interview, she admitted having read all the comments but did not reply because of what she described as her own “laziness.”

Figure 11

Screenshots of Padlet Week 3-4 Discussion Posts by Group 4 Members



However, Catherine’s pattern of interaction on Padlet appeared to reflect a face-saving politeness strategy in which she avoided disagreement and focused on showing support. Her comments typically followed a formula of thanking the author and expressing agreement with their views. She confirmed that strategy in her interview by saying, “Because I wanted to be

polite... I didn't comment on that [viewpoints she disagreed with] because other people might get upset or angry."

Both Tom and Catherine also restricted their responses to posts written by classmates from their ESL class. Tom explained that he chose to engage with people he already "knew" and topics he had a personal "interest" in. This limited and selective engagement suggests that the group approached the VE cautiously, prioritizing relational comfort and alignment over deeper intercultural curiosity. The four posts from the left in Figure 11 belonged to Catherine and they showcase some comments she exchanged with Tom on cultural stereotypes of Japan they both had. The level of agreement with one another confirms both of their interview responses on feeling comfortable with one another because they share a similar cultural background being Chinese. Like Catherine, Tom's posts included personal experiences and thoughts of the issues they posted about. In his post on the left, for instance, he shared personal thoughts on cultural stereotypes as a concept and his experience with it with some reflections. Although the post below does not show any responses, Catherine followed up on his other two posts. He did not reply.

The uneven communication patterns and limited engagement with Tamara gradually widened the gap between her and her partners, Tom and Catherine. Despite showing initial support for Tamara, Tom and Catherine continued to struggle in establishing meaningful interaction with her and made multiple unsuccessful attempts to include her in planning the group's intercultural script. As communication faltered, they eventually proceeded to meet via Zoom without Tamara to plan two separate scenarios independently: a mock job interview between Tom and Catherine, and a brief exchange between Catherine and Tamara portraying two friends meeting before one moved abroad.

The structure of both scenarios, however, suggests that they were designed in haste, with minimal scaffolding from Week 3-4 Padlet discussions and limited alignment with the

intended aims outlined in the project guidelines. Neither scenario fully embodied the intercultural focus encouraged by the project, nor did they reflect the shared themes explored on Padlet during Weeks 3-4. For example, when explaining their strategy for incorporating comments about why young people study abroad, Catherine and Tom wrote that the international job interview scenario addresses stress, nervousness, and the value of international work experience.

Yet, the scenario itself included no dialogue on these topics. Similarly, the second scenario was intended to explore opportunities such as “exploring the world” and challenges such as “generational gaps” in living abroad. Instead, the second scenario was limited to the following encounter:

Catherine:	Tamara, long time no see, how have you been?
Tamara:	Great, how are you? It's been a while since the last time I saw you.
Catherine:	I remembered I mentioned you had a facebook interview, right? How did it go?
Tamara:	Pretty well.I got their offer recently.
Catherine:	Really?! Congratulations! What great news! I really felt happy about you! Wait...is facebook head office located in the US?
Tamara:	Yes... that's why I ask you out for coffee today...Because I'm moving to the US next month. I want to hang out with you before I leave.
Catherine :	What...you are going to work in the US? Why? Your family and friends are here.
Tamara:	Umm, you know it's really hard to find a nice job in Toronto since there are fewer companies. But the US is different, it's full of job opportunities. Plus, I finally can achieve my American dream and be rich with a higher salary working in the US.
Catherine:	Yes, you told me before. But I thought you were just joking. Anyway,even I miss you and don't want to go. But I understand your decision and wish you all the best.
Tamara:	Thank you, you are so sweet.I miss you too. I will still keep in touch with you after I move to the US.
Catherine:	Yes, please. Call me any time if you need help. I'm here for you always.

This disconnect suggests that the group lacked cohesion in preparing and completing the scenarios as originally envisioned.

When asked why they scripted two scenarios instead of one, Catherine explained that after she and Tom had completed the task and written both scripts, they decided to give Tamara a chance to contribute by assigning her a role in the second scenario. Instead of writing her full lines, Catherine noted that Tamara contributed only two sentences, after which she and Tom had to complete the remainder of the script on her behalf. With a frustrated tone, Catherine said, “She didn’t participate in our project. I think this person is kind of lazy and I don’t want to work with her anymore”. Pointing out the two sentences she wrote on his phone, Tom complained that writing one sentence was Tamara’s only contribution to the task. With a tense tone, he concluded his interview with me, summarizing his ongoing frustration with Tamara:

She did nothing. She just wrote one sentence on the final task, and also didn't respond to email the first time, and she is not always speaking during the meeting. She is not always open the camera. I asked her a question and didn't respond so I had to WhatsApp her to ask her to come back and listen to us. I was confused.

Despite moments of politeness and surface-level cooperation, the group’s collaboration was marked by delayed, inconsistent communication that hindered relationship-building. Tom and Catherine often used collective strategies such as patience, polite agreement, and avoidance to maintain harmony, even as frustration grew. Individually, Tom relied heavily on Zoom chat for basic communication and limited his engagement to familiar peers on Padlet, reflecting a task-focused, low-investment approach. Catherine, in contrast, showed more interpersonal effort, simplifying language, offering examples, and encouraging Tamara to participate.

While these strategies suggest flexibility, they often aimed more at avoiding conflict than fostering genuine collaboration. Their dominant role in decision-making, with little integration of Tamara’s input, reinforced group imbalance. Tamara, meanwhile, navigated the exchange through selective participation, occasional Arabic use, and reliance on WhatsApp to

express herself, strategies that went largely unsupported. The inclusion of a secondary scenario for her felt more compensatory than collaborative.

Ultimately, these dynamics shaped a culture of polite disconnection, where surface harmony masked limited intercultural engagement and unequal participation.

5.3 Chapter Summary

This chapter explored the types of intercultural interactions and collaborations that emerged within each VE group, as well as the strategies learners used to navigate them. The analysis revealed that group cultures were not pre-determined or fixed but evolved over time through the participants' interactions, shaped by their individual and collective responses to the challenges and affordances of the VE context.

Across the groups, learners employed a range of intercultural strategies, including linguistic, behavioral, and technological approaches, that reflected their autonomy in managing communication, building rapport, and navigating cultural and linguistic differences. These strategies, including paraphrasing, simplifying language, using humor, being polite, and selecting the right platform, were not only instrumental in managing tasks but also in shaping the overall dynamic and culture of each group. In many cases, individual strategies informed collective ones, contributing to group-specific ways of relating and collaborating.

Ultimately, it was the participants' autonomy, rather than the structure of the VE itself, that played the most significant role in shaping how intercultural engagement unfolded. Their active, and at times passive, responses to the evolving conditions of their group work laid the foundation for the development of collaboration and interaction. These processes were deeply influenced by a range of dynamic factors, which will be unpacked in the following chapter.

Chapter 6

Dynamic Factors and Cross-Case Analysis

This chapter discusses findings on the second research question: What are the dynamic factors that influence the evolving intercultural interactions, collaborations, and strategies of learners across VE groups, and how do they navigate these dynamics over time? The first part of the chapter outlines the four dynamic factors that shaped the formation of group cultures (curiosity and compassion, mutual support, confusion and dissonance, and face saving) and intercultural strategies in this VE. These factors are termed “dynamic” because they evolved over time and were continuously negotiated, in practice, by participants in response to unfolding group interactions. I then conducted a comparative cross-case analysis to examine how these dynamic factors influenced the development of group cultures, and the intercultural strategies learners employed to sustain or reshape their collaborations. This analysis explores how participants’ decisions and interaction patterns were shaped by the interplay of these factors and how these, in turn, informed the evolution of their group cultures across time. It also identifies which factors appeared more salient or influential in each group’s trajectory, offering insights into how learners navigated intercultural challenges and opportunities within their specific group contexts.

6.1 Dynamic Factors Shaping the Groups’ Collaboration in the Virtual Exchange

Like many VE projects, this study shows that students’ collaboration and performance were shaped by structural factors such as differences in university calendars and time zones, the short duration of the exchange, and demographic aspects such as age and gender (Helm, 2015; Lewis & O'Dowd, 2016; O'Dowd, 2018; Stickler & Emke, 2015). While participants attempted to adapt to these external constraints, they remained largely beyond their control and did not account for the evolving patterns of interaction observed over time. Instead, four factors emerged from the data as most influential in shaping how participants engaged with one another

and navigated intercultural collaboration. These were: (1) instructor pedagogical choices for the VE implementation, (2) participant identities, personalities, and evolving intercultural experiences, (3) ELF as a shared ground for communication and intercultural bonding, and (4) digital tools and group interaction.

These factors were selected because they revealed themselves in the data not as fixed elements but as *dynamic*, that is, shifting, negotiable, and re-shaped by participants' ongoing experiences and decisions throughout the exchange. This dynamic quality was evident in how learners initiated, adjusted, or withheld engagement; how they interpreted and responded to intercultural challenges; and how collaboration either developed or stalled across time. These factors most directly addressed the goals of this study and the research questions, particularly in their emphasis on the processual nature of intercultural learning and the ways in which participants formed, disrupted, and re-formed their collaborative relationships. By focusing on these four interrelated elements, the study captures not only the pathways and outcomes of student interaction but also the evolving *process* through which intercultural engagement was negotiated, an essential lens for exploring interculturality in TMLL contexts.

In this chapter, I define these dynamic factors by illustrating how they shaped the formation of the emerging group cultures. After each factor, a cross-case analysis follows, highlighting which of these factors appeared more influential in each group, including patterns, similarities, and differences of how individual and collective strategies evolved in response to these factors, shaping the groups' intercultural interactions and collaborative processes throughout the VE experience. The cross-case analysis aims to explore how the different dynamic factors (instructor pedagogical choices for the VE implementation, participant identities, personalities, and evolving intercultural experiences, ELF as a shared ground for communication and intercultural bonding, and digital tools and group interaction) influenced the formation of VE group cultures across multiple groups. By comparing and contrasting how

these factors influenced group interactions and task collaboration, I aim to reveal patterns, commonalities, and differences that emerged over the course of the virtual exchange across all the cases. Given the intersection of such factors in VE projects, some comparisons might also include reference to other factors as well.

6.1.1 Instructor Pedagogical Choices for the VE Implementation

As described in Chapter 3, both instructors were mentored during the summer period on a variety of VE-related matters, including how to facilitate students' interaction and collaboration, addressing VE-related issues, and supporting students based on their needs. During the seven weeks of the VE, both instructors made their own decisions regarding leading and adjusting the VE independently and without the interference of the researcher.

The observation of participants' collaborations, interactions, and interview responses revealed that different instructor approaches, both individual and collective, to facilitating the VE led to divergent group processes. These variations influenced how groups navigated collaboration, engaged with the intercultural dimension of the tasks, and formed their own VE environments. As a result, students employed a range of strategies, some evolving over time, others remaining static, as they built relationships and shaped their group cultures and modes of interaction:

6.1.1.1 Frequency and Type of Instructor Support

All VE participants confirmed that both instructors consistently offered logistical support throughout the exchange, organizing groups, explaining task instructions, addressing questions, and helping with communication when partner responses were delayed. Both instructors dedicated some class time to the VE; the instructor in Jordan used this time for task explanation and addressing questions, while the instructor in Canada used it to introduce students to Padlet and for student groups to debrief on their progress and to explain VE tasks. The instructor in Canada dedicated the final hour to give students more focused time to work

on their VE tasks. According to VE participants from Jordan, their instructor responded to requested feedback during her office hours. The only time dedicated to the VE was the first 15-30 minutes to explain the tasks.

6.1.1.2 Assigning Participants in Canada as Group Leaders

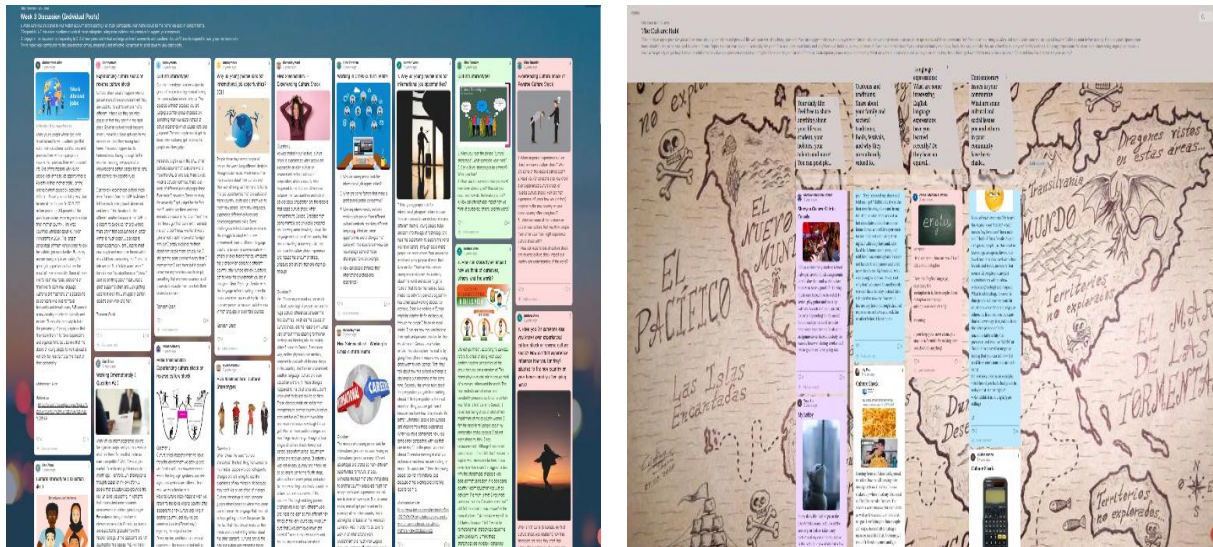
As described in Chapter 4, instructors formed small student groups to facilitate interaction and collaboration on the VE tasks. To support smoother group coordination, they assigned one leader per group, all of them students from the ESL course in Canada. In some cases, group leadership changed after the first few weeks of the exchange; however, the new leaders were still selected from the ESL course in Canada. Interview responses from participants in both courses suggest three possible reasons for this decision: greater access to Zoom Premium, higher English language proficiency, and increased age-related seniority.

6.1.1.3 Facilitating Intercultural Dialogue

When facilitating tasks in VE, instructors often support student interaction either synchronously or asynchronously to ensure effective communication and task completion (Hampel & Stickler, 2015; O'Dowd & Waire, 2009). In asynchronous settings, this facilitation may take the form of posting probing questions, encouraging students to elaborate on their language choices and viewpoints, or prompting them to share personal stories related to the task topics (Helm, 2015; Vinagre, 2016). Although instructors initially planned to alternate facilitation on both Padlet spaces, observation of activity on these platforms showed otherwise. Figure 12 includes screenshots from the Culture Hub and Weeks 3-4 Padlet discussion walls. There was no evidence of instructor facilitation on any of the Padlet walls, and engagement on the Culture Hub Padlet was minimal. The board displayed only a few posts from students in Canada and a single post from a non-participating student in Jordan, all of which occurred during the first week of the project.

Figure 12

Screenshots of Unfacilitated Student Posts of Week 3-4 Discussions (left) and the Culture Hub (right) Padlet



Furthermore, all participant interview responses emphasized that, during in-class VE sessions, instructors primarily focused on task progress with partners, mainly addressing technical and/or logistical communication issues with their partners. As some participants clarified, instructors briefly showcased earlier Padlet posts to highlight examples of expected work but did not discuss the strategies or approaches students had used in previous tasks or delve into any discussions about the intercultural issues encountered during the exchange.

6.1.1.4 Instructor Pedagogical Choices Shaping Emerging VE Cultures: Cross-Case Analysis

Both VE instructors made individual and joint pedagogical decisions that shaped students' participation and performance within their groups. Ultimately, these choices positioned students as primary agents in forming their group cultures and navigating the dynamics of their interactions and collaborations.

Collective interview responses from participants suggest that all student group members appreciated the regular check-ins with their instructors in class, as this time helped

them work on their individual and group tasks with clarity. Lubna (Group 1) confirmed that in the first few weeks, their instructor also showed them the Padlet samples she posted “to show us [the students] how things should be done”. She added: “we talked about the tasks during class, the lecture and we like read instructions and stuff. When I went back home, I knew what I needed to do.” Similarly, Holly (Group 3) found those samples to be helpful as she mentioned that “before we do any task, our professor and the Jordan professor also post the example first to tell us what we should do or what we should follow, and that is very helpful.” In terms of communication support with their partners, Group 4 (Catherine, Tom, and Tamara) seemed to be the most in need of their instructor interference to help them move forward with their collaboration.

Participant responses revealed varied expectations regarding instructor involvement in the VE. Some (Tom, Catherine, Dania, Rana) only anticipated instructor support in response to specific issues or concerns. Dania, Eric, and Lubna mainly expected an explanation of the task instructions and deadlines. Others (Kamal, Holly, and Bella) appeared to hold no clear expectations of instructor involvement. Layla, by contrast, expected instructors to actively join and facilitate the sessions, while Nancy, not expecting support, believed it was her responsibility to take the lead in her group to ensure their task completion. Looking at the groups these participants formed, this potentially suggests a relationship between students’ expectations of instructor support and how groups coped (or failed to cope) with challenges during the VE. While Groups 3 and 4 struggled in part due to a lack of clear expectations around instructor involvement, Groups 1 and 2 demonstrated a more intentional or adaptive approach to managing their VE experiences, shaped in part by differing views on pedagogical support.

In Group 1, Layla stood out as a student expecting instructor involvement. As she shared in her study interview, she hoped the VE instructors would facilitate sessions including a variety of topics for dialogue between the VE classes. While this expectation was not met,

her vision of a more guided experience may have influenced her attempts to maintain structure and accountability within the group. Conversely, Eric and Lubna did not articulate clear expectations, but the group still functioned relatively effectively. This may be attributed to complementary personalities, prior intercultural experience, or a shared sense of task responsibility, which helped mitigate the lack of instructor guidance. In Group 2, Nancy, Dania, and Rana also did not expect direct intervention from instructors, but Nancy's initiative, given her leadership ability as a business owner, appeared to set the tone for group coordination. Dania and Rana demonstrated responsiveness and adaptability to the group's evolving needs. This shared orientation fostered a more agentic approach to managing their collaboration, contributing to a relatively cohesive group dynamic despite minimal external facilitation.

In contrast, Group 3, composed of Holly, Kamal, and Bella, also did not express clear expectations for instructor intervention, yet their collaborative experience was more fragmented. Although both Holly and Bella took their leadership roles seriously, the absence of a clearly articulated group vision and the lack of prior expectations for self-directed leadership seemed to limit the group's cohesion. Without a strong guiding presence or adaptive communication strategies, the group struggled to maintain momentum and navigate the intercultural and logistical complexities of the VE tasks. This contrast suggests that while minimal instructor support was a common condition, individual readiness and internal group dynamics played a critical role in shaping the outcomes of group collaboration.

Group 4, comprised of Tom, Tamara, and Catherine, lacked both a clearly defined internal leader and a shared vision of external instructor support, which left them particularly vulnerable to fragmented communication and inconsistent task coordination. Both Groups 2 and 4 had group members who only expected instructor involvement when issues arose. In Group 4, however, this reactive stance, combined with an absence of proactive leadership, limited the group's ability to establish cohesion. Their collaboration was marked by tentative

participation, unclear delegation of roles, rushed task planning, and delayed decision-making. Without articulated expectations or a sense of group direction, the members navigated their VE experience in a disjointed manner, rarely initiating strategies to improve interaction or seeking clarification from instructors, even when difficulties emerged.

Among the four VE groups, Group 2, led by Nancy, was the only group that maintained a consistent leader throughout the exchange. Nancy's leadership balanced task management with the creation of a welcoming and inclusive environment. Her deliberate choices, such as avoiding pressure by not wanting group members "to feel forced to speak" and starting conversations casually to ensure the VE did not feel "purely task-driven", reflected both her leadership sensitivity and her central role in shaping the group's tone, guiding communication, and managing direction. This approach also empowered others, like Dania, to take the initiative in fostering a culture of support.

In contrast, Group 1 demonstrated a more distributed leadership model. Although Eric was the designated leader, the interaction among Eric, Layla, and Lubna showed a strong sense of shared responsibility and relatively equal participation. Eric's comment, "I appreciate Layla, she works very hard," underscored the mutual recognition within the group. Despite facing several challenges, this co-leadership dynamic enabled open dialogue around sensitive issues and helped extend their interaction beyond formal VE tasks.

Groups 3 and 4, however, showed more authoritative leadership tendencies, though for different reasons. In Group 3, Holly and Bella adopted a task-oriented leadership style, often making executive decisions to meet academic expectations. While they made initial attempts to involve their peers, decision-making ultimately rested with them, partly due to their caution around navigating unfamiliar cultural discussions. By contrast, Group 4's leadership dynamic was shaped more by necessity than choice. As the smallest group, with only one participant from Jordan, who appeared disengaged and minimally collaborative, the remaining members

had limited opportunities to establish co-leadership. This led to leadership being assumed by default, rather than emerging through active collaboration or mutual agreement.

Across groups, several participants who demonstrated leadership qualities, actively engaged in collaboration, and took initiative in solving challenges raised questions about the instructors' decision to appoint leaders exclusively from the partner class. In Group 2, Dania questioned this choice directly, "why is it from the other class? or what if she wasn't like a good leader or something? How did you know that she would be the best leader for our group?" While both she and Rana appreciated Nancy's leadership, Dania remained uncertain about the criteria behind the decision. Rana added that although Nancy never acted as if "كانت قائد علينا" ("she was our head"), she still would have valued the opportunity for herself or Dania to take on the leadership role, even temporarily.

Similar views emerged in Group 1. Lubna acknowledged the benefit of having the older participants in Canada as leaders but pointed out the missed opportunity: "If we got the chance to be leaders, we would learn to be more responsible... so it was a disadvantage for us." However, both Lubna and Layla, like Dania and Rana, emphasized that not being assigned as leaders did not hinder their active participation or willingness to contribute. As Lubna put it, "We have to also do our work and put full effort." Dania echoed this by saying: "I did not see that the actual experience has to deal with who's the leader."

Participants like Nancy and Eric, who embraced a more inclusive leadership style, fostered relaxed and participatory VE environments. Nancy described herself as "the cool leader", while Eric expressed appreciation for Layla and Lubna's critical roles despite knowing that "they only need[ed] to pass their course." These dynamics suggest that leadership was often negotiated informally within groups and that collaborative approaches, regardless of formal titles, were key to effective intercultural engagement.

In contrast, participants who prioritized task completion and English language practice often viewed leadership through a more functional or pragmatic lens. From the Jordanian side, Kamal (Group 3) linked the instructor's decision to language proficiency, "I think that the students in the Canada, the leader Holly and Bella, is not that the English language is a new language for them... they communicate the English language better than our [students] in Jordan." Bella echoed this view, framing the disadvantage of not being selected as a leader in terms of both English and technological skills:

If only ESL students in Canada have the opportunity to be group leaders, it seems that we assume Jordan students are not good at using English or online software, such as Zoom or Teams, to coordinate with other VE partners compared with ESL students in Canada.

Other participants connected the leadership structure to course assessment differences. For instance, Eric (Group 1) suggested that the leadership decision might reflect the stakes involved, "...the rubric is different. They only need to pass or feel this class... in our ESL class, everything need to be great for your final marks." Similarly, Holly (Group 3) acknowledged that being a leader came with added pressure but welcomed the responsibility: "It was more responsibility for me," she explained, adding that she and Bella were thankful for the opportunity to develop their leadership skills:

Another disadvantage, maybe, is like, because we all come from Canada so in many topic, that we are dominant. The idea for what we should talk about. So I think if we can give some leadership or choosing a leader from Jordan, they can talk more about their experience.

Notably, Holly was the only participant who explicitly acknowledged the power imbalance created by assigning leadership solely to participants in Canada, "Because we all come from Canada, so many topic, that we are dominant... So I think if we can give some leadership or choosing a leader from Jordan, they can talk more about their experience." Her reflection underscores the irony that, while she recognized the group's dominance, the leadership exercised was itself somewhat one-sided and did little to empower the Jordanian

members to take initiative. In fact, the VE experiences navigated in Group 3 illustrate clearly how limited instructor guidance may have shaped learners' goals and priorities during the exchange. In their interview responses, members framed intercultural sharing as somewhat "off-task," suggesting that they did not view it as integral to the VE's objectives. This perception points to the potential value of greater instructor guidance and facilitation, both within class and across the VE, to reinforce the idea of task-as-process rather than task-as-product. Given that this VE was situated in a language course, where students were accustomed to predefined learning goals and teacher-directed instruction, they may have defaulted to focusing narrowly on linguistic outcomes and task completion. In this context, the absence of explicit scaffolding around intercultural aims meant that students may have missed opportunities to engage more meaningfully with the exchange as an intercultural learning experience. This highlights how limited instructor support, combined with uneven leadership distribution, can shape dynamics in ways that either restrict or empower participation.

A key factor shaping students' engagement with intercultural learning was the limited instructor facilitation of intercultural dialogue. The absence of structured tasks that explicitly encouraged learning about one another's cultures, and the gradual neglect of the Culture Hub, reduced opportunities for students to engage meaningfully with cultural content. Although Week 3 included themes such as stereotypes, culture shock, and global work environments, these were typically addressed at a surface level, with minimal student-led efforts to deepen the conversation or reflect critically. Without active facilitation, the responsibility for initiating and sustaining intercultural dialogue fell entirely on the students. As a result, personal motivations and group dynamics significantly influenced how the intercultural dimension was approached.

This divergence was particularly visible when comparing the groups. Groups 1 and 2 showed a stronger curiosity about one another's cultural contexts, initiating conversations

around complex and sensitive issues such as surviving military occupation, navigating life as a minority, or adjusting to new cultural environments. These topics emerged organically and were discussed with openness. In contrast, participants in Groups 3 and 4 appeared more task- and language-focused. Their discussions largely revolved around completing assignments and practicing English, with fewer attempts to explore intercultural issues in depth. While these students occasionally shared cultural facts (e.g., about food or traditions), their engagement with cultural topics remained limited in scope and duration. This contrast illustrates how different group cultures, and the lack of consistent instructional support shaped the depth and direction of intercultural learning across the VE.

Across the cases, the data revealed that all groups experienced interruptions in intercultural communication, though in different forms. In Group 1, discussions on sensitive issues, such as the situation in Palestine, were left uncompleted. Group 3 frequently relied on let-it-pass strategies to avoid topics they perceived as sensitive, whereas Groups 2 and 4 did not sustain engagement with potentially controversial decisions around task completion. Even decisions about whether and how to respond to partners' Padlet posts may have been influenced by the absence of instructor facilitation. For example, Bella's comment that replies to comments were not important but replies to questions were may reflect the lack of visible follow-up from instructors and an attitude of doing only the minimum required for assessment. Taken together, the absence of active instructional guidance meant that opportunities for deeper exploration were frequently left unresolved, reinforcing a tendency toward avoidance or surface-level closure rather than deep and ongoing critical engagement.

These interactional patterns suggest that while students were willing to initiate certain discussions, they often lacked the tools or confidence to navigate the complexities of intercultural dialogue. The absence of active instructor facilitation meant that opportunities for

deeper exploration were frequently left unresolved, reinforcing a tendency toward avoidance or surface-level closure rather than deep and ongoing critical engagement.

In this context, intercultural interactions did not revolve solely around learning about partners' cultures or addressing specific intercultural "issues." Instead, the data suggest that participants engaged with broader, process-oriented aspects of "the intercultural." This included learning how to function within diverse group settings, negotiate roles and tasks, manage misunderstandings, and navigate the everyday complexities of co-existing with culturally different others. While some groups exchanged basic factual knowledge (e.g., about food, fashion, or traditions) and challenged surface-level stereotypes, these discussions were rarely extended or revisited beyond their immediate task contexts. Group 1, for example, briefly explored critical cultural issues but did not appear to build on them over time. Their Week 2 interaction, however, highlighted how turn-taking could create space for follow-up questions and back-and-forth exchanges, allowing cultural topics to unfold more dynamically in the moment, even if such dialogue was not consistently sustained across later weeks. By contrast, in Groups 2, 3, and 4, turn-taking was more constrained, with members often keeping a one-to-one discussion, limiting the scope for topic and perspective exploration.

Although the VE was designed with a task sequence intended to scaffold intercultural learning, this progression was not consistently followed or facilitated. As a result, the most meaningful evidence of intercultural engagement emerged not through direct cultural discussions but through the relational and communicative processes students used to co-construct their group cultures. Their capacity to navigate communication breakdowns, tensions, differing expectations, and collaboration styles became the most telling indicators of their intercultural development in the VE environment.

6.1.2 Participant Identities, Personalities, and Evolving Intercultural Experiences

Participants brought hybrid identities and diverse cultural experiences into their VE group interactions. While many were motivated to share about themselves and their cultural backgrounds and to complete tasks collaboratively, they also encountered challenges related to differences in communication styles, personal attitudes, and collaboration approaches. Interview responses and group observations revealed that participants' personalities and self-perceptions played a key role in shaping their engagement. Some participants explicitly attributed their reactions or behaviors to specific personality traits, using these explanations to clarify misunderstandings or interpret their partners' expressions and intentions.

Prior intercultural experiences also influenced students' ability to navigate the VE. Several participants indicated that their previous exposure to international or intercultural contexts prepared them to interact more openly and flexibly with their partners. Importantly, these intercultural dispositions were not static. Some participants demonstrated a shift in their strategies for negotiation and collaboration, while others maintained or even regressed in their approaches throughout the VE. Many reflected on how the exchange enabled them to discover and explore aspects of their "online selves" or virtual identities, contributing to a process of ongoing identity construction (Dooly, 2017; Kramsch, 2009).

These evolving identities and personalities shaped how students managed moments of misunderstanding, negotiated tasks, and responded to tension within their groups. The presence of such interpersonal and intercultural diversity created both challenges and opportunities for learning, making identity and personality key dynamic factors in shaping the trajectory of intercultural collaboration.

6.1.2.1 Identities, Personalities, and Evolving Intercultural Experiences Shaping Emerging VE Cultures: Cross-Case Analysis

While all participants in Canada had prior experience living in a multicultural society, and a few participants in Jordan also referenced past intercultural encounters that helped ease communication, the data suggest that these structural or contextual experiences alone were not the primary drivers of their intercultural engagement. It was also the individual personalities, relational dispositions, and identity awareness of group members that most strongly shaped their group cultures and depth of interaction. A comparison across the four VE groups reveals how individual identities, personality traits, and relational dispositions significantly influenced the formation of emerging group cultures and the depth of intercultural engagement. While the structural design of the VE set the stage, with limited instructor facilitation, it was ultimately the interpersonal and identity-driven contributions of group members that shaped their collaborative experiences.

Group 1 displayed a distinctly proactive and identity-conscious dynamic. Layla's natural inclination toward leadership, her multilingual background, and her approach to intercultural differences made her a confident contributor who often initiated discussions. Lubna, driven by a strong sense of responsibility and her lived experience as a Palestinian navigating occupation, contributed thoughtfully and with determination. Her longing for learning about Islam and her ongoing search for "a sense of belonging", as she explained, seemed to inspire her interactions with Eric on his life as a Muslim Chinese in China and Canada. Eric brought a reflective, hybrid perspective as a Muslim Chinese international student, often connecting across cultural lines both synchronously and asynchronously. From what he shared about his first jobs in Canada, it seems that curiosity and the ability to initiate interactions with others are markers of his character. Together, their shared openness and cultural hybridity fostered an inclusive space for critical conversations, especially around

complex topics such as identity, marginalization, and cultural misunderstandings. Despite Michael's apparent disengagement, the group's core members co-constructed a culture that embraced difference, shared responsibility, and dialogue, highlighting how personal values and identity positioning can actively shape intercultural engagement.

Group 2 developed a strong sense of cohesion rooted in relational openness, humor, and mutual respect. Nancy's flexible and supportive leadership style was shaped by her evolving identity as an immigrant in Canada, her reflections on life experiences in both China and Canada, and her ability to reevaluate and adjust her life choices, as seen in how she described her decisions about her major and English language learning. Her leadership approach fostered a safe and engaging group culture. Dania's humor, linguistic enthusiasm, and informal initiative functioned as important social glue, easing tensions and fostering rapport within the group. Her earlier articulation of the uniqueness of languages appears to have informed her subsequent linguistic practices, particularly her initiation of code-switching with one participant and her supportive engagement with others. This suggests that her metalinguistic awareness not only shaped her communicative choices but also contributed to the development of a more inclusive group dynamic.

Rana, despite her more limited English proficiency and nervousness in the beginning of the VE, asserted her equality within the group and demonstrated a strong willingness to learn and collaborate. Her early expression of openness to learning from others' experiences, along with her readiness to seek language support from her partners, shaped her positive orientation toward their assistance, particularly evident in synchronous interactions. The group's dynamic was characterized by emotional generosity and reciprocity, where personal expression was welcomed and leadership was exercised with sensitivity. This contributed to meaningful, if sometimes subtle, intercultural learning, particularly as members explored issues such as cultural adaptation and inclusion through shared narratives.

Group 3, in contrast, exhibited a more functional and language-oriented group culture. Holly and Bella's leadership was shaped by their academic focus and desire to improve English skills, which made the group highly task-oriented. Their early shared concerns about handling uncertainty across cultures and navigating unfamiliar intercultural topics with their VE partners likely shaped their cautious VE interactions and collaborations. Their interactions with Kamal were cordial but somewhat instrumental, as all three members showed limited willingness to share deeply about their hybrid identities. While brief mentions of their experiences living in Canada offered some cultural insight, the group often defaulted to safe or familiar conversational ground, relying on shared linguistic goals to frame their collaboration.

Bella's accounts of her life experiences prior to the VE, as well as her early interactions during the exchange, reflected a modest curiosity and interest in engaging with others. Nevertheless, her interactional trajectory, particularly in her role as the second incoming group leader, appeared to be shaped, at least in part, by the dominant leadership style of Holly, whose directive approach managed the group's interactions with their VE partners. Kamal's focus on improving his English, paired with a deferential view of his partners' language abilities and direct, concise exchanges with them, reinforced a hierarchical dynamic that left little room for deeper intercultural engagement. Unlike Groups 1 and 2, personal stories and curiosity about cultural complexity played a marginal role in shaping this group's VE experience.

Group 4 reflected a more detached and cautious dynamic. With Tamara largely isolated due to her groupmates' limited interest in her culture, the group operated through a lens of politeness rather than meaningful engagement. Catherine's selective cultural interest and Tom's reserved demeanor contributed to a minimalistic approach to interaction. While both Catherine and Tom were reportedly kind to Tamara and avoided overt tension, their primary goal seemed to be completing the exchange with minimal disruption. Their shared identities provided a stable platform for collaboration but also appeared to limit openness to difference.

Consequently, intercultural dialogue in this group remained shallow and task-focused, with little evidence of personal or cultural curiosity driving their interactions.

With limited instructor facilitation, strategies influenced by individual traits or problem-solving approaches to navigate tension, learning challenges, or cultural differences became more visible. In Groups 1 and 2, for instance, both Lubna and Rana tended to use Arabic when they struggled to find the right English phrasing, and Layla and Dania readily supported them through code-switching. In Group 4, when Catherine and Tom struggled to pronounce Tamara's name, their approach was to suggest she adopt an Anglo name, following a norm many Asian students adopt in cross-cultural contexts to facilitate smoother interactions. Finding their suggestion abnormal, Tamara rejected it, and the mispronunciation of her name gradually became a key factor in widening the gap between them. Without further discussion of the matter, Tom and Catherine were upset with her decision. Similarly, the "let-it-pass" strategy gradually became a central mechanism through which Bella and Holly in Group 3 managed the group's decisions with minimal input from their VE partners. In contrast, when Eric sensed Michael's growing distance from the group after the scenario meeting, he approached him privately to better understand the situation and, together with the group, made scenario adjustments accordingly. These contrasting strategies and responses, ranging from avoidance and accommodation to proactive negotiation, underscore how individual personalities and dispositions can significantly shape the trajectory of intercultural collaboration in the absence of strong instructor guidance, ultimately influencing group cohesion, inclusivity, and the depth of mutual understanding.

6.1.3 ELF As a Shared Ground for Communication and Intercultural Bonding

All participants in this study had studied English for most of their school and university years. Their autobiography videos and VE interactions revealed that the majority learned English in their home countries through education systems that emphasized textbook-based

syllabi and a grammar-translation approach. With limited opportunities for speaking practice in class, many participants identified speaking as their most challenging skill.

English proficiency levels within each VE group ranged from advanced to intermediate to novice. These differences significantly influenced the depth and quality of VE interactions, participants' ability to contribute to group tasks, and the development of interpersonal relationships. Language ability also shaped group dynamics and prompted support strategies, such as translation, the use of written versus spoken communication, and asynchronous messaging outside scheduled meetings.

As noted in earlier sections, many participants joined the VE experience with the goal of improving their English. Most viewed the exchange as a valuable opportunity to connect with other learners and share language learning experiences and advice. For many participants in Jordan, the VE represented their first experience using ELF in live intercultural communication. While participants in Canada had previous experience using ELF, this was their first time engaging with peers from Jordan.

Despite varying levels of proficiency, participants often acknowledged each other's efforts to learn English and openly discussed and validated the challenges involved. These shared understandings influenced both individual and group strategies for managing linguistic barriers. Participants' perceptions of ELF also contributed to shaping their engagement in the VE. While some viewed culture as integral to communicating in ELF, others treated the exchange primarily as a space for language practice. These differing orientations toward ELF influenced how participants understood the purpose of the VE, how they defined intercultural interaction, and how they approached collaboration and communication within their groups.

6.1.3.1 ELF Shaping Emerging VE Cultures: Cross-Case Analysis

Groups demonstrated varying capacities to accommodate members with lower English language proficiency, revealing how interpersonal dynamics, attitudes toward collaboration,

and perceptions of linguistic equity shaped their group experiences. In Group 1, Layla and Lubna acknowledged that Eric and Michael had comparatively lower English proficiency, yet this difference did not hinder participation. Their inclusive and supportive environment, coupled with Eric's openness and genuine curiosity about his partners' cultures, enabled balanced engagement. Eric explained that learning about his partners' culture "pushed" him to speak with more confidence and improve his skills. During the group's reflection on their Week 2 interviewing experience, he clearly stated that discussing English language learning only can be "boring" and the task "forced" him to ask his partners about their English language journey. Instead, he would rather "ask [them] something else like [their] personal experience and [their] own stories." Layla, who often took the initiative in supporting communication, played a key role in bridging linguistic gaps, ensuring no one was left out.

Group 2 reflected a similar dynamic. Dania frequently offered Arabic-English translation when needed, and Rana, despite her own linguistic limitations, welcomed Dania's support. Like in Group 1, Rana's willingness to get closer to her partners, learn about their cultural experiences, and fulfill her contribution to the group was not hindered because of her lower proficiency in English. It also did not discourage her from participating, as she acknowledged that they are all participating in this VE to learn and improve. In the group's reflections on their VE experience, she thanked her "friends" for their "good listening and kind treatment" and acknowledged the VE space through which she changed from "pressured" to "more relaxed and more confident". Moreover, the group's open, humorous, and collaborative atmosphere fostered a sense of equality and mutual encouragement, helping all members engage meaningfully regardless of their proficiency levels.

In contrast, Kamal (Group 3) appeared to be frustrated with their fourth partner's "bad" English. Both Bella and Holly later recognized the value of using Arabic, though this realization came somewhat late in the exchange. It was only when they asked Kamal to assist

their other partner in Jordan to set her Zoom background, after several unsuccessful attempts in English, that they turned to Arabic for support. Reflecting on this experience, Bella noted: “If we have some difficulty to express ourselves in English, then we can use our native language to communicate.” Throughout their group interactions, Bella and Holly showed some flexibility toward both of their partners’ limited proficiency. This accommodation aligns with their expressed understanding that, as English language learners themselves, they are all in continuous need of practice and support. On the other hand, their approach might also reflect a generally cautious communication style and the emotional distance that seemed to characterize interactions within the group.

The gap between Tamara and her partners in Group 4 seemed to be a reason for not tolerating her lack of contribution to the group. Both acknowledged her efforts to practice English in Jordan. They showed casual empathy, encouraging her to keep practicing, inviting her to “practice here [the VE] with [them] and stay in touch”. However, they did not seem to know how to support her need to use Arabic. Unlike Groups 1 and 2, who demonstrated more flexible and relational approaches to supporting each other’s language needs, Group 4’s interactions suggest a more superficial engagement with linguistic difference. While their encouragement was well-intentioned, the absence of deeper relational investment and adaptive strategies ultimately left Tamara marginalized and less integrated into the group’s collaborative process.

In summary, across all groups, participants’ perceptions of English as a lingua franca shaped their collaborative behaviors and intercultural engagement. Groups 1 and 2 treated ELF as a shared, flexible space for both communication and cultural exchange, which helped them bridge language gaps and build stronger interpersonal bonds. In contrast, Groups 3 and 4 viewed ELF more instrumentally, prioritizing fluency and correctness over connection. This resulted in more distant or uneven collaborations, particularly when working with partners with

lower proficiency. These differences underscore how orientations toward language learning influence how intercultural communication is practiced and experienced in VE contexts.

6.1.4 Digital Tools and Group Interaction

VE instructors designated Zoom as the primary tool for synchronous group meetings and Padlet for asynchronous engagement, including discussions on the Culture Hub and Week 3 task, as well as submissions of other VE assignments. Email was also suggested as the initial means of communication. However, during the exchange, most groups shifted to using alternative platforms, primarily WhatsApp and Instagram, to maintain more fluid contact. According to participants, this change was often initiated by partners in Jordan, who reported infrequent use of university email and a preference for instant messaging and social media. Participants in Canada similarly noted that email felt too formal and welcomed the shift to social apps, as these allowed for quicker, more responsive communication.

As illustrated in the section on emerging VE cultures, students demonstrated varied multimodal preferences when creating their autobiography videos, reflecting differing communication styles and comfort levels. These ranged from how they recorded, using phones or laptops, to how they presented content. Some used slides alongside their video feed, while others spoke directly to the camera. A few opted for voice narration with the camera off. Their choices also varied in content, with some incorporating multiple languages, text, and personal images. While a few students spoke spontaneously, others preferred to read from a script. These varied approaches not only highlight individual digital literacy and stylistic preferences but also reveal deeper cultural orientations toward self-presentation, privacy, and linguistic confidence in intercultural settings.

6.1.4.1 Digital Tools Shaping Virtual Exchange Cultures: Cross-Case Analysis

Participants' multimodal choices in crafting their autobiography videos and managing their presence during Zoom meetings revealed patterns tied to their personalities, hybrid

identities, and goals for VE. Across all four groups, participants reported that their selected formats, whether appearing on camera or incorporating photos, were intended to represent what they considered their “authentic” and “natural” selves. For example, Catherine (Group 4) and Rana (Group 2) expressed initial discomfort with being on screen, citing shyness as a reason for withholding their video presence until a stronger rapport was built with their group members. In Group 3, Holly, Bella, and Kamal explained that their decision to avoid including personal photos in their autobiography videos was based on the absence of explicit requirements from the instructor, indicating a more task-oriented approach to the exchange.

Zoom background choices followed a similar pattern. Most participants used unblurred backgrounds during group meetings, except for Bella and Holly (Group 3), and Catherine (Group 4), who consistently opted to blur their backgrounds. Although this preference was not directly explored in interviews, their choices may be interpreted as attempts to maintain a neutral or professional appearance. This tendency may also reflect greater familiarity with digital norms in formal educational settings, particularly those prevalent in Western academic contexts.

Across all groups, participants agreed that email was not a feasible or effective tool for communication during the VE. Instead, alternative platforms were adopted based on each group’s dynamics, communication goals, and interpersonal rapport. Group 1 used Instagram, while Groups 2, 3, and 4 relied on WhatsApp. For Group 1, the decision to use Instagram was driven by a desire to foster stronger interpersonal connections and gain insight into one another’s identities beyond the formal academic context. In his VE reflections, Eric shared that he “enjoyed” using Instagram because it was a new experience for him as he had been used to *WeChat*, a Chinese-built instant chat application, for communication. Lubna explained that Instagram provided a richer sense of who her group members were, even before they formally met: “Instagram is a good way for communication. We added each other so we knew how each

one of us looked before watching the videos, we checked each other's accounts, shared stories and highlights.”

This early informal engagement appeared to enhance group cohesion and comfort in discussing personal and sensitive topics. Eric, for example, noted that he preferred using Instagram for private conversations about delicate issues he had raised in Padlet posts: “Here in Instagram we can have a private conversation, and I can tell her the truth about that... If someone from China or even the Chinese students read my comment in Padlet, they maybe take a screenshot and send to the Chinese government.”

In contrast, participants in Groups 2, 3, and 4 used WhatsApp primarily for functional purposes, scheduling meetings, sharing resources, and coordinating tasks. While less personal in nature, WhatsApp was viewed as effective and efficient. Nancy (Group 2) emphasized its ease of use: “WhatsApp, I feel like it's very easy to communicate. I don't need to go to email and then type hi this that. But it's more straightforward.” Similarly, Holly (Group 3) expressed satisfaction with their communication once they transitioned to WhatsApp, noting that it was more reliable than previous methods:

In the beginning, I used email to contact with our group member. But it doesn't efficiency [it was not efficient], I think because maybe the time zone, maybe the habit of checking email is different. So, the people in Jordan suggest for us maybe we can switch to the social media that we chat more frequently. That was a very great idea, and then we switch to Whatsapp group and that's help us to save a lot of time when we discuss it together

All participants were familiar with Zoom and its basic features, and many offered technical support to their partners when issues arose, such as troubleshooting audio problems or assisting with Zoom backgrounds. Zoom was widely valued across all groups for enabling more direct and engaging communication. As Eric (Group 1) described, Zoom created a sense of closeness, “[We] are actually sitting together.” Similarly, Nancy (Group 2) emphasized the benefit of visual interaction, describing it as “much easier because it makes [us] see each other and see their [her partners'] reaction.” Google Docs was another platform all participants used

comfortably for collaborative tasks. They all reported that they were used to it after COVID-19.

However, Padlet was a new tool for all groups and, despite its multimodal affordances, was largely perceived as formal and limiting. Most participants viewed Padlet as a space for submitting assignments rather than facilitating genuine interaction. Holly (Group 3) referred to it as the platform for posting “homework,” while Dania (Group 2) noted its lack of interactivity, “it didn’t allow [us] to talk.” Bella and Catherine (Group 4) acknowledged that Padlet posts provided some insights into Jordan and its people, but all groups confirmed minimal engagement with the platform outside of required tasks. Particularly, participants in Canada highlighted the increasing academic workloads as a reason for not checking Padlet regularly. Holly noted one of the platform’s limitations, “Padlet doesn't have any notification that let me know that someone [was] sending a message for me and waiting [for] my reply.” This reflection confirms Hewitt's (2005) findings that the features of digital tools, or a lack of familiarity with them, can limit participation.

Regarding the intercultural scenario task, all groups were given the flexibility to prepare either asynchronously or through a combination of synchronous and asynchronous communication. All chose the mixed approach, reporting that synchronous meetings enhanced their connection and made it easier to complete the task efficiently. Even though groups had different dynamics, this suggests that all groups valued a balanced, flexible approach to collaboration and recognized the limitations of relying solely on asynchronous tools for meaningful intercultural engagement. It also reflects a shared sense of responsibility and autonomy across groups; participants took the initiative to create the communication environment they needed.

6.1.5 Intercultural Strategies in Motion: Cross-Case Analysis

6.1.5.1 *Common Strategies with Divergent Impact Across Groups*

Linguistic Accommodation and Solidarity in ELF-Mediated Interaction. In every VE group, participants employed a variety of linguistic accommodation strategies to facilitate intercultural communication and understanding. Commonly used strategies included paraphrasing, clarification requests, rewording and confirmation checks (e.g., "do you mean...?") that were cognitive and relational, to negotiate meaning and support group cohesion. Backchannels, tokens of agreement (e.g., "yes", "I see", "me too") and laughter helped to reinforce peers' contributions and maintained interaction, often spontaneously, signaling engagement and rapport.

Code-switching was particularly relevant in Groups 1 and 2 where switching between English and Arabic helped build comfort and relational closeness. In these groups, it served as a cultural and emotional bridge, easing communication pressures. Group 3 came to appreciate its value later in the exchange, recognizing that earlier use might have clarified meaning and improved connection. In contrast, Tamara's code-switching use between Arabic and English within WhatsApp was seen by Tom and Catherine in Group 4 as distancing. Tom and Catherine did accommodate Tamara by shifting to typed questions (Zoom chat/WhatsApp) and simplifying language; however, these moves were largely pragmatic and task-driven rather than explicitly inclusion-oriented. In practice, code-switching and text-based support were treated as efficiency tools, which narrowed their potential to enable fuller participation.

There were also differences in how the groups utilized certain linguistic strategies and the purposes they served in action. In Groups 3 and 4, paraphrasing, agreement tokens, and politeness markers often acted as face-saving devices to maintain harmony and avoid confrontation, sometimes masking disagreement. This resulted in surface-level interaction where solidarity was expressed, but deeper engagement was limited. Particularly in Group 3,

empathy coexisted with avoidance, creating a dynamic in which participants were supportive but reluctant to explore cultural differences in depth.

Despite these variations, one common thread that was present across all groups was their shared understanding and empathic stance to belonging as English language learners. Even though they noted a difference in their respective proficiency levels, it was not a reason not to engage. For example, Tom described the VE in Group 4 as a "safe" space where they all learned together and faced challenges. This identity as a collective ELF provided a sense of solidarity, patience, inclusion, and within their group, a culture of empathy and joint working.

Use of Synchronous and Asynchronous Technologies to Serve Group Goals. Across the VE groups, participants strategically leveraged various platforms and technologies to support both relational and task-oriented goals. Zoom emerged as a shared favorite, with all groups noting that their synchronous meetings created a more in-person atmosphere, fostering a sense of closeness and improving the efficiency of their collaboration. Beyond Zoom, however, the use of additional tools varied in alignment with each group's priorities and interpersonal dynamics. Group 2 stood out in its deliberate use of multiple platforms, including Zoom, Google Docs, and WhatsApp, to collaborate effectively and complete the task. Their multimodal strategy enhanced both coordination and co-construction of their intercultural scenario, reflecting a high level of task-oriented engagement. In contrast, Group 1 prioritized relational bonding and cultural exchange; their use of Instagram, in and outside the VE timeframe, reflected a desire to connect personally and share more informal aspects of their lives. This selective use of a visual and interactive platform supported their goal of building deeper intercultural understanding.

Groups 2, 3, and 4, by comparison, primarily used WhatsApp for functional purposes, scheduling meetings and finalizing tasks. As they clarified in their study interviews, the platform served as a logistical tool rather than a space for relationship-building. These

differences underscore how the choice and use of platforms, whether synchronous or asynchronous, visual or textual, shaped both communicative strategies and the nature of interpersonal connections. In this sense, the platform acted not only as a medium of communication but also as a mediator of the group's relational and collaborative norms.

As evident in the previous chapter, Padlet and the Week 3 discussions were marked by a limited incorporation of the insights shared by VE participants regarding their experiences with culture shock, cultural stereotypes, and working internationally. These themes were not meaningfully integrated into the scenario meetings or final scripts. With few follow-ups or responses to each other's questions, most groups appeared to treat Padlet as a formal communication tool rather than a space for dialogue. Although Padlet is widely used for brainstorming and dialogue-based activities because of its multimodal affordances, it was primarily used in this context as a platform for posting group work for instructors to review and grade. Many group members tended to only comment on posts created by their own group members. They often used agreement-based responses and avoided disagreement or deeper engagement with controversial topics, as Catherine did in Group 4.

This pattern suggests a reliance on comfort strategies to maintain harmony rather than invite critical discussion. While all participants mentioned that their demanding study schedules limited how often they could check Padlet, the nature of their posts, particularly during Week 3, reflected a task-oriented atmosphere. Students appeared to feel obligated to interact with only a minimal number of posts rather than engage in broader intercultural dialogue. The absence of instructor facilitation may have also contributed to the perception that engaging with the intercultural dimensions of the tasks was secondary or peripheral, with greater emphasis placed on using English and demonstrating communicative competence with group members.

6.1.5.2 Interplay of Individual and Collective Strategies in Shaping Group Dynamics

The cross-case analysis revealed clear contrasts in how individual and collective strategies shaped group dynamics. Groups 1 and 2 demonstrated a much clearer relationship between individual affordances such as empathy, curiosity, and affective openness, and group-level cohesion. Although the collaborative goals of each group were not consciously negotiated, participants' individual characteristics and the norms co-constructed within their groups were closely related to how collective strategies were shaped during the VE. While the VE offered distinct opportunities for learner autonomy, the cases showed how participants' attitudes and subsequent actions around communication and collaboration had a notable impact on group interaction. For instance, members frequently used storytelling, open-ended questions, and language accommodations to foster relational depth and intercultural understanding.

In contrast, Groups 3 and 4 showed more limited and selective forms of individual engagement, with collective strategies shaped largely by practical goals and a desire to avoid conflict, rather than relational investment. For example, in Group 4, Tom and Catherine assumed leadership roles and made key decisions without meaningful input from Tamara. Similarly, in Group 3, members relied on polite phatic tokens and surface acknowledgments to sidestep potential friction, which ultimately hindered deeper engagement. Nevertheless, individual behaviors, such as Bella and Holly stepping in to lead and organize tasks, had immediate implications for group relationships and functionality.

These cases illustrate that individual and collective intercultural strategies are deeply interconnected. For example, Dania's decision to initiate code-switching in Group 2, as well as Holly and Bella's approach to leadership in Group 3, and how these individual decisions affected the flow and quality of interaction, reinforce the idea that autonomy is not only individual but also co-constructed through group dynamics.

6.2 Chapter Summary

This chapter examined the four dynamic factors that shaped the formation of each group's emerging culture and the intercultural strategies that influenced the evolution of their collaboration and interaction: instructor pedagogical choices for the VE implementation, participant identities, personalities, and evolving intercultural experiences, ELF as a shared ground for communication and intercultural bonding, and digital tools and group interaction.

Across cases, learners navigated group relationships, language use, technological tools, and task expectations in distinct ways, resulting in diverse group cultures characterized by varying levels of cohesion, empathy, and engagement. The findings also underscore the importance of affordances, technological, linguistic, and relational, and learner identity in shaping how and why certain strategies were used. Participants' perceptions of themselves as English learners, cultural representatives, or task completers significantly influenced their communicative choices and group dynamics. The analysis highlights the central role of strategic autonomy, which enabled students to make intentional choices about how to communicate, collaborate, and relate to one another. Not all participants treated VE as a cultural learning space, but those who did demonstrated deeper intercultural engagement and more adaptive, layered strategies. Their use of technological and linguistic affordances was closely linked to their identities as language learners and their willingness to view the exchange as more than a language task. Building on the findings from the previous two chapters, the following chapter undertakes a broader epistemological reflection on these experiences, examining how such learner interactions contribute to rethinking interculturality and competence in TMLL environments.

Chapter 7

Revisiting Intercultural Competence in Technology-mediated Language Learning

This chapter addresses the third and final research question of this study: How do learners' experiences and interactions within VE environments contribute to shaping current epistemological understandings of intercultural competence in technology-mediated language learning contexts? Using data from group collaborations, Week 2 and Week 7 reflections, and participant interviews, the chapter explores how participants navigated cultural differences, relational dynamics, and communicative challenges in digital environments. Rather than acquiring cultural facts or predefined skills, learners' experiences in this VE pointed to the fluid, processual, and relational understandings of interculturality, an orientation that encourages revisiting traditional competence-based models of IC and their application in VE.

While previous chapters focused on the group cultures that emerged during VE and the intercultural strategies applied to maintain or evolve these cultures (Chapter 5) and the dynamic factors shaping collaboration and interaction (Chapter 6), this chapter shifts the analytical lens to the epistemological implications of those experiences. In particular, the findings highlight a noticeable shift from what learners *were traditionally expected to achieve*, such as deeper knowledge of other cultures, and what they *actually engaged in*, including, but not limited to, the construction of meaning through strategic interaction, emotional management, formation of VE group culture, and digitally mediated collaboration. Instructors played a limited role in facilitating cross-cultural dialogue, and the tasks often prioritized collaboration over cultural comparison. As a result, learners rarely articulated clear shifts in cultural knowledge or moved from ethnocentric to ethnorelative (Bennett, 1993, 2013) worldviews in a linear fashion. Yet, the data show that many participants embodied a dynamic understanding of interculturality through their actions; they adapted their communication styles, made space for emotions and differences, negotiated roles, and utilized technology to shape their interactions. These

practices suggest that intercultural learning was taking place, but not always in the form typically captured by conventional IC assessment tools such as IDI and other quantitative scales or self-reported surveys.

The chapter is structured into four main sections. First, it examines participants' limited traditional culture learning and explores how they engaged with culture as a dynamic, interactional process. Second, it analyzes how interculturality was co-constructed and relational in context and mediated through learners' strategic autonomy. Third, it situates participant experiences in parallel with widely used frameworks and models, such as those by Byram (1997), Bennett (1993, 2013), and Deardorff (2006, 2009) and perspectives such as interculturality and simplicity (Dervin, 2011, 2016) and transculturality (Grünfelder & Montecinos, 2021; Grünfelder et al., 2024), in addition to approaches to critical virtual exchange (CVE). Finally, the chapter concludes by discussing how these findings point toward an epistemological shift in TMLL, from viewing IC as a set of competencies to embracing intercultural belonging as a central goal of language education in digitally mediated spaces. Through this lens, learners are not merely acquiring IC; they are *living it*, navigating it, and, in some cases, reshaping its meaning.

7.1 From Static to Dynamic Views of Culture: A Limited but Telling Shift

As highlighted earlier, the VE tasks did not directly instruct students to conduct intercultural compare-and-contrast activities, nor did they include specific intercultural issues related to the VE countries or students' home countries for them to learn about or address. Both instructors agreed that including the Culture Hub Padlet with specific questions about students' cultural contexts would help them learn about each other and deepen some of their conversations throughout the VE. However, as noted in the previous chapter, this Padlet was not utilized after Week 1. Student interview responses indicated that their instructors did not

remind them about the Padlet, and given their busy university schedules, students preferred to focus on the main VE tasks.

As a result, students, organically and selectively, fostered dialogue and exchanged information about their cultures, including background on their home countries, cultural identity, student life, customs and traditions, and cultural stereotypes generated by others about their societies or religions. Although most participants reported learning about their partners' cultures and managing to address stereotypes, their examples of gained knowledge were mostly limited to factual information about food, learning English, or traditional customs. For example, participants in Canada in Groups 3 and 4 frequently referred to differences between their educational system and the one in Jordan. Similarly, students addressed stereotypes in their Week 3–4 Padlet discussions and while working on their intercultural scenarios. However, most scripts show that they addressed the stereotypes in passing and rarely interrogated or problematized them in depth.

Without offering specific examples, Layla and Lubna from Group 1 shared that, over time, they developed more knowledge about Chinese culture, including Hui Chinese culture, while Eric shared that he learned more about Jordan and some Arabic words. Most participants indicated that the cultural knowledge they gained, whether through direct interaction with partners or from Week 3 Padlet posts, was mainly for the purpose of completing the intercultural scenario task. Other group members referenced their partners' personal intercultural experiences when discussing what they learned about their culture. In doing so, they mainly focused on life experiences such as immigration, living in urban vs. rural communities, and the opportunities and challenges faced as young people in their respective societies. These responses reflect participants' views of culture and their appreciation for learning through their partners' lived experiences in the VE context.

When asked whether they had researched their partners' countries or cultures prior to the VE, almost all participants said they had not, explaining that they preferred to learn directly from their partners. Some, such as Holly, Catherine, and Bella, searched the time zone difference between Canada and Jordan. Holly and Bella also looked up the geographical location of Jordan and Syria. Lubna and Layla began searching about China and relevant cultural matters after Week 2, as their curiosity grew. Although obtaining cultural knowledge through interaction with partners did not seem to be a goal that students fully fulfilled, their perspectives on learning about culture through interaction established a foundation for their autonomy in choosing how to engage in such learning, despite the limited formal facilitation of intercultural learning in the VE.

Similarly, most participants reported that the VE did not necessarily encourage them to reflect deeply on their own culture. Participants like Nancy and Rana from Group 2 mentioned that connecting with their VE partners made them recognize the need to improve their educational systems in relation to English teaching and learning. Lubna and Layla, on the other hand, stated that the VE helped them appreciate their culture more, although they did not articulate how this appreciation had developed. Overall, participants did not seem to engage in substantial reflection on their own culture in the traditional sense, nor did they offer concrete examples of developed cultural knowledge, whether about their own or their partners' cultures, beyond surface-level topics such as food, fashion, and festivals.

In other words, the VE environment did not appear to strongly promote traditional notions of cultural knowledge or static representations of culture. However, the data did provide compelling evidence that participants' formation of group cultures and the strategies they employed reflected dynamic and fluid understandings of interculturality. These dynamic cultural processes included storytelling and content sharing through social media, which often

sparked spontaneous discussions. In Group 1, for example, these exchanges contributed to building mutual trust and understanding of each other's cultural struggles.

As was clearly shown in previous chapters, the different decision-making processes that those VE groups followed resulted in different levels of navigation of their VE interactions and collaborations. Participants across all groups employed a range of strategic linguistic accommodations to navigate differences through interaction. These included the use of multimodal communication (as seen in Group 4), code-switching (Groups 1 and 2), backchannels (all groups), open questioning (Groups 1 and 2), and confirmation and paraphrasing strategies (all groups). These practices emerged organically, reflecting participants' strategic autonomy in shaping their intercultural engagements. The strategic use of open questioning and storytelling, for instance, helped members in Groups 1 and 2 to establish strong relationships and develop knowledge to communicate more effectively with their intercultural partners. When addressing in the study interview how her VE interactions with her partners helped her develop insights into communicating with her partners, Dania said that her experience taught her that one can learn a lot from engaging with people without necessarily asking directly about their culture or what is acceptable or not acceptable in the cultural environment. In fact, she believed that one should be "in a comfortable environment" with others after "talking to them" and "breaking the ice" to engage in a direct conversation on cultural differences. Lubna and Layla, on the other hand, emphasized that learning about others' stories is important to appreciate differences and that listening to these stories opens opportunities to learn about communal matters.

Strategic use of ELF and code-switching was different among groups, and it showed different processes to cultural navigation. Learners used ELF not just as a shared language but as a strategic and flexible tool for negotiation, demonstrating solidarity, rapport-building, and identity expression. In Group 1, ELF was dynamically negotiated between Layla, Lubna, and

Eric, and they were comfortable navigating English strategically. Code-switching to Arabic by opening the group conversations using greetings such as *masa' al-khayr* (good evening) and *marHaba* (hello) helped create solidarity and normalize plurilingual practices. Similarly, Layla's rephrasing of Lubna's complex ideas in simpler English for Michael and Eric to ensure understanding is an example of using language to demonstrate support and empathy. Lubna's comfort in sharing sensitive stories (e.g., about her imprisoned friend) was tied to Layla's compassionate question framing, showing how ELF use was shaped by emotional awareness, not just fluency. Although there was less code-switching was observed in Group 2, strategic ELF use was evident through multiple attempts to paraphrase, slower speech, or the use of body language.

Dania, for instance, initiated humor and self-deprecating strategies to help the group navigate uncertainty and lower communication tension. Communication in Group 3 was more task-oriented. Holly and Bella's use of ELF was clear and pragmatic, but less relational. Kamal's limited fluency led to shorter turns and fewer follow-ups, contributing to less cultural negotiation and less bonding. In Group 4, English remained the sole medium, a decision mainly made by Tom and Catherine since they perceived Tamara's use of Arabic as distancing and confusing. Given their stand on code-switching, along with Tamara's limited proficiency in English, the group interactions were formal with minimal contributions from Tamara. Tom and Catherine's politeness strategy and Tamara's absence led to a more static and surface-level interactional environment and limited cultural negotiation. By noting these observations, code-switching and ELF served not only functional roles but relational and cultural ones, which created safety, clarifying meaning, and expressing shared identity. Participants navigated cultural differences through their speech (tone, choice of words, pacing), not just what they said. These findings challenge traditional views of ELF as deficient English (Helm, 2016; Kilmanova & Hellmich, 2021; Lindner, 2016; O'Dowd, 2021b) and instead support ELF as a

fluid, negotiated practice of intercultural belonging and an emergent understanding of intercultural communication, shaped by learners' linguistic resources and relational intentions.

7.2 Doing Culture Through Interaction and Strategic Autonomy: Interculturality as Relational, Co-constructed

The findings highlight that learners engaged in *doing culture* through their interactions. Rather than treating culture as fixed knowledge to be transmitted, students engaged in interculturality in real-time by navigating differences, managing misunderstandings, and negotiating relational dynamics. These practices underscore Dervin's (2016) argument that interculturality is not acquired as a set of skills but enacted through situated choices, emotional labor, and collaborative meaning-making. Within this overarching process, two dynamics stood out across the cases: the role of respect, curiosity, and emotional attunement in shaping relational engagement, and the role of autonomy in how learners strategically used language and tools to manage their collaborations.

7.2.1 Interactional Practices of Respect, Curiosity, and Emotional Attunement

In Group 1, doing culture was evident in their scenario planning, where members tackled religious and cultural stereotypes. Their decision to change the script's setting from a classroom to a coffee shop created a more casual and emotionally safe environment for discussion, reflecting an awareness of how interactional context shapes cultural talk. Group 2 similarly showed curiosity and care through personal disclosures, such as accommodating Rana's language struggles and Nancy's navigation of her cultural belonging. Their scenario planning integrated real-life examples of negotiating stereotypes in response to partners' stories, while Nancy's flexible leadership and the group's emotional support reinforced the idea that affective dynamics contribute to intercultural practice.

By contrast, Groups 3 and 4 demonstrated limited curiosity and cultural elaboration. Group 3 relied on efficiency-led leadership from Bella and Holly, which marginalized Kamal's contributions and prioritized productivity over connection. Group 4 drew on surface-level politeness and a "let it pass" strategy, avoiding deeper engagement and reinforcing distance, particularly in how Tom and Catherine navigated leadership without Tamara's meaningful input.

Participants' responses in study interviews reinforced these patterns when asked about moments in which they perceived other VE partners as interculturally competent. Layla described Eric as "always asking respectful questions" and showing interest in learning Arabic. Lubna appreciated Michael and Eric's curiosity about cultural symbols in their scenario, seeing it as an extension of their intercultural bond. Tom highlighted his partners' patience in re-recording their scenario several times, framing patience as essential to feeling comfortable when communicating in English. In Group 2, Rana valued her partners' curiosity about stereotypes related to Jordan while working on their intercultural scenario, while Nancy emphasized Dania's relaxed humor and caring for Rana as key in shaping their interpersonal relationships and their group collaboration. On the other hand, Bella (Group 3) appreciated Kamal's "courage" in admitting that he had possibly "misunderstood" the task requirements for the intercultural scenario. She interpreted his agreement to the script she and Holly had completed as consenting to the group.

Across these accounts, curiosity emerged not only as a cognitive disposition but also as an affective and relational dynamic. It fostered mutual respect, encouraged openness to difference, and helped navigate moments of ambiguity or tension.

7.2.2 Strategic Autonomy in Language and Technology Use

Autonomy was another dimension through which learners engaged in *doing culture*. This was reflected in how groups used language and digital tools to shape their interactions in

context-sensitive ways. In Group 1, Instagram was used relationally, with members exchanging information and photos and continuing sensitive conversations beyond scheduled meetings. Lubna and Eric's inclusion of family and festival photos in their scenario represented multimodal storytelling, while their performative use of voice during the recording showcased creative engagement with tasks. Group 2 similarly drew on multimodality, altering their voices during recordings and scaffolding each other's language use.

By contrast, in Group 3, Holly created a WhatsApp group that maintained only minimal logistical coordination, while her and Bella's consistent use of blurred Zoom backgrounds suggested distance or insecurity when connecting with partners. In Group 4, Catherine and Tom selectively used Padlet to affirm shared views with Canadian partners while avoiding deeper discussion with Tamara, showing a strategic use of technology to maintain comfort rather than pursue intercultural exploration.

Autonomy here was not uniformly expressed. It was shaped by comfort with language, relational positioning in the group, and interpretations of what constituted respectful and meaningful engagement. Strategic autonomy was performed through code-switching, ELF use, and tool selection, highlighting interculturality as an evolving and interactional achievement rather than a fixed trait.

7.2.3 Learner Reflections on Interculturality as Process

Participants' reflections reinforced these patterns. When asked what lessons they would take into their future VEs, if they ever participated in similar projects in the future, students emphasized the importance of respect, patience, and flexibility. Eric and Layla (Group 1) noted the importance of constant personal interaction and strategic use of communication channels, with Layla reminding herself that VE is "not just something academic." Nancy (Group 2) emphasized mutual respect as key, while Catherine (Group 4) highlighted the importance of politeness and understanding of different proficiency levels.

Others acknowledged discomfort, nervousness, or uncertainty as inevitable and, in some cases, ongoing aspects of intercultural engagement. Reflecting on their Week 2 interview, Lubna shared that in future VEs she would be more confident in asking follow-up questions, as this “VE helped [her] become less nervous when speaking to others from different cultures.” In Group 3, Rana acknowledged that people’s histories and realities differ and, therefore, she should adopt a more flexible communication style to interact cross-culturally more effectively. Furthermore, Dania admitted that she would probably remain nervous in all intercultural interactions, but she would ask more questions, engage more with people, and, if completing a VE in a future course, “[she] would like to have leadership since [she] developed time management skills.”

Bella (Group 3) emphasized that in future VEs, she would “encourage” code-switching from the beginning. Holly shared that deciding early on communication channels “that works for everyone,” as well as building communication skills and knowing “how to interact with each other, handle questions in the group,” were among her main takeaways. Kamal stated that he would want to interact with his new partners “not like now,” and that he would spend more time talking to them and getting to know them via Zoom or WhatsApp. Tom from Group 4 clarified that in addition to asking for his partners’ schedules ahead of time for better meeting planning, he would also request additional “contact information,” such as “Facebook or Instagram” and would be “more patient” with delayed responses if they occur.

Rather than treating these reflections as failures or missed opportunities, they highlight interculturality as a nonlinear, emergent process shaped by emotional, linguistic, and contextual factors. Students demonstrated an emerging awareness that intercultural learning is less about fixed skills or outcomes and more about navigating ambiguity, relational complexity, and emotional labor in real time.

Taken together, these findings affirm that interculturality in VE was practiced as *doing culture*: a relational, co-constructed, and context-sensitive process. Respect and curiosity functioned as affective anchors for intercultural exploration, while autonomy enabled learners to strategically manage tools, language, and group dynamics. This emergent view resonates with transcultural perspectives that frame culture as negotiated and co-constructed (Grünfelder & Montecinos, 2021; Grünfelder et al., 2024). Importantly, intercultural gains were not limited to acquiring knowledge about partners or comparing cultural practices, but included navigating discomfort, silence, and avoidance as integral aspects of learning. These findings suggest that IC in digitally mediated VE contexts is less about outcomes and more about the situated practices through which learners relate, adapt, and co-construct meaning together.

7.3 Intercultural Competence Through Learner Experiences: Revisiting Popular Models

This section reflects on how learners' VE experiences both affirm and extend traditional models of IC commonly used in VE research. While these models provide useful foundations, the findings suggest that learners' experiences in digitally mediated group contexts reveal dimensions of interculturality that are more relational, situated, and emergent. Rather than challenging the validity of existing frameworks, the data point to areas where they could be further developed to account for the complexities of intercultural engagement in TMLL environments.

7.3.1 Towards Contextualized Understanding of Intercultural Competence in Virtual Exchange: Learner Perspectives

The findings of this study offer a situated and nuanced lens through which to reconsider how IC is understood, enacted, and developed in TMLL contexts. While widely adopted models such as Byram's (1997) intercultural communicative competence (ICC), Bennett's (1993,

2013) Developmental Model of Intercultural Sensitivity (DMIS), and Deardorff's (2006; 2009) Process Model of Intercultural Competence remain foundational in VE literature, the learner experiences in this study call for more fluid and digitally situated interpretations of such models. Across cases, learners' engagement with culture and interculturality emerged as non-linear, affectively charged, and deeply contextual, shaped by dynamic factors such as digital affordances, participant identity, evolving group norms, and the nature of interaction. For instance, while some learners (e.g., Group 1 and 2 members) demonstrated affective openness, curiosity, and strategic relational engagement, others (e.g., Group 3 and 4 members) opted for cautious, task-oriented approaches that prioritized harmony and efficiency over intercultural exploration. These varied responses highlight how competence is neither universally defined nor uniformly enacted, even within the same VE design.

In their study interviews, after completing the VE, participants were asked about characteristics that make individuals competent intercultural communicators. Part of that involved reflecting on traits and habits they discovered about themselves as online intercultural communicators in this VE. Almost all participants validated the importance of attitudes commonly emphasized in IC models, such as open-mindedness toward learning about others and their cultures, and respecting differences and perspectives that deviate from one's own. Others emphasized that one should be a "good listener," be "willing to share" personal experiences, and be "curious" enough to "research" others' cultures. Moreover, responses included being "brave" and "confident" to ask questions, "generous" in responding to them, and "patient" when interacting interculturally.

When asked how these intercultural traits could be enacted in virtual environments, many participants explained that, just like in face-to-face communication, one's personality plays an essential role in online intercultural communication and that, as Dania put it, practice makes it easier with time. Explaining how patience and open-mindedness can be demonstrated

in both synchronous and asynchronous virtual learning contexts, Dania pointed to her group's strategies while working on the scenario task, including "not being strict" and "being open to others' ideas" when these are "[communicated] in respectful language." Nancy also noted that the COVID-19 pandemic had "somewhat made online communication easier for some," but stressed that practice enhances communication skills. She further emphasized that off-task time in virtual environments can be useful for cultural learning, for example, by watching YouTube vlogs to gain insight into other cultures, "... maybe it's not deep, but at least give you a sense for what that culture is, or maybe you misunderstand that culture, but after you watch on YouTube... then maybe it might correct you."

Holly explained that respect online can be shown through "looking to your partners' eyes directly in the camera," and "nodding your head" to demonstrate active listening. Layla also emphasized that the willingness to compromise and negotiate is key for intercultural communicators. Although she did not elaborate on how this plays out differently online, she noted that open communication beyond the task can help create a more "relaxed" environment, allowing for "more difficult" conversations. Additionally, a few participants, especially those who faced communication challenges, emphasized the importance of responsiveness (both synchronous and asynchronous) in online intercultural environments. Other participants, such as Rana, Kamal, and Eric, stressed that "good English language skills" are important for sustaining "open and lengthy" interactions. Lubna, meanwhile, highlighted code-switching, though she emphasized the importance of "good knowledge on when to use it and with whom."

These responses confirm that traits such as curiosity, open-mindedness, willingness to interact, and respect are essential in intercultural communication regardless of modality. However, participants grounded these traits in relational dynamics and framed them through critical reflections on their own positionality, power, and participation. While such qualities align with core components of widely used IC models, participants' experiences also point to

less investigated dimensions, such as autonomy, criticality, and discourse-level engagement, that take on distinct forms in VE settings. These findings do not contradict existing frameworks but suggest the value of extending them and their practice to account more fully for the situated, dialogic, and context-sensitive nature of IC in TMLL environments.

7.3.1.1 Affirming and Extending IC Frameworks: Insights from VE Group Experiences

Bennett's (1993) DMIS outlines a linear progression from ethnocentric stages, denial, defense, and minimization, toward more ethnorelative orientations of acceptance, adaptation, and integration. However, consistent with critiques of the model (Dervin, 2011, 2016; Durocher Jr, 2008; Holliday, 2011; Piller, 2011), the findings of this study challenge the applicability of such a staged progression in the context of technology-mediated and relationally dynamic virtual VE. Rather than demonstrating steady movement from one stage to the next, learners displayed simultaneous and fluctuating orientations that reflected the complexity of intercultural sensitivity as lived and situated practice.

For instance, Tom and Catherine from Group 4 occasionally displayed attitudes associated with adaptation, one of Bennett's ethnorelative stages. They accommodated Tamara's limited English proficiency by using WhatsApp and Zoom chat to encourage her participation in tasks and meetings. These behaviors suggest some degree of empathy and flexibility in communication. However, their actions also revealed tendencies linked to earlier, ethnocentric stages, particularly minimization and defense. In their Padlet posts during Week 3, both avoided deeper engagement with other VE partners and instead maintained a surface-level politeness to preserve harmony. Catherine's reluctance to confront intercultural tension and Tom's preference for interacting primarily with Catherine, whom he perceived as culturally closer, reflected an effort to minimize difference rather than engage with it. These examples illustrate that the same learners can oscillate between ethnocentric and ethnorelative orientations depending on the context and perceived safety of the interaction.

A similar pattern was observed in Group 1. The group members initially showed openness and rapport, but their responses to intercultural tension revealed inconsistent orientations. Lubna and Eric's emotionally charged exchange about safety in Palestine versus Jordan raised discomfort, and their group struggled to extend empathy or fully address the cultural sensitivities involved. While working on their intercultural scenario in Week 5, the group took concrete steps to include Michael, explicitly considering his position as the only non-Muslim, checking in directly, and later, Layla and Lubna assuming his lower English proficiency constrained participation (which Michael confirmed in Week 7 reflection). However, the changes remained episodic rather than systemic. In DMIS terms, the group moved beyond minimization but did not consolidate a stable pattern of adaptation, which Bennett (1993, 2013) describes as ongoing frame-shifting and behavioral code-shifting that become part of group norms. This illustrates a limitation of DMIS as a linear stage model: development here did not manifest as a clean "stage shift," but as context-bound, relational moves that never fully stabilized. The gap between recognizing factors (religion, anxiety, language proficiency) and stabilizing new practices exposes a limitation of DMIS's stage-like progression. In this example, development unfolded as context-bound, relational oscillation, not a clean move "up" the continuum. This case thus supports nonlinear, processual views of intercultural development over strictly sequential stage models.

Together, these findings underscore that intercultural sensitivity in VE contexts is not a unidirectional progression along Bennett's continuum but a context-sensitive, relational, and emotionally charged process. Learners navigated their positions dynamically, often revisiting earlier orientations when faced with discomfort or unfamiliarity. The data suggest that intercultural development is less about advancing through fixed stages and more about managing contradictions, uncertainty, and the affective demands of intercultural collaboration in real time. It should be acknowledged, however, that in a 7-week VE, typical for COIL/VE

modules ($\approx 6\text{--}8$ weeks), it's also unrealistic to expect durable norm changes without strong, ongoing scaffolds.

When thinking about Byram's (1997, 2020) ICC model, the findings show affirmation with some of its dimensions and areas of possible extension when applied in VE and wider TMLL contexts. Byram (2020) argues that critical cultural awareness (*savoir s'engager*) is a core component of ICC, emphasizing the need for learners to develop analytical tools to interrogate dominant cultural narratives, both their own and others'. He stresses that IC is not only about acquiring factual knowledge of national cultures, but more importantly, about cultivating critical methods to navigate, compare, and reflect on complex cultural practices. In lingua franca contexts, where learners cannot possibly acquire knowledge of all national cultures they engage with, this methodological focus becomes even more important. Learners must be equipped to analyze the cultural practices and beliefs embedded in communication, especially as they relate to issues of power, dominance, and identity.

This position resonates strongly with the emergent, group-mediated, and agentic intercultural practices observed in the current study's VE environments. Rather than approaching culture only with its national affiliations to be explored and learned, participants formulated intercultural meanings in their VE groups, often through strategies to navigate asymmetries, silences, and conflicting or confusing assumptions. The student experiences in this VE suggest that IC emerges through interaction, co-negotiation, and the affective atmospheres of digitally mediated spaces. As highlighted in the earlier section, students often identified moments of empathy, misunderstanding, humor, or discomfort in Zoom or WhatsApp conversations as turning points in their learning. These moments were not simply about demonstrating a skill but about navigating complex relational dynamics in real time, where their identities, emotions, and communicative choices were all at play.

This is exemplified in Group 1 when Eric contacted Michael after their scenario meeting to inquire about his approach to distancing himself from the group. Following their private discussion, the group adjusted the scenario script with a view to enhancing Michael's level of comfort and fostering a closer relationship with the group. In a similar vein, Dania's initiative to assist Rana with her English during the Week 2 interview resulted in a greater number of opportunities for group support, as their partners in Canada relied on code-switching later during that interview and in their subsequent communications, as reported by participants in the study interviews. This approach illustrates how cultural interaction can prompt reflexive comparison and awareness of positionality, which is a form of critical cultural engagement. This aligns with Byram's conceptualization of learners as intercultural speakers who "draw upon their existing knowledge, have attitudes that sustain sensitivity to others with sometimes radically different origins and identities, and operate the skills of discovery and interpretation" (Byram, 2020, p. 49). These learners are not passive recipients of native-speaker knowledge, but rather "[managers of] dysfunctions that arise in the course of interaction" (p. 49).

Moreover, Byram's focus on learner agency in uncovering and analyzing cultural ideologies aligns with this study's emphasis on autonomy and group interaction as central drivers of intercultural learning. In Groups 2 and 4, learners tried to cope with unexpected situations by adjusting their roles to better suit their interactional needs. For instance, Dania's code-switching helped Rana gradually feel less nervous about speaking in English with the group. In Group 4, Catherine and Tom tried to accommodate Tamara's limited participation by creating two scenarios instead of one and used Zoom and WhatsApp chat functions to encourage her participation. These examples echo Byram's claim that IC includes the capacity to observe the power dynamics in intercultural interaction, and demonstrate action to address relational dynamics, not merely conform to dominant models of behavior or communication.

Participants often did this without direct instructor intervention, further emphasizing the autonomous nature of interculturality in digitally mediated group settings.

At the same time, the study expands on Byram's model by shifting the lens from national culture to group-level interaction, especially relevant in lingua franca VE contexts. Byram acknowledges that focusing solely on national cultural content is insufficient and supports learners' preparation through methods of critical inquiry. The current study extends this notion by showing that learners' agency in task negotiation, relational strategies, and group culture building are not only methods, but they are also sites of IC themselves. This affirms that IC emerges not from content mastery but from learners' reflective and collaborative work in complex, digitally situated intercultural encounters.

Thus, the findings support and stretch Byram's model in two main ways; they affirm the centrality of critical reflection, positionality, and power awareness as necessary components of IC and they call for a greater recognition of learner autonomy, task re-design, and group dynamics as essential vehicles for enacting such criticality, especially in VE contexts where interculturality is enacted, not pre-scripted.

Byram emphasizes the value of learners developing methods to critically analyze dominant cultures and power structures, rather than passively absorbing representations of national identities. This argument is particularly important in VE contexts, where national culture is often treated as the default intercultural unit of analysis. However, in this VE study, learners' intercultural engagement did not follow this national framework. Instead, group cultures, emerging through evolving relationships, roles, and emotional dynamics, became the primary contexts in which interculturality was negotiated.

For example, in Group 1, Michael and Eric's conversations around religious and ceremonial diversity in China and Lubna and Layla's about Lubna's safety in Palestine and Jordan revealed moments of positional reflection and emotional sensitivity that go beyond mere

comparison of national values. Similarly, in Group 4, Tamara's resistance to anglicizing her name and her growing discomfort with Tom and Catherine's avoidance strategies pointed to unspoken cultural hierarchies and microaggressions that were negotiated not through pre-existing cultural knowledge, but through emergent emotional labor, discomfort, and silence. These examples affirm the importance of critical reflection and awareness of power relations in intercultural interaction, all central to Byram's notion of critical cultural awareness. Yet, they also highlight the limits of assuming that such criticality can or should be anchored in national culture alone.

Moreover, while Byram's model encourages learners to "engage" critically, it tends to assume that such engagement is best achieved through structured educational scaffolding and curriculum-driven content. In contrast, this study demonstrates how learners exercised autonomy in shaping their own VE experiences, often with minimal instructor facilitation. Through approaching task-as-process (Dooley, 2011), informal multimodal communication, and peer-led problem-solving, learners in Groups 1–4 formed intercultural spaces that were emotionally charged, dynamic, and unpredictable, features that are not fully captured by Byram's conception of competence development.

Byram's (1997) model indeed provides a comprehensive foundation for IC by emphasizing key attitudinal and ethical components such as curiosity, openness, respect for otherness, and critical cultural awareness. Its inclusion of these affective and reflective dimensions positions the model well to accommodate complexity in intercultural learning. However, the findings of this study suggest that applying Byram's model to VE environments, where communication is shaped by multimodal, asynchronous, and platform-specific affordances, requires a more expanded and situated interpretation.

For instance, while Byram's 'skills of interpreting and relating' are essential for navigating meaning across cultural contexts, they are often oriented around interaction with or

interpretation of ‘documents’, whether textual, oral, or event-based,) as a foundation for perspective and analysis exchange. However, in the context of VE, where communication unfolds through dynamic, often ephemeral digital exchanges, this notion becomes limiting. In this study, students communicated across semiotic modes. Eric and Lubna’s use of Instagram to exchange stories and questions on Islam in Group 1 allowed them to cultivate social presence and solidarity; meanwhile, Group 2 relied on open and collaborative interaction over WhatsApp chat, Google Doc comment threads, and Zoom meetings to maintain informal cohesion. These practices demand what Hauck (2019) and Satar et al. (2023) describe as critical multimodal competence, the ability to interpret, negotiate, and produce meaning across multiple communicative modes and technological environments. As such, the “document” in ICC may need to be reimagined not as a fixed, textual artifact, but as a distributed, relational, and multimodal trace of interaction, embodied in memes, screenshots, silences, emojis, shared links, and collaborative edits. These fluid artifacts reflect how learners actively co-construct cultural understanding, navigate emotional labor, and exercise agency in ways that extend beyond the interpretive scope of Byram’s original model.

Moreover, while Byram’s model importantly foregrounds critical cultural awareness as a central dimension of ICC, this study suggests that such awareness may not always unfold through overt critique or discursive reflection alone. Instead, criticality in VE contexts often emerged through embodied, affective, and relational practices. For instance, Tamara’s decision in Group 4 to reject the suggestion of adopting an Anglo name was not framed as a verbalized critique of cultural assimilation, but it nonetheless functioned as a powerful act of cultural agency and resistance. In this sense, her response, grounded in refusal rather than rational argument, points to a form of ethical judgment that resonates with Byram’s intent but also stretches its expression beyond traditional forms. Humor, silence, and non-participation also surfaced as legitimate modes of critical engagement, suggesting the need to expand our

understanding of what it means to be “critically aware” in mediated, intercultural exchanges. These findings affirm the foundational role of Byram’s model while indicating that VE environments call for a broader and more nuanced reading of critical cultural agency, one that accounts for the affective and semiotic complexity of digital interaction. Thus, this study shows that VE contexts call for an enriched application of Byram’s (1997, 202) model components. A more digitally attuned reading of the model, one that integrates the collectivity of culture construction, emotional resonance, platform-specific literacies, and the co-constructed, multimodal nature of interaction, is essential to meaningfully understanding IC as it unfolds in the realities of 21st-century digital exchange.

The findings of this study affirm several core principles of Deardorff’s (2006, 2009) process model of intercultural competence, particularly its emphasis on IC as a dynamic, iterative, and developmental process. First, the study supports the centrality of attitudes such as openness, curiosity, and respect in intercultural learning. Participants across groups demonstrated a willingness to engage with unfamiliar perspectives, whether through empathetic responses to cultural discomfort (e.g., Lubna and Eric’s exchange on safety and occupation in Palestine) or through multimodal collaboration that valued inclusivity over linguistic fluency, such as in Group 2, and to some extent, Group 4. These dispositions align closely with the attitudinal foundation of Deardorff’s model.

Second, the process-oriented nature of IC in Deardorff’s framework is affirmed through the non-linear trajectories observed in students’ development. Rather than progressing through fixed stages, students shifted between empathy, discomfort, and withdrawal depending on contextual and relational factors. This echoes Deardorff’s conceptualization of IC as emergent and adaptive, shaped through ongoing reflection and interaction.

Third, the study reinforces the model’s emphasis on both internal outcomes (flexibility, adaptability, and empathy) and external outcomes (effective and appropriate communication).

For example, students in Group 2 cultivated mutual understanding through WhatsApp and Google Docs, demonstrating external behaviors that were interculturally appropriate while also reflecting internally on their positionalities and roles. Similarly, the employed accommodation strategies, such as agreement tokens and code-switching, are all external behaviors that reflect attempts to navigate internal struggles and uncertainty as much as achieve cohesion and understanding.

Finally, the findings validate Deardorff's (2017) call for reflective, formative approaches to IC assessment. Moments of emotional labor, such as strategic silence or negotiation of discomfort, highlight the need for assessment practices that capture not only cognitive or behavioral dimensions of IC but also affective and processual ones. Thus, the study affirms Deardorff's model as a flexible and inclusive framework for understanding IC development in virtual, intercultural learning environments.

The findings also suggest important extensions and challenges, particularly in the context of tech-mediated, relational, and group-based virtual exchange (VE) environments. The study reveals that group-level dynamics play a key role in shaping IC. Participants formed VE group cultures through their interactions, strategies, and roles, such as peer support, storytelling, and co-leadership, which complicate linear models of IC development. While Deardorff's Process Model of IC (2006, 2009) explicitly encompasses a progression from individual-level attitudes and skills to interaction with others, this study extends the interaction dimension by making the relational context more explicit. Findings show that much of the intercultural learning unfolded not only through individual engagement but also through co-constructed group cultures, emotional labor, and the collective negotiation of meaning within ongoing relationships. For instance, empathy and openness were often not stable traits of individuals but emerged through interaction, such as when Catherine and Tom adapted their communication styles to include Tamara. These findings point to a need to expand Deardorff's

model to account more explicitly for group-level dynamics and emergent relational processes, which are central in VE settings.

The model positions critical reflection as a central internal outcome of intercultural competence (IC) development. In Deardorff's framework, this is often understood as a cognitive process, where learners actively analyze and question cultural assumptions and dominant narratives. However, the findings of this study show that criticality did not always emerge through discursive reflection (i.e., explicit verbal or written analysis). Instead, it frequently appeared in affective and embodied forms of practice. For example, silence sometimes operated as a strategic response to cultural discomfort, signaling awareness and resistance without direct confrontation. Refusal also functioned as a form of critical engagement, as when Tamara rejected the suggestion to adopt an Anglo name, a choice that asserted her cultural identity against the pressures of assimilation. Similarly, subtle acts of resistance were evident in conversational strategies, such as Bella and Holly's decision to employ a "let-it-pass" strategy when they were uncertain about Kamal's comments on his cultural background. This response demonstrated ethical sensitivity, even if it avoided direct clarification.

These moments may seem less overtly "reflective" than what the model anticipates, but they were nonetheless deeply intercultural and ethical. They reveal learners negotiating power, identity, and belonging in ways that extend beyond cognitive analysis. Thus, the study challenges the model's more cognitive framing of critical awareness, suggesting that IC also requires recognition of emotional intelligence, embodied judgment, and alternative forms of ethical engagement.

While incorporated in TMLL and some VE studies, Deardorff's model does not explicitly account for the multimodal nature of communication in digital contexts. In this study, participants used images, memes, code-switching, and digital silence as part of their

intercultural negotiation (e.g., Eric and Lubna's Instagram exchanges on Islam, or Group 2's task coordination via WhatsApp and Google Docs). As discussed earlier, these forms of meaning-making extend beyond verbal or written language, necessitating an expanded understanding of communication competence to encompass critical multimodal literacy (as suggested by Hauck, 2019; Satar et al., 2023).

To sum up, the findings of this study suggest that models of IC, especially when used in VE research and design, should evolve to account for:

- Multimodality and platform affordances: Competence is shaped by the tools students use and how they use them. Zoom, WhatsApp, Padlet, and Instagram all foster different forms of engagement and positioning.
- Affective and relational autonomy: Emotions, group climate, and relational norms play a significant role in how students navigate differences and connection.
- Situated and dynamic identities: Learners' positioning as cultural representatives, English learners, or task doers shifts constantly, shaping their strategies and outcomes.
- Co-construction and group-level dynamics: Competence is not merely individual; it is negotiated within group interactions and influenced by leadership, silence, resistance, and collaboration.

Table 7 summarizes some of the suggested extensions to these IC models and frameworks based on insights from the study findings.

Table 7*Suggested Extensions to Dominant IC Frameworks Based on VE Study Findings*

Framework	Aspect	Proposed Extension Informed by Findings	Proposed Visual Model Adaptations
Bennett (1993, 2013)	Developmental Sequence	- Embrace non-linear, context-specific intercultural positioning that allows learners to shift between stages depending on context, group dynamics, platform used, peer relationships, and task. - Highlight the role of emotional safety and multimodality.	Replace the rigid line of stages with a network map or spiral, where learners can move back and forth depending on context, task, and emotional safety. Mark the nodes of movement with different platforms (Zoom, WhatsApp, Instagram), showing how context shapes positioning.
	Role of Emotion	- Implied in the affective dimension of empathy and acceptance. - Explicitly Include emotional labor, discomfort, vulnerability, and group-level affective dynamics.	colored waves or currents flowing across the spiral or halos of varying colors/sizes to represent emotional intensity.
	Cultural Orientation	- Emphasize shift from viewing cultures as separate entities to seeing them as relative and dynamic. - Reposition culture as emergent and relational rather than discrete categories. Center cultural co-construction and group identity.	Show clusters of learners navigating these pathways together, sometimes converging, sometimes diverging, to indicate that development is relational.
Byram (1997)	Critical Cultural Awareness (savoir s'engager')	Extend the model to account for embodied, emotional, and affective forms of critique (e.g., strategic silence, resistance, humor) in VE contexts.	Affective dimensions: Add a "layer of color" or "emotional currents" running through the model to represent humor, silence, resistance, and trust as relational strategies.
	Skills of interpreting and relating	Extend the model to account for multimodal meaning-making and how learners build intercultural	Add visuals (emoji, chat threads, images, videos) around the skills of interpreting/relating to

		relationships through social media (e.g., Instagram), code-switching, and informal emotional expressions in online settings and collaborative platforms. • Expand “document” to include interactional, dynamic, and affective artifacts (e.g., Instagram posts, chat threads, comments) used in VE collaboration.	show learners using multimodal and social media resources.
	Developmental Trajectory	• Suggest revising the model to reflect a context-sensitive, group-level, and relational trajectory, as intercultural development fluctuated across group dynamics.	Show skills and attitudes converging into a <i>shared</i> collaborative space at the center (rather than just individual competence), symbolizing collective intercultural meaning-making.
Deardorff (2006, 2009)	Internal outcomes (flexibility, empathy, curiosity)	• Extending the model to explicitly account for emotional presence, discomfort, and affective labor as central components in online IC development.	Place a surrounding “web” or “mesh” representing co-constructed group norms, trust, and emotional labor as the <i>context</i> in which the cycle unfolds.
	Attitudes: openness and respect	• Suggest expanding the model to recognize interpersonal vulnerability, trust-building, and social cohesion as key relational attitudes in VE environments.	Show icons of digital tools (chat bubbles, social media, video call symbols) along the interaction arrows to highlight technology as the medium of intercultural growth.
	Interaction emphasis on individual-level outcomes	• Extending the model to better capture group-based, emergent IC development, where meaning is co-constructed rather than only individually processed.	Instead of focusing only on the individual, depict multiple circles (learners) overlapping to form a shared relational space.

7.4 Virtual Exchange as Space for Criticality: Building on Critical and Decolonial Epistemologies in Technology-mediated Language Learning

7.4.1 From Essentialism to Emergence: Relational Interculturality in Virtual Exchange

While revisiting these foundational models, this study also aligns with and extends more recent epistemologies of intercultural learning in VE, particularly CVE (e.g., Hauk, 2019, 2013; Helm, 2020; Kilmanova & Hellmich, 2021) and navigating interculturality and complexity (Dervin, 2016). Instead of constructing culture and competence as static concepts, these approaches view interculturality as negotiated, power-laden, and socially constructed. Throughout the study, learners encountered asymmetrical participation, divergent motivations, and misunderstandings shaped by technological mediation. These factors revealed the messy and emotionally labor-intensive nature of intercultural engagement. For instance, Group 4 experienced an uneven distribution of decision-making responsibilities. Across groups, Padlet was perceived as a formal, non-relational tool. This further indicates that VE/TMLL environments are not inherently equitable or dialogic. Rather, they require considerable negotiation and reflexivity to become meaningful. These VE experiences connect to CVE (Hauck, 2023; Helm, 2024), manifesting VE as a potential space for critical reflection, power awareness, and reflexive identity work, not always achieved or navigated by participants the same way.

Participants' reflections during interviews also aligned with a more critical understanding of competence. While many entered and finished the VE with essentialized views of culture (i.e. national cultures), their growing awareness of their roles as online communicators revealed a shift toward recognizing the fluidity and contextual complexity of culture and interculturality. Some reflected on how their linguistic accommodations supported their interactions or acknowledged that building a "trusting" relationship was a key precondition for meaningful cultural exchange. Furthermore, technology allowed creative

expression for many (e.g., use of multimodalities, Instagram for deeper connection, voice-acting) but also reinforced silence and distancing for others (e.g., functional engagement using WhatsApp in Groups 2-4). These insights mark a notable move toward a more relational and embodied understanding of IC, underscoring the complex, emergent, and sometimes contradictory nature of transcultural engagement.

7.4.2 Critical Language Awareness in ELF Virtual Exchanges

Although several VE interactions in this study remained task-driven, ELF also emerged as a powerful site for intercultural exploration, solidarity-building, and epistemic co-construction. This aligns with decolonial scholarship that reimagines ELF beyond a neutral conduit of communication, instead viewing it as a contested, power-laden terrain through which identities, ideologies, and hierarchies are constantly negotiated (Matsumoto & Kubota, 2023).

Learners routinely normalized language mistakes, viewing them not as deficiencies but as part of their shared communicative repertoire. As Canagarajah (2023) argues, plurilingual competence recognizes that all language users draw on multiple linguistic and semiotic resources without aspiring to native-speaker norms. Participants across VE groups engaged in strategic practices such as code-switching, clarification requests, paraphrasing, and repetition, in addition to use of photos and pictures in some of their video design to co-construct meaning and scaffold mutual understanding. These strategies were not only functional but relational, underscoring a shared responsibility for communication and an ethic of care among peers. Such behavior, as explicitly mirrored in Nancy's statement about Rana's English (Group 2), challenged linguistic determinism by emphasizing that limited fluency did not equate to a lack of intelligence or creativity of expression.

Moreover, any participants expressed admiration for their partners' plurilingual repertoires in ways that reflected genuine curiosity and respect. In Group 1, Eric consistently incorporated Arabic greetings during their meetings and, as reported by Layla and Lubna, used

their Instagram group to request that they teach him basic Arabic phrases. This informal, learner-initiated effort to engage with his partners' linguistic backgrounds illustrates a small but meaningful act of linguistic reciprocity.

In Groups 2 and 3, similar moments of recognition occurred. Nancy, for instance, showed interest in Dania's self-directed language learning, remarking "good for you" and asking several follow-up questions about how she managed to teach herself multiple foreign languages. Bella, similarly, praised Kamal for his background in French and expressed curiosity about his strategies for learning additional languages. This moment was particularly notable given that Kamal's English proficiency, while perhaps rated "low" by standardized assessment measures, did not diminish his perceived linguistic competence or peer respect.

These examples show how participants valued linguistic difference as a resource rather than a deficit. Their openness to learning from one another's plurilingual experiences challenges the dominant paradigms in ELT that equate proficiency with nativeness and often marginalize speakers from non-dominant English backgrounds.

Crucially, accent, often a marker of linguistic marginalization, was not framed as a deficit in any of the groups. Instead, shared accentedness became a source of connection, a marker of common linguistic experience that fostered solidarity. As Kubota (2024) notes, ELF users in global contexts often engage in mutual accommodation and collaborative negotiation, resisting hierarchical assumptions embedded in native speaker norms. Participants demonstrated this orientation, where communicative legitimacy was distributed relationally rather than measured against a monolingual ideal.

Furthermore, participants' navigation of their ELF VE environments supports Panditai's (as cited in Canagarajah, 2023) call to move beyond deficit views of non-native speakers, showing how learners actively apply and develop "non-representational processes, strategies, and dispositions that can help students critically negotiate dominant norms and conventions"

(pp. 291-292) to shape discourse through translingual practices, emotional attunement, and identity negotiation. Thus, it is argued that English users in global contact zones do not passively absorb dominant norms; they remix, resist, and revise them to suit their local ecologies (Canagarajah, 2023; Kubota, 2024; Matsumoto & Kubota, 2023), a reality clearly visible in how participants in this study redefined communicative success on their own terms.

Thus, relational practices across groups in this study encourage a decolonial reconceptualization of ELF in VE, treating it not merely as a pedagogical medium but as a discursive and ideological space where power circulates through language choices and interactional norms. This analysis echoes Matsumoto and Kubota's (2023) argument that ELF should be examined not only as a tool for communication but also as a site where power, privilege, and voice are dynamically constructed and contested.

These insights mark a significant progression toward a more embodied and relational IC that transcends static or prescribed models. This shift aligns with the critique of fixed models and is further supported by the relational approach to transculturality, which frames interculturality as a lived, situated, and context-dependent process that unfolds through collective meaning-making and reflexivity (Dervin et al., 2024; Grünfelder et al., 2024). Thus, the findings point towards epistemological shifts in IC away from competence as fixed knowledge or skills to processes of *intercultural becoming*; a flexible, negotiated, and sometimes contradicting process. In their intercultural becoming, learners engage with identity, emotion, language, and power in ways that extend beyond language practice into deeper reflexivity; a process that the data show is not the same for all participants. Therefore, it should be interpreted beyond the practicum of positive-negative intercultural outcomes. The study builds on and extends current epistemologies of IC by grounding them in empirical cases of learners navigating technology, difference, and collaboration on their own terms.

7.5 Chapter Summary

This chapter examined how learners' experiences and interactions in the VE revealed interculturality as an emergent, co-constructed, and contextually negotiated process, shaped not by acquiring static cultural knowledge but by navigating relational tensions, linguistic accommodations, and digital affordances in real time. Drawing on across-group comparisons and participants' reflections, the chapter illustrated how learners "did" culture through strategic autonomy, affective labor, and the mediation of technology, rather than engaging in formalized cultural learning. Examples from all four groups demonstrated that intercultural engagement was not always linear or harmonious; strategies such as code-switching, clarification requests, silence, and let-it-pass strategies were flexibly used to manage discomfort, distance, or cohesion.

These findings inspire revisiting competence-based views of IC and suggest reframing IC in TMLL as a process of becoming with others. The chapter identified areas for extending the models of Byram (1997, 2020), Bennett (1993, 2013, 2017), and Deardorff (2006, 2009) in their application to VE, particularly by emphasizing multimodal communication, emotionally grounded engagement, and power-sensitive practices.

Incorporating decolonial perspectives, the chapter also situated the use of ELF across groups as a site of negotiation rather than neutrality. Whether aiming for task completion or further intercultural learning, ELF enabled mutual support and solidarity, fostered connection, and signaled shared learner status.

Learners' discomfort, misalignment, or uncertainty were not failures but moments of intercultural growth (Belz, 2003, 2005; O'Dowd & Ritter, 2006), aligning with interculturality and CVE approaches (Dervin, 2016; Hauck, 2019, 2023, Helm, 2020). By grounding interculturality in the lived ELF experiences of learners, the chapter called for viewing IC as

collaborative, situated, and agentic. The next chapter brings together all findings to inform broader theoretical and pedagogical conversations in VE and TMLL contexts.

Chapter 8

Discussion and Conclusion

This chapter synthesizes the key findings of the study and discusses their implications for theory, pedagogy, and future research. Building on the analysis presented in Chapters 5 to 7, it reflects critically on how learners' evolving intercultural experiences in VE environments contribute to rethinking dominant understandings of IC and interculturality in TMLL. In doing so, it interrogates widely accepted frameworks of IC, foregrounds the role of learner autonomy and group dynamics, and highlights the significance of multimodality and identity in shaping intercultural collaboration online. The chapter also reflects on the practical implications of these findings for VE planning, instructor facilitation, and curriculum design. Finally, it considers broader sociopolitical concerns related to the use of VE in today's global context, including reflections on researcher positionality and the potential of VE as a space for critical intercultural engagement and solidarity.

8.1 Summary of Key Findings

This study set out to explore how ESL/EAL learners navigate IC and interculturality in an ELF VE project connecting students from Canada and Jordan. The research was grounded in the goal of offering both theoretical and practical insights into how learners engage with intercultural learning processes in TMLL. To investigate these dynamics, the study employed a digital ethnographic approach combined with a multiple case study design, allowing for an in-depth, situated understanding of group-level interaction and individual meaning-making over time. Digital ethnography was chosen for its capacity to capture multimodal and asynchronous/synchronous interactions in online contexts, while the multiple-case study approach facilitated cross-case comparisons and the identification of patterns and divergences in learner experiences across groups. Data collection methods included a pre-study survey to learn about the study participants and collect their demographic information, two rounds of

semi-structured interviews during Weeks 3 and 7 of the study, participant observation of VE interactions and collaborations including artifacts (e.g., Zoom recordings, Padlet posts, intercultural scenarios), capturing both the process and perception of intercultural engagement.

The study aimed to explore the following research questions:

RQ1: What kinds of intercultural interactions and collaborations emerge within VE groups, what strategies do learners use to navigate them, and to what extent do these interactions, collaborations, and strategies evolve over time?

RQ2: What are the dynamic factors that influence the evolving intercultural interactions, collaborations, and strategies of learners across VE groups, and how do they navigate these dynamics over time?

RQ3: How do learners' experiences and interactions within VE environments contribute to shaping current epistemological understandings of culture and interculturality in technology-mediated language learning contexts?

In response to RQ 1, the study found that intercultural interactions in VE were highly contextual and fluid. Examining the groups' relational dynamics revealed that participants in each VE group formed their own group culture and employed several individual and collective intercultural and negotiation strategies in that process. They employed various intercultural strategies such as paraphrasing, clarification requests, and emotional regulation to navigate collaborative tasks. However, these strategies were not consistently sustained across the exchange. For example, while some groups developed cohesion over time, others experienced periods of misalignment or disengagement. Overall, intercultural development did not follow a linear trajectory, but rather unfolded through moments of connection, tension, and re-engagement.

RQ 2 focused on the dynamic factors shaping learner collaboration. The findings revealed that instructors' choices and decisions on VE implementation, learners' identities,

personalities, and intercultural experiences, English as a lingua franca as a space for interaction and intercultural belonging, and learner choices of digital tools for group interaction played critical roles in shaping learners' experiences. Equally important were internal factors such as learner autonomy, personality traits, and individual comfort with technology. Learners responded to tensions, misunderstandings, and silence in diverse ways, some withdrawing, while others adapted or stepped into leadership roles. Interactions were shaped not only by linguistic and cultural diversity, but also by learners' evolving perceptions of their groupmates, digital identities, and the power dynamics embedded in their exchanges.

For RQ 3, the study showed that learners' experiences in VE contribute to revisiting and reflecting on dominant and current epistemologies of IC, as understood and practiced in VE research. Participants' VE reflections, their group dynamics, interactions, and task collaborations revealed that interculturality emerged as a situated, dialogic process, shaped by real-time interaction, digital self-representation, and group negotiation. Many learners demonstrated an ability to co-construct meaning, adapt communication strategies, and manage discomfort, even with limited instructor intervention. These findings affirm qualities align with core components of widely used IC models and also suggest additional dimensions that confirm the need to move beyond fixed models of IC and adopt more flexible, interculturality-informed frameworks that recognize complexity, relationality, and learner autonomy in TMLL settings. The data also highlighted the limits of over-relying on national culture categories and underscored the role of multimodality, power, and identity in shaping intercultural learning online.

These findings collectively offer a foundation for critically reflecting on theoretical, pedagogical, and design implications of VE, topics that will be addressed in the sections that follow.

8.2 Re-thinking Intercultural Competence and Interculturality Post-Study

The findings of this study call for a critical rethinking of IC and interculturality in the context of TMLL. This study foregrounds interculturality as a lived, emergent, and relational process. This perspective aligns with recent critiques of essentialist views of intercultural competence and emphasizes its relational and context-dependent nature, highlighting how learners navigate cultural complexity through ongoing dialogic interactions that are dynamic, co-constructed, and situated within fluid group relations and multimodal environments (Dervin et al. 2024; Grünfelder & Montecinos, 2021; Grünfelder et al., 2024; Hauck 2023)..These approaches enrich the reconceptualization of IC in TMLL by situating competence within dynamic, collective practices shaped by power, identity, and technology-mediated communication.

As suggested by Dervin et al. (2024), exploring interculturality online includes expanding the meaning of culture from national affiliation to a process of negotiating being and knowing through interaction with others. The exploration of interlocutors' multimodal competence, their navigation of digital spaces, and how they co-construct meaning through these choices are key to understanding interculturality in such media. The findings of this study support this construct of interculturality in two keyways.

First, learners' evolving practices, particularly their use of intercultural strategies such as *let-it-pass* strategies, paraphrasing, small talk, laughter, silence, and storytelling, enabled them to engage with fluidity and responsiveness in negotiating their tasks and co-constructing meaning within and beyond their formal collaboration time. Many participants initially approached the VE with communication styles shaped by their national education systems, such as respect for authority, indirectness, mimetic learning, and face-saving strategies (Jin & Cortazzi, 2006). However, the findings revealed a gradual transformation as learners began to show greater motivation, confidence, and self-evaluation, along with more emotional

attunement and reasoning in their VE interactions. For instance, in Group 1, Lubna and Eric gained more confidence to interact with their partners after their Week 2 interview. The linguistic support Lubna received from Layla, along with Eric's tendency to initiate follow-up interactions to learn about Islam and Jordan, helped them become more accustomed to their partners and use Instagram strategically for interaction. Michael (Group 1) remained relatively concise and quiet during early synchronous sessions and Bella (Group 3) did not realize the potential of using code-switching to ease group interactions. However, both of their later reflections suggested that Michael's silence was not necessarily a disengagement; rather, it was a form of strategic observation. Realizing his concerns about his intercultural encounters with his group members, he was still engaging with the process of becoming more intercultural by remaining silent. Similarly, through the simplex process of intercultural interactions, Bella realized the potential of code-switching in easing intercultural communication. Therefore, they both identified valuable intercultural strategies that they had not practiced themselves but came to appreciate. These accounts demonstrate that interculturality is not always overt or immediate; it may involve emotional reflection, silent learning, and shifting between modes of engagement. It also supports the view of interculturality as emotional, strategic, and non-linear.

Although the national affiliation and cultural backgrounds of some participants appeared to influence their collaborative decision-making and interaction approaches more than those of others (Bella and Holly from Group 3, and Tom and Catherine from Group 4), national culture was not a deterministic factor, but rather an intersecting reality with personality, positionality, and social identities (Byram, 2020), all of which are relational. For instance, it was clear that Holly's 'introvert' personality, as she described it in the study, and Bella's cautious eagerness to connect with their partners in Jordan were key mediators of their interactions. They found task navigation challenging due to Kamal's limited ability to elaborate on ideas clearly and deeply, and their common facilitation of the let-it-pass strategy gradually

built a distance between group members. In contrast, Group 2's punctuality and supportive attitude in their work together was helped by Dania's spontaneous personality, Nancy's leadership skills and Rana's determination to participate in the group's activity. Looking at the level of curiosity and intercultural engagement in Group 1 compared with the other VE groups, we realize that individual traits such as Layla's tendency to elaborate, Lubna's use of storytelling, Eric's curiosity to learn about his partners and Michael's silent observation shaped their VE experiences. Multimodality and non-verbal meaning-making were also key to contextualizing evolving group intercultural interactions within all these groups. Thus, we must understand IC in VE as being shaped by the interaction of contextual and semiotic forces.

Second, the study illustrates learners' capacity to move beyond the role of cultural informants or representatives and to inhabit multiple roles throughout the VE. These included peer supporters, co-leaders, linguistic accommodators, storytellers, and intercultural negotiators, roles that varied not only between learners, but within individual learners over time. In Group 2, Nancy took on a leadership role by summarizing group ideas and encouraging participation but later deferred to other group members when planning and completing their intercultural scenario, relying on the friendly atmosphere of the group and recognizing her partners' multimodal and multilingual capacity to support one another. In Groups 1 and 2, Layla and Dania served as a linguistic accommodator in the groups' Week 2 interviews by helping Lubna and Rana with Arabic-English translation, but they were both aware of when to step in to support and when to step back, allowing their partners to take part in the conversation with comfort. These role fluctuations highlight the value of shifting focus from national cultures to group cultures, which more accurately reflect the interpersonal dynamics and evolving responsibilities learners navigate throughout VE projects.

These findings suggest that examining interculturality requires attention not only to what learners *say* about culture, but how they relationally position themselves and one another

in different moments and tasks. It challenges VE practitioners and researchers to look beyond fixed categories or representational assumptions and instead consider the interpersonal and group-level practices that shape the trajectory of intercultural learning. This move toward non-essentialist understandings of culture also resonates with the Arabic term for culture (ثقافة *thaqāfa*), which implies more than national affiliation. It suggests ways of knowing as it means “speed of learning, preserving and possessing knowledge, adjusting things and contents, understanding them tightly, and leveling the crooked” (Hamdawi, 2016, p.7.) Thus, a متقف *muthaqqaf* (an intellectual individual) is a discerning person who experiences living and being with a shift over time and such ability changes through lived experience and situated interaction. Such a perspective supports the view of interculturality as a temporal and evolving process, one that requires sensitivity to language, identity, positionality, and digital context.

In sum, this study calls for more incorporation of group-level conceptualizations of IC processes to capture the situated, evolving practices that unfold in unpredictable, affectively charged, and socially embedded ways. Group-level dynamics, multimodal interaction, and emotional strategies are central to this process. Interculturality, then, is not a skillset to be acquired once and for all, but a way of engaging with difference that is always in motion, emerging through the nuanced, human, and contextual interplay of Self and Other in digital spaces.

8.3 Task-as-Process, Learner Autonomy, and Intercultural ‘Engineering’ in Virtual Exchange

The implementation of the VE was primarily driven by participants' autonomy in their collective decision-making, relationship-building, and approaches to bridging interaction and collaboration for task completion. Across all four groups, participants made strategic decisions to navigate learning opportunities and challenges within their VE group, often without strong external guidance. The contrasting approaches, Group 1's tendency to experience intercultural

exchange beyond specific tasks and Groups 3 and 4's more task-oriented approach focused on developing language and collaborating within the boundaries of the VE tasks, confirm the importance of understanding task-as-process in VE contexts (Dooly, 2011).

This study foregrounds the significance of learner autonomy as a central driver of intercultural learning in VE, particularly when understood through the lens of task-as-process. Rather than viewing tasks as static prompts with pre-defined outcomes, this perspective, rooted in sociocultural and ecological approaches, emphasizes how learners co-construct, reframe, and negotiate task goals and forms in real time through their interactions. As such, task-as-process becomes a powerful lens for understanding interculturality as emergent, situated, and shaped by learners' evolving identities, strategic decisions, and collaborative dynamics.

Across all four groups, participants did not engage with VE tasks as fixed templates. Drawing on a range of communicative and emotional strategies, some groups transformed tasks into opportunities for personal and collective meaning-making (mainly Group 1), while others followed task instructions more closely limiting opportunities for intercultural exchange beyond the VE tasks (Groups 2-4). For example, Group 1, adapted their scenario-planning task by blending formal dialogue with spontaneous cultural storytelling, using humor and reflection to deepen mutual understanding. Similarly, in Group 2, Nancy, initially feeling nervous, grew into an active facilitator of group discussions, reshaping the group dynamic and assuming flexible leadership in directing the collaborations within the group. These examples illustrate how participants navigated the task space not as passive responders, but as co-designers of their own learning processes.

Importantly, learners' navigation of tasks was not always smooth or linear. In several instances, participants encountered discomfort, miscommunication, or uncertainty, yet used these moments to reconfigure their approach. In Group 3, the let-it-pass strategy was commonly employed as a face-saving mechanism which seemed to gradually widen the distance between

group members. Despite their discomfort in their VE interactions with Tamara, Tom and Catherine developed a rhythm of backchanneling and politeness to maintain alignment. The study also revealed moments where learners reflected on their evolving roles and strategies during the exchange, showcasing task-as-process as a space for self-awareness. In Group 1, Layla mentioned during her second interview that, throughout the VE, she began questioning her leadership practices and gradually adapted her style to be more flexible and open to negotiating and accepting different ways of working. In Group 3, Bella and Holly seemed to be more accepting of Kamal's views and incorporated some of his suggestions in the script they were completing.

This autonomy was also evident in learners' management of time, technology, and group roles. In Group 4, Tom and Tamara frequently negotiated new meeting schedules with Tamara after identifying mismatches in time zone availability. Group 2 strategically fluctuated their use of platforms, switching from Zoom meetings and chat to shared Google Docs, to support more fluid collaboration. These shifts were not imposed externally, but were engineered by the learners themselves, demonstrating an acute awareness of their needs and constraints. These examples demonstrate how learners made real-time adjustments based on their intercultural experiences, rather than relying on prior training or predefined models. Thus, these adaptations illustrate how task progression unfolded through iterative micro-decisions, marked by a variety of negotiation strategies and subtle shifts in tone and participation. In this way, intercultural learning emerged through engagement with the task-as-process, where participants negotiated meaning across emotional and linguistic boundaries.

Furthermore, understanding task-as-process is critical for grasping the social and metacognitive dimensions of autonomy in VE. The study findings complement previous studies and debates on the topic by offering an empirical example of the socially constructed practice of autonomy in building VE experiences (de Moraes Garcia et al., 2017; Little & Thorne, 2017;

Peeters & Ludwig, 2017). Through self-regulation and group formation strategies, learners engaged in collaborative tasks and constructed shared meanings about culture, identity, and communication. This mutual exploration suggested a movement beyond surface-level understandings of interculturality toward more interdependent and nuanced perspectives, though these shifts remained context-bound and developing, reflecting the situated complexity of intercultural exchanges.

The process of collaborating on a task allowed learners to reflect on their actions, language use, and intercultural encounters in real time. As they faced intercultural challenges, they adjusted their communication strategies, fostering critical reflection on their cultural assumptions and practices. For example, Group 1's flexibility and empathy towards Michael, trying to make him feel included in the group, contrasted with Group 3, where participants in Canada maintained a more leader-solo attitude, limiting their partners' participation in the process. This highlights the complexity of interculturality in VE, where the task itself acts as both a learning tool and a context for personal and collective growth (as divergent as it could be for different learners). This awareness of participants was evident in the characteristics they identified as key to successful virtual collaborative environments. This included patience, openness to sharing with others, responsiveness, initiative-taking, and active listening. While these traits are often considered individual, the study demonstrated their relational and social dimensions, as exhibited differently among the four VE groups. For instance, it was through Layla and Dania's active listening that they initiated linguistic accommodation of their partners. Similarly, Catherine and Tom's experiences with Tamara's lack of responsiveness made them value openness to sharing and active participation for rewarding TMLL experiences. Observing such traits in VE group dynamics helps us understand interculturality as a relational and social process, emphasizing the interdependence of individual and collective actions in intercultural communication.

Building on Thorne's (Little & Thorne, 2017) call to examine learner autonomy as a framework for pedagogical and methodological approaches in TMLL, the task-as-process approach provides a framework for understanding 'autonomous' practices of interculturality in context. Since tasks are negotiated and adapted based on the interaction and participants' needs and interest, interculturality becomes a process deeply embedded in the specific contexts of each VE experience. The flexibility inherent in task-as-process means that interculturality is understood as something that emerges from interaction and is shaped by situational factors, such as the medium of communication, the participants' cultural backgrounds, and the specific goals of the task. This aligns with views of interculturality, which emphasize its contextual and co-constructed nature.

Thus, learner autonomy in this VE project was not a byproduct of critical design, but a generative force that revealed the inclusive, equitable, and diverse potential of VE. Participants demonstrated the ability to engineer their own intercultural experiences, grounded in their navigation of communication norms, peer dynamics, and task goals. These observations challenge static understandings of VE tasks and reinforce the need to see task engagement as a site of interculturality in motion, a relational and strategic process shaped by learners' own autonomy.

This research suggests that VE design and assessment should prioritize learners' narratives, strategic roles, and peer relationships as core indicators of intercultural growth. Rather than only evaluating learning outcomes, educators and researchers should attend to the practices, decisions, and reflections that shape how interculturality is experienced in real time. In doing so, we move closer to an understanding of IC that is inclusive, equitable, and truly responsive to learners' diverse pathways.

8.4 Interpreting Criticality: Insights from This Study for Critical Virtual Exchange

As Helm (2020) clearly indicated, we must continuously reflect on our research and implementation of VE. This process also involves reflecting on how our own constructions and practices as researchers and designers of intercultural TMLL experiences influence learners. The VE began with co-created plans and mutual expectations regarding the facilitation of intercultural learning by instructors. However, participants were ultimately responsible for shaping and evolving their own VE experiences over the course of seven weeks. Although this approach is unusual in the field, particularly since it was not a teletandem where minimal instructor facilitation is expected, it presented a valuable opportunity to shift the focus of attention and critique from the national representations of individual learners to group-level processes such as emotional labor, silence, disengagement, participation asymmetry, conflict avoidance, and inclusion. In this VE context, all these processes were central to navigating the individual and collective learning of interculturality. In other words, this study emphasizes the value of analyzing VE groups as *relational ecologies*, rather than focusing on individual learners. The unique VE group cultures that emerged, the individual and collective strategies employed, and the dynamic formation of interactions and collaborations encourage a redefinition of 'success' in VEs (Dooly & Vinagre, 2021). This redefinition perceives and explores problem spaces, discomfort, and misunderstanding as indicators of growth.

In this context, criticality, as it emerged from the participants' experiences, did not stem from a pre-structured design informed by a critical pedagogy. Rather, it was enacted through learners' agentic responses to moments of uncertainty, discomfort, and difference. These observations invite extending existing definitions of critical virtual exchange that often emphasize pre-designed critical tasks or explicitly political content. This study demonstrates that criticality can be relational, situational, and emergent, surfacing through group decision-making, moments of silence, interpersonal negotiation, and strategic inaction.

For instance, in Groups 1 and 2, participants did not plan for code-switching nor were they introduced to this practice or encouraged to use it by their instructors, but it was used spontaneously by Layla and Dania to support their group members. Similar observations include utilizing synchronous and asynchronous digital tools for effective collaboration and personal communication, all subtle forms of critical intercultural engagement. In Group 1, Lubna and Eric's joint reflections after their Week 2 interview task revealed that they were both aware of the sensitivity of the Palestine talk and Eric's 'failed' attempt to comfort Lubna. However, this did not seem to create a gap between the two as they continued to rely on laughter, small talk, and narrative sharing to maintain relational harmony. In their interview responses, early in the VE, Lubna acknowledged her partner's attempt to comfort her, and Eric trusted that Lubna understood his intentions, despite possible miscommunication of his empathy towards her. These practices and perceptions of one another suggest that criticality in VE is not always overt, confrontational, or visibly political. It can instead be embedded in micro-practices of meaning-making, emotional self-regulation, and careful attention to group dynamics.

This study's group-level analysis of interculturality offers a valuable lens for understanding how IC is enacted not only by individuals but also co-constructed within the relational and communicative practices of VE groups. Rather than isolating learner outcomes or competencies, the analysis traced interculturality as an emergent, interactional process, shaped by group dynamics, shifting roles, power relations, and the affordances and constraints of technology-mediated collaboration.

Such an approach responds to longstanding calls in intercultural communication and VE research to move beyond static or individualistic models of competence and instead adopt analytical lenses that foreground culture and interculturality as fluid, situated, and performative constructs (Dervin, 2016; Jackson, 2012; Kramsch, 2009). As widely argued, reducing culture

to fixed traits risks overlooking the ways individuals negotiate meaning across contexts (Byram, 2021; Deardorff, 2017; Dervin 2016; Dooly & Vinagre; 2021; Holliday, 2011; O'Dowd, 2021a). A group-level perspective provides the means to capture this dynamic negotiation, particularly in TMLL environments where meaning-making unfolds across time, platforms, and communication modalities.

Moreover, this analytical shift also opens new possibilities for understanding learner autonomy, a construct frequently explored in VE and online learning contexts as an individual trait or behavior (Cappellini et al., 2017). While personal initiative and self-regulation remain critical, the group-level findings in this study confirm that autonomy is also collectively shaped and enacted, for example, through how group members manage turn-taking, establish norms of responsiveness, or negotiate conflicting preferences or cultural expectations. In Group 1, for instance, autonomy was reflected in how members co-developed collaborative strategies to ensure balanced participation and mutual accountability. In contrast, in Group 4, a more cautious and hierarchical dynamic emerged, where individual expressions of autonomy were constrained by group norms that prioritized harmony over dissent.

This reframing of autonomy as a socially negotiated practice resonates with theorizations of "relational autonomy" in language learning (Murray, 2014; Oxford, 2020) and provides an important complement to individual-centered approaches. In digitally mediated, low-structure VE contexts, such as in this study, autonomy is not only about independent action but also about one's relational positioning and the shared understandings that allow for (or limit) action and voice within a group.

In sum, group-level analysis not only deepens our understanding of interculturality as processual and co-constructed, but also offers a way to expand existing conceptualizations of autonomy in VE and TMLL research. It foregrounds the interpersonal, emotional, and

contextual dimensions of intercultural engagement that may be overlooked when focusing solely on individual learners or prescriptive models of competence.

Moreover, this study also responds to recent calls in CVE research to interrogate the assumption that critical pedagogy must be introduced from above by instructors or designers. While Hauck (2023) argues that CVE frameworks offer a step toward cultivating learner autonomy, this study findings suggest the inverse: that it is through learners' agentic practices, particularly their ability to reframe tasks, negotiate norms, and assume fluid roles within group cultures, that the potential for CVE becomes visible. Participants effectively mediated their own intercultural experiences, co-constructing meaningful interactions that were inclusive, reflexive, and equitable, even when their instructors stepped back.

8.5 Group-Level Interactions as Sites of Decolonial Practice in VE: Methodological Framing: Challenging the Individualized Lens

This study's group-level analysis offers an important methodological and conceptual contribution to decolonial approaches in VE and TMLL. Rather than focusing solely on individual learners or dyadic exchanges, the analysis centered on small group dynamics as the primary units of meaning-making. This analytical lens made it possible to examine how interculturality unfolded collectively, in relation to both interactional patterns and emotional labor, offering a counterpoint to static, outcome-based models of intercultural competence that often dominate VE research.

By analyzing learner interactions at the group level, across meetings, platforms, and task types, this study moved beyond individualized assessments of competence or cultural awareness. Instead, it captured relational strategies, emergent roles, and shared navigations of discomfort, ambiguity, and solidarity. This approach aligned with the critical view that interculturality is not a personal trait but a social, co-constructed process, shaped by power,

positionality, and the affordances and constraints of digital tools (Dervin, 2016; Hauck, 2019; Helm, 2020).

Furthermore, the choice to center groups as the core units of analysis revealed findings that confirmed two key decolonial principles. First is foregrounding relationality over essentialism as group-level analysis highlighted how learners co-constructed meaning through emotional attunement, clarification practices, and collective support strategies, challenging essentialist readings of culture based on national categories.

The second principle is disrupting hierarchies of linguistic legitimacy. Examining group-level dynamics allowed the examination of how learners negotiated ELF not through the lens of deficit or nativeness, but as a relational and strategic resource, a move that resonates with Canagarajah's (2023) call for 'pluriversal' orientations to language use and Matsumoto & Kubota's (2023) critique of standardized norms in ELF scholarship.

The analytical focus revealed how power circulated within and between VE groups not through overt conflict, but in the micro-negotiations of turn-taking, task ownership, and platform choices. This approach helped uncover small but important moments where learners resisted dominant ideas such as the idea that English must be spoken perfectly, or that one culture is more "correct" than another. Even though students did not always talk about power or inequality directly, their actions, such as using their home languages, helping partners understand, or simply being patient and kind, showed a different way of learning together. These behaviors challenged common assumptions in language education that center on native speakers, perfect grammar, or fixed cultural traits. Instead, they highlighted relationships, care, and flexibility.

By looking at group interactions, this study showed that VE can be more than just a space to "learn about" other cultures. It can become a shared space where different ways of speaking, knowing, and being are accepted and valued, what Mignolo and Walsh (2018) call a

pluriversal space. In this kind of space, learners are not just absorbing cultural facts but actively co-creating intercultural experiences with others in ways that are more just, more human, and more real. Ultimately, this approach challenged static models of competence and essentialist views of culture. It framed VE groups as pluriversal spaces, where learners enacted interculturality not through predefined categories but through flexible, strategic, and power-aware interactions. The group-level analysis thus served as both method and praxis for recognizing everyday acts of resistance and solidarity as central to decolonial VE.

8.6 The Researcher's Role: Reflexivity and Lessons Learned

As a digital ethnographer or a critical VE researcher in this study, I was encouraged to keep open practice to reflect on my engagement with the digital space, with the study participants, and my different roles throughout the study to produce knowledge, in addition to their own positionality they bring to the research process (Pink et al., 2016). It was equally instrumental to follow Holliday's (2016) recommendations for researchers to *hear* participants rather than listen to them, challenging the process of ascribing fixed cultural identities to individuals. Therefore, there were a few challenges and opportunities for learning I experienced as a researcher with multiple roles in every stage of this research.

When I decided to take an insider-outsider approach to support the VE instructors and collect data, I was deeply concerned about my ability to execute my non-participant observer and interviewer roles as balanced and objective as possible. On one hand, there were multiple times during the VE implementation when I felt the need to intervene in facilitating the Padlet discussions or remind the VE instructors of the intercultural facilitation resources I shared with them pre-study. As an experienced dialogue facilitator and coordinator of VE projects, it was very challenging to observe participants missing opportunities for deepening their intercultural learning due to lack of instructor guidance. On the other hand, I gradually became more curious about exploring how participants would navigate their group-level dynamics in such an

uncommon context. I found refuge in reminding myself of the uncertainty of research and the analysis opportunities the study implementation would bring to my original methodological design. To do so, I immersed myself in data observation multiple times to focus on how participants formed cultural meanings, questioning the dominance of my researcher discourse and assumption about participants' intercultural encounters (Dervin, 2011; Holliday, 2016).

One of the key insights that emerged from this practice, for instance, was regarding the accents of the study participants. Since I have worked with students in Jordan and Canada, I was fully aware of some cultural stereotypes about Asians 'not sounding clear' in English to many Jordanians because they consider their accent to be hard to understand and follow. My observation of participants throughout the study, however, proved me wrong. None of the data sources suggest that miscommunication occurred due to variety of accents. None of the participants directly referred to their partners' accent as a barrier to comprehension. On the contrary, as explained earlier, many showed solidarity with one another and acknowledged their shared learning challenges as English language learners. I still recall my reaction to Tom's description of the VE environment as a "safe" one in which they can speak English adhering judgement against each other. Given the dynamics of that group, I was not expecting this description. It reminded me of Thorne's (2003) argument that exploring TMLL spaces includes being open to "the compelling, problematic, and surprising conditions" (p. 38) of this media, especially when conducting research on the dynamic, complex, and non-linear phenomenon of culture and interculturality.

Interacting with my study participants was another practice I was open to reflecting on and evolving. I recall, for example, taking detailed notes about my interviewing performance including the extent to which I thought I made my interviewees comfortable to respond, my navigation of them misunderstanding questions, their rejection to answer some questions (only with Tom), my ability to paraphrase questions objectively, in addition to keeping a 'friendly'

and ‘human’ interface with each one of them during my interaction with each participant through the screen. Although I had previous experience conducting study interviews online, my experience in this study was slightly different. In addition to feeling stressed about the quality of data I would be able to collect in interviews, I was concerned that my interviewees would perceive my observation of participants’ interactions and collaborations with their partners as judgmental conclusions about their ‘intercultural performance’. I recall moments in interviews such as with Catherine when participants needed to be assured that their interview responses were confidential. Bella was curious to learn why she was chosen as an interviewee and whether her “performance”, as she put it, was the reason for being so. Throughout my interview time with all participants, I placed myself as someone who is purely interested in learning about their experiences and that I’m in a position where my observations are only attempts to understand what was ‘behind the scenes of these experiences.

What I believe helped my interviewees trust this process was my follow-up communication with them via email when I needed further clarification on responses which were unclear or confusing to me or when I missed asking them key questions during the original interview. Before ending the interviews, I took interviewees’ verbal consent to reach out to them via email if I needed further clarifications on their responses. All the participants I contacted were responsive to my emails and welcomed any future questions I might have (some like Bella kept wishing me luck in my doctoral research). In some cases, participants exchanged relevant WhatsApp interactions (in text) via email to support their interview responses, and others clarified certain aspects of their interactions to further explain or paraphrase their responses, especially when my observation did not seem accurate to them. This is exemplified in my email chains with Bella and Eric. With Bella, she tried to provide further explanations of Group 3’s processes with Week 5’s scenario planning as it was not clear in their scenario outline how they decided to complete the script after the meeting. With Eric, we exchanged a few

emails on his Instagram interactions with Lubna and Layla, specifically to clarify what conversations he elaborated on there and for what reasons. I also recall Group's willingness to share about their scenario meeting in writing via email when Nancy realized that they forgot to record the meeting as originally required. Both Dania and Rana responded to my questions in writing, while Nancy recorded a short video to share her insights.

The focus on metacognition in learner autonomy has been recognized as essential for exploring autonomy, learning habits, and shifts in TMLL (de Moraes Garcia et al., 2017). During data collection, it became evident that the research process itself had the potential to function as a form of meta-intercultural learning and co-learning. In particular, the interview questions prompted several learners to critically reflect on their behaviors and strategies within VE collaborations during the period between the third and seventh week of the exchange.

For instance, Layla noted that "our conversation in the first interview" increased her awareness of group dynamics, suggesting that the interview process served as a reflective checkpoint. Bella made explicit comparisons between her responses in the first and second interviews, especially when describing how she had made greater efforts to collaborate more effectively with her group members. Similarly, in his second interview, Eric shared that the initial interview made him feel more confident in addressing difficult topics and expressing himself more comfortably in English. These examples indicate that research participation extended beyond data collection; it also created a structured space for participants to monitor their learning processes, reconsider their communication strategies, and develop greater critical awareness of their intercultural engagement. In this sense, the study itself became a platform for fostering metacognitive awareness and learner autonomy within the VE experience.

Thus, the open participation of interviewees and their realization of my role as the study researcher helped collect data that I believe was genuine and authentic. The participants and I had clear expectations for one another, and we kept an open research-based channel for

communication when needed. Keeping this working relationship with participants was an eye-opening practice for my future research activity. While triangulation is often used in qualitative research to suggest validation through convergence, this study showed that such framing can obscure the fluid, relational nature of meaning-making in intercultural contexts. Drawing on Holliday's (2016) and Dervin's (2011, 2016) critiques of essentialist and fixed cultural assumptions, I found that the phrase *complementing data resources* better captures the interpretive and evolving dimensions of the research process. Both scholars call for a reflexive approach that questions dominant discourses and foregrounds the co-construction of meaning within situated interactions. My open yet structured communication with participants, through interviews, observations, and ongoing email communication, enabled access to diverse perspectives that enriched, rather than just confirmed or disapproved, each other. This aligns with scholars such as Mathison (1988) and Tobin and Begley (2004), who argue for *complementarity* over triangulation, emphasizing that the goal is not verification but deeper insight through layered, context-sensitive engagement.

As for the methodology used to conduct this research, I initially intended to combine digital ethnography (Hine, 2015) with a multiple case study design (Creswell, 2007) to explore interculturality in ELF VE through group-level dynamics. This study's attempt to operationalize an ecological or multi-framework approach is deeply informed by Reinhardt's (2012) assertion that diverse analytic lenses should be viewed as complementary rather than contradictory. The combined methodology and multiple data types supported the complementarity of data across linguistic, intercultural, and technological dimensions within the VE project. By attending to these indicators, the study was able to capture not only how participants navigated their intercultural VE environments and negotiated VE tasks, but also how they engaged with affective alignment, digital constraints, and intercultural identities.

Reinhardt's (2012) critique of the limitations inherent in isolated frameworks, particularly the interactionist lens commonly employed in VE studies, resonated with the study's empirical observation that negotiation sequences alone did not adequately reflect the richness of learner engagement. By integrating an ecological stance, the study employed both thematic and multimodal discourse analyses, drawing on insights from digital ethnography, within- and cross-case analyses, and critical interculturality. These analytical layers enabled the identification of intercultural strategies used to form VE group cultures, including affective, linguistic, and multimodal engagement patterns that would likely remain hidden by applying a single framework design.

The result was a more grounded and relational understanding of intercultural interaction, one that situated learner choices within their group dynamics, task-as-process trajectories, instructors' presence, multimodal practices, personalities, identities, and their negotiation of ELF for intercultural communication. Furthermore, this approach aligns with the study's findings suggesting that research on interculturality in TMLL must move beyond the static use of IC frameworks and adopt multidimensional and critical approaches to intercultural communication. This approach allowed for a more nuanced examination of the relationship between culture and the creation of meaning in digital environments. Thus, Reinhardt's (2012) vision of a multi-perspectival VE research framework not only informed the study's design but also enriched its capacity to respond to the research questions with interpretive depth and contextual sensitivity.

8.7 Researcher Positionality from VE, Criticality, and the Sociopolitical Present

When I started my doctoral research, I approached it with a clear understanding of my potential as an emerging academic and interculturalist professional with expertise in navigating differences and reflecting on my personal and professional growth in the process of intercultural becoming. During my years as a PhD scholar, I have immersed myself in

practicing design, instructor training, and conducting further research through leading special interest groups (SIGs), co-organizing seminars on topics relevant to CVE, and amplifying voices of IC from the Global South. Doing so allowed me to take part in debates on re-framing decolonial approaches to intercultural education, specifically in VE, and constantly reflect on how such virtual experiences can further enrich the ‘critical’ voices the field needs to hear and the extent to which we can make VE ‘intercultural’. Inspired by my initial data analysis in 2022, I became a stronger advocate for CVE, initiating academic and professional activities in the global VE community to take further action towards real epistemological and methodological change in VE research and practice.

During the genocide in Gaza, which started in October 2023, I first became more reluctant to find meaning in my research. I struggled with my data analysis not only because I was mentally drained by being a helpless witness to the genocide against my people, but also because everything ‘intercultural’ seemed to gradually become more of an approach to normalize injustice, occupation, and power structures. Navigating the silencing of pro-Palestinian voices while seeking solidarity among my mentors and colleagues proved to be a challenging experience. Questioning my position in today’s world, as a female Palestinian Jordanian scholar conducting intercultural research in Canada and writing about it later in Jordan, did not guide me to a place of comfort. I found myself going back to the question I asked myself as a VE student participant in 2008: What is ‘the intercultural’? How do we know each other and under whose terms?

I carried these questions into my later rounds of observations and data analysis in this study. Although it did not directly include projects or tasks addressing genocide, occupation, or other sociopolitical struggles, I could not help but think of Gorski’s (2008) call for rethinking my role as a researcher and educator of interculturality:

... Can we practice an intercultural education that does not insist first and foremost on social reconstruction for equity and justice without rendering ourselves complicit in

existing inequity and injustice? In other words, if we are not battling explicitly against the prevailing social order, are we not, by inaction, supporting it? (p. 3)

I found these questions particularly relevant as I tried to navigate the neutral and passive engagement, and in many cases, the double standard practice and educational response to similar sociopolitical issues when they occur in the Global North (e.g., Ukraine), compared with when they happen in the Global South (e.g., Lebanon and Palestine). As much as I believed I had reflected deeply on CVE and CIC before, the recent world events obliged me to “reexamine philosophies, motivations, and world views that underlie [my] consciousness and [my] work” (Gorski, 2008, p. 3) in VE.

The events in Gaza forced me to confront the limitations of traditional VE designs that often emphasize ‘shared humanity’ and ‘intercultural understanding’ as universal solutions for promoting equity, diversity, and inclusion. As a female Palestinian Jordanian scholar from the Global South, these frameworks felt particularly disconnected from my lived reality, where the complexities of identity, power, and resistance cannot be reduced to a simplistic call for mutual understanding. In reflecting on these concepts, I began to recognize how such approaches, often rooted in Western ideologies, can unintentionally perpetuate colonial frameworks, normalizing power imbalances. My reflections also align with insights from other non-Western epistemologies, such as *ubuntu* and *ujamaa*, which speak to the deep interdependence of communities and the idea that harm to one is harm to all. While not frameworks I directly drew on at the time, they offer powerful conceptual support for challenging individualistic and depoliticized understandings of interculturality. Such perspectives further underscore the urgency of centering justice, solidarity, and relational accountability in VE design, particularly in contexts marked by systemic violence, such as in Gaza.

As I navigated the silencing policies within academia, I was constantly reminded of how marginalized voices, especially from the Global South, are often suppressed in favor of mainstream narratives that align with dominant global powers.

This realization shifted my thinking about the purpose of VE and what ‘the intercultural’ truly entails and led me to reflect more deeply on the aims of VE and the layered meanings of ‘the intercultural.’ Rather than promoting superficial calls for ‘resilience’ or ‘shared humanity’ that overlook the deep-rooted realities of global inequalities, VE must critically engage with power dynamics, structural injustice, and epistemological diversity. Without sustained critical reflexivity, VE initiatives risk reinforcing tokenistic representations or reproducing dominant Western narratives, rather than cultivating meaningful and transformative intercultural dialogue (Helm & Baroni, 2022; Jørgensen et al., 2022).

This perspective aligns with emerging scholarship that frames intercultural learning within broader social justice paradigms. For example, Collett and Slapac (2023) argue that VE must address political, cultural, and economic dimensions of inequality to foster participatory parity. Similarly, Cohen & Sikenyi (2025) emphasize the need for critical ‘global’ learning that moves beyond idealized notions of global citizenship or unity to explicitly address neocolonial dynamics and calls for solidarity. Weaver et al.’s (2024) review further underscores that while VE holds potential as a “third space” for intercultural engagement, this potential remains limited unless intentionally designed to disrupt global North–South imbalances and institutional hierarchies. I now strongly see the urgent need for VE design to be more transparent and honest about the power structures at play, ensuring it creates spaces for dialogue based on mutual respect and authentic engagement.

As a graduate student navigating both academic authorities and policies of silencing, I understand the importance of providing platforms where diverse, often marginalized voices can engage in meaningful exchanges. In fact, I now better realize the need for a critical view on criticality in VE, which would begin by recognizing that not all forms of “criticality” are the same. While VE programs may promote reflection or critical thinking, these processes can remain superficial or individualized unless they are anchored in a structural analysis of

inequality, colonial histories, and power dynamics. As I reflected in the context of Gaza, calls for intercultural understanding that ignore such realities can feel disconnected, or worse, complicit in the reproduction of systemic injustices, particularly when they lead to forms of self-censorship, where participants from marginalized contexts feel unable to fully express their political realities or lived experiences for fear of disrupting the perceived neutrality of the exchange.

This said, even critical approaches to VE have limitations. There is, for example, a risk of educators or programs adopting the language of decolonization or justice without making structural or material changes. Moreover, learners and institutions differ significantly in their access to resources, pedagogical support, and cultural or political readiness to engage in dialogues that are emotionally demanding or politically sensitive (Andreotti, 2006). These differences become especially pronounced in contexts marked by deep asymmetries, such as those shaped by conflict, occupation, or systemic marginalization, where speaking openly about lived realities may carry emotional risk, institutional resistance, or even personal consequences. Thus, while CVE offers important corrective possibilities, it also requires sustained reflexivity about its own conditions of possibility, and the risks of reproducing exclusion through its very critique.

8.8 Implications for VE Design and Instructor Facilitation

The findings revealed that participants navigated their VE cultures by adapting their intercultural strategies to maintain or change their culture of interaction and collaboration during the seven weeks of the exchange. Four dynamic factors were found to be most influential in this process: instructor pedagogical choices for the VE implementation, participant identities, personalities, and evolving intercultural experiences; ELF as a shared ground for communication and intercultural bonding; and digital tools and group interaction. It cannot be denied that more direct facilitation and process support from instructors could have made a

noticeable difference in participants' ability to acquire cultural knowledge about their partners and engage in critical intercultural reflections on their partners' cultural diversities, as well as their own.

Given that participants in Canada mostly had never experienced such types of intercultural encounters, and that many in Jordan grew up in local communities with limited exposure to people from other cultures, instructors' facilitation was central in helping them bridge these gaps. By supporting VE groups through the process of navigating their interactions and collaborations as they emerged, instructors could have made a significant difference. This was evident in Group 3, for example, where Bella and Holly's caution and uncertainty about their partners' cultures, combined with Kamal's focus on English speaking practice, could have been better directed with more facilitative support, fostering deeper intercultural interactions. Group 2 demonstrated promising potential for collective harmony and open interaction, potential that could have been further nurtured with the guidance of their instructors to encourage exchanges on topics or issues of mutual interest.

Thus, the study suggests that VE instructors should design for process and plan beyond VE tasks that tend to emphasize static and superficial representations of culture, such as national holidays, cuisine, or etiquette, without engaging with the underlying historical, political, or social dynamics. Planning for process can include multiple factors, in addition to feasible and strategic facilitation. First, the tendency of some groups to treat intercultural sharing as "off-task" suggests the need for explicit scaffolding of intercultural aims and a reframing of tasks as processes rather than products. Without such guidance, learners often defaulted to task completion, pragmatic tool use, or avoidance strategies, which limited opportunities for deeper engagement. In addition, task design should purposefully draw on learners' personal histories and hybrid identities as entry points for intercultural engagement. By validating these lived resources, instructors can foster a sense of safety (Glimäng, 2022)

and belonging within group cultures, ensuring that intercultural dialogue emerges from exploration of perspectives and authentic experiences rather than surface-level representations of culture.

Second, the predominant use of tools such as Zoom chat, WhatsApp, and Padlet for efficiency rather than relationship-building highlights the need to demonstrate how such affordances can support intercultural exploration and community-building. As O'Dowd and Ritter (2006) suggest, instructors can design activities that engage students in reflecting on their digital artifacts and multimodal choices, fostering metacognitive awareness and critical cultures of use (Cappellini, 2024). Given this study's emphasis on relational dynamics, instructors are encouraged to integrate group-level practices, such as small talk or multilingual reflections, initially facilitated by teachers and later sustained by learners. In this process, instructors play a pivotal role in creating room for learners to shape their intercultural experience, while scaffolding reflection and validating their multilingual and multicultural resources (de Moraes Garcia et al., 2017; Helm, 2024). This requires sensitivity to group dynamics, pacing, and emotional support so that learners' diverse trajectories are acknowledged, and all VE experiences are recognized as intercultural, contributing to students' ongoing growth.

Finally, issues of uneven leadership roles and the tendency to prioritize assessment-driven outcomes indicate that VE should be deliberately embedded within broader curricular structures, with reflective tasks, rotating roles, and assessment criteria that emphasize intercultural learning alongside language development. Instructors can also trial different approaches to group formation, such as having students rotate across groups for different tasks or alternate leadership roles within the same group, to broaden participation and allow more learners to experiment with and develop diverse leadership styles. Taken together, these implications call for VE designs that position instructors not as controllers but as facilitators of

intercultural processes, ensuring that learners have both the tools and the support to move beyond surface-level exchanges.

The various strategies employed within the groups also suggest that instructors should encourage, validate, and facilitate CVE approaches by promoting multimodal and translanguaging practices among learners. The VE instructors in this study demonstrated the multimodal affordances of Padlet, for instance, by posting their own autobiographical videos and conducting interviews with one another. Such practices are especially valuable when combined with further explanations of various social media platforms learners are likely to use for VE purposes (e.g., WhatsApp and Instagram), particularly when learners have never used them for pedagogical purposes or are unfamiliar with them.

8.9 Study Limitations

While this study provides valuable insights into the dynamics of intercultural communication in VE, several limitations must be acknowledged, which may influence the interpretation and generalizability of the findings.

Although this study contributed to critiques of Eurocentric intercultural competence IC frameworks and advanced more relational, contextual understandings of interculturality, it stopped short of articulating fully developed decolonial alternatives. While incorporating insights from critical and post-foundational perspectives, the study did not systematically apply decolonial theories that challenge the epistemic hierarchies underpinning mainstream IC models. Instead, Chapter 7 aimed to revisit and extend established frameworks, which are widely applied in VE research (those of Byram, Bennett, and Deardorff) by grounding the analysis in learners' lived, digitally mediated experiences. Rather than proposing a ready-made alternative, the study prioritized data-driven insights, allowing interculturality to emerge through learners' reflections, affective labor, and group-level interactions. This represents both a limitation and an opportunity. The group-level lens, combined with attention to multimodality

and strategic agency, began to unsettle normative assumptions about communication and legitimacy. Future research could build on these insights by more explicitly integrating decolonial perspectives (e.g., Canagarajah, 2023; Kubota, 2024; Mignolo & Walsh, 2018).

Due to the specificities of the VE implementation and design, along with the relatively small participant sample, the findings of this study are not intended to be generalized. However, the data provided valuable insights into the relational, dynamic, and group-level constructs of culture and interculturality in VE. The findings reveal the complex and evolving nature of cultural engagement as they highlight how interculturality is negotiated through ongoing interactions and collaboration within VE groups revealing the complex and evolving nature of cultural engagement. For example, the study shows how learners navigated intercultural differences, adapted their communication strategies, and reflected on their roles within the group context. While these insights are specific to the study's particular context, they contribute to a broader understanding of how interculturality operates in VE environments and offer important implications for future research and practice in the field. Additionally, these findings support recent calls, such as those in Dooly and Vinagre (2021), to reexamine the nature of IC gains in VE. They urge for a deeper, more critical approach to understanding how IC evolves in dynamic, group-level interactions rather than static or one-dimensional assessments.

Interaction with the VE instructors was limited to supporting them in setting up their partnership and preparing for VE implementation. Data collection did not include instructor data; everything learned about instructor facilitation of the VE; the support provided to students and how the VE was integrated into each course was obtained through observation and responses to participant interviews. Given the VE implementation dynamics and the lack of instructor facilitation of VE tasks observed, it would have been helpful to conduct interviews with the instructors to better understand the rationale behind their change of implementation plan and the supporting resources they provided to their students. According to participants,

both instructors limited their in-class support to addressing logistical issues and checking in on groups' progress, as well as providing instructions and answering questions about the weekly tasks. During the VE, my interaction with both instructors remained at a high level for logistical checks. When they had questions, I deferred to them to decide what was best for their respective classes. Although collecting instructor data was not feasible given the amount of data I needed to collect about participants' VE experiences, instructor interviews could have provided more information about the implementation process and the VE instructors' interactions, as well as the challenges and opportunities they navigated with and without their students to complete the VE.

It is also worth noting that all the data analyzed in this study were data that the participants had recorded and shared on Padlet with their instructors and other students. Zoom chats were not shared during Zoom meetings. This data could have provided live examples of how groups used the chat function during their synchronous interactions. For example, Tom from Group 4 said that he and Catherine used the chat function to type questions to help Tamara with her comprehension. They both referred to the chat function in their recorded meetings in Weeks 2 and 7. Similarly, Group 1 members frequently referenced their Instagram exchange during their interviews emphasizing the role it played in enriching their interpersonal relationships and intercultural learning. It would have been helpful to see whether Tamara also used the same chat function to interact with them.

Moreover, all interviewees referred to 'off-task' Zoom chats within their groups that were not recorded because, as they described, only task-related communication was expected to be recorded. These conversations could have provided enriching data capturing the interpersonal interactions between group members and offering more examples of the cultural topics discussed and negotiation strategies employed. Participants in Groups 1 and 2 mentioned these interactions in their study interviews. Group 1 members reported spending an extra hour

connecting after completing their VE reflections. Specifically, Lubna and Eric mentioned exchanging information, talking to some of their partners' family members, joking and discussing a few other personal plans after graduation. Nancy said that, after their Week 2 interview, they spent around 30 minutes together resolving upload issues but also used this time to ask follow-up questions about Chinese and Jordanian cultures. As this data were not recorded, it is impossible to verify these observations, but they do confirm that VE experiences encompass more than researchers and instructors can see on the screen, and that there is 'behind the scenes' work that needs to be done to gain a deeper understanding of these experiences. Furthermore, learner decisions, influenced by task instructions or the guidance provided by instructors regarding what is considered relevant or irrelevant, offer valuable insights into how learners make decisions in VE contexts.

8.10 Future Research Directions

While this study provides valuable insights into the dynamics of ESL/EAL learners' experiences of culture and interculturality in ELF VE, it also opens several avenues for future research.

Shifting the unit of analysis from the individual to the group challenged dominant assumptions about who gets to speak, be heard, and be valued in VE. It revealed that relational interculturality is not only possible but already being practiced, often subtly in the margins of formal tasks or in the silences between turns. Building on these insights, future research could benefit from comparative analyses of VE groups across different geopolitical contexts. Examining how learners navigate cultural differences in diverse settings would uncover the nuanced dynamics of intercultural collaboration shaped by broader historical and political forces. Such an approach would illuminate how relational engagement unfolds differently across contexts, and how VE designs can be adapted to meet the specific needs and positionalities of learners globally. Together, a group-based and comparative lens offers a path

forward for designing VE programs that are both contextually responsive and epistemologically inclusive.

There is potential for further incorporating decolonial and CVE frameworks in VE design. For example, studies such as Goulebeva (2025) show how learners critically engage in observing and deconstructing the systems they belong to or communities they are members of, to assess inequalities and respond through action. Integrating such frameworks into VE design can foster deeper, more reflective intercultural learning and encourage students to critically examine global power structures.

Future research should investigate how learners navigate intercultural communication through Global Englishes and translanguaging in VE. This study showed that learners used plurilingual practices, such as code-switching, paraphrasing, and clarification, to foster connection, accommodate others, and express solidarity. Such strategies challenge native-speaker norms and illustrate how ELF can be a site of decolonial meaning-making and relational engagement. Exploring these practices further can illuminate how language learners resist linguistic hierarchies and co-construct intercultural understanding in digital spaces (Canagarajah, 2023; Kubota, 2024; Matsumoto & Kubota, 2023), contributing to more inclusive, ethical, and context-sensitive approaches to language and culture in VE.

Another important avenue for future research is exploring instructor positionality and autonomy in co-constructing intercultural learning with students. While VE research has focused on learners' experiences, less attention has been given to how instructors can actively shape the intercultural dynamics of the learning environment. Investigating this relationship can help better understand how instructors can guide learners through intercultural reflection and facilitate deeper engagement with VE tasks. Recently, some attempts have been made to involve learners in designing VE courses, mentored by facilitators or instructors, such as those seen in initiatives like the online courses developed “by youth for youth” at Global Nomads

Group (check <https://gng.org/youth-courses/>). However, the full potential of these initiatives has yet to be explored in either primary or higher education VE contexts. Future research could investigate how such learner-centered approaches influence the effectiveness and depth of intercultural learning in VE, particularly within more formal educational settings.

The concept of friendship is another relevant area for further exploration in VE and its role in shaping emotional dimensions of autonomy. Many study participants referenced friendship when reflecting on how they managed interactions and worked through challenges. Given the relational dynamics of small VE groups, it is crucial to explore how friendship is constructed and understood differently by learners in virtual environments. Understanding how friendship operates in VE can offer a deeper analysis of the emotional aspects of autonomy and how these emotional connections impact learners' intercultural growth. One thing to consider is longitudinal studies that trace these VE friendships after VE, if they last, and the extent to which these short or long-term relationships impact learners and their motivation for intercultural interactions, both in-person and virtually.

With the emerging research on the role of VE in blended mobility (Helm & O'Dowd, 2020, O'Dowd, 2023; O'Dowd & Werner, 2024) future research could explore how VE contributes to the development of critical intercultural competencies that prepare learners for international mobility. Specifically, research could investigate how VE fosters critical reflections on power, identity, and cultural dynamics before engaging in physical study abroad programs, particularly by comparing the intercultural learning outcomes of students who participate in VE before traveling abroad versus those who do not. This would include examining how VE supports learners in deconstructing dominant cultural narratives, challenging stereotypes, and developing a more nuanced understanding of interculturality. Furthermore, comparative studies could assess how critical intercultural learning through VE influences learners' adaptability and engagement in real-world intercultural encounters abroad,

particularly in terms of navigating global inequalities and fostering social justice in intercultural interactions.

8.11 Conclusion

This study contributes to the rethinking of intercultural competence as emergent, relational, and co-constructed. Building on critical approaches in the field, it provides an alternative to traditional models that emphasize fixed national cultures as the primary frame of reference.

By focusing on the group-level dynamics within virtual exchange, this research challenges the conventional emphasis on national identity markers. Instead of culture being a static, predictable, and generalizable concept tied to national affiliation, participants navigated and enacted culture through relational processes shaped by personality, power dynamics, affect, and communication modalities. This highlights the importance of adopting a group-level analysis in VE, where intercultural competence is not merely about transmitting knowledge but involves collective negotiation, emotional engagement, and shared practices within the group.

The study also brings a valuable epistemological lens drawn from the Arabic language, particularly the word *thaqāfa*, commonly translated as "culture." Unlike the Western conceptualization of culture as a national or ethnic identity, *thaqāfa* refers to a way of knowing, cultivating, and refining oneself in relation to others and the world. This nuanced interpretation reinforces the need to move away from essentialist and static definitions of culture in VE research. Although this shift away from culture as national identity has been acknowledged and called for in IC and VE literature (e.g., Baker, 2022; Cappellini, 2024; Deardorff, 2009; Dooly & Vinagre, 2021; Helm, 2024; Holliday, 2011, 2018; Kramsch, 2011; Piller, 2011), the move away from VE design that situates learners primarily as representatives of national cultures rather than as complex, agentive individuals with diverse, intersecting identities remains an ongoing concern, with research continuing to advocate for more nuanced and critically

informed approaches (Dooly & Vinagre, 2021; Helm, 2024; O'Dowd, 2021b). Joining these calls, this study encourages viewing VE groups as spaces of co-becoming, where culture is enacted through ongoing practice and interaction, not simply possessed as a fixed identity.

While not centered around fully developed decolonial frameworks, this study took a step in that direction by foregrounding learners' agentic, relational practices, and by problematizing static notions of language and culture. The group-level analysis offered a methodological stance attentive to plural ways of knowing and engaging, opening up space for more inclusive, critically reflective understandings of interculturality. Future research can build on these foundations by integrating decolonial theories more explicitly to interrogate global asymmetries and language ideologies in VE.

The findings from this study contribute to the current debate on critical virtual exchange by:

- Proposing that criticality in intercultural learning is not always predesigned but can emerge organically through learners' agentic and relational practices.
- Arguing for a shift away from only evaluating national identity or checklist-like markers to examining the emotional, strategic, and relational processes at the group level.
- Challenging conventional models of intercultural competence by grounding interculturality in situated, negotiated, and lived experiences.
- Emphasizing learners' autonomy in engineering their own critical paths, making VE a more inclusive, co-constructed space for intercultural learning.
- Approaching "culture" as a process of knowing and relating, informed by dynamic human interactions rather than static categories tied to ethnicity or nationality.

Findings from this study underscore the need for VE design and research to critically revisit how success is conceptualized, whose perspectives shape the learning agenda, and

which forms of intercultural learning are valued. Participants' experiences revealed that meaningful intercultural development emerged not from pre-defined cultural content or externally imposed goals, but through the relational, dynamic, and often unpredictable group processes. Learners valued opportunities to navigate tensions, reflect critically, and draw on their diverse lived experiences, elements that were often constrained by overly structured tasks or narrowly framed learning outcomes. In light of these findings, this study calls for VE pedagogies that create space for learners to shape their own intercultural learning trajectories and to co-construct meaning from within their group dynamics. Crucially, the group-level analysis approach adopted in this study offers a valuable lens for tracing interculturality as an emergent, collective process, one that unfolds through the interplay of evolving relationships, strategic negotiations, and shifting power dynamics over time. By attending to these processes, future VE research and design can better support equitable, learner-driven intercultural experiences that are grounded in the lived realities of collaboration.

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Appendix A

Institution Recruitment Email

Dear [administrator's title and full name]

We are writing to ask for your consent to carry out a study examining intercultural competence in virtual exchange that will be conducted between [name of institution] in [city, country] and [partner institution] in [city, country].

The aim of this study is to better understand the phenomenon of intercultural competence in virtual exchange by exploring the perceptions and experiences of the phenomenon among English as a Second/Additional Language (ESL/EAL) university students. The study specifically aims to (1) to explore the ways through which ESL/EAL university students engage with intercultural competence when collaborating and interacting in intercultural language tasks in virtual exchange; (2) to better understand the factors that impact students' engagement with intercultural competence ; and (3) to better understand the extent to which students' virtual exchange experiences add to the current approaches to understand intercultural competence in technology-mediated language educational contexts.

To investigate these questions, I will first need to recruit an ESL/EAL instructor to participate in this study. I will invite ESL/EAL students involved in this study to participate in a short pre-study survey and semi-structured interviews and allow me to observe their virtual exchange-based interactions and products, which will take place on the online course. The summary will be made available to all participants and to you as well.

Participation is completely voluntary, and participants may withdraw at any time, for any reason, if they wish. They may also refuse to answer any of the survey or interview questions. I will keep all information about individuals fully confidential. I will ask each participant to provide a pseudonym to conceal their identity, and when I write up the results of the research, I will conceal any personal information that might identify individuals. The name of the ESL/EAL program or provider will not be used in any final reports or publication unless you explicitly request it be credited as the site of the research. I will store the data on my personal password-protected computer and backup storage drives and destroy them ten years after the research is completed.

If you have any questions about the research, I would be happy to answer them. Thank you for your consideration of this request. We will look forward to your reply.

Kind regards,
Hiba B. Ibrahim
[full signature]

Appendix B

Informed Consent Form – Instructor

Date: TBD

Study Name: Examining intercultural competence in virtual exchange: Experiences and perceptions of university students in Canada and Jordan

Researcher Name and Contact Information:

Hiba Ibrahim (principal investigator)
 Doctoral Candidate in linguistics and applied linguistics
 Department of Languages, Literatures, and Linguistics
 York University
 4700 Keele Street
 Toronto, Ontario M3J 1P3
 Canada

Email: hibaib87@yorku.ca
 Phone numbers:
 Jordan: +962797632290
 Canada: +1 647-656-8011

Purpose of the Research:

In the context of language education, virtual exchanges are technology-mediated programs, which connect language students from different geographical spaces for developing communicative and intercultural competence. The primary goal of this study is to explore English language experiences of intercultural competence in virtual exchange, connecting English as a second/additional language (ESL/EAL) university students at X University in Canada and Y University in Jordan. The study will use a pre-study online survey, interviews, and observation of multimodal interactions and collaborative artifacts to explore students' intercultural competence trajectories in this virtual exchange and how their intercultural competence experiences can inform current understandings of intercultural competence in technology-mediated language learning contexts. Excerpts and examples of participants' interactions and artifacts and interview responses will be used in writing my doctoral dissertation, presented at scientific conferences, or published in scientific articles. Anonymity will be maintained at all times when reporting and presenting this data from all sources. All information from your students' interactions, collaborations with their virtual exchange partners, survey and interview responses will only be used to complement the study questions and expand understanding of intercultural competence in virtual exchange and wider technology-mediated language education contexts.

What You Will Be Asked to Do in the Research:

Your students are the potential participants in this study. I will primarily ask you to:

- Allow me to conduct a 15-20-minute virtual information session with your students to orient them about the study and recruit study participants. Students who agree to participate in the study need to sign the study consent forms before the study starts. Students who don't consent to take part in the study will not be reached to take the survey or take part in the interviews. Their VE interactions and artifacts will be blanked out to eliminate observation.

- Grant me access to your online course during the period of the virtual exchange to observe consenting students' multimodal interactions and collaborative artifacts.
- Connect with the partner course instructor via email and Zoom virtual meetings (2-3 live Zoom meetings) to co-design the virtual exchange language tasks between June-August 2022. I will be part of these discussions to explain the research objectives and provide you with support, when/if needed.

Risks and Discomforts:

Planning and implementing virtual exchange might include a minimal level of nervousness and discomfort due to connecting with a course partner from a different country to ensure the success and smoothness of the virtual exchange experience for participants. Similarly, some participants might experience minimal levels of embarrassment, frustration, or stress because of connecting with learners of other cultural backgrounds, using English to complete the tasks, or delay in connecting with their partners from time to time due to different time zones. All these risks are minimal and similar challenges to what instructors and students might encounter in remote learning or everyday activity on social media platforms. I will be supporting you and your partner instructor by providing virtual exchange resources and addressing any concerns you may have before the exchange takes place. The study doesn't aim to evaluate your task design or teaching approaches in virtual exchange. I will not be observing or taking notes on your activity with your virtual exchange course partners nor students' interactions with you or vice versa. I will not be assessing your teaching or facilitation practices in any way. Any information you and your students provide will remain confidential and at no point in time will be shared with your administration, other institution members, or students. Reference to any identifying personal information (i.e. your real name, country of origin, nationality, university rank) will be removed when reporting on the research (see "confidentiality" later in this document.)

Benefits of the Research and Benefits to You:

This study will help researchers understand more about culture and intercultural competence and its development in virtual exchange from the perspectives and experiences of ESL/EAL learners, when using English as a lingua franca. By doing this, it will help researchers to expand current thinking and understanding of the complex phenomenon of intercultural competence by considering the different trajectories of ESL/EAL language learners in virtual exchange. This study will also help researchers consider alternative approaches to investigating intercultural competence and its development in technology-mediated language learning research. For you personally, you will gain an opportunity to expand your intercultural knowledge and skills and expand your pedagogical practices by virtually meeting and collaborating with an instructor from a different cultural context. This study might also encourage you to keep virtual exchange as a strategy to globalize your curriculum in future courses.

Voluntary Participation and Withdrawal:

Your and your students' participation in the study is completely voluntary and you and your students may choose to stop participating at any time. If students don't agree to participate in the study, they will not be observed nor their interactions and artifacts they take part in during the exchange. Their interactions and artifacts will be blanked out to eliminate the researcher's access to their data. You and any participant can stop participating in the study at any time, for any reason, if you or they so decide. Your and their decision not to volunteer or stop participating in this study will not influence the nature of your and their relationship with the researcher, your institution or York University, or any other group associated with this study

either now or in the future. In the event you withdraw from the study, all associated data collected will be immediately destroyed.

Confidentiality

Data will be collected in this study in the form of pre-study online student surveys, recorded student interviews, and the observation of multimodal intercultural interactions and artifacts. I will ask each participant to provide a pseudonym to conceal their identity, and when I write up the results of the research and when I write up the results of the research, I will conceal any personal information that might identify individuals. Data that involve instructors will not be collected. At no point in time will your name and any other identifying information be shared with anyone else nor will it appear in any report or publication of this research. Our synchronous communication will never be recorded, and our email communication, syllabi, or any study-related resources you share will be downloaded offline and saved on my personal password-protected computer and backup storage drives, or in the case of hard-copy data, digitized and stored in the same way. Only I will have access to this stored data. Same protocol will be maintained in communication with participants, collecting, and remaining their data. Confidentiality will be provided to the fullest extent possible by law.

Questions About the Research?

If you have questions about the research in general or about your role in the study, please feel free to contact me at hibaib87@yorku.ca or my supervisor, Geoff Lawrence at glawrenc@yorku.ca and/or +962797632290/ +1647656-8011. You may also contact the Graduate Program in Linguistics and Applied Linguistics at redge@yorku.ca and/or (416) 650-8046.

This research has received administrative approval from the Deanship of Scientific Research and Graduate Studies at the American University of Madaba and ethics review and approval by the Delegated Ethics Review Committee, which is delegated authority to review research ethics protocols by the Human Participants Review Sub-Committee, York University's Ethics Review Board, and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

Legal Rights and Signatures:

I _____ consent to participate in the study: Examining intercultural competence in virtual exchange: Experiences and perceptions of university students in Canada and Jordan the permission to access my _____ course for the period between [mm/dd] and [mm/dd] of the Fall semester of the academic year of 2022-2023. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature _____

Date _____

Instructor

Signature _____

Date _____

Principal Investigator

Appendix C

The co-designed VE Tasks based on O'Dowd & Ware's (2009) Framework

Timeline	Task	Type of task	Type of Communication
Week 1 (Oct 15-23)	Information exchange tasks •Creating and sharing Autobiographical videos •Preparing 2 questions per partner	Individual	Asynchronous
Week 2 (Oct 24-30)	Group interviews ending with a reflection	In groups	Synchronous
Weeks 3&4 (Oct 31-Nov 13)	Comparison & analysis tasks •Padlet discussion on working internationally, culture shock and reverse culture shock, and cultural stereotypes •Deciding on a topic out of the three for an intercultural scenario •Drafting a scenario outline	Individual posts followed by a class-class discussion on Padlet	Asynchronous Students' preference
Week 5&6 (Nov 14-28)	Collaborative tasks •Write the full scenario script •Rehearse, record, and share scenario	In groups first then individually (while synching)	Students' preference Synchronous
Week 7 (Nov 28-Dec 5)	•Giving feedback for another group. Wrap up task •VE group reflection	Individual In groups	Asynchronous Synchronous

Appendix D

Examples of Instructor Support Resources Facilitated by the Researcher

VE Prep First Meeting

Day/Time: Wednesday, Aug 3st/ 10:00 am- 11:30 am EST/ 5:00-6:30 pm Amman

Attendees: Hiba, Instructor in Canada, Instructor in Jordan

Zoom link:

Meeting Agenda

PART 1

- Welcome and Introductions
- Check-in: questions on instructor consent form
- Hiba: research objectives and key milestones (slides)
- Q & A
- Orientation to the Drive (sharing screen)

PART 2

- Instructors share about their courses (to be uploaded to the Drive by Aug 10) and VE expectations with one another.
- Instructors exchange info on their students, cultural and socio-institutional context they work in
- Finalizing dates for the VE (proposed for 7 weeks Oct 24- Dec 12)
Canadian Institution: Fall 2022 starts on Sep 7
Jordanian Institution: Fall 2022 starts on Oct 14
- Ideally aligning the VE tasks to the research objectives (slides)
- Farming it to student benefits as well
- Q&A

PART 3

- Hiba: Proposed work plan (doc): instructors discuss and decide how they prefer to move forward (including timeline)
- The role of the researcher and instructors during the VE (Hiba and the instructors discuss).
- Instructors share contact info (Zoom chat)
- Next Meeting (deciding on a time)
- Final questions and comments

Proposed Work Plan (to be discussed and finalized on Aug 3)

Timeline	Proposed Activity	Suggested Resources to look at	Notes
Aug 3-8	Continue to know each other; aligning expectations and VE goals for both courses; setting the task design framework	Frameworks for task design: <u>O'Dowd & Ware, 2009</u> <u>Müller-Hartmann, 2000</u> <u>Syllabi Example: Communicating in English Through Digital Media</u> <u>Syllabi Example: Cross-cultural Storytelling</u>	Outline of VE goals and task framework to be shared in a Google Doc
Aug 8-15	Continue to know each other; planning Week 1 and 2 tasks including the tech tools used, instructions, deadlines, assessment, etc.	<u>Example and Ideas for Tasks</u> <u>Wicking et al., 2021</u> <u>A review of multimodalities and tech tools used in previous studies</u>	45-minute-meeting on Aug 15? Week 1 and 2 tasks to be shared in a Google Doc
Aug 15-22	Continue to know each other; planning Week 3 and 4 tasks including the tech tools used, instructions, deadlines, etc.	Continue reviewing same resources <u>Issues and challenges that impact student experiences in VE</u>	Week 3 and 4 tasks to be added to the Google Doc
Aug 22-30	planning Week 5 and 6 tasks; discuss facilitating roles and support needed;	Facilitating dialogue/ VE interactions <u>Helm, 2016</u> <u>Steven's Handbook</u>	This handbook is a resource to keep consulting
Aug 30-Sep 7	Setting the tasks up on platform/external tech tools (if applicable). Hiba can support this task.	<u>Learning from the past</u>	

Appendix E

Informed Consent Form for Pre-study Survey- Student Participant

Date: TBD

Study Name: Examining intercultural competence in virtual exchange: Experiences and perceptions of university students in Canada and Jordan

Researcher Name and Contact Information:

Hiba Ibrahim (principal investigator)

Email: hibaib87@yorku.ca

Phone numbers:

Doctoral Candidate in linguistics and applied linguistics

Jordan: +962797632290

Department of Languages, Literatures, and Linguistics

Canada: +1 647-656-8011

York University

4700 Keele Street

Toronto, Ontario M3J 1P3

Canada

Purpose of the Research:

In the context of language education, virtual exchanges are technology-mediated programs, which connect language students from different geographical spaces for developing communicative and intercultural competence. The primary goal of this doctoral study is to explore intercultural competence in virtual exchange, connecting English as a second/additional language (ESL/EAL) university students at X University in Canada and Y University in Jordan. The first phase of this study will use a pre-study online survey, which aims to collect some demographic and intercultural learning experience information. This survey will inform subsequent phases of the study with the goal of exploring English language students' perspectives and experiences of intercultural competence in virtual exchange and therefore, inform current understandings to intercultural competence in technology-mediated language learning educational contexts.

What You Will Be Asked to Do in the Research:

Your participation will be online. As a participant in this study, you will be primarily asked to:

- complete a short online survey where you will share some basic demographic information and previous intercultural learning experiences you had, if any. The survey will take 10-15 minutes to complete.

To participate in this survey, you will need:

- to be officially enrolled in [course title] during the study period.
- A device capable of viewing and completing the survey (mobile phone, laptop, tablet)
- An internet connection

Risks and Discomforts:

I do not foresee any risks or discomfort from your participation in the survey, but if you do not feel comfortable answering any of the questions in the questionnaire or survey, you can skip certain questions or stop your participation altogether at any time.

Benefits of the Research and Benefits to You:

By participating in this phase of the study, you are given the opportunity to reflect on your previous intercultural learning experiences and expectations from participating in a virtual exchange with English language learners in another country (if you choose to take part in the next phases of the study). The information you will be sharing in this survey will also help the researcher start to identify emerging themes and topics of intercultural discussions between you and other participants, in addition to developing questions for interviews, which will be conducted at a later phase of the study.

Voluntary Participation and Withdrawal:

Your participation in the study is completely voluntary and you may choose to stop participating at any time for any reason, if you so decide. Your decision not to volunteer or to stop participating in this study will not influence the nature of the ongoing relationship you may have with the researcher(s) or the nature of your relationship with York University either now, or in the future. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

Confidentiality

All information you supply during the research will be held in confidence. Your survey responses will contain potentially identifying information about you. At no point in time will your name and any other identifying information be shared with anyone else nor appear in any report or publication of this research. To ensure your anonymity in the study, you will be asked to use a pseudonym of your choice to protect your identity. Any study-related data and communication will be downloaded offline and saved on my personal password-protected computer and backup storage drives. Only I will have access to this stored data. Since this study is my doctoral research, data from this study will be destroyed in March 2032.

Confidentiality will be provided to the fullest extent possible by law. As the primary investigator in the study, I acknowledge that the host of the online survey (Google Forms) may automatically collect participant data without their knowledge (i.e., IP addresses.) Although this information may be provided or made accessible to the researcher, it will not be used or saved without participant's consent on the researcher's system. Further, because this study employs e-based collection techniques, data may be subject to access by third parties as a result of various security legislation now in place in many countries and thus *the confidentiality and privacy of data cannot be guaranteed during web-based transmission.*

Questions About the Research?

If you have questions about the research in general or about your role in the study, please feel free to contact me at hibaib87@yorku.ca or my supervisor, Geoff Lawrence at glawrenc@yorku.ca and/or +962 797632290/ +1 647-656-8011. You may also contact the

Graduate Program in Linguistics and Applied Linguistics at redge@yorku.ca and/or (416) 650-8046.

This research has received administrative approval from the Deanship of Scientific Research and Graduate Studies at the American University of Madaba and ethics review and approval by the Delegated Ethics Review Committee, which is delegated authority to review research ethics protocols by the Human Participants Review Sub-Committee, York University's Ethics Review Board, and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

Legal Rights and Signatures:

I _____, consent to participate in this component of the study: Examining the development of intercultural competence in virtual exchange: Experiences and perceptions of university students in Canada and Jordan. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature _____ **Date** _____

Participant

Signature _____ **Date** _____

Principal Investigator

The researcher wants to collect participant email addresses to reconnect with participants during the study.

Email address: _____

Please enter your preferred pseudonym (fake name) _____

(If you do not enter one, a pseudonym will be assigned by the researchers to protect your identity)

Appendix F

Informed Consent Form for Observation of Multimodal Interactions and Artifacts-

Student Participant

Date: TBD

Study Name: Examining intercultural competence in virtual exchange: Experiences and perceptions of university students in Canada and Jordan

Researcher Name and Contact Information:

Hiba Ibrahim (principal investigator)

Email: hibaib87@yorku.ca

Doctoral Candidate in linguistics and applied linguistics

Phone numbers:

Department of Languages, Literatures, and Linguistics

Jordan: +962797632290

York University

Canada: +1 647-656-8011

4700 Keele Street

Toronto, Ontario M3J 1P3

Canada

Purpose of the Research:

In the context of language education, virtual exchanges are technology-mediated programs, which connect language students from different geographical spaces for developing communicative and intercultural competence. The primary goal of this study is to explore intercultural competence in virtual exchange, connecting English as a second/additional language (ESL/EAL) university students at X University in Canada and Y University. This phase of this study will use observation of multimodal interactions and collaborative artifacts, which aims to explore participants' intercultural engagement and collaboration with their virtual exchange partners. This observation will inform subsequent phases of the study with the goal of exploring English language students' perspectives and experiences of intercultural competence in virtual exchange and therefore, inform current understandings to intercultural competence in technology-mediated language learning educational contexts. Excerpts and examples of participants' interactions and artifacts will be used in writing my doctoral dissertation, presented at scientific conferences, or published in scientific articles.

What You Will Be Asked to Do in the Research:

Your participation will be online. As a participant in this study, you will be primarily asked to:

- Provide your consent to the study researcher to observe and download the multimodal interactions and collaborative artifacts (using the mix of text, audio and/or video files) you engage in and produce with your virtual exchange partners during the period of the study (7 weeks) between September-December 2022.

- Engage with me, the principal investigator in this study, if I reach out to you with follow-up questions or clarifying requests on discussions you exchange with your VE partners. However, you may choose not to answer or discuss any question you don't feel comfortable addressing with the researcher.

To participate in this component of the study, you will need:

- to be officially enrolled in [course title] during the study period.

Risks and Discomforts:

The risks to you from this study are minimal and are similar to what you might encounter in an everyday conversation or on social media platforms when you interact with others. It is possible that you may experience some mild discomfort or embarrassment or find some topics difficult to talk about with your VE partners or me. I will not be evaluating or judging your opinions or collaborative artifacts at any point of the study. You can choose at any time not to answer any question or discuss any topic that you are not comfortable with. All of your data will be treated as confidential. Anytime I use your data in research publications, you will remain entirely anonymous. I will preserve confidentiality in documenting the data and will conceal your identity in reporting on the research; your data will only ever be included in publications as text, never as audio or video clips, unless you provide your explicit consent. There is no risk of the information becoming known beyond myself and my supervisory committee.

Benefits of the Research and Benefits to You:

You will be helping by sharing your experiences, perceived benefits and challenges of intercultural learning in virtual exchange at the postsecondary level. Your contribution and cooperation will be useful and informative in understanding university students' experiences of intercultural competence in virtual exchange and how these experiences contribute to researchers' and practitioners' understanding of it in wider technology-mediated language learning contexts. For you personally, the study will offer you the opportunity to virtually meet and collaborate with other English language learners from different cultural backgrounds. This connection will help you expand your critical thinking and intercultural knowledge and skills, which are critical factors for employability in today's globalized world. You will also gain new insights about others' cultures and your own by engaging with other ESL learners on a variety of intercultural discussions.

Voluntary Participation and Withdrawal:

Your participation in the study is completely voluntary and you may choose to stop participating at any time for any reason, if you so decide. Your decision not to volunteer or to stop participating in this study will not influence the nature of the ongoing relationship you may have with the researcher(s) or the nature of your relationship with York University either now, or in the future. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible. Should you wish to withdraw after the study, you will have the option to also withdraw your data up until the analysis is complete. If you choose not to take part in the study, your virtual exchange interactions and artifacts will be blanked out on the online course to eliminate your data from any observation during the study.

Confidentiality

During my observation of multimodal interactions and collaborating artifacts, I will be taking notes and downloading relevant interactions and artifacts offline for analysis at a later stage of writing my dissertation. All information you supply during the research will be held in

confidence. Your interactions and artifacts will contain potentially identifying information about you. At no point in time will your name and any other identifying information be shared with anyone else nor will it appear in any report or publication of this research. To ensure your anonymity in the study, you will be asked to use a pseudonym of your choice to protect your identity. Any study-related data and communication will be downloaded offline, and in the case of hard-copy data digitized and saved on my personal password-protected computer and backup storage drives. Only I will have access to this stored data. Since this study is my doctoral research, data from this study will be destroyed in March 2032. Confidentiality will be provided to the fullest extent possible by law.

Questions About the Research? If you have questions about the research in general or about your role in the study, please feel free to contact me at hibaib87@yorku.ca or my supervisor, Geoff Lawrence at glawrenc@yorku.ca and/or +962 797632290/ +1 647-656-8011. You may also contact the Graduate Program in Linguistics and Applied Linguistics at redge@yorku.ca and/or (416) 650-8046.

This research has received administrative approval from the Deanship of Scientific Research and Graduate Studies at the American University of Madaba and ethics review and approval by the Delegated Ethics Review Committee, which is delegated authority to review research ethics protocols by the Human Participants Review Sub-Committee, York University's Ethics Review Board, and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

Legal Rights and Signatures:

I _____, consent to participate in this component of the study: Examining the development of intercultural competence in virtual exchange: Experiences and perceptions of university students in Canada and Jordan. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature _____ **Date** _____

Participant

Signature _____ **Date** _____

Principal Investigator

Additional Consent

1. Observation and download of multimodal interactions and collaborative artifacts

I consent to the observation of my multimodal interactions with my VE partners

- ☐ Yes
☐ No

I consent to the observation of my collaborative artifacts with my VE partners

- ☐ Yes
☐ No

I consent to the download of my multimodal interactions and collaborative artifacts to be accessed and used by the researcher only for data analysis purposes

- ☐ Yes
☐ No

2. Use of multimodal interactions and collaborative artifacts excerpts

I _____, consent to the use of my multimodal interactions and artifacts (which may include text, video and/or audio files), my environment, and property in the following ways (please check all that apply):

- | | | |
|----------------------------------|------------------------------|-----------------------------|
| In thesis materials | ☐ Yes | ☐ No |
| In academic articles | ☐ Yes | ☐ No |
| In academic presentations | ☐ Yes | ☐ No |
| In print, digital, or slide form | ☐ Yes | ☐ No |

The researcher wants to collect participant email addresses to reconnect with participants during the study.

Email address: _____

Please enter your preferred pseudonym (fake name) _____

(If you do not enter one, a pseudonym will be assigned by the researchers to protect your identity)

Appendix G

Informed Consent Form for Semi-structured Interviews – Student

Date: TBD

Study Name: Examining intercultural competence in virtual exchange: Experiences and perceptions of university students in Canada and Jordan

Researcher Name and Contact Information:

Hiba Ibrahim (principal investigator)

Doctoral Candidate in linguistics and applied linguistics

Department of Languages, Literatures, and Linguistics

York University

4700 Keele Street

Toronto, Ontario M3J 1P3

Canada

Email: hibaib87@yorku.ca

Phone numbers:

Jordan: +962797632290

Canada: +1 647-656-8011

Purpose of the Research:

In the context of language education, virtual exchanges are technology-mediated programs, which connect language students from different geographical spaces for developing communicative and intercultural competence. The primary goal of this study is to explore intercultural competence in virtual exchange, connecting English as a second/additional language (ESL/EAL) university students at X University in Canada and Y University in Jordan. This phase of this study will use two semi-structured interviews (after Week 3 and Week 7 of the virtual exchange), which aim to seek in-depth understanding of the participants' intercultural learning experiences in the virtual exchange. These interviews will conduct in-depth discussions between the researcher and individual participants with the goal of exploring English language students' perspectives and experiences of intercultural competence in virtual exchange and therefore, inform current understandings to intercultural competence in technology-mediated language learning educational contexts. Excerpts and examples of participants' interview responses will be used in writing my doctoral dissertation, presented at scientific conferences, or published in scientific articles.

What You Will Be Asked to Do in the Research:

Your participation will be online. As a participant in this study, you will be primarily asked to:

- Talk with me about your intercultural learning and collaboration experience in the virtual exchange in two 45-60-minute recorded interviews, one by the end of week 3 of the exchange and the other by week 7. Both interviews will be recorded, and you get to choose between audio or video recording based on your preference.
- Read, watch, and/or listen to and talk about your own virtual exchange participation in some tasks or aspects of tasks during the virtual exchange.

To participate in this survey, you will need:

- to be officially enrolled in [course title] during the study period.
- A device capable of running Moodle and a videoconferencing meeting application (Zoom, Skype, Teams, etc.)
- An internet connection

Risks and Discomforts:

The risks to you from this study are minimal and are similar to what you might encounter in an everyday conversation. It is possible that you may experience some mild discomfort or embarrassment or find some topics difficult to talk about with me during the interview. I will not be evaluating or judging your opinions or artifacts you will be sharing at any point of the study. During the interview, you can choose at any time not to answer any question or discuss any topic that you are not comfortable with. To protect your data, all of your interactions with me during scheduling and conducting the interviews, via Zoom, email, or other channels, will be treated as confidential. Anytime I use your data in research publications, you will remain entirely anonymous. I will preserve confidentiality in documenting the data and will conceal your identity in reporting on the research; your data will only ever be included in publications as text, never as audio or video clips, unless you provide your explicit consent. There is no risk of the information becoming known beyond myself and my supervisory committee.

Benefits of the Research and Benefits to You:

You will be helping by expressing your ideas and talking about your intercultural experiences, highlighting issues relevant to intercultural interaction and collaboration in virtual exchange, and reflecting on your approaches to intercultural communication with other English language learners from different cultural backgrounds. Your contribution and cooperation will be useful and informative in understanding university students' experiences of intercultural competence in virtual exchange and how these experiences contribute to researchers' and practitioners' understanding of it in wider technology-mediated language learning contexts. These interview discussions might help you gain confidence and better understand and better put into words how you think and feel about these issues, which may be useful to you in the future.

Voluntary Participation and Withdrawal:

Your participation in the study is completely voluntary and you may ask to skip any question you don't want to answer or stop participating at any time for any reason, if you so decide. Your decision not to volunteer or to stop participating in this study will not influence the nature of the ongoing relationship you may have with the researcher(s) or the nature of your relationship with York University either now, or in the future. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible. Should you wish to withdraw after the study, you will have the option to also withdraw your data up until the analysis is complete.

Confidentiality

I will be recording both interviews using Zoom and I will be taking notes to help me highlight and summarize your responses. All information you supply during the research will be held in confidence. Your interview responses will contain potentially identifying information about you. At no point in time will your name and any other identifying information be shared with anyone else nor appear in any report or publication of this research. To ensure your anonymity in the study, you will be asked to use a pseudonym of your choice to protect your identity. Any study-related data and communication will be downloaded offline, and in the case of hard-copy data digitized and saved on my personal password-protected computer and backup storage

drives. Only I will have access to this stored data. Since this study is my doctoral research, data from this study will be destroyed in March 2032. Confidentiality will be provided to the fullest extent possible by law.

Questions About the Research? If you have questions about the research in general or about your role in the study, please feel free to contact me at hibaib87@yorku.ca or my supervisor, Geoff Lawrence at glawrenc@yorku.ca and/or +962 797632290/ +1 647-656-8011. You may also contact the Graduate Program in Linguistics and Applied Linguistics at redge@yorku.ca and/or (416) 650-8046.

This research has received administrative approval from the Deanship of Scientific Research and Graduate Studies at the American University of Madaba and ethics review and approval by the Delegated Ethics Review Committee, which is delegated authority to review research ethics protocols by the Human Participants Review Sub-Committee, York University's Ethics Review Board, and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

Legal Rights and Signatures:

I _____, consent to participate in the study: Examining the development of intercultural competence in virtual exchange: Experiences and perceptions of university students in Canada and Jordan. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature _____ **Date** _____

Participant

Signature _____ **Date** _____

Principal Investigator

Additional Consent

1. Recording of interviews

Using the virtual meeting software's built-in recording functionality,

I consent to the audio-recording of my interview(s)

- ☐ Yes
☐ No

I consent to the videorecording of my interview(s)

- ☐ Yes
☐ No

2. Permission to recontact

I would like to receive a copy of my interview transcripts, and consent to the researcher re-contacting me with them.

- ☐ Yes
☐ No

Signature:

Date:

I would like to receive a summary of the findings of this study, and consent to the principal investigator to re-contact me with this summary once the analysis is complete.

Signature:

Date:

Participant: (name)

3. Use of interview audio or video excerpts

I _____, consent to the use of my interview audio recording, my environment and property in the following ways (please check all that apply):

- | | | |
|----------------------------------|------------------------------|-----------------------------|
| In thesis materials | ☐ Yes | ☐ No |
| In academic articles | ☐ Yes | ☐ No |
| In academic presentations | ☐ Yes | ☐ No |
| In print, digital, or slide form | ☐ Yes | ☐ No |

I _____, consent to the use of my interview video recording, my environment and property in the following ways (please check all that apply):

- | | | |
|----------------------------------|------------------------------|-----------------------------|
| In thesis materials | ☐ Yes | ☐ No |
| In academic articles | ☐ Yes | ☐ No |
| In academic presentations | ☐ Yes | ☐ No |
| In print, digital, or slide form | ☐ Yes | ☐ No |

Signature:

Date:

Participant: (name)

The researcher wants to collect participant email addresses to reconnect with participants during the study.

Please Enter your preferred pseudonym (fictitious name) and email address here

(If you do not enter one, a pseudonym will be assigned by the researchers to protect your identity)

Appendix H

Questions for Pre-study Survey (to be created and shared in Google Forms)

Thank you for participating in this short survey. Please answer the following questions. You can choose to skip questions you are not comfortable answering.

- **Section 1: Personal Information**

Full Name: _____

Age: _____

Major: _____

Year of Study: _____

Country of origin: _____

1. Which of these English language courses are you enrolled in?
 - a. Advanced Oral Communication
 - b. English Communication Skills 1
 2. Language(s) I learned as a child is/are: _____
 3. My second language(s) is/are: _____
 4. I have been studying English for the past _____ years.
 5. How would you identify your cultural background?
-

- **Section 2: Previous Intercultural Learning Experience**

6. Have you had the opportunity to live, work or study in a country other than your home country?
 - a. Yes, I have done this in the past
 - b. Yes, I am doing this right now
 - c. Yes, I have done this in the past and am doing this right now
 - d. No, I have no experience living, working or studying in another country
7. Please indicate how many times you have lived, studied or worked in a country other than your home country.
 - a. 1 time
 - b. 2-3 times
 - c. More than 3 times
 - d. I have never lived, worked or studied in another country
8. Which of the following best describes your experiences living, working, or studying in a country other than your home country? Please select all that apply.
 - ☐ I lived in a country other than my home country as a child.
 - ☐ I lived in a country other than my home country as an adult.
 - ☐ I worked for a period of time in a country other than my home country.

- ☐ I studied for a period of time in a country other than my home country.
- ☐ I have never lived, worked or studied in a country other than my home country
- ☐ Other

If you selected “other” please explain in the space below.

9. Use a few words to describe an intercultural learning experience you had in the past. This could be something you experienced in your country or abroad, as a language learner, on social media, while traveling, in formal schooling, or other contexts.

• **Section 3: The Virtual Exchange**

10. Virtual exchanges/telecollaborations are programs where groups of people from different countries or communities meet, engage in dialogue, and collaborate with each other in different tasks and projects, using technology. Have you taken part (whether within a credit course, an extra-curricular activity, etc.) in virtual exchange/telecollaboration programs?

- a. Yes
- b. No
- c. I'm not sure/I don't remember

11. If you answered Yes to the previous question, use a few words to describe your learning experience you had in virtual exchange in the past.

12. Why did you agree to participate in this study?

—

13. What are some expectations you have for this virtual exchange? What are things you are looking forward to achieving or learning?

14. What are some challenges or concerns you have?

Thank you for taking this survey!

Enter your preferred pseudonym _____ (If you do not enter one, a pseudonym will be assigned by the researcher to protect your identity).

Appendix I

Semi-structured Student Interview Questions

- **Week 3 Interview Questions**

Part 1: Intercultural Experiences in the First 3 Weeks

1. When you took the survey earlier, you identified your cultural background as [researcher to insert student response]. Would you like to add or change anything about that now?
2. What are some of the topics you have discussed in the virtual exchange so far?
3. What are some of the viewpoints you and others have shared about them?
4. In the past three weeks you have engaged with your partners in [task/topics]. What can you tell me about your engagement with your partners so far?
5. How have you found discussing intercultural issues and collaborating in the tasks with your partners?
6. What strategies or techniques did you use to get across your cultural perspective?
7. What do you feel you have learnt about your culture and your partners' cultures so far? Anything you didn't expect?
8. What insights have these virtual exchange interactions and collaborations given you regarding the topics of culture and intercultural communication?

Part 2: Stimulated Recalls

9. How would you describe what happened here (highlighting a choice of language, an attitude, a strategy), what were you thinking about back then? What were you thinking when you said/wrote (researcher quotes participant)?
10. How do you think your partner(s) responded when you did/said ((highlighting a choice of language, an attitude, a strategy)?
11. What were you thinking when you said/wrote (researcher quotes participant)?
12. After that, you did/said (researcher provides a description), what was the reason for doing/saying what you did/said next?
13. (if applicable): I noticed that you addressed (highlighting a choice of language, an attitude, a strategy) differently, what were you thinking about then? Why did you choose to make this change?
14. Did you think of any other strategies at that time to address/handle this situation?

Part 3: Benefits and Challenges in the VE Experience

15. How has this experience been different from other intercultural learning experiences you had in the past? Can you share some examples?

16. Have you got the chance to connect with your partners via Zoom or Skype? How has this connection been different from connecting and collaborating via eClass? Can you share some examples?

17. Describe any benefits you have found in interacting with participants from other cultural backgrounds. Why do you see this as a benefit? How have you tried to invest in these affordances?

18. Describe any challenges you have faced in your group work so far. What do you think the causes are?

19. Have you tried to work with these challenges? Why/why not? And if yes, how?

20. Is there anything I haven't asked you about that you would like to share regarding your intercultural VE experience so far?

- **Week 7 Interview Questions**

Part 1: Intercultural Experience Between Weeks 3-7

1. How did your impressions, viewpoints, or knowledge about your culture or your partners' cultures change between weeks 4-7, compared to the first few weeks of the VE? What changed and why? Can you give me any examples?
2. Based on your VE experience, can you identify some qualities or aspects of people who are competent in intercultural communication online?
3. Based on your engagement with your VE partners, can you recall a moment (behavior/ something they said) when you thought of any of your partner as competent in intercultural communication? Why did you perceive him/her as such?
4. What are some factors that made intercultural communication smooth in VE?
5. What are some factors that made intercultural communication challenging in VE?
6. You used both synchronous (live communication via Zoom) and asynchronous communication (Google docs/ chat/ email) between weeks 4-7. In our first interview you said that some of the strategies you used to maintain effective communication with your partners were "quote participant". How did your communication approaches develop/change? What do you think are the reasons behind this change? Can you give me any examples?
7. How would you describe your interactions and collaborations with your partners between weeks 4-7? What changes/similar behavior or intercultural communication

strategies did you use to communicate and collaborate with your group members? What do you think are the reasons behind these changes, if they occurred?

8. In our earlier interview you talked about the benefits of “quote participant”. Do you still look at them as benefits? Why/Why not? Have you discovered any additional benefits between weeks 4-7? Have you tried to invest in them during this period? How?
9. You also talked about the challenges, you said “quote participant”. Do you still see that as a challenge? Why/Why not? Have you faced any additional challenges between weeks 4-7? How have you tried to cope or deal with these challenges?
10. How did these changes impact your learning during the VE? What about your relationship with your partners?

Part 2: Stimulated Recalls

11. If the participant chooses the segment: Why did you choose this segment?
12. What can you tell me about what is happening in this segment?
13. How would you describe what happened here (highlighting a choice of language, an attitude, a strategy), what were you thinking about back then?
14. What were you thinking when you said/wrote (researcher quotes participant)?
15. How do you think your partner(s) responded when you did/said/wrote (highlighting a choice of language, an attitude, a strategy)?
16. What were you thinking when you said/wrote (researcher quotes participant)?
17. After that, you did/said (researcher provides a description), what was the reason for doing/saying what you did/said next?
18. (if applicable): I noticed that you addressed (highlighting a choice of language, an attitude, a strategy) differently, what were you thinking about then? Why did you choose to make this change?
19. Did you think of any other strategies at that time to address/handle this situation?

Part 3: Tasks, Technological Tools, Instruction, and other factors

20. How did the VE tasks help improve your intercultural communication and collaboration with your partners? Can you give me any specific examples?
21. If you were to make any changes to any of these tasks, what would they be? Why?
22. When you were about to start the VE, how did your instructor explain it in class? What expectations did you have from your instructor to help you navigate this VE experience?

23. Did you do any class work that helped improve your understanding of/performance in the VE tasks or your communication with your partners?
24. Other than Zoom and Padlet, how did you interact/collaborate with your VE partners?
25. How was your interaction experience using each? How did these different communication channels impact your intercultural learning in the VE?
26. During the entire period of the virtual exchange, your group leader was from the ESL classroom in Canada, what do you think are the advantages and disadvantages of this? How do you think it impacted your intercultural communication and collaboration with your partners in Jordan?
27. Looking at your VE experience, how did you find the experience of using technology for intercultural communication and collaboration with other English language students? How was this experience different from other intercultural learning experiences you had in the past?
28. When you look at your intercultural experience in this virtual exchange, with all its different components, how do you describe it? What are some factors that have made it the experience it was?

Part 3: Reflecting on the VE Experience

29. When you look at your intercultural experience in this virtual exchange, with all its different components, what has made it the experience it was?
30. How did you find the experience of using technology for intercultural communication and collaboration with other English language students? How was this experience different from other intercultural learning experiences you had in the past?
31. What did this virtual exchange experience teach you? What about the topics of culture and intercultural communication?
32. Earlier, you said that the VE taught you to/that “quote participant”. Has the VE made you discover/ pay more attention to anything else about your identity as an online intercultural communicator. Has that changed now?
33. When sharing about your expectations for this VE, you said “quote participant.” To what extent do you feel you achieved that in the VE?
34. If you were to experience this intercultural exchange again with different partners, what are some lessons you learned and would carry out when you communicate and collaborate with them? Manage your emotions and reactions?
35. Is there anything I haven’t asked you about that you would like to share regarding your intercultural VE experience?

Appendix J

Sample of Observation Notes

Mapping Data Collection

File Edit View Insert Format Data Tools Extensions Help

Zoom setting: speaker mode instead of gallery.

	B	C	
1	Participant	Observation notes	
2	Dania	Dania seems to be relaxed in the online environment, she takes initiative to ask Nancy to clarify how they will ask each other questions and jokes with the group early on. Dania steps in to help Rana with language and offers to help her with translation. She seems to be trying to ask in-depth questions to Rana, but she is either misunderstood or Rana's limited proficiency is hindering elaborative conversation. When she asks Nancy about her transition from China to Toronto, Nancy focused on weather differences, language environment. Dania had no follow-up. Why? X seemed more engaged with her, he laughed, smiled. She engaged with him too "I can relate to that" when he talked about communicating speaking and how different it is from writing, "to be honest, mine too. I'm not so good at writing". She also seemed to engage with him differently (<i>what makes that the case?</i>) They greeted each other in Korean as well (how did she feel about this? What did she think of that move of his?) She also responded to his questions with elaboration, stated her opinion clearly, used Arabic as an example to support her opinion regarding every language has its own beauty. Towards the end, Dania feels comfortable asking Nancy to share her screen so they could talk about the reflection questions. When Nancy was reflecting and sharing thoughts, Dania was making follow-up comments, nodding in agreement. In her reflection she mentions that this interview is different from other conversations she had (<i>she mentioned she had online friends, so other than speaking about her passion for languages in this group, what makes this experience different?</i>)	- Zoom setting: speaker mode instead of gallery. - student settings: Dania and Rana were comfortable sharing their background in Zoom (they were at home it seems?), Nancy had a blurred background. - students mainly repeated some info from the video focusing on the university/major and languages they speak: <i>Why not something else that formal atmosphere change throughout the way?</i> - the group went right from intros to the main task (questions) as the follow-up questions or made comments on what they shared so far - Nancy and Dania seem to be friendly and relaxed with others, Rana - Nancy decided that each will ask all of their questions to everyone they were waiting for their turn: how did this impact the culture of the group? and if they were not feeling good about this approach, why?
3	Rana	keeping a smile on her face, saying thank you to X when he went first introduced himself The first question from Nancy to Rana, Rana gave short answers to the point of the question (Nancy was taking notes?). She starts then having limitation with English (switches to Arabic). When she is stuck, she finds a way out by resharing the last sentence (was nervous?) Rana has her questions written and she is reading them to partners (perhaps because of the language barriers?) - Rana throughout the meeting seems to feel more relaxed (min 19:57-21:47 as an example with her exchange with Dania). She is not making follow-up comments but she has some follow-up questions and her tone changes a bit (less tense). <i>How did she feel when X told her that her answer to his question about the app changed what he thought about speaking the same language to bring people closer?</i> Rana in reflecting: "I got to know my friends in Canada... I want to travel to Canada, China one day" <i>what made her than enthusiastic despite the anxiety and limited conversations she had?</i> <i>Does she feel neglected in the end when they both asked Dania questions and not her?</i> Rana shows some intercultural competence when she repeats the questions in different ways to X to make sure she did her best to communicate herself (she didn't directly ask him if he understands her). - She is a bit intimidated by X because of his way of communication, facial expressions, voice tone etc. - the dynamics between Rana and Nancy vs. with X. Although she was nervous due to the language factor, she was more relaxed with Nancy. - "Surviving the interview" was an obvious goal for Rana. - representation for Rana is important. The fact that she herself wasn't able to communicate much bothered her but the fact that Dania was made her happy because it would give a good image about them. - her confidence in what she is able to understand is low (example is in her encounter with X on the translating app). She answered the question but wasn't sure so she laughs (nervous laugh) but then when Rana translates the question, her voice tone shows that she did understand the question the first time but probably wasn't sure if she did. <i>There seems to be an elaboration expectation gap (X repeated the question and repeated some of her words like "no" and "to learn" because he was probably hoping for her to elaborate on her answer. He was also asking the question in different ways because he thought she didn't get the question. To Rana, that was a yes/no question (also elaboration can be a challenge for public sector students as they are not used to it).</i> - Rana's answer to my question reflects her desire yet worry? about how this exchange with her partners (in English) will go. She wanted to reassure her partners that she wants to communicate with them, understand them, and learn more about them. - When I asked her why she said she didn't understand although she thought she answered the question, she said that he might have aimed for something different (X didn't try to clearly say what he is after or didn't use any language to indicate that he is challenging her answer or asking for elaboration or that he was surprised. He didn't follow up with questions like: why? which confused Rana.) - Stereotyping/generalization is clear in Rana's attitude towards her partners (positive): <i>I love China/Canada, my friends, they are disciplined, etc. (probably because she was overwhelmed by the first intercultural encounter).</i> - Rana has somewhat of an "idealistic" view of the West and western cultures as she shared. This is probably why she is being a bit stereotypical about her views of partners and is the motivation to improve her language skills as she wants to study or work abroad one day. - She speaks very generally about her partners' cultures and the intercultural encounter in general. Whenever she answers questions (e.g. opportunities/benefits or challenges) she focuses on the language aspect and how time consuming it is to try to improve her language (<i>not surprising given her English proficiency level</i>). - She technically didn't answer the questions about challenges and how she is dealing with them in direct relevance to the VE or how she is trying to communicate better with her partners.	
4	Nancy	Nancy is leading the talk. She is taking a "facilitator" role. She is trying to fix others' mic issues and has a smile welcoming everyone, asking to start with introductions (giving the option for her partners to go). Who wants to go first? She noticed Rana's smile, saying thank you and asked her if she wants to go next; then Dania, then she went herself: <i>why did she do that/why this order?</i> Nancy is very interested in asking Dania about Korean drama (how often she watches it, if she keeps subtitles on now, etc.) In her responses to X, she seemed to be comfortable sharing stories of culture shock. When Nancy opens up other questions, X asks Dania about other Korean drama she watched. <i>Nancy mentioned that this is the first time she has an interview with students from another university (not another culture or country) and it is fun and positive.</i>	3:34: she asked if others would like to start asking questions, but if nobody wanted to start: why that offer? She smiled and Rana started.

+ ≡ 2 Survey Week 1- Autobiography Videos Week 2- Interviews 7 Week 3- Padlet Discussions Week 4- Scenario Planning Meetings Week 5: Intercultural Scenarios Week 6: VE Reflections 1 Inte < >

Appendix K

Samples of Data Coding Using MAXQDA 24.9.1

The screenshot displays the MAXQDA 24.9.1 software interface. The top menu bar includes options like Home, Import, Codes, Memos, Variables, Analysis, Mixed Methods, Visual Tools, Reports, MAXDictio, and AI Assist. Below the menu is a toolbar with icons for importing various data types (Texts, PDFs, Transcripts, Tables, Focus Group, Audio, Images, Videos, YouTube Data, Documents from Excel Spreadsheet, Web Pages, Reference Manager Data, Emails) and functions like Create Document, Convert Text to Table Document, and Convert Text to Focus Group Transcript.

The main workspace is divided into three panes:

- Left Pane (Documents):** Shows a hierarchical tree of documents. Under 'Documents', there are 'Group 1' (Interview 1 with sub-items Lubna 1, Eric 1, Layla 1; Interview 2) and 'Group 2' (Interview 1, Interview 2 with sub-item Dania 2; Stimulated Recall Segments). 'Group 2' is expanded, showing 'Week 2 interview Eric-Layla encounter 1' (11 Paragraphs) selected.
- Bottom Left Pane (Codes):** Displays a list of codes with their frequencies. Codes include 'focusing on task' (0), 'confirmation check' (1), 'open question' (1), 'avoidance' (1), 'politeness' (4), 'story/narration' (2), 'Code-switching' (0), 'Clarification Practice' (0), 'Paraphrasing' (0), 'Backchannel' (5), 'laughter' (2), 'head nod' (1), 'strong agreement token' (3), 'neutral agreement token' (1), 'weak agreement token' (1), and 'Technology Use' (0).
- Right Pane (Text):** Shows the transcript of the selected document. The text is numbered 1 to 11. Various codes are applied to different parts of the text, such as 'excitement', 'Backchannel', 'weak agreement token', 'Personality Trait', 'story/narration', 'confirmation check', 'head nod', 'neutral agreement token', 'strong agreement token', and 'curiosity'.

The status bar at the bottom indicates 'Retrieved Segments 20'.

MAXQDA (24.9.1) Dissertation

Home Import Codes Memos Variables Analysis Mixed Methods Visual Tools Reports MAXDictio AI Assist

Texts, PDFs, Transcripts Tables Focus Group Transcripts Images Audio Survey Data YouTube Data Documents from Excel Spreadsheet Web Pages Reference Manager Data Create Document Convert Text to Table Document Convert Text to Focus Group Transcript

Documents

- Interview 2
 - Dania 2
- Stimulated Recall Segments
- Group 3
 - Interview 1
 - Holly
 - Interview 2
- Stimulated Recall Segments
 - Kamal-Bella encounter
- Group 4
 - Interview 1
 - Catherine
 - Interview 2
- Stimulated Recall Segments
 - stimulated recall_Cath...

Sets

Codes

- patience
- curiosity
- online vs. in-person
 - online communicator id...
- Home culture knowledge
- Target Culture Knowledge
- Dynamic Factor
 - Personality Trait
 - English proficiency
 - time zone difference
 - instructor support
 - VE task design
 - Group Leadership
- Individual Intercultural Strategy
 - focusing on task
 - confirmation check

stimulated recall, Catherine's Padlets

Individual Intercultural Strategy

... ..Backchannel
...strong agreement token

Individual Intercultural Strategy
...Backchannel
...strong agreement token

..Feelings about one's self/beliefs
...worry/concern

..frustration

..Feelings about one's self/beliefs
...strong agreement token

showing agreement
...politeness

Individual Intercultural Strategy

Document

1 / 4 64%

Cultural stereotype (Question #4)

Stereotypes don't define us

Cultural stereotype is a term to describe categorizing a certain group of people having a same characteristics. It could cause a positive or negative impact on people that is stereotyped. It's developed by lazy thinking. Living in a multicultural country, it's quite common to face cultural stereotype. Even me, I have stereotyped to someone that I felt extremely guilty for. Because the history of Sino Japanese war, I always had a awful impression on Japan and Japanese. In my opinion, Japanese are short, ruthless and cruel. Until I met my doctor, at beginning, I thought he was a CBC because of his native English speaking and his Asian

looking appearance. I started to chat with him by asking his background. I was so shocked and wanted to switch to another doctor when I realized he was from Japan. Unfortunately, he was the only doctor that could fit my schedule. Therefore, I had to face him since I didn't have any option. With I got closer with him, I found out that he was super patient, kind, humorous and professional. I felt so bad to stereotype him when I noticed his nationality. I should not comment him based on his background. Everyone is unique and different. Never judge a book by its cover.

person we meet through his behavior, facial features or the way he talks, and this for me is the cultural stereotype because I always see it around me through new people I meet but it is usually wrong in most of the times

Hi, my school requires me to study the history of Sino Japanese war in my home country. I had a similar stereotype to you, I feel Japanese cruelty, they killed nearly 3,000,000 people in history. Last year, I still a grade 12 student my teacher require a group project and I find a person is an Asian face and work together. I believe he is Korean and I find it his last name google it and show it comes from Japanese. I feel a little worried since Japanese in my stereotype is cruelty, but my groupmate is very hard working and helpful. Finally, I figure out I cannot treat history as a stereotype.

Here, your explanation about cultural stereotype was really interesting specially the part where you mentioned that stereotype's developed by lazy thinking. I completely agree with you and I think this is the reason that almost all people unintentionally show some behaviours that represent cultural stereotype. I really liked your honesty when you talked about your experience, but don't feel bad, as I mentioned almost all people do it (including me) and this is because of what you call lazy thinking.

I really liked what you wrote and how you dealt with your doctor because many of us always take the first impression of the

Culture shock (Question #1)

As we have discussed in the class, culture shock is very common phenomenon and it could happen to anyone who lives abroad with own different impacts. It might brings anxiety and pressure when people is facing a different environment without full preparation. Culture shock contains four stages including honeymoon period which it usually occurs at first and people shows their interest to the new environment, discomfort period that people might feel aggressive to the new country, adjustment period which people is trying to adapting themselves to this new environment and recovery period which people can used to living in this new country. Everyone will have their own symptoms, speed and orders of culture shock. Currently, after living

In Canada for years I'm experiencing the first stage which is the recovery period. I felt calm and peaceful to accept all changes without any stress. It's strange that I even missed Canada and thought of my time in Canada when I travelled back to China last year. This weird situation is called reverse culture shock. Hope all of you can safely pass culture shock and let's exchange comments on these experience.

Hi, I let how you mentioned that culture shock brings anxiety because that is how I would describe my first one. I remember that I was anxious for my first winter because it was going to be the first time I experienced such a temperature in my life. I went through different of the stages you mentioned and I can now say that I am in the final one as well. Unfortunately, I have not been able to travel back to Vancouver yet, but I am sure, I will experience some of that reverse culture shock you experienced on your trip back to China. Thank you for your informative post!

1. Why do young people look for international job opportunities?

part in how I feel about working abroad. For example, I feel like working in Europe might be a better fit for me because, through the people I follow on social media, I can see how they can balance their work and personal lives better than we do here in Canada. In a Forbes article, they also explore this matter by giving three different reasons

Hi, Thank you so much for sharing the article you found and your ideas. I very like the factor you have mentioned which is social media plays a significant role on attracting young people to work internationally. I felt the same way, these attractions on social media light up my curiosity and make me want to work

Retrieved Segments 26

MAXQDA (24.9.1) Dissertation

Home Import Codes Memos Variables Analysis Mixed Methods Visual Tools Reports MAXDictio AI Assist

Texts, PDFs, Tables Transcripts Focus Group Transcripts Images Audio Survey Data YouTube Data Documents from Excel Spreadsheet Web Pages Reference Manager Data Create Document Convert Text to Table Document Convert Text to Focus Group Transcript

Documents

- Interview 1
- Interview 2
 - Dania 2
 - Stimulated Recall Segments
- Group 3
 - Interview 1
 - Holly
 - Interview 2
 - Stimulated Recall Segments
 - Kamal-Bella encounter
- Group 4
 - Interview 1
 - Interview 2
 - Catherine
 - Stimulated Recall Segments
 - stimulated recall_Catheri...

Codes

- VE task design
- Group Leadership
- Individual Intercultural Strategy
 - focusing on task
 - confirmation check
 - open question
 - avoidance
 - politeness
 - story/narration
 - Code-switching
 - Clarification Practice
 - Paraphrasing
 - Backchannel
 - laughter
 - head nod
 - strong agreement token

Catherine (3659 Paragraphs)

Individual Intercultural Strategy > avoidance

Document 75%

Calibri 11 B I U S A

2520 836
2521 01:14:49.810 --> 01:14:54.440
2522 Hiba Ibrahim: So do you remember how you wrote these replies?
2523 837
2524 01:14:55.800 --> 01:14:59.970
2525 [redacted] Yeah, because I wanted to be polite.
2526 838
2527 01:15:00.420 --> 01:15:05.410
2528 [redacted] That's why I thank them for sharing.
2529 839
2530 01:15:05.550 --> 01:15:07.349
2531 [redacted]: and
2532 840
2533 01:15:08.610 --> 01:15:13.149
2534 [redacted]: and the find the the similarity
2535 841
2536 01:15:13.260 --> 01:15:13.969
2537 hmm.
2538 842
2539 01:15:15.070 --> 01:15:23.199
2540 Hiba Ibrahim: Do you remember? If you found a post, or maybe one of these posts that you disagreed with, maybe at some point?
2541 843
2542 01:15:23.360 --> 01:15:30.570
2543 [redacted]: I don't I I have read some, but I didn't comment on that because I feel it's unpolite
2544 844
2545 01:15:30.610 --> 01:15:37.289
2546 [redacted] and me to do so, and then other people might get upset or
2547 845
2548 01:15:37.490 --> 01:15:42.940
2549 [redacted]: or angry about that, or feel that that will be offense.
2550 846
2551 01:15:42.990 --> 01:15:48.440
2552 [redacted]: So I didn't do that I just of find something like I agree it.

Retrieved Segments 6

MAXQDA (24.9.1) Dissertation

Home Import Codes Memos Variables Analysis Mixed Methods Visual Tools Reports MAXDictio AI Assist

Texts, PDFs, Tables Transcripts Focus Group Transcripts Images Audio Survey Data YouTube Data Documents from Excel Spreadsheet Web Pages Reference Manager Data Create Document Convert Text to Table Document Convert Text to Focus Group Transcript

Documents

- Interview 2 0
- Stimulated Recall Segments 15
 - Week 2 Interview Eric-La... 15
- Group 2 10
 - Interview 1 0
 - Interview 2 10
 - Dania 2 10
 - Stimulated Recall Segments 0
- Group 3 16
 - Interview 1 4
 - Holly 4
 - Interview 2 0
 - Stimulated Recall Segments 12
 - Kamal-Bella encounter 12**
- Group 4 15
 - Interview 1 0

Codes

- focusing on task 0
- confirmation check 1
- open question 1
- avoidance 1
- politeness 4
- story/narration 2
- Code-switching 0
- Clarification Practice 0
- Paraphrasing 0
- Backchannel 5
 - laughter 2
 - head nod 1
 - strong agreement token 3
 - neutral agreement token 1
 - weak agreement token 1
- Technology Use 0

Kamal-Bella encounter (7 Paragraphs)

Strategy > Backchannel > weak agreement token

Document 100% AB

1 0:16:12 Bella: You also learn French as a third language, which is very similar as with the English, but have the different pronunciation. Do you have any challenges to learn both of these languages? And how did you handle these challenges?

2 0:16:29 Kamal: Okay Ah, to be honest, Um, I know a little knowledge about French language, because I learned it in school, when.. with a young age. I don't speak it every time a French language. But my second language, which is English, that I, you speak with with ah more people, and communicate with with him...That will make me better in this language.

3 0:17: 14 Bella: Yeah, I think that the more you practice, the more we get to familiar with this language. And I also think you speak language very fluently. Um, I'm very curious how you how you make it. And could you share something about your English learning methods?

4 0:17:34 Kamal (light laugh): I don't think I speak I don't think I speak it very fluently

5 Bella and Holly smile

6 0:17:37 Kamal (light laugh): and I want to and I try to be more better in this language, by communicate with people every time...I want, and I try to be better, very good in English, and communicate continuously in a confidentially way. And then this virtual exchange. I want to be focusing more in the English language.

7 0:18:12 Bella: Yeah. Thanks for sharing

Messenger

Interviewed Segments 20

Appendix L

List of Codes and their Definitions

Code	Sub-Code	Definition
Early Intercultural Experiences	Self-awareness of cultural identity	This code includes all statements/ actions where participants reflect on their own cultural identity.
	Cultural comparison and perception shifts	This code includes all statements/actions that show changed or reinforced cultural views.
	Intercultural engagement strategies	Descriptions and statements of how participants conveyed their cultural perspective.
	Feelings about self in intercultural collaboration	Statements/actions demonstrating or expressing emotions or evaluations about their own behaviors, identity, or performance. These include confidence, discomfort, pride, worry/concern, fear/uncertainty, happiness, sadness, surprise, disappointment/frustration, anger, admiration, appreciation in sharing or understanding culture or in response to partner perspectives.
	Feelings about others in intercultural collaboration	Statements/behaviors/actions that reflect participants' emotional responses or judgments about others' behaviors or attitudes or their cultural expressions. These included worry/concern, fear/uncertainty, happiness, sadness, surprise, disappointment/frustration, anger, pride, admiration, appreciation, respect
	Learning about cultures	Statements about learning something unexpected or insightful about self/others.
	Intercultural meaning-making	This code includes all statements and reflections on cultural themes and insights about intercultural communication.
	Tension	Statements/behaviors in which participants describe/demonstrate feelings of discomfort, strain, or interpersonal unease during intercultural collaboration. These may reflect moments of emotional or cultural friction that influence group dynamics.
	Miscommunication/Misunderstanding	Statements/ behaviors that highlight/demonstrate instances of misunderstanding or failed communication across cultural or linguistic boundaries, as well as reflections on how understanding was eventually reached or remained unresolved.
	Change in cultural understanding	How participants' cultural views evolved over time.
	Behavioral indicators of IC	Features attributed to interculturally competent partners.

Mid-Exchange Intercultural Experiences		Descriptions of partners' actions seen as interculturally effective.
	Smooth communication factors	Elements facilitating successful collaboration.
	Barriers to communication	Reported causes of miscommunication or conflict.
	Change in strategies	Development or shifts in how communication was handled.
	Re-evaluation of benefits/challenges	Reflections on earlier perceptions and whether they persisted or changed.
	Impact on learning and relationships	Statements about the effect of collaboration on personal learning and group dynamics.
	Changes in self-perception	How participants viewed themselves as communicators or cultural beings.
	Tension	Statements/behaviors in which participants describe/demonstrate feelings of discomfort, strain, or interpersonal unease during intercultural collaboration. These may reflect moments of emotional or cultural friction that influence group dynamics.
	Miscommunication/Misunderstanding	Statements/ behaviors that highlight/demonstrate instances of misunderstanding or failed communication across cultural or linguistic boundaries, as well as reflections on how understanding was eventually reached or remained unresolved.
Intercultural Strategies	Emotions about overall VE experience	Statements that included expressions of pride, disappointment, excitement, or other feelings about the VE.
	Linguistic accommodation: Code-switching	Use of switching between languages to support communication or clarify meaning.
	Linguistic accommodation: Paraphrasing	Restating messages in different words to aid understanding.
	Linguistic accommodation: Confirmation request	Asking for confirmation to ensure mutual understanding.
	Linguistic accommodation: Clarification request	Requesting clarification when a message is unclear.
	Linguistic accommodation: Backchannel	Statements that included use of weak, neutral, and strong agreement tokens such as use of minimal responses (e.g., 'uh-huh', 'I see') to show engagement. Those also included head nods and laughter while interacting
	Intercultural strategy: Showing agreement	Verbal or non-verbal expressions of agreement to foster rapport.
	Intercultural strategy: Showing disagreement	Expressing differing opinions, potentially with mitigation.
	Intercultural strategy: Politeness	Employing culturally appropriate forms to show respect or mitigate face threats.

	Intercultural strategy: Avoidance	Avoiding direct confrontation or sensitive topics to maintain harmony.
	Intercultural strategy: Open question	Using open-ended questions to invite elaboration or perspectives.
	Intercultural strategy: Narration/story	Telling stories to share experiences or cultural values.
	Intercultural strategy: emotional management	Strategic efforts by participants to regulate their emotions (e.g., frustration, anxiety, defensiveness) to maintain respectful and constructive intercultural interactions.
	Intercultural strategy: tension/miscommunication management	Deliberate actions or communication strategies used to address, mitigate, or repair interpersonal or intercultural tension and miscommunication (e.g., clarifying intent, using humor, switching topics, apologizing, seeking mutual understanding).
Benefits and Challenges	Perceived benefits of VE	Statements describing opportunities or personal/professional growth.
	Perceived challenges of VE	Statements detailing barriers, discomfort, or conflicts.
	Strategies to overcome challenges	Actions or coping methods to address intercultural or communicative problems.
	Emotions in navigating challenges	Feelings like frustration, stress, or satisfactions related to overcoming difficulties.
	Comparative experience with past IC learning	Reflections on how this VE differs from prior intercultural or educational experiences.
	Communication platform impact	Perceived differences between synchronous and asynchronous interactions.
Tasks, Tools, and Instruction	Relationship development	Statements about building or lacking connection with group members.
	Impact of VE tasks	How specific tasks influenced collaboration or IC development.
	Suggestions for task improvement	Participant ideas for improving task design or flow.
	Role of instructors	Expectations, support, or gaps regarding teacher preparation.
	Classroom preparation	Statements about pre-VE lessons or materials and their usefulness.
	Tool-specific experiences	Evaluations of Padlet, Zoom, etc. and their influence on learning.
	Power dynamics and group leadership	Reflections on how leadership roles affected interactions.
	Technological mediation of IC	Insights about using tech for intercultural communication.
Overall learning outcomes	Takeaways, insights, or new competencies.	
	Future behaviors and strategies	Lessons participants would apply in future intercultural settings.
	Expectation vs. reality	Comparisons between what was hoped for and what occurred.
Values	Beliefs	Statements where participants share core beliefs or convictions about intercultural communication or learning. Included: I think/thought, I believe, in my opinion, to me

	Attitudes	Statements reflecting positive, negative, or ambivalent attitudes toward the VE experience or participants.
	Evaluations	Statements in which participants assess or appraise events, partners, strategies, or tasks.
	Personal values	Statements that highlight what participants personally value in communication, learning, or intercultural experiences.
