Article

Intercultural Sensitivity as a Pathway to Students' Cultural Competence and Identity Formation in Virtual Exchanges

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ABSTRACT: *Virtual exchanges are increasingly used to expand access to international education. This study explored how Japanese students experienced intercultural learning and identity development within a virtual exchange programme conducted at a Finnish university. Using the Intercultural Sensitivity Scale as an analytical lens, qualitative data were drawn from semistructured interviews with programme participants to investigate how virtual, multicultural environments shape students' intercultural sensitivity and identity formation. The findings revealed that challenges related to interaction engagement, attentiveness and confidence were exacerbated by language barriers, differing communication norms, and the limitations of online learning environments. These factors significantly influence students' capacity for meaningful intercultural engagement and identity exploration. Moreover, respectful and inclusive peer interactions, scaffolded group work and play-based activities were found to enhance students' enjoyment, confidence and self-awareness. As a result, intercultural sensitivity emerged as a key condition shaping identity formation, which underscores the importance of culturally responsive programme designs tailored for online learning spaces that foster inclusion and personal transformation.*

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INTRODUCTION

Universities increasingly operate on a global scale (de Wit, 2020) and are expected to prepare students for an interconnected and complex world marked by challenges such as climate change, growing inequality and nationalism. In response, many institutions have adopted strategies to integrate the United Nations' Sustainable Development Goals (SDGs) into their core missions and practices, indicating a shift toward a more coherent, institution-wide approach to sustainability (Toman et al., 2023). By fostering intercultural understanding, promoting global citizenship and connecting learners across borders, the internationalization of higher education (IoHE) encourages collaboration while simultaneously cultivating the knowledge, values and capabilities needed to tackle global challenges, pursuing these goals primarily by facilitating intercultural encounters between students and educators. These intercultural encounters can trigger disorientating experiences that create conditions for transforming worldviews and deep personal change, prompting students to reassess their assumptions, emotional responses and ethical frameworks in ways that extend far beyond employability or skill acquisition.

INTERNATIONALIZATION OF HIGHER EDUCATION AND IDENTITY FORMATION

Identity is not a fixed essence and is never complete; rather, it is a positioning that is always in process and shaped by cultural and historical contexts (Hall, 2015). It involves the negotiation of personal values, beliefs, cultural affiliations and social roles, often shaped by experiences of difference and interaction with others. In educational contexts, identity is continuously constructed and reconstructed through learning, reflection, and social engagement (Abes et al., 2007; Mezirow, 1997), as students define themselves in relation to the world around them. Especially in multicultural or transnational learning environments, exposure to new perspectives can act as a catalyst for students to reevaluate their own cultural assumptions and self-concepts.

IoHE creates structured opportunities for students to engage with diverse perspectives and cross-cultural dialog, encouraging a process of self-formation in

which students are not passive recipients of cultural norms but active agents who reflexively shape their identities amid multiple and sometimes conflicting cultural influences (Marginson, 2023). Engaging in intercultural learning environments can lead students to question taken-for-granted assumptions, confront ethnocentric biases and articulate a more complex understanding of themselves in relation to others. When students participate in well-facilitated intercultural learning activities, they often report shifts in how they view themselves (Onosu, 2021). In this way, identity formation is not only a byproduct of IoHE but also an intentional outcome that reflects the broader educational mission of preparing reflective, empathetic and engaged global citizens, further highlighting the need to increase the opportunities for students to join IoHE activities. This underscores the importance of designing internationalization efforts that go beyond physical mobility to encompass all students, faculty and staff (Beelen & Jones, 2020; Robson, 2017), creating meaningful intercultural learning and supporting students' identity formation.

THE ROLE OF VIRTUAL EXCHANGES IN IoHE

Virtual exchange programmes—online learning programmes through which students from different cultural backgrounds engage with each other—are a popular approach to foster internationalization at home, promoting cross-cultural dialog and understanding (Jager et al., 2019; O'Dowd & Dooly, 2020). Unlike traditional student mobility programmes, virtual exchanges do not require physical travel, making them particularly attractive for students who face financial (Verzella, 2018) or logistical issues, such as insufficient institutional support or different institutional timetables (Helm, 2015). Therefore, if virtual exchanges can become more integral to universities' internationalization strategies, they will offer greater accessibility to international education.

Previous research has highlighted the multifaceted benefits of virtual exchanges in higher education. As with traditional exchange programs, virtual exchanges can promote students' linguistic accuracy (Belz & Kinginger, 2002), foster greater openness to different cultures (Schenker, 2013) and enhance intercultural communication skills (Guth et al., 2012; Renner, 2019) and intercultural competencies (Bassani & Buchem, 2019). Additionally, participating in diverse virtual classrooms encourages students to engage as active, socially conscious global citizens (Lenkaitis & Loranc-Paszylk, 2019), enabling them to reflect on the complexities of an interconnected world critically.

However, virtual exchanges come with their own set of challenges. Online learning can be challenging because of factors such as limited access to technologies, teachers' lack of digital competencies or time zone differences (O'Dowd, 2018). Furthermore, the online environment can lead to isolation and distractions, making it difficult to keep students engaged. Students working on their own laptops, for example, are more vulnerable to external distractions such as social media. Without the immediate social presence of peers and instructors, they may not pay as much attention as they would in face-to-face interactions.

Students may also be unfamiliar with the mainly Western-centric pedagogical frameworks that often underpin many virtual exchange programmes. Different cultural norms and prior academic experiences can shape the way they interact in multicultural classrooms. For example, Richmond and Vannieu (2019), drawing on their experiences teaching in Japan, introduced the metaphor of a wall of silence to describe how, on the basis of their observations, some Japanese students might hesitate to speak—not because of disinterest or low motivation but rather because of culturally embedded expectations about modesty, risk and group harmony. They reported that the act of responding verbally in class can feel socially risky, especially when answers are not yet 'correct' or when peers are present. This norm contrasts sharply with Western pedagogical frameworks that emphasize spontaneous verbal participation as a key sign of engagement. In a similar context, Zhu and O'Sullivan (2022) demonstrated that Chinese students often experience a pedagogical shift from a teacher-dominated, lecture-based environment in China to a more interactive, discussion-oriented classroom culture in the United Kingdom, which can result in classroom silence that is frequently misinterpreted by lecturers as a lack of interest or engagement. In some cases, students perceive intercultural dialog as occurring on unequal grounds that elevate White Western cultural norms and marginalize others, leading them to withdraw from interaction (Amos, 2021). In multicultural virtual exchanges, these differing expectations, communication styles and classroom experiences are paired with the difficulties of communicating online.

RESEARCH QUESTIONS

Given the challenges posed by both virtual learning environments and the multicultural backgrounds of students, research is needed to better understand what enables meaningful intercultural learning and personal transformation. This study aims to offer new insights by focusing on a multicultural virtual exchange designed for Japanese students—a group often underrepresented in the literature on virtual exchanges. To reveal the conditions under which virtual exchanges can support intercultural learning and identity formation, this study uses Chen and Starosta's (2000) intercultural sensitivity scale (ISS) as an analytical lens to answer the following research questions:

1) What challenges do Japanese students encounter when they are participating in virtual exchange programmes, particularly within Western-designed pedagogical environments?
2) In what ways do these challenges affect students' intercultural sensitivity?
3) How does intercultural sensitivity shape students' capacity for intercultural engagement and identity formation in virtual learning environments?

ONLINE COLLABORATION PROGRAM

To understand how Japanese students participate and learn during virtual exchanges, this study draws on the experiences of Japanese students who joined the Oulu Online Collaboration Programme (OOCP). The OOCP is a one-week intensive virtual exchange programme created by the European Branch Office of Yokohama National University in collaboration with the Finnish University of Oulu, with the clear goals of 1) supporting internationalization at home at both universities; 2) improving participants' English proficiency and intercultural communication; 3) developing critical thinking and self-reflection through a comparison of Japan and Finland and discussing issues related to education, culture and society; and 4) creating a mutually beneficial experience for both Finnish and Japanese students.

The OCCP began in 2021 during the COVID-19 pandemic to create intercultural learning opportunities when physical mobility was made impossible by travel restrictions, and it has continued to be organized annually. While the programme's overarching goals have remained the same, it is revised each year based on student feedback collected through interviews and surveys (Rogler et al., 2021). Students are recruited for the one-week intensive online program via posters on campus, university websites and mass e-mails. In total, 20 Japanese students and approximately 10 Finnish students participate each year, allowing for smaller breakout rooms where students can work more closely and build connections.

The OCCP was developed with a student-centered pedagogical framework that provides ample time for student discussions and collaborative tasks, fostering intercultural learning among both Finnish and Japanese students. In addition to facilitating active discussions in the main Zoom room, smaller collaborative tasks are incorporated to provide students with low-threshold opportunities to engage and communicate with their peers in breakout rooms. This student-centered pedagogical design is employed to address the challenges of an online learning environment in which students can easily be distracted and feel disconnected by actively engaging them. To encourage critical and reflective discussions about issues and ideas related to education, culture and society, instructors offer concrete examples or pose questions so that students can relate to and discuss their own experiences. The topics discussed in the OOCP include the World Happiness Report, the role of equity in the Finnish education system and Hofstede's cultural dimensions (see Annexe A).

METHODOLOGY

Since the study is based on the OOCP virtual exchange, a qualitative case study research design was used. Case studies design excel at answering questions about students' experiences in real-life contexts (Grauer, 2012). According to Yin (2014), the case study research methodology is an empirical enquiry that investigates a contemporary phenomenon within its real-life context via multiple sources of evidence, such as semistructured phenomenographic interviews, online

feedback surveys and teaching diaries. For this case study, we drew on data collected via semistructured phenomenographic interviews in which Japanese OOCP participants discussed their experiences with IoHE activities in general and the virtual exchange they had joined in particular. The interview questions explored primarily the students' experiences participating in the OOCP, focusing on what made the virtual exchange both personally meaningful and challenging (see Annexe B). The semistructured interview format allowed for follow-up questions, encouraging participants to focus on the themes, experiences and issues they found most significant.

All the interviews were conducted in English by the first author. While using English rather than Japanese may be viewed as a potential limitation, this choice was made to maintain consistency with the language of the virtual exchange program itself and to observe how students expressed their intercultural experiences within the same linguistic context in which those experiences occurred. Nevertheless, we recognize that using a nonnative language introduced communication barriers that affected participants' responses. To mitigate this risk, several strategies have been employed to create a supportive interview environment and reduce language-related anxiety. The interviews began with casual small talk to help participants feel at ease, and the questions focused on personal experiences rather than abstract concepts, reducing the pressure to speak on behalf of a broader group. The participants were sent the questions in advance and provided with definitions and examples to aid comprehension. During the interviews, clarification strategies, such as paraphrasing, summarizing and inviting fictional examples, were used to check mutual understanding without leading the participants. In addition, the students were able to use translation tools, such as Google Translate, if needed. These measures helped foster a conversational atmosphere in which participants were able to reflect critically and share nuanced insights about their experiences despite occasional language challenges.

In total, 14 interviews were conducted, all of which followed the conclusions of the OOCP in 2023. Participation in the interviews was entirely voluntary and was based on informed consent. Potential participants were informed about and invited to take part in the study on the final day of the OOCP. They later received an invitation email, which included a clear explanation of the study's objectives, data use, and confidentiality practices as well as the participants' right to withdraw at any time without consequence. Prior to each interview, verbal consent was reconfirmed, and permission to record the discussion on Zoom was explicitly obtained. Owing to privacy concerns, all personal data were anonymized. Two interviews were conducted in written form, as requested by the participants. All the data were anonymized and handled in line with Finnish and European research integrity guidelines (TENK, 2023; ALLEA, 2017).

DATA ANALYSIS

This study is grounded in a poststructuralist understanding of identity as fluid, relational and shaped through social interaction (Hall, 2015; Marginson, 2023).

From this perspective, international learning environments can trigger identity shifts through reflection, dialog and discomfort. To examine how intercultural engagement supports identity formation, Chen and Starosta's (2000) ISS was used as an analytical and developmental tool. The ISS identifies five dimensions of intercultural sensitivity: 1) interaction engagement, 2) respect for cultural differences, 3) interaction confidence, 4) interaction enjoyment and 5) interaction attentiveness.

These five dimensions offer a practical and empirical means of observing how students navigate intercultural experiences. More importantly, they offer insight into the emotional, cognitive and behavioral processes that underpin identity formation in transnational learning contexts. In this framework, intercultural sensitivity is not just an outcome of international education; it is a precondition for meaningful identity work. When students feel safe, respected and capable of engaging with cultural others, they are more likely to take the interpersonal and cognitive risks necessary for identity exploration. This includes sharing personal stories, asking questions and articulating emerging beliefs and values. By using ISS as both a diagnostic tool and a developmental tool for designing intercultural learning, this research aims to understand students' intercultural learning journeys better and identify which dimensions may need support to help cultivate the interpersonal relationships that support identity formation.

For the data analysis, we transcribed the interviews and used a deductive, framework-based content analysis with a color-coding system across the five dimensions measured by the ISS. Although the ISS was originally developed as a quantitative survey instrument, in this study, its five dimensions were adapted as conceptual lenses to guide qualitative coding. This approach enabled us to identify how participants' experiences reflected the emotional, cognitive, and behavioral aspects of intercultural sensitivity within the virtual exchange context. The interview sections related to each ISS dimension were analyzed to understand their role during the exchange, and rather than measuring the frequency or strength of responses, the aim was to capture the qualitatively different ways in which students experienced each dimension and how these experiences shaped their identity formation. In the final step, the interconnections between the dimensions and the virtual learning environment were analyzed.

NAVIGATING VIRTUAL INTERCULTURAL LEARNING THROUGH THE LENS OF INTERCULTURAL SENSITIVITY

Interaction Engagement

The results demonstrated that Japanese students often had few opportunities to speak English in their daily lives, and in the interviews, they highlighted that English education in Japan has focused mainly on vocabulary and grammar. According to one participant, this often resulted in the fact that 'Japanese people are afraid of [speaking] English, and Japanese people [are] also afraid to go to [a]

foreign country' (Participant 2). In fact, many participants reported a lack of confidence in speaking and understanding English, which can be especially challenging online when communicating with other students in different physical spaces. For example, students reported that 'face to face is [easier] – more [easy] to talk. … When you do it online, it's more difficult to feel a connection' (Participant 1).

The online learning environment made engaging in intercultural exchange with Finnish students even more difficult for the participants, as they lacked the social cues needed to identify the right moments to take turns speaking. As one participant stated, 'Since it was online, I didn't know when to speak, and when I wanted to talk to someone, I didn't know how to say her name. … I [didn't] know whether she realized I [was] talking to her' (Participant 13). Furthermore, compared with face-to-face classroom interactions, the frequency and quality of spontaneous interactions are lower in virtual classrooms.

A lack of knowledge of the sociocultural code of interactants can constrain opportunities to explore and experiment with their identities in a new intercultural context. For the participants, this often led to conversations lacking personal expression and relationship building: 'We only talk about the course, the topic of the class. We don't talk about each other' (Participant 4). As a result, reduced engagement online meant fewer chances for students to express personal values, observe others' perspectives and develop a more nuanced understanding of themselves, which are crucial for identity development.

Interaction Attentiveness

The participants reported challenges with interaction attentiveness, showing that nonverbal communication was less effective online. As Participant 1 noted, 'During face-to-face [communication], we can use body language, [but] in online [learning], it is difficult to see body language.' Nonverbal communication played an important role in conveying to other students what was understood and what was not. During the OOCP, Japanese students felt insecure because they were unable to see and interpret other people's responses to their talk. For example, Participant 8 said, 'We have to consciously send the information. If some people stop talking or stop smiling in front of the cameras, … we couldn't know their situation. Therefore, we couldn't know how to support the person.' The absence of visual cues limited the students' ability to express themselves fully. Furthermore, limited language proficiency and the online learning environment made it demanding to listen and understand the other person: 'I truly struggled with, like, listening – just listening – … to conversation with other students, so I truly focused on just listening' (Participant 5). In addition, in the case of Participant 13, technical problems, such as an unstable internet connection, limited their interaction attentiveness: 'There [was a] lag when they [were] introducing their school [from] their smartphone or tablet. We couldn't see very well because of the internet connection.' Ultimately, the lack of face-to-face cues, physical presence and social context could make students feel detached or disengaged from the learning process, leading to lower interaction engagement.

Interaction Confidence

Our interviews revealed that the online learning environment of virtual exchanges hindered the students' ability to actively engage in intercultural dialog and their intercultural attentiveness. In turn, this lowered their confidence in their own skills, leading to effective and fruitful conversations with the other students. Language barriers could be more pronounced in virtual environments, especially when the students were unable to rely on nonverbal cues to aid understanding. Seeing themselves on the camera made students feel more exposed and self-aware, leading to insecurities and a reluctance to contribute. As a result, low interaction confidence limits students' language use and inhibits their ability to express personal perspectives, both of which are essential for participation and identity development in intercultural learning spaces.

Virtual exchanges posed challenges to Japanese students' engagement and attentiveness in interactions; however, when reciprocity was present, their confidence increased. As mentioned previously, once the participants engaged in interactions, their confidence increased: 'It's difficult for me to tell my thoughts, but gradually, I could tell my thoughts because of a lot of communication with foreign students. Communication with others made it easier for me to talk with them' (Participant 3). This progression—from hesitation to contribution—not only reflects increasing confidence but also represents an important moment in which students begin to see themselves as valid contributors in an international context. The participants noted the importance of interaction attentiveness in building the confidence necessary to contribute: 'When I don't feel responsive reactions, such as nodding or laughing, I feel that people aren't listening to me. However, when I receive these reactions, I feel more confident in continuing talking' (Participant 11).

Respect for Cultural Differences

Our analysis revealed how the dimension of respect for cultural differences can be affected by the settings of virtual exchange. As shown by Participant 5, respect for cultural differences was a main motivator for students joining the virtual exchange: 'The reason why I got interested in going outside of Japan is because I wanted to see what Japan is like from the outside. I wanted to learn more about different perspectives and how people in other countries think.' In the virtual exchanges – which were multicultural by design – respect for cultural differences played an important role in helping students recognize and accept different forms of communication, as illustrated by Participant 12: 'When we respect each other's communication styles – like being patient when someone is thinking about what to say – it makes the discussion much smoother.' Furthermore, respect for cultural differences was an important factor in creating a safe learning environment: 'When Finnish students explained their culture to me, it felt welcoming, because they were genuinely curious about mine too. This made me more comfortable and willing to engage in discussions" (Participant 9). As discussed previously, and as this quote shows, this safe learning environment

is crucial for encouraging students' active participation, unlocking their ability to learn from each other's diverse backgrounds and encouraging their identity formation by not only learning about others but also about the self. In other words, this kind of mutual curiosity—central to virtual exchanges—helped students feel recognized not only as learners and receivers of knowledge but also as cultural beings with valuable perspectives to offer, thereby affirming their emerging sense of self within the group by, for example, stepping into the role of teacher: 'It was difficult to tell foreign people about Japanese culture and Japanese, Japanese–specific [things]. However, it was interesting to tell Japanese [things to] foreign people. Therefore, it was [a] good experience for me' (Participant 3). This shift from learner to cultural informant represents a tangible moment of identity work, where the student actively performs a new role within the group. In addition, Participant 8 took on the role of moderator during a group discussion: 'When other people stop talking, I have to ask some questions to them … in order to make good moods in the room.'

Interaction Enjoyment

The participants found intercultural learning and the opportunity for identity exploration to be particularly enjoyable aspects of virtual exchanges. For them, enjoyment was not only about having fun; it reflected moments when they felt confident, included and able to bring their full selves into the interactions, supporting the emergence of a more socially embedded sense of identity. As discussed previously, respect for cultural differences created a deeper commitment among the students, which increased their interaction enjoyment: 'When we cooperated in the games and talked about cultural differences, it was fun to learn from each other. I enjoyed seeing how similar and different we are at the same time" (Participant 6). The participants not only felt more relaxed and enjoyed themselves during the discussion but also took part in intercultural dialogs much more actively. However, creating enjoyable interactions was not easy during the virtual exchanges, as cultural differences between the participants could create challenges: 'When talking with Finnish students, I noticed that they are more direct in their communication. This was interesting because Japanese people often take time to express their opinions. Sometimes it felt like they were too quick to move [on] to the next topic, and I wasn't ready to share my thoughts yet' (Participant 9). The online learning environment made language problems more pronounced due to a lack of body language, limited feedback and the distance created by the screen, making it challenging to be proactive and showing initiative in discussions online. Our interviews revealed that the cultural differences among the participants created challenges.

Taken together, the five dimensions of the ISS revealed students' identity development in distinct yet interconnected ways that either supported or inhibited their capacity to reflect on their identities. Interaction engagement and interaction attentiveness influence how deeply they participate in conversations and how open they are to cultural ambiguity. Interaction confidence and respect for cultural differences, in turn, played a critical role in their willingness to express personal

perspectives and view cultural differences as a resource. Interaction enjoyment often results from curiosity or emotional conversations and positively affects other dimensions and identity formation. These findings suggest that intercultural sensitivity not only facilitates communication but also acts as a developmental scaffold for personal growth in virtual transnational learning environments.

DISCUSSION

To understand how Japanese students navigated the intercultural and technological challenges of virtual exchanges, we used the five dimensions of the ISS as both an analytical lens and a developmental framework. The ISS helps illuminate not only the challenges the students faced but also the affective and interpersonal processes that shaped their learning and identity formation. The analysis revealed a dynamic interplay between the different dimensions, allowing us to address the research questions in a more nuanced way. In the case of RQ1, we found that participating in virtual exchange programmes creates a variety of culturally and structurally interconnected challenges that simultaneously serve as learning opportunities. One key difficulty was the mismatch between Japanese students' educational experiences and Western-designed pedagogical frameworks. Since the majority of research on virtual exchanges has focused on exchanges within Europe, the United States and Australia, it is important to pay special attention to the experiences of students with non-Western backgrounds, since higher education, even in non-Western contexts, is still very much dominated by longstanding Western discourse, especially Anglo-American discourse, pedagogical frameworks and ideas about, for example, the notion of the public good of higher education (Yang & Chen, 2024). This concern is further illustrated by Alami et al. (2022), who reported that East Asia remains among the regions most affected by underrepresentation and marginalization in global VE networks, with limited institutional incentives and VE training. Their findings reveal that Western pedagogical norms and English-dominant practices often alienate participants from non-Western backgrounds, underscoring the need for contextually grounded, inclusive approaches to virtual exchange. The concerns identified in the broader literature closely align with those raised by Japanese higher education stakeholders. For example, Huang et al. (2024) highlighted that the dominance of English can create inequality for nonnative English speakers and cautioned that universal pedagogical models often fail to accommodate diverse epistemologies and communication styles. This can be problematic, especially for virtual exchanges that rely heavily on students interacting with each other to facilitate learning, for example, by encouraging peer support or using smaller group sizes (Rogler et al., 2023).

For RQ 2, the OOCP-created learning environment was found to affect all five dimensions of students' intercultural sensitivity. The interview transcripts revealed that dimensions such as interaction confidence, interaction attentiveness and interaction engagement were particularly vulnerable. For example, limited confidence in speaking English and uncertainty about when to contribute often inhibited students from participating in open dialog, directly impacting their

ability to engage meaningfully with culturally diverse peers. Similarly, the reduced ability to read nonverbal signals in online settings made it more difficult for students to assess the dynamics of intercultural communication, which in turn affected their sensitivity to others' perspectives. These challenges often make students hesitant to interact, reducing intercultural engagement and diminishing the growth of intercultural sensitivity and intercultural learning. This can result in a reduced frequency and quality of spontaneous interactions in virtual exchanges, which not only are important for keeping students engaged but also serve as valuable opportunities for students to learn from each other's experiences (Takayama, 2020). As a result, the students' progression in developing a deeper respect for cultural differences and confidence in intercultural interaction was slower than it might have been in a face-to-face context.

This study confirms Marginson's (2024) view that 'self-formation is a condition of higher education, its central process and its most important outcome' (p. 63). International education can contribute to personal development through, for example, increased competency, trust in others and happiness (Mihut, 2024) or by encouraging students to reflect critically on cultural norms, which can create meaningful shifts in worldviews and identities—for example, by challenging students' gender-related views and attitudes (Uematsu-Ervasti & Kawachi, 2022). Similar observations of personal development and identity formation were reflected in our findings of students' growing self-confidence, engagement and intercultural awareness when appropriately scaffolded, showcasing that international education also has the potential to create personally meaningful learning experiences for students, even within the constraints of online learning. This becomes even more evident since, long before online learning became a widespread educational practice, adolescents were already using digital platforms such as chat rooms, blogs and online games to explore and construct their identities by testing values, presenting curated versions of themselves and forming a sense of belonging within virtual communities (Subrahmanyam & Šmahel, 2011).

This identity formation is especially present in virtual exchanges that integrate groups of students from different cultural backgrounds with different academic experiences and potentially different styles of communication. Navigating these diverse yet challenging spaces can prompt students to reflect on who they are, how they communicate and how they are perceived by others. During virtual exchanges, students need to identify and understand cultural differences, reflect on their learning experiences and actively contribute to the class by sharing their own personal insights and stories. In other words, students need to be engaged in a process of portraying something of themselves to the group, communicating about who they are, what they know, what they value and how they think (Delahunty et al., 2014). Like the identity reconstruction processes observed among transnational students (Hou et al., 2025), Japanese students in the OOCP are often prompted to reassess their roles, expectations and communication styles in intercultural group settings. This self-reflective shift aligns with what Hou et al. (2025) described as a reflexive process of identity reconstruction whereby students begin to recenter their sense of self in dialog with

new environments and peers. In other words, virtual exchanges can become spaces for identity formation where students negotiate their roles, values and voices in relation to others. For example, Devereux and Glenn (2022) reported that students in a U.S.–Liberia virtual exchange developed stronger global perspectives and a sense of empowerment as they shifted from a white-savior attitude to a more decolonized mindset grounded in partnership and mutual learning, illustrating how virtual exchanges can catalyze identity development in intercultural learning.

Intercultural Sensitivity as a Developmental Scaffold for Identity Formation in Virtual Exchanges

The effectiveness of any virtual exchange as a transformative space is heavily modified by students' ability not only to recognize, appreciate and reflect on cultural differences but also to understand their own cultural identities. In our case, this transformation was not merely about acquiring skills but about a deeper shift in self-perception, as students developed greater confidence and agency to see themselves as active contributors in intercultural contexts. The development of intercultural sensitivity among Japanese students played a pivotal role in enabling both their engagement with culturally diverse peers and their exploration of their personal identities within the virtual learning environment. Increased interaction confidence and attentiveness provided the psychological safety needed to participate more actively in discussions. In contrast, respect for cultural differences affirmed the students' own perspectives and created moments of mutual recognition. As Participant 7 reflected, 'My values—my way to think— broadened through communicating with international people,' showing how intercultural encounters encouraged self-awareness and value reflection as integral aspects of identity formation. These experiences were supported by the students sharing personal stories, asking questions and stepping into roles such as facilitator or cultural informant, which deepened their self-awareness and encouraged reflection, as seen by the experiences of Participant 8, who stated, 'I could know more about Japan by comparing it to other countries… it broadened my eyes.' At the same time, difficulties with interaction engagement and attentiveness often undermined confidence, revealing how fragile these processes can be when students face linguistic and cultural barriers. Taken together, these dynamics highlight intercultural sensitivity as both an enabling condition and a developmental scaffold that shapes students' capacity to communicate across cultural boundaries and, in turn, to reflect on and articulate aspects of their emerging identities within a global learning environment. For the students, the virtual exchange was therefore not only a space for intercultural exposure but also an environment that prompted self-identity formation by navigating unfamiliar cultural contexts, developing agency and integrating new experiences and personal growth. Our research findings align with Esposito's (2025) argument that students experience virtual exchanges not as detached digital environments but as hybrid 'places' where identity is continually negotiated. Participant 4 perfectly summarized this sentiment: 'I didn't go to exchange to learn about academic

things. I just went to exchange for a new experience, [a] new perspective... to meet new people, to meet [a] new myself.' In the case of the OOCP, these moments of connection enabled students to see themselves not only as learners but also as cultural contributors, highlighting the need to consider identity formation as a central learning outcome of internationalization at home.

While the benefits of international education programmes are widely acknowledged, access remains uneven, with economic disparities and the income levels of students' countries of origin continuing to shape who can participate in global learning opportunities (OECD, 2025). Furthermore, many categories of inequality, such as LGBTQ+ status, disability status and refugee status, are underrepresented in IoHE activities (Lomer et al., 2024). While virtual exchanges can increase the accessibility of international education programs, doubts still exist about the effectiveness of virtual exchanges. Simply sharing a virtual classroom with international students does not ensure intercultural learning experiences (O'Dowd & Dooly, 2020), and previous research has shown that many virtual exchange initiatives suffer from superficial engagement with cultural differences and a lack of critical reflection. For example, Liu et al. (2022) emphasized the irreplaceable sensory and emotional depth of physical mobility.

Other recent findings have shown that virtual exchanges can trigger meaningful affective and cognitive growth. For example, Cheung et al. (2025) reported that even brief, informal WhatsApp-based exchanges reduced intercultural apprehension and fostered cross-cultural curiosity. Similarly, students in the OOCP engaged in intercultural dialog that encouraged intercultural sensitivity and identity formation, even without the sensory immersion of physical travel. As O'Dowd (2025) emphasized, while virtual exchanges should not be mistaken for a full substitute for physical mobility, neither should they be seen as competing alternatives. Rather, they represent complementary strategies that, when designed inclusively, can expand access to meaningful intercultural learning for students who would otherwise not join such exchanges. As a result, virtual exchanges can play a particularly important role since local students with fewer previous intercultural learning experiences benefit the most from international classrooms (Hofhuis et al., 2024). This underscores the potential of virtual exchanges to serve as an inclusive pathway to global learning if programmes are designed to support students who are not yet confident in intercultural actors.

CONCLUSION

To support inclusive and equitable international education aligned with the SDGs – particularly Goal 4 (quality education) and Goal 17 (global partnerships) – virtual exchange programmes can be a more accessible alternative if they manage to adopt culturally responsive and pedagogically flexible designs. To fully realize this potential, institutions need to provide faculty training in culturally responsive pedagogies that are mindful of intercultural sensitivity and support psychologically safe virtual learning environments. Similarly, curricular frameworks should prioritize reflection and student agency, and institutional resources are needed to create more opportunities for intercultural encounters.

The findings of this study demonstrate that many of the challenges Japanese students faced during the OOCP stemmed not from a lack of motivation but from structural and cultural mismatches between students' communicative norms, language proficiency and learning expectations. To counteract this, virtual exchanges should incorporate alternative modes of participation, visual communication tools, collaborative problem-solving tasks and play-based or creative activities. Furthermore, small-group settings, explicit turn-taking protocols and clear task scaffolding can lower the threshold for participation and foster equitable dialog. Crucially, programmes must create safe, nonhierarchical learning environments in which mistakes are normalized and diverse communication styles are respected. By acknowledging power imbalances in language use as well as the importance of intercultural sensitivity, virtual exchange programs can become more inclusive and accessible, and if they are designed mindfully, they can expand students' capacity for self-formation by creating safe yet challenging intercultural encounters. As Marginson (2024) emphasizes, reflexive experiences such as these are essential to realizing higher education's transformative potential—a goal that ultimately requires students' capacity for agency, self-reflection and ongoing identity development.

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