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"Beyond the screen:" Exploring Students' Sense of Place in Virtual Exchange

Master's Thesis
By

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Submitted in partial fulfillment
of the requirements for the degree of
Master of Arts in International Higher Education

April 1, 2022

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Abstract

As an emergent form of internationalization that incorporates the use of digital technology, virtual exchange offers students the possibility to transcend national borders and connect with other students entirely within a virtual learning environment. Participants in virtual exchange mediate between the physical and virtual worlds, and a sense of place allows them to connect with peers, actively engage with their environment, and achieve learning outcomes. Despite a growing interest in virtual exchange in higher education, however, there is limited research on how students navigate their online learning environment and develop a sense of place. This thesis addresses this gap by exploring how students construct and experience a sense of place while participating in virtual exchange. Focus group interviews were conducted with 29 students participating in virtual exchange through the non-profit provider, Soliya. Using grounded theory, a number of emergent themes were explored, revealing how students understood and situated themselves within both their physical and virtual spaces before, during, and after their virtual exchange. The findings of this study suggest that sense of place is impacted by the environment as well as both individual and communal identity. The results of this study will provide higher education institutions and virtual exchange providers with a better understanding of the construct of sense of place within virtual learning environments and, consequently, how to foster a strong sense of place among virtual exchange participants.

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Chapter 1: Introduction

It is common before the start of a class to hear the screeching sounds of furniture being dragged across a classroom floor. These are the sounds of teachers considering the best possible arrangement of tables, desks, and chairs that will allow students to engage appropriately with the specific tasks of the day. In essence, these teachers are ensuring that students will be able to achieve a sense of place within their classroom.

A sense of place has been defined as "an individual's perception of the capability of a place to actively engage the individual by supporting a set of well-defined place-specific functional and socio-emotional needs" (Arora & Khazanchi, 2014, Sense of Place section, para. 2). A sense of place is fundamental in providing a supportive environment that allows students to achieve desired learning outcomes. The impact of new technologies, however, has revolutionized our understanding of place in higher education. Not only are new, more sophisticated technologies being used in the classroom, but in many cases (and especially during the COVID-19 pandemic) classrooms themselves are being transformed into virtual spaces. This is especially the case with new forms of internationalization within higher education, referred to as virtual internationalization, which take advantage of such technologies to connect students across the world and help them develop important global competencies.

Virtual exchange, an emergent form of virtual internationalization, offers students the possibility to transcend national borders and connect with other students entirely within a virtual learning environment. It often makes use of video conference software, such as Zoom, as well as other messaging applications, to create a combination of both synchronous and asynchronous activities. In the 2021 *Virtual Exchange Field Report*, the Stevens Initiative highlights the fact that "virtual exchanges are fundamentally different from online learning in that they intentionally

further collaboration as well as reciprocity of knowledge and learning" (p. 3). Yet, despite the engaging and interactive nature of these international exchanges, very little research has thus far been conducted on the virtual learning environment that allows students to collaborate and learn with and from their partners. How can we understand students' sense of place within these virtual spaces?

This thesis seeks to address this by exploring students' sense of place within virtual exchange. In particular, it addresses the following research questions:

1) *How do students construct and experience a sense of place while participating in virtual exchange?*

2) *How does environment, and individual and communal identity impact students' sense of place within the learning environment of their virtual exchange?*

This thesis explores the questions above within the context of Soliya, an international non-profit organization and virtual exchange provider. It seeks to identify how participants constructed a sense of place within this program, and what factors impacted their experience of sense of place. In doing so, it hopes to lay a foundation for understanding the significance as well as the multidimensionality of sense of place within virtual exchange and how both higher education institutions and virtual exchange providers can create learning environments that promote a strong sense of place for all students.

Chapter 2: Literature review

Introduction

This thesis explores students' sense of place within the learning environments of their virtual exchanges. The purpose of this chapter is to lay the foundation for this study through an exploration of relevant literature in the field of virtual exchange. The chapter begins by

examining the concept of virtual exchange and how it has come to be defined and studied in higher education. This is followed by an exploration of the attributes of the learning environment within virtual exchange. The chapter concludes with a look at how sense of place is defined and understood in higher education and specifically in virtual learning environments. Through the review of relevant literature, this chapter demonstrates how the present study provides an opportunity to better understand the significance of sense of place and how students' perceive this construct within their virtual exchanges.

Virtual Exchange

Against the backdrop of a rapidly changing society impacted by the development of new technologies and the forces of globalization, higher education is currently in a "dynamic process of change" (Bruhn, 2020, p. 16) that impacts all aspects of education, including teaching and learning. Internationalization lies at the heart of this transformation, with institutions and policy makers recognizing more than ever the need to prepare students to live and work in an increasingly interconnected world. Approaches to internationalization within higher education have also begun to shift, with a current focus away from physical mobility to efforts to internationalize at home (Leask, 2015). Such a shift has been spurred on by a number of factors, including economic and environmental interests as well as issues of accessibility and equity within higher education (de Wit & Altbach, 2021). Most recently, the COVID-19 pandemic, which forced institutions across the globe to rapidly shift to online learning and at least temporarily halted student mobility, has provided an impetus for institutions to explore innovative approaches to internationalization that make use of digital technologies (Finardi & Guimaraes, 2020).

Within this context, virtual exchange provides a promising opportunity for institutions to take advantage of the *digital turn* (Kergel et al., 2018) in higher education in order to promote and increase access to internationalization. Research in the field of virtual exchange has largely developed in isolation, with a general lack of awareness amongst researchers and practitioners of other practices and initiatives in the field (O'Dowd, 2018). This is likely in part the result of the lack of common terminology and frameworks to explore this approach to internationalization. As noted by the Stevens Initiative (2020), "virtual exchange and its components vary widely, diminishing the field's cohesion and clarity and hampering widespread adoption" (p. 2). Indeed, in their report of virtual exchange typologies, the Stevens Initiative (2020) identifies twelve components of virtual exchange that vary considerably among programs, including the learning content, program duration, types of activities, and technologies used.

UNIcollaboration (2014), a professional organization for virtual exchange in higher education, has offered a comprehensive definition that encompasses the variety of types of exchanges as follows:

> Virtual exchanges are technology-enabled, sustained, people to people education programs. They entail the engagement of groups of students in online intercultural exchange, interaction and collaboration with peers from partner classes in geographically distant locations, under the guidance of educators and/or expert facilitators (p. 1).

This definition describes the overarching characteristics of the term while highlighting the importance of interaction and collaboration between students in an intercultural context.

The majority of research on virtual exchange in higher exchange has thus far focused on pedagogy and learning outcomes, particularly in regards to class-to-class international virtual exchanges. Of interest is a 2019 mixed methods EVALUATE study, which examined 25

class-to-class Erasmus+ virtual exchanges within the field of teacher education in 16 countries (Baroni et al., 2019). The study explored both teacher and student perspectives of virtual exchange, with findings indicating that these virtual exchanges aided in the development of digital, intercultural, and foreign language competences.

In another recent study, O'Dowd (2021) examines the question, *What do Students Learn in Virtual Exchanges?* using a qualitative content analysis with 345 students across 13 virtual exchanges. The author's findings demonstrate the potential for virtual exchange to enhance intercultural competence and global citizenship. Furthermore, in regards to the content of virtual exchange, O'Dowd (2021) discusses the importance of selecting appropriate tasks. He notes specifically that tasks that "shift the focus away from cultural presentation and comparison can help learners to develop intercultural awareness" (p. 11). Tasks that focus on cultural comparison run the risk of oversimplifying and generalizing cultural issues and may in fact emphasize cultural differences, drawing distinctions between students and *others*.

The Stevens Initiative 2022 *Virtual Exchange Impact and Learning Report* further highlights significant outcomes of virtual exchange. Through a student survey, the Stevens Initiative (2022) demonstrates how virtual exchange fosters a number of important outcomes, including cross-cultural collaboration and communication.   Students also reported gaining knowledge of other countries and cultures during their exchange. The report ultimately demonstrates that virtual exchange can be an opportunity for students to "build friendships with peers from different backgrounds, expand their worldview, and develop skills that will prepare them for an interconnected world" (Stevens Initiative, 2022, p. 2).

The focus of the above studies is primarily on outcomes, and specifically how virtual exchange programs can help students develop intercultural competences. This limited focus on

outcomes, however, can inadvertently position virtual exchange alongside mobility programs and encourage a comparative approach. Indeed, a number of studies draw connections between virtual exchange and study abroad. Hilliker (2020), for example, describes virtual exchange as an alternative to mobility. Other studies (e.g., Ryan, 2020; Wojenski, 2019) consider the use of virtual exchange in order to preparate for study abroad. Such proposals, however, may reduce virtual exchange to a secondary role, placing emphasis on what some consider to be the more immersive and enriching experience of actual mobility. This secondary role of virtual exchange is reinforced in marketing imagery, with study abroad repeatedly depicted through images of students immersed in and literally embracing their new environments: "jumping, horizon-gazing, and standing with their arms open wide" (Miller-Idriss et al., 2019, p. 1091), unlike images of virtual exchange which usually have limited views of the environment and place more emphasis on the technology itself. To address the seemingly unacknowledged potential of virtual exchange, one must first consider the virtual learning environment and how it can provide opportunities for immersive and engaging experiences in its own right.

Virtual and Real Virtuality

Despite its wide recognition and use, the term virtual exchange has been questioned by some practitioners and researchers in the field. Drawing on the meaning of virtual as approximate or in the likeness of reality, Colpaert (2020) notes that "the term 'virtual exchanges' would suggest that online exchanges do have some limitations compared to real, physical exchanges" (p. 654). O'Dowd (2021) suggests the term *online intercultural exchange* instead, since, by eliminating the word virtual, it does not carry with it the connotation of the unreal. Yet, Bruhn (2020) notes the original use of 'virtual,' first documented in 1654, as "being something in essence or effect, though not so formally or in name" (Barnhart, 1995, p. 862). Drawing on

this meaning, Castells (2010), in his seminal work, *The Rise of the Network Society*, positions the digital world not within the virtual but rather in the context of real virtuality, "in which the digitized networks of multimodal communication have become so inclusive of all cultural expressions and personal experiences that they have made virtuality a fundamental dimension of our reality" (p. xxxi). Such a distinction, itself a play on virtual reality, highlights the reality that is experienced in the online and digital world, not in imitation of the real, but as an important dimension of it. It is within the context of this real virtuality then, that this thesis will explore virtual exchange. Virtual exchange is thus considered not a parallel or subordinate form of mobility, but rather as its own form of internationalization. As such, it is hybrid in nature, merging both the real, physical world and the online platform, neither of which can be separated from the experience. In other words, virtual exchange can be seen as a combination of the analog and the digital.

Hybridity

Hybridity has been described as "the moment of play, in which the two sides of the binary begin to dance around (and through) one another before landing in some new configuration" (Stommel, 2012). Similarly, Pöysä et al. (2005) state that hybrid experience "does not denote a single place, but instead it is likened to an experience being distributed over various places nearby and remote, including environments online" (p. 164). Thus, despite its common usage, hybridity does not refer merely to pedagogical approaches that combine online and physical learning environments. Instead, hybridity moves beyond simple dichotomies, creating new and dynamic learning environments that are composites of them.

In their 2019 case study, Hilli et al. explore the concept of hybrid learning environments within higher education. The authors address the need to challenge the traditional concept of

learning environments and to move beyond the dichotomy between physical and virtual spaces. Their notion of hybridity extends the boundaries of the classroom, "celebrat[ing] and valu[ing] dialogues between people in different kinds of physical and digital networks and contexts that support hybrid or fluid forms of becoming and being in, with and for the world" (Hilli et al., 2019, p. 78). Hilli et al.'s (2019) case study presents the findings from an online course collaboration between two Educational Design classes in Denmark and Finland. The authors develop a set of five principles for developing a hybrid learning environment. Of particular significance is their analysis of space, which they describe as both layered and permeable. For the authors, this space is one with "depth and breadth – a constellation of joint engagement in individuals, partnerships, teams, groups, collectives, communities and networks" (Hilli et al., 2019, p. 78). Thus, for Hilli et al. (2019), the hybrid online environment allows for movement between and within personal and group space, and physical and digital environments.

Third Space

Hybridity allows for the creation of unique, blended learning environments, and thus can serve as a lens through which to examine virtual exchange. The concept of hybridity helps to inform our understanding of the sense of place within online international exchanges. It highlights not only the duality of place (Pöysä et al., 2005, p. 164) but also the emergence of a new third space. In an interview for the *Journal of Virtual Exchange*, O'Rourke (2018) describes this third place as "kind of a neutral space…[which is] neither there nor here, it's a shared space" (p. 28). This description of the characteristics of this space are significant for online learning environments and especially in the intercultural context of virtual exchange. For example, in their article discussing the pilot project of Erasmus+ Virtual Exchange, Helm and Acconcia (2019) draw on Bhabha's (1995) work on post-colonialism and the third space, noting that "the

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third space approach is seen as a way to promote greater respect for different ways of being and an embracing of linguistic and cultural diversity" (p. 215).   Thus, the third space is co-created by participants and may allow for a safe environment for expression and understanding across cultures.

Sense of place

The concepts of real virtuality, hybridity and the third space help to inform our understanding of place within virtual exchanges.   The study of place itself has its origins in the fields of sociology, environmental studies, psychology, and geography (Arora & Khazanchi, 2014), and has been expanded upon with the development of new technologies and digitalization.   Because place is related to a variety of disciplines, there have been a number of theoretical frameworks to explore this concept. As Arora and Khazanchi (2014) note, however, many scholars generally agree with the definition and broad characteristics of place as well as the relationship to its counterpart, space. According to Harrison and Dourish's (1996) widely accepted distinction, space may be considered the physical and material structures in an environment, while place refers more to the meaning, values, and human interactions that occur within them. As the authors note, "Space is the opportunity; place is the understood reality" (Harrison & Dourish, 1996, p. 67). Yet, more recent scholarship on the subject questions the simplicity of this distinction. In his discussion of the politics of space, for example, Kuntz (2010) notes that space itself is not neutral, and that rather than being a "passive background," it may also be "an active contributor to meaning-making" (p. 146).

This distinction between space and place is important for understanding the sense of place people experience in their environments. As noted above, sense of space has been defined as "an individual's perception of the capability of a place to actively engage the individual by

supporting a set of well-defined place-specific functional and socio-emotional needs" (Arora & Khazanchi, 2014, Sense of Place section, para. 2). It is therefore related to both cognitive and affective domains (Semken & Freeman, 2008). According to Harrison and Dourish (1996), it is the sense of place which alters or reconstructs the physical space, embedding it with meaning. This sense of place is created by the community within it and although it may be framed by the features of its space, it is in fact quite distinct from it (Harrison & Dourish, 1996).

Higher education research has witnessed a growing interest in the study of space and place in recent decades (e.g. Thelin and Yankovich, 1987; Kuntz, 2010; Hillman, 2017). As noted by Metcalfe and Blanco (2019), research on this topic has developed from the study of "higher education's foundational aspects, as seen in campus architecture, to theoretical and methodological engagements with the latest understandings of spatiality in relation to the social construction of physical environments" (p. 156). In this light, the university campus shifts from being considered a physical space to becoming a communal setting for learning and engagement. As Arora and Khazanchi (2014) describe, "the university campus is a 'place' where students' various learning needs are supported, and students' perceive a sense of place when present there" (Sense of Place in VLEs section, para. 1).

This concept of place can be extended to online learning environments. Research has shown that a sense of place is fundamental in online educational spaces, with Brook and Oliver (2003) noting its role in creating a sense of community among participants. In addition, Northcote (2008) indicates that a sense of place is necessary for student online learning, stating that "without a sense of place, individual students may not be able to contribute or participate in online communities" (p. 677-678). Yet despite this recognition, there is ambiguity regarding the notion of place within online learning environments and especially virtual exchange. Arora and

Khazanchi (2014), for example, point out that sense of place is rarely defined within the context of virtual learning environments and, referencing Champion (2005), note that "it is unclear what factors are important in studying and measuring perceived SOP [sense of place] in virtual settings" (Introduction section, para. 3).

One such area of debate in the field is whether virtual environments need to be realistic in order to foster a sense of place. Several studies on virtual learning environments support the notion that a realistic representation of space is important for creating a sense of place online and propose the use of realistic virtual campuses (Maher et al., 2001; De Lucia et al., 2009). In their 2009 experimental study, for example, De Lucia et al. developed a virtual campus using the software Second Life, which recreated both formal and informal physical environments of a college campus. The purpose of this intervention was to simulate the real campus environment to create a sense of presence, place, and belonging, with participants commenting on how this environment facilitated collaboration and community.

Other studies have explored the potential of virtual reality to provide an immersive environment for virtual exchange, much like that of a mobility experience. Jauregi Ondarra et al.'s (2020) study examined the use of virtual reality technology in a virtual exchange between 30 university students in the Netherlands and Germany. Through questionnaires, interviews, and focus groups, the authors found that virtual reality technology helped to foster a sense of place, with one student commenting that "the environment gives you some security because you feel more like you are talking to someone in the same room" (Jauregi Ondarra et al., 2020, p. 141). Students did, however, mention an inconvenience brought about by the technology, including feeling dizzy and disoriented and difficulty holding up the heavy headset. They also noted

technical difficulties with the virtual reality technology as well as the inability to access their computer without disconnecting from the otherwise immersive experience.

Despite the great potential for this technology, the above-mentioned technical difficulties are major challenges to the use of virtual reality in international virtual exchange. The use of virtual reality also requires financial resources, for both institutions as well as the students themselves, as virtual reality headsets must be provided for all participants and must be supported by the use of computers with strong bandwidth (Baxter & Hainey, 2019). Training is also crucial for the successful use of such technology in higher education settings such as virtual exchange (Baxter & Hainey, 2019).

With this in mind, some studies question whether such realistic simulations are in fact necessary for creating a sense of place in online environments. In a 2013 study, for example, Turner et al. tested the use of a non-immersive approach to online learning and its impact on students' sense of place. The purpose of this intervention was to "recreate the experience of place rather than to build a veridical model of a three-dimensional space" (Turner et al., 2013, p. 65). Through observations and semi-structured interviews of 25 university participants, the authors demonstrated that students were successfully able to develop a sense of place within this *constrained* environment (Turner et al., 2013).

Although virtual exchange is not the focus of the above study, its findings are relevant for the present study, as virtual exchange programs often employ limited types of technology in order to make their programs more accessible. Programs such as Soliya, for example, do not employ virtual worlds that imitate reality but rather make use of video conferencing applications such as Zoom and messaging applications for both synchronous and asynchronous activities.

This study aims to contribute to existing literature by exploring how such seemingly less immersive environments can still be conducive to a sense of place for participants.

Summary

The present study will expand on the foundational research on virtual exchange and the characteristics of virtual learning environments, such as real virtuality and hybridity. Drawing connections between the literature in these areas, it aims to fill a gap in the existing literature by focusing on the attributes of the learning environment of virtual exchange which thus far have not been explored. In particular, this research project seeks to better understand students' sense of place within the learning environment of virtual exchange. In doing so, it hopes to shed light on the unique characteristics of place within virtual exchange and how a sense of space may contribute to student experience and engagement in their exchange.

Chapter 3: Conceptual Framework

Introduction

In order to systematically examine students' sense of place in virtual exchange, we must consider the attributes of place within such environments. What are the main components of place specifically within international virtual exchange and how do these characteristics work together to create a sense of place for students participating in them from a variety of international contexts and geographical locations? This section aims to dissect the notion of place specifically in relation to virtual learning environments in order to create a framework with which to explore students' sense of place within their virtual exchange.

Several scholars have dissected the concept of place, with Northcote (2008) commenting that it is the "sense of community, location, and personal identity" in online learning environments that contributes to sense of place (p. 677). Similarly, Arora and Khanzanchi

(2014) define the dimensions of place as the physical environment, the activities, and the social interactions that occur within them. Drawing on these descriptions, the present study proposes a framework with which to consider place in virtual exchange. This framework is composed of three main characteristics of place in virtual exchange: the physical environment, individual identity, and community. It will be argued that each of these three dimensions play a fundamental role in place and together help to form a students' sense of place within their virtual exchange.

Physical and virtual environments

Both the physical and virtual environments are perhaps the most obvious components of place. It centers on where participants are situated, the physical and virtual spaces they identify \ and interact within. In an online environment, however, it can be difficult to delineate these spaces. This is especially true for virtual exchange, which, as an interactive and collaborative learning environment, connects people across many different contexts and across different physical spaces. This aspect of place is not necessarily unidimensional, and this study argues that, especially within an international virtual exchange, it is possible for participants to be positioned within more than one physical space.

In their theoretical study of sense of presence in virtual environments, Lombard and Ditton (1997) discuss six conceptualizations of presence, a concept which is inherently connected to sense of place (Turner et al., 2012). Their analysis includes a discussion of the physical component of presence, which they deconstruct into three categories. Interestingly, they conceptualize this type of presence as transportation, alluding to the fluid nature of place in online platforms. Lombard and Ditton (1997) identify the different types of transit between places as *you are there*, *it is here*, and *we are together*. Applying this dichotomy to virtual

exchange, participants could experience being transported to the place of their peers across the globe (*you are there*), a place that is "in a world other than where their real bodies are located" (Slator & Usoh, 1993, p. 222). Virtual exchange also offers the possibility of experiencing peers being transported into one's own personal space (*it is here*), which "may bring the objects and people from another place to the media user's environment" (Lombard & Ditton, 1997, "It is here," para. 1). Finally, is the creation of shared space (*we are together*), a communal place which lies between the physical spaces of all participants. Such a place corresponds to the notion of a third space, which does not physically exist outside of the virtual and is co-constructed by all participants.

In online learning environments, one must also consider technology and infrastructure as part of the environment. The specific devices used during a virtual exchange as well as the availability of a stable internet connection all support the establishment of a sense of place. As Helm (2018) states, technology is not in fact neutral and "the mediating effect of technologies and the affordances they offer cannot be ignored in the analysis of online interactions" (p. 32). The significance of connectivity is emphasized by Lombard and Ditton's (1997) reference to "the consistency of information" ("Number and consistency of sensory outputs," para. 2). As the authors explain, the lack of such consistency (issues with connectivity, for example), "emphasizes the artificial and thus the mediated nature of a media use experience" (Lombard & Ditton, 1997, "Number and consistency of sensory outputs," para. 2). Technology and infrastructure therefore play a fundamental role in the sensory outputs that are experienced in the virtual exchange and thus contribute to a sense of place within these environments.

Individual Identity

Sense of place extends beyond the environment, with a participant's individual identity also being an integral component. According to Northcote (2008), "without [a] focus on individual students' identity and their online sense of place, the development of online communities may be impeded" (p. 678). In virtual exchange, participants bring with them a variety of intersecting identities, including but not limited to their national, cultural, and linguistic identity. These all contribute to one's sense of place within their virtual learning environment.

Kuntz (2010) expands on the notion of individual identity in his discussion of space and embodiment, describing how "our material bodies intermix with, encounter and produce meaning through multiple overlapping environments" (p. 149). Referencing the work of Heidegger (2001), he explores the idea of the physical and corporal body, concluding that "the body has no distinct boundaries that separate it from an outside environment – instead, our bodies remain intricately connected, blurring into multiple contexts, inhabiting and contributing to multiple spaces" (Kunz, 2010, p. 149). Kuntz (2010) continues by examining how our bodies and our perceptions of them within diverse spaces are conditioned by our various identities, providing the example of what he describes as the western concept of *personal space*. Within the context of international virtual exchange, individual identity is especially important, as participants bring with them their identities but also negotiate them within a common space.

In her landmark 2018 study on identity in virtual exchange, Helm employs a case study of the Soliya program to explore identity from both a theoretical and practical perspective. Her work lays the foundation for understanding identity in virtual exchange by proposing a five-point framework. She notes that "online contexts give young people the chance to invest in and construct identities which are not available to them in their formal, monolingual classrooms"

(Helm, 2018, p. 27). Thus, not only does identity inform the online space, but this space also provides a set of affordances for the development of participants' identity. In her discussion of the Soliya program, the focus also of the present study, Helm (2018) comments that "Soliya is intentionally designed to offer possibilities for doing 'identity work' on different levels, both in terms of situated identities (facilitators and participants) and transportable identities" (p. 75).

A final dimension of individual identity that should be noted lies in daily practices, the everyday actions we perform within our spaces. As Harvey (2006) notes, "it is through those daily material routines that we absorb a certain sense of how spatial representations work' (p. 132). Kuntz (2010) further elaborates that these daily practices and routines are "articulated through the body, made manifest by embodied activities" (p. 150). In online environments such as virtual exchange, then, individual identities within a place are constructed not only by how participants identify themselves, but also through the daily routines and actions that they perform around their exchanges.

Community

Harrison and Dourish (1996) define sense of place as "a communally-held sense of appropriate behaviour, and a context for engaging in and interpreting action" which is "forged by the users" (p. 70). Their definition highlights the importance of community for developing a sense of place in online environments. By nature, virtual exchange is a social space, one that centers around intercultural collaboration, engagement and dialogue.

Within this shared online space, or third space, a sense of community may allow participants to co-construct their place and locate themselves within it as a group. Northcote (2008) highlights this co-creation by explaining that students are not passive observers in their online environments but rather "contribute, collaborate, and create" (p. 679). Furthermore,

referencing Mcluhan's (1964) seminal work on media, Relph (1976) describes the virtual realm as a "global village," where "each medium of communication not only carries people or ideas, but also transforms the cultural environment of which it is part" ("Electronic Media and Sense of Place," para. 3). The community developed within a virtual exchange can help participants position themselves in this shared space and may allow them to engage and express their thoughts freely in ways otherwise not possible. Háhn (2020) notes, for example, that such a co-created space in virtual exchange "can reduce fears, decrease stress and enhance collaboration among students from different countries and/or cultures" (p. 50).

At the same time, however, it must be noted that such spaces are not necessarily neutral and that participants may not always have a strong sense of community within their virtual exchange. In the Stevens Initiative 2022 *Impact and Learning Report*, for example, students reported only moderate gains in self-other overlap, which the authors define as "feelings of commonality with people from their partner regions" (p. 8). This may be in part because virtual exchanges can make evident identity and power relations, as has been noted in the above discussion of the third space, leading to different levels of engagement.

Such disparities within the virtual environment may create feelings of *insideness* and *outsideness* among students (Turner et al., 2013). These distinctions bring to mind Urry's (1990) notion of the tourist gaze. According to Urry (1990), the gaze "presupposes a system of social activities and signs which locate the particular tourist practices…through the contrasts implied with non-tourist social practices" (p. 2). The tourist acknowledges their transitory status in the space, and recognizes the differences between themselves and the 'others' who inhabit it. Students who feel disengaged in the virtual environment of their exchange therefore may take the

role of tourist, which does not allow for the creation of a strong sense of place within their learning environment.

Community is a fundamental component of sense of place in international virtual exchange. Participants' creation of and engagement in their shared space helps to create a communal identity within the virtual space. Just like with individual identity, the communal identity within virtual exchange is created not only by the members themselves but also by the activities and actions that occur in and around the place. This may include, for example, the available modes of communication such as text chat and messaging, the presence and participation of a facilitator, as well as various synchronous and asynchronous tasks that students engage with as a group.

Summary

This section has explained the lens through which sense of place will be explored in this research project. Drawing upon the literature on place, a framework has been developed that deconstructs sense of place into three elements: physical environment, individual identity, and community. These three components work together in the virtual exchange learning environment to create a sense of place among participants.

Chapter 4: Research Context

Introduction

This section will explore the research contexts for this study. It will begin with an exploration of the internationalization initiatives at the Universidad de Monterrey, which includes virtual exchange. This institution's virtual exchange program will be used as the pilot study for the current project. Next, it will examine the non-profit exchange provider, Soliya, which was used as the case study in this project. Each research context will include background

information on the virtual exchange initiatives as well as a literature review of studies that have focused on virtual internationalization at these two institutions.

Pilot Study: Universidad de Monterrey (UDEM)

The Universidad de Monterrey (UDEM, n.d.) is a private university founded in 1969 in Monterrey, Mexico. The institution is a leader in the field of internationalization at home, and was the recipient of the Institute of International Education's Heiskell Award "to recognize its consistent effort and strong ongoing institutional commitment to internationalize across the institution" (IEE, 2009). In addition to mobility programs, the university has developed numerous initiatives to promote internationalization of the curriculum. For example, it is the first university in Mexico to offer a degree in International Studies (IEE, 2009). Furthermore, all majors at the institution require the completion of two internationally focused courses: Global Competences and International Compared Contexts, which "involve students in exploring the social, economic, and political aspects of problems in the context of Mexico and other countries" (Cantón and Garcia, 2018, p. 24). A fundamental component of the innovative efforts to internationalize the curriculum has been the development of virtual internationalization initiatives.

Virtual internationalization within the institution takes two forms: Collaborative Online International Learning (COIL) and virtual/online exchange. COIL courses, administered by the Internationalization at Home department, are offered directly by the university, taught by a university faculty, and include an exchange with another international institution. They are teacher-driven and are generally taught in a hybrid form, with UDEM students attending class in-person and meeting their colleagues from a partnering institution online. In their 2019 descriptive study, Nave Aguirre and López Morales explore the COIL program at UDEM's

business school, noting that COIL activities added to business courses at the institution employ experiential learning and have contributed to students' intercultural competence.

In addition to COIL programs, UDEM also has virtual or online exchange programs as part of their virtual internationalization initiatives. Unlike COIL, online exchange programs at UDEM are overseen by the Department of Education Abroad, reflecting the categorization of these programs as more aligned with the objectives of mobility programs. The online exchange programs at UDEM are designed by the host institution, not UDEM. These programs are considered to be more student-driven and are taught entirely online.

Case study: Soliya

Soliya is a non-profit virtual exchange provider founded in 2003. The organization brings together students from a variety of countries, with a specific focus on North America and the Middle East and North Africa, through a variety of virtual exchanges. Their two main exchanges are the Connect Program and Global Circles, which was sponsored by the Stevens Initiative in 2021 (Soliya, n.d.). Both of these exchanges focus on specific content areas or current topics, and are student-centered, with the presence of a facilitator to moderate and oversee discussion.

A 2013 study by Guarda outlines the outcomes of Soliya's Connect program, which aims to provide students with "a virtual place in which they can discuss global issues, share perspectives and collaborate to establish meaningful relationships over cultural divides" (Guarda, 2013, p. 111). Through a qualitative analysis of three participants' journals, questionnaires and final papers, Guarda (2013) demonstrates that Soliya Connect fostered intercultural competence in students. In particular, the author notes that the students' work reflected critical thinking regarding their own cultures as well as a new awareness for other cultures. Although this study

makes an important contribution to the understanding of the Soliya Connect program, it is limited in its small sample size. Furthermore, the study focuses primarily on learning outcomes, with limited attention to the attributes of the learning environment that contribute to the development of such outcomes.

In another significant study also focusing on learning outcomes, Elliot-Gower and Hill (2015) explore two case studies of American universities partnering with Soliya: Georgia College and Kennesaw State University. The authors examined courses offered at both institutions, which included participation in Soliya's Connect program. They demonstrate that in both cases, the Connect program facilitated student learning outcomes in the courses, specifically those related to intercultural competence. Elliot-Gower and Hill (2015) conclude with a discussion of how the Soliya Connect program compares with traditional study abroad programs, stating that "Soliya's Connect Program offered our students an educationally valuable, low-cost alternative to traditional study abroad" (p. 128).

This study is significant in its detailed discussion of learning outcomes specific to each course as well as the assessment of such outcomes. However, its comparison of the Soliya Connect program to study abroad may be simplistic. As noted earlier, comparing virtual exchange to mobility programs reduces this form of virtual internationalization to an alternative to a more widely accepted internationalization approach. This ultimately ignores the unique characteristics of the virtual environment and the potential for this environment to promote internationalization in innovative ways that go beyond traditional travel.

A more recent study by Helm (2018) moves beyond previous research focusing on learning outcomes to a more exploratory study of how the environment within virtual exchange can provide opportunities for students to co-construct identities. Through a case study of the

Soliya Connect program, the author describes how identities can emerge through interaction and engagement in online platforms. Her study explores online identity through various lenses, including situatedness, relationality, and mediation of technology, and demonstrates how identity in virtual exchange extends beyond "static and essentialist" (Helm, 2018, p. 9) identities of language and culture. In regards to the Soliya program, the author explains how the synchronous and asynchronous activities and spaces provide opportunities for students to establish identity online. Ultimately, Helm demonstrates the fluidity of identity as well as the importance of context in shaping both individual and group identities in the Soliya virtual exchange program.

According to Helm (2018), "identity can be seen as a key construct to successful learning because it links the learner to the social world, both inside and outside of the classroom" (p. 12). Thus, identity is fundamentally related to one's connection to their environment. Although Helm does not explicitly or systematically explore place in virtual exchange, she lays a solid foundation for the present study in her discussion of identity, which, as this study argues, is an important component of students' sense of place. Helm's (2018) study is also especially relevant for the current research project in that both focus on students participating in virtual exchanges organized by Soliya.

Summary

This section covers the two research contexts that will be the subject of the present study: the Universidad of Monterrey for the pilot study, and Soliya for the case study. Both institutions have been leaders in the field of virtual internationalization and research has been conducted on their virtual internalization efforts. An exploration of this literature, however, reveals that there is a lack of focus on the online learning environment of virtual exchange and how this can foster

a sense of place for participants. This present study hopes to fill this gap particularly within the context of these two institutions.

Chapter 5: Methodology

Introduction

This study explores student perceptions of their sense of place within virtual exchange and, as noted above, will be guided by the following research questions:

1) *How do students construct and experience a sense of place while participating in their virtual exchange?*

2) *How does environment, and individual and communal identity impact students' sense of place within the learning environment of their virtual exchange?*

This chapter describes the research methodology employed to address these questions and will include a justification of this approach for this study. It will describe the research design as well as the process of collecting and analyzing data. This chapter will conclude with a discussion on ethical considerations as well as methods employed for ensuring trustworthiness of the data.

Research Design

This thesis employs qualitative methods to study student perceptions of their sense of presence in international online exchanges. This grounded theory study is descriptive and exploratory in nature. As described by Strauss and Corbin (1998), in grounded theory, "one begins with an area of study and what is relevant to that area is allowed to emerge" (p. 12). The study employs a case study approach and data was collected through focus groups with participants in the Soliya program. Emergent themes were then noted, analyzed and interpreted. In the following section, the specific research design will be detailed, including recruitment, participants, and data collection and analysis methods.

Recruitment of Participants

The target population for this study is higher education students who were currently enrolled in an international virtual exchange at the time of this study, or had participated in such an exchange within the past year This criteria was chosen to capture the most accurate data on virtual exchanges that have occurred during the 2021 academic year.

The recruitment process consisted of several phases. First, through convenience, recommendations of virtual exchange programs were requested from faculty members at the Lynch School of Education and Human Development at Boston College. This resulted in four potential programs, and the directors of these programs were contacted via email with an invitation to participate in this study. Of these programs, one response was received, from the Director of International Programs at Universidad de Monterrey (UDEM) in Mexico.

Additionally, a search was conducted on the virtual exchanges receiving grants from the Stevens Initiative. Founded in 2015, the Stevens Initiative is sponsored by the U.S. Department of State and is administered by the Aspen Institute. Each year, the Initiative provides grants to educational institutions and nonprofit organizations for virtual exchange programs between students in the United States and the Middle East and North Africa (MENA). In 2021, there were 21 grants offered (Stevens Initiative, n.d.-a). Of these 21, those with students in primary or secondary education were excluded, resulting in eleven programs for recruitment in this project (Stevens Initiative, n.d.-b). Through a Google search, the contact information for each program was found and each of the eleven programs were contacted with an invitation to participate in the study. Of the eleven programs, one response was received, from the non-profit organization and virtual exchange provider, Soliya.

Recruitment Materials and Procedures

The invitation emails sent to both UDEM and Soliya included an information sheet as well as a brief video directed toward students which described the study in more detail. These resources included a link as well as a QR code directing students to a Qualtrics survey. To begin this survey, students were required to read and agree to an informed consent form. By providing informed consent, participants gained access to a short survey to begin participation in this study. Upon completion of the survey, students were then contacted via email to participate in an online focus group.

Participants

Pilot study: UDEM.

Ten students from UDEM participating in virtual exchange responded to the survey. Since there was a smaller population of UDEM virtual exchange students when compared with Soliya, this group was later selected to become the pilot study. The students ranged in age from 19 to 44 years old, with the average age being approximately 24 years old. All had previously participated in a study abroad or mobility program prior to their virtual exchange. Students came from a variety of academic backgrounds, with sixty percent studying in the fields of economics or business. The ten students participated in different virtual exchange programs organized by UDEM with different partnering institutions, from Europe, South America and North America. The virtual exchanges also varied in duration, ranging from one to four months.

These ten students were then contacted via email with an invitation to join a 30-minute focus group. Two students attended the focus group. Both participants were 19 years old, and had participated in a one-month virtual exchange program in July 2021 with different universities in Germany that focused on youth studies. Therefore, although the students had different

academic backgrounds and participated in different exchanges, there was a relative homogeneity to this sample.

Case study: Soliya.

141 students from Soliya programs responded to the survey. The age of participants ranged from 18 to 60 years old, with an average age of 23. Participants came from a variety of academic backgrounds, including business, finance, economics, as well as language studies and engineering. Nationality also varied widely, and included countries in Europe, the Middle East, Asia, Africa, North America and South America. Sixty percent of the students surveyed had not participated in a mobility program prior to their virtual exchange.

Of the 141 students surveyed, 29 students participated in the six focus groups (see Figures 1 and 2). The average age of the students in the focus groups was 23 years old. Thirteen countries were represented in this sample, with sixty-five percent of the students coming from North Africa, including Tunisia, Egypt, Libya, and Algeria. Students from Asia, North America and the Middle East were also present. Significantly, sixty-five percent of the sample participated in a virtual exchange program that began less than 2 months before the focus group, meaning that their experiences were relatively recent.

Data Collection

Survey.

The survey (see Appendix A) was designed through Qualtrics and was used to capture demographic and contact information from participants. It consisted of fourteen questions and included student information such as nationality, name of higher education institution, and major. The survey also asked for information about the students' virtual exchange, such as the name or topic of the exchange, the country and name of the partnering institution, and the beginning and

end dates of the exchange. This information served to confirm recent participation in a virtual exchange as well as to better understand the population of this study. For example, although data was anonymized, issues regarding nationality, major, age, and partnering countries all arose during the focus groups. This data informed the discussion and was therefore important to consider during data analysis.

Focus groups.

The focus group was chosen as a method to better understand students' perspectives and opinions on their sense of place in their virtual exchange. Focus groups have been defined as "a way of collecting data which involves engaging a small group of people in an informal group discussion 'focused' on a particular topic or set of issues" (Lauri, 2019, p. 65). Lauri (2019) further notes that focus groups "provide the participants with the possibility to say what they think, to discuss their views and opinions with other participants, to listen to other people's points of view, to disagree or to elaborate and to think aloud," (p. 65) in a way not possible with the traditional personal interview. Thus, focus groups allow for rich and engaging discussions due to the dialogue created among participants and allow the researcher to adopt the role of facilitator, guiding, but not necessarily directing, the discussion.

A total of seven focus groups were conducted: one for the UDEM pilot study and six for Soliya students, with an average of approximately four students per focus group. The focus groups were conducted and recorded on Zoom and the recordings were later transcribed. Each focus group lasted for thirty minutes and consisted of four interview questions (see Appendix B). The questions were open-ended and semi-structured with follow-up questions, to encourage dialogue among participants. They were as follows:

Question 1*: Take a look at these three images of virtual exchange. Which of these do you feel best represents your own experience in your virtual exchange this year and why?* (see Figure 3)

This first question incorporates visual methodologies, particularly photo elicitation. The purpose of this question was to encourage students to think about their sense of presence in their virtual exchange, including their own position, that of their peers, and their physical surroundings. In her chapter on visual methodologies in higher education, Gourlay (2010) criticizes the "prototypical research interview," arguing that this method "may unnecessarily restrict the potential richness of qualitative enquiry, might flatten participant engagement, and could be underutilizing the potential of othermodes in research processes" (p. 81). Photo elicitation was chosen as a way to address this issue, with the images serving as a prompt. Rather than begin by asking students to draw from their own personal experiences, participants first had the opportunity to consider and discuss together the three images on their screen.

The use of photo elicitation in the first question also reflects the need to align theory with research methodology. Indeed, there is a growing awareness of the importance of visual methodologies within the field of higher education (e.g. Gourlay, 2010), and in particular in regards to the notions of space and place (e.g. Metcalfe, 2012; Kuntz, 2010). Metcalfe (2012), for example, notes that the image of a college campus helps to inform institutional identity and the notion of place within this environment. She states that "we can consider an image of a higher education institution, especially an official view, as being…a truth-claim about the institution itself (Metcalfe, 2012, p. 521). By extension, therefore, images of virtual exchange can help to inform our understanding of these learning environments.

The three images for this question were selected through a Google search of the phrase "virtual exchange." They were chosen because they each represent different typologies of virtual learning environments and how students may identify with these environments. Image 1 is a screenshot of a Zoom meeting during a virtual exchange. It depicts ten student images forming a circle around a facilitator. This arrangement is very similar to that of Soliya virtual exchanges. This image was chosen for its sole focus on the online platform as the learning environment. The second image, on the other hand, depicts an external space beyond the screen. Taken from the perspective of the student themselves, it depicts a student's hands on a desk with other objects such as pens, a cup of coffee, and an iPad. The student is taking notes near a screen on which appears a partner from a virtual exchange. This photograph was selected for its emphasis on the student's physical and personal space beyond the screen. In the third photograph, students are depicted in a university classroom, seated in a circle around a projector screen, on which appears a classroom of students from a partnering institution. This image emphasizes the campus classroom as a learning space as well as the role of virtual exchange in connecting two distinct classes.

Question 2: *Where did your virtual exchange take place?*

This open-ended question was intended to help students explore their understanding of their sense of place during their virtual exchange. During the pilot study, this question was initially met with silence, and thus more guidance was given for the remaining six focus groups. Students were told, for example, that there were many ways to answer this question and were encouraged to respond with the first thought that came to mind. Despite Krueger's (1998) belief that focus group questions should be unidimensional, limited to one type of answer, this question

was purposefully worded to be multidimensional. In fact, the purpose of the question was to elicit different meanings and ways of understanding the sense of space in online exchanges.

Question 3: *Walk me through your virtual exchange experience or routine during the synchronous sessions.*

Drawing on the work of Foucault, Kuntz (2010) notes that "space, time and embodiment are examined productively through the close analysis of daily practices," which "often escape notice by their subtle 'everydayness'" (p. 150). These daily practices or routines are key to understanding presence in terms of identity, community and space. As Harvey (2006) states, "The question 'what is space?' is therefore replaced by the question 'how is it that different human practices create and make use of different conceptualizations of space?" (p. 126). Question 3, therefore, serves to engage students with the daily practices around their virtual exchange and better understand how such colloquial experiences helped to create a sense of presence.

Question 4: *How would you describe your interactions with your partners during your virtual exchange?*

The purpose of this question was to explore the sense of community and social presence in the virtual learning environment of online exchanges and how this relates to students' overall sense of presence and in turn sense of place. According to Lehman and Conceição (2010), this social dimension of presence can be described as when peers in the virtual environment appear real. This question focused on the types of interactions that students had with each other in their virtual environment, the locations and such interactions, and when they took place.

Data Analysis

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Grounded theory served as a foundation for data analysis in this study. According to Charmaz (2014), "researchers may use grounded theory methods to pursue varied emergent analytic goals and foci instead of pursuing a priori goals and foci" (p. 180). The process of transcribing allowed for full immersion in the data, as much time was spent reviewing and listening to the recordings in order to create an accurate transcription. This immersion in the data led to the generation of a series of broad categories and then themes related to students' sense of place in virtual exchange. The approach was to explore the data and allow for themes to emerge, without pre-developed templates or codes based on either theory or the interview questions themselves. As per Marshall et al.'s (2022) discussion of data analysis, considerations were also placed on what information or themes did not appear in the data. Following the generation of emergent themes, axial coding methods were employed in order to consider the relationship between the various themes. This led to the development of clusters and subclusters, which were organized visually (see Figure 4 and Table 1), in alignment with Marshall et al.'s (2022) notion of "playing with construction pictures of how the data fit together" (p. 244).

Ethical Considerations

The research design for this study was approved by the Institutional Review Board at Boston College. Students were required to read and sign a consent form prior to participation and were able to stop participation at any time during this study. Student data was anonymized and the video recordings, which contained identifiable data, were deleted after transcription. However, the problematic nature of transcriptions must be noted. As Marshall et al. (2022) describe, "the ethical issues that arise in transcribing…other's words center on how we represent our research participants, how we demonstrate respect for them" (p. 227). For the purpose of this research study, it was decided that, as speech and text are inherently different forms of

communication, some aspects of speech such as conversational fillers would be eliminated only if they did not alter the meaning of the response, in order to treat participants with utmost dignity and respect in their responses.

Trustworthiness

Several steps were taken to ensure the trustworthiness of this study. Collecting data from a wide variety of participants helped to increase credibility. This is a type of triangulation via data sources where "individual viewpoints and experiences can be verified against others and, ultimately, a rich picture of the attitudes, needs or behaviour of those under scrutiny may be constructed based on the contributions of a range of people" (Shenton, 2004, p. 66). Although all students in this study participated in an exchange program organized by Soliya, the population was highly diverse, with students from different academic backgrounds, nationalities, and age groups. Also, students did not all participate in the same virtual exchange program nor were they from the same institutions. This could be considered site triangulation, with "participation of informants within several organisations so as to reduce the effect on the study of particular local factors peculiar to one institution" (Shenton, 2004, p. 66). Furthermore, the variety of data sources coupled with the rich description of the processes behind data collection and during analysis will help to ensure a certain degree of transferability and dependability.

Limitations

There are several limitations to this study. In order to gain as large a sample as possible, the selection criteria included students who were either currently enrolled in or had participated in a virtual exchange program organized by Soliya within the past year. This meant that, although all students participated in a Soliya program, there was a wide variety in the sample.

This could have had an impact on the accuracy of the data, especially in regards to students' memory and understanding of their experiences.

One must also acknowledge the limitations of the focus group. Although this method was selected to encourage dialogue and interaction, it is possible that certain students' responses were impacted by the presence of others, and that individual student responses may have been influenced by previous answers of their peers.

Summary

This chapter has described the specific research design of this study. This is a qualitative study which employs grounded theory. The population of this study was university students who were enrolled in an international virtual exchange program organized by Soliya, a non-profit virtual exchange provider. Data was collected through focus groups. This chapter concludes by describing analysis methods as well as ways in which trustworthiness was ensured.

Chapter 6: Findings

Introduction

This chapter explores the central themes that emerged during the seven focus groups that occurred in December 2021 through a grounded approach. Although many topics were discussed, the following represents the most significant and dominant themes that help to better understand students' experiences in their virtual learning environment and their sense of place. A total of six themes emerged from the data and are explored in this chapter: locating space, accessing the virtual space, adapting the physical space, merging physical and virtual space, extending space, and finding a safe space. When defining these themes, the term "space" has intentionally been used instead of "place," drawing on the notion of space as "opportunity" (Harrison & Dourish, 1996, p. 67) and "not a passive background [but]...an active contributor to

meaning-making" (Kunz, 2010, p. 146). The *spaces* that will be explored in this section thus work together and ultimately contribute to a student's sense of *place*, which will be examined more fully in the following chapter.

Locating space

When exploring a sense of place, it is important to consider the multiple layers of space involved in virtual exchange: the physical space, including the room in which one participates, the surrounding neighborhood, the country, as well as the virtual space. When participating in a virtual exchange, where do students locate themselves? Do they identify with one or multiple spaces? During the focus groups, students reflected on these questions. When asked to consider the location of their virtual exchange, a variety of responses were given (see Table 2). Of twenty-eight responses provided, the majority of students (nine) indicated as a first response that their virtual exchange took place in their home or bedroom. Seven students responded with their country, while six indicated that their exchange took place online. An additional four students associated their location with their provider, indicating that their exchange took place with Soliya. Only one student responded with their university as the place of their exchange. One student considered a multiple of places, stating that their exchange took place in "local space, the physical space and the virtual space." Another student reflected this multidimensionality of space in a later discussion noting, "I felt like I traveled online to other countries because I see everyone sitting separately in their room from other parts of the world, very far from me. But I felt like it's happening everywhere, the virtual exchange, really."

Accessing the virtual space (through technology and infrastructure)

An important emergent theme that developed over the course of all seven focus groups was how technology and infrastructure mediated students' experience in their virtual exchange.

In particular, students mentioned the challenges brought about by both an unstable internet connection as well as electrical power interruptions. Through the discussions, it became clear that such challenges were directly related to students' physical space and contributed to their sense of place within their virtual environment.

In their comments about the difficulties with the internet and electricity, many of the focus group participants drew connections between this challenge and their environment, with the vast majority mentioning their national context within this discussion. For example, one student from Libya commented:

> Actually for me, the one challenge is finding a good connection. 'Cause you know, in my country, Libya, the connection is really weak because of the servers. We don't have a main server in Libya, so we are connecting to other servers.

Another participant mirrored this comment, noting specifically how the lack of a stable internet connection impacted their sensory experiences in their virtual exchange, stated: "...I live in Libya so in Libya…our network is really bad. It's the worst network ever so sometimes I was in the group but I didn't hear anything and they can't hear me." This comment demonstrates a sense of displacement, as the problems with the internet connection caused the student to feel removed from the virtual exchange learning environment, in a space separate from their peers. This resulted in a disengagement with the place of the virtual exchange.

This disengagement with and detachment from the virtual experience was also reflected in the emotional impacts of internet and electrical issues that students reported. One student, for example, stated:

> At my last session we had an electricity blackout, so I wasn't able to attend and that was really frustrating for me…I really wanted to attend the last session, I mean it's the last

session, I have to attend it, but the funny thing is the electricity just came back like

moments after the session was ended, so it was really, really, really frustrating.

For this student, attending the final session was important both academically and socially, and

thus the inability to attend was particularly disappointing, as it was out of the students' control.

Another student expressed feelings of anger toward similar technical difficulties: "But sometimes

the electric goes off; I've been so mad because of that, so sometimes, some hours I don't see, I

don't listen to anything actually."   Similarly, another participant explained how the fear of

unexpected internet and electrical power issues resulted in continuous stress throughout their

virtual exchange experience. She stated,

> So it is like, when you have this feeling, you are worried about not attending the virtual
>
> exchange. It's not a mandatory thing...It's something we do because we love it. At the
>
> end of the day, you still worry about it, you carry this worrisome thing with you in your
>
> mind about the electricity and about the network.

Through these examples, it is clear that these technical issues had a profound impact on the

virtual exchange experience for students. They resulted in unpredictable detachments between

students and their virtual learning environment and caused students to temporarily become

disengaged and separated from their peers within this environment.

In addition to affecting students' experience with their virtual environment, internet

connectivity also impacted students' physical environment. Specifically, weak or nonexistent

internet connections resulted in students' moving to different locations to participate in their

virtual exchange. This usually meant that students were forced to move from a more

comfortable private location, usually in their homes, to a public space that presented itself with a

variety of issues.   One participant described their experiences as follows:

In the first session, because I didn't have internet, I went to class to join in because

the electricity in our country is not very good, so a lot of times we don't have internet.

…of course at home I feel better, less noisy…A lot of times, I didn't want to speak [in the

class] because they [the other students and a professor] speak also in the same room in

the class.

Through this comment, it is evident the public space did not provide an environment conducive

to the students' virtual exchange. In particular, it resulted in the students' inability to express

themselves freely and comfortably and be heard within their virtual environment.

Another student from Tunisia also described their immense frustration of having to move

to a public space due to lack of internet in their home, describing themselves as a "global

nomad," wandering her town to find a public space with a strong connection. Describing their

experience in a public coffee shop, the student explained, "It was very difficult at first

because…I could not have an intimate space. People were looking at me, listening at me…it

affected my experience. I remember I was frustrated sometimes." For this student, the physical

environment was not conducive to their virtual exchange and became a distraction, preventing

her from maintaining a focus on their virtual environment. As the student further elucidated,

So you need to have a lot of confidence so that you ignore them, you see,

because they keep looking at you. Even on camera, actually they showed up on camera

some people I remember stood right behind me, and they [the virtual exchange peers]

have the videos, I'm sure they saw that.

Through this discussion, it became clear that the student became focused on their physical

surroundings, concerned about what their virtual exchange peers could see and hear from this

environment. This prevented the student from feeling connected to their virtual space.

The challenges this particular student faced due to connectivity issues is further revealed by how this experience changed for her once the student acquired internet access in the home. Of this shift to from a public to private space, the student commented:

> It changed a lot psychologically [when I got wifi] because I felt more comfortable and even the way I presented; I remember the last session I felt more fluent, even my fluency got better. Because it's very difficult to be bothered…to feel that people are looking at you, watching your every move. But in your own space you feel more at ease, you know, to speak.

This comparison between the student's experiences in both a public and private space illustrates the importance of the physical environment on student experiences in their virtual exchange.

The focus group discussions shed light on the challenges students faced due to internet connectivity and electrical power issues. Through students' comments, it became clear that these challenges were associated with students' physical environment, as students made associations with both their personal and national contexts. These issues had a direct impact on students' experiences within their virtual exchange, resulting in feelings of frustration and anger. Furthermore, this often resulted in students moving to more public spaces to participate in their exchange, which created distractions and inhibited students from actively participating in their virtual space. In doing so, these challenges ultimately impacted students' sense of place within their virtual exchange.

Adapting the physical space

The majority of students interviewed participated in their virtual exchanges from their homes. For many, this provided a comfortable environment conducive to studying, with one student, for example, commenting, "For me, I prefer to be at home inside my room to be more

focused." Yet, attending the virtual exchange at home also provided its own set of challenges that students had to address in order for their space to be compatible with their virtual exchange. This ultimately entailed adapting personal and private space, shared with others, into a learning environment.

In order to adapt this private space for their virtual exchange, many students mentioned the need to reduce noise and distraction. Participants commented on the need to routinely tell family members about their exchange to ensure a quiet environment. One student described their routine as follows: "I told my parents, told my family that they should be quiet, not to yell, so I can focus more." Another student similarly echoed, "For me, my routine - I tell my family that I have got online session so everybody gets ready. No one talks to me. No one knocks on the door because it's kind of bothering." One student also included a more detailed description of their home environment and their actions to moderate noise and distractions, explaining:

> I have a little nephew with me in my home so I always, before I start the class, come to him and tell him like, 'take your ball and play in any other place,' so he's not gonna make noise for me. [I] tell my parents that I'm going to my class right now so no one shouts my name or anything.

In all three cases, the daily routines of these students involved adapting a shared space to become the site of their virtual exchange. Interestingly, all of the above students noted that the preparation of the virtual exchange involved the whole family: with one even noting that "*everybody* gets ready." Thus, family members also needed to adapt to the virtual learning environment during the time of the students' virtual exchange.

When discussing the need to adjust their private space with their virtual learning environment, two students also noted the layout, arrangement, and number of people living in

their homes and how that either facilitated or inhibited their ability to focus on their virtual exchange. One student, for example, noted the position of his room:

> My room is one floor up in my house. I can literally make sure that nobody is around here when I'm speaking. But when I have to switch rooms, I have to go down… I have to find a vacant room and ask my family members to not come inside 'till the meeting is going on.

While this student's room offered privacy for him to focus on his virtual exchange, he also acknowledged the occasional need to move downstairs into the main living environment and how this represented a challenge not only for himself but for the entire household.

In the same focus group discussion, a student from Iraq described his particular situation participating in his virtual exchange from his home as follows:

> Actually in our country, our number at home, we are 10 people in the same home because we live together in Iraq…I consider it was not any noises, but in home at least they went to a different room and also even when they come into the room, they will ask if they can speak.

This student's comment highlights the challenges of finding a quiet space in a large household and how these challenges impacted the entire family. He further discussed his physical environment by describing the room where he participates in his exchange:

> The room is also the sitting room, study room, we use the same room for almost everything. It's not like Europe or in the United States for example, as we talk with our friends there, they have for example each room for everything, like a living room, a sleeping room. But we have one room for almost everything. So I was almost always there, in this room.

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In this description it is clear that, for this student, the physical environment was mediated by cultural context. Furthermore, the layout of his house provided additional challenges to making this space compatible for his virtual exchange.

Only one student in the focus groups described having to reconcile actions and responsibilities in the home environment with those of her virtual exchange. This student stated, "You know for me, for example, I have to help my mom in the house and do some things in the house and complete my study." Specifically, this student had to take breaks during her virtual exchange to help her mother at home. She had to assume two roles, as a daughter and a student, and performed her domestic obligations while also being a part of the virtual learning environment.

Finally, when discussing how she prepares and adapts her physical space for her exchange, one student also considered the extension of her space from the walls of their homes to her surrounding environment. She stated:

> I will tell my family to not be loud at home but sometimes, because I'm from Indonesia and my house is near with the mosque, sometimes when the prayer comes and the loud noises will come too, so yeah sometimes I just do what I say with text because [otherwise] it will bother all the other people in the audio.

This comment demonstrates the multiple layers of space that can impact the virtual exchange experience. The student first comments on her home and her need to advise her family before widening the limits of her physical space to include her neighborhood including the surrounding buildings. By mentioning her country, she also sets her neighborhood within the broader national context, indicating yet another layer of space with which the student identifies and

engages.   Ultimately, not only does this student adapt her space, but also adapts to it when participating in her virtual exchange.

Merging physical and virtual spaces

For many students, attending their virtual exchange in the home led to the transformation of their private, personal space into a semi-public space with their peers. This experience was surrounded by a number of routines that allowed students to connect or merge the physical environment of their homes to the virtual learning environment of their exchange. One student who participated in her virtual exchange from her bedroom, succinctly described this connection between the two spaces as follows: "So all of my experiences took place in my room and it's sort of ironic how such a formal experience takes place in such an intimate space, but yeah it all took place in my room." This quote highlights the juxtaposition of the informal home environment with the more formal learning environment and how these two spaces merged, with the blurring of boundaries, during the student's the virtual exchange experience.

Many students noted ways in which they would prepare for the merging of two spaces and ultimately the sharing of their private space online. This often involved routines that would not necessarily be performed in the home otherwise. For example, several students commented on making themselves "presentable," with one student describing the process: "I'd get dressed so that I'd look presentable to the members of the virtual exchange as if I was, you know, talking to them face to face." Another participant from Tunisia similarly noted: "[I] put on my hijab obviously because at home we don't have that on all the time. And so I change my attire and I look presentable and then I sit in front of the screen." In this comment, the student juxtaposes her preparation for a public space with her actual place "in front of the screen" in her home.

In a similar comment, a student described her routine and how it contrasted with her actual location. She stated:

> I just change my clothes and do some stuff like makeup because I need to prepare and I need to be in good appearance because you have to respect the situation you are in…I prepare myself to go outside, but it's like you are in the room but you prepare yourself to go outside and hang around. No, I'm just in my bed; in my room I do this.

The juxtaposition of public and private space was particularly noteworthy for this student, who participated in their virtual exchange while laying in her bed, beneath the covers, but prepared as if to go outside. Her routine was particular to her virtual exchange and helped create a place for the online learning environment that was distinct from her physical surroundings.

Although the majority of students described this experience of opening up their private space to a public group as positive, it should be noted that this was not an easy or comfortable situation for all students. One student, for example, described her social anxiety and the need to calm herself down and "get my head and emotions right" before entering the virtual exchange space while in her bedroom. Another student explained her initial desire to avoid showing her physical surroundings and personal objects to her virtual exchange colleagues:

> In the beginning I was more, not shy, but I didn't like to show personal things. My room is full of photos, bands that I like, photos of me and my boyfriend, a lot of personal things. So, in the beginning, when something was shown in my camera, I was hiding it with my head.

Interestingly, this student eventually felt more comfortable in her virtual learning environment and with her exchange peers, and her feelings toward presenting her private space considerably changed. In the focus group, she discussed how, later on, a professor suggested that she move to

a public space at the university for her virtual exchange in order to avoid the issues she was facing. She stated,

> …And when my teacher suggested that I go to school and have this [the virtual exchange] at school, I didn't want to because I wanted to share what I was talking just with them [her peers]. I didn't want other people to hear me. I wanted to have them in my personal space, my room. And it felt like they were in my room, not behind the screen.

Thus, after becoming acquainted with her virtual exchange partners and developing a sense of community, this student's experiences with the learning environment dramatically changed. Not only was she no longer concerned about participants seeing her room through the screen, but she began to welcome her colleagues into her private, personal space. Indeed, her comment demonstrates that she was able to create a sense of place that allowed her partners to be transported into her own private space during the virtual exchange.

Icebreakers seem to have played an important role in helping students ease anxiety, form a sense of community, and ultimately share their space with their peers. In several of the focus group discussions, participants described specific icebreakers created by their facilitators that they found to be helpful. Interestingly, all of the icebreakers described involved students sharing something from their physical space with their virtual community. One student, for example, described their icebreaker activity as follows:

> We did a really really good icebreaker like chose something from your room or like from the environment around you and it allowed us to open our space I guess a little bit more. Everyone shared something significant to them. Like it could be anything, like a pencil or anything. And that, like, helped us feel more comfortable.

This student describes the icebreaker as allowing the group to "open" and allow their peers access to their personal space.

Other students commented on similar icebreaking activities in which they were asked to share an object from their space "that was significant to them and their traditions" or "something that represents yourself." These descriptions reflect not only the sharing of physical space but also cultural and personal identity with the group. In both cases, the students described the outcome as increasing comfort in their virtual exchange, with one student stating "it helped make us feel more comfortable with our environment."

In the same focus group, a student described a slightly different icebreaker that her facilitator included during their exchange. She explained:

It was creative a little bit. It was to open something you [had] closed for a while and you didn't open, or something you don't open all the time, like a box or something. So I really found a box; I hadn't opened it since 2 years so I forgot what was in it, and when I opened it through the screen there was a gift from my ex-boyfriend and it was little cute stuff [laughing]. Yeah, I laughed and the session laughed all. It was good.

This activity involved the literal opening of an object, which interestingly parallels the above student's comment about how her icebreaker helped to open her space up to her peers. The activity also involved not just showing an object, but the act of opening something hidden from plain sight (closed) in front of the group in their virtual space. This is an extremely personal activity, as the student describes not even remembering what was in the box and finding some gifts from her boyfriend. Yet, this private experience was shared with her peers as she mentions opening the box "through the screen." Here, the screen can refer not only to the computer screen but also to a permeable layer that both separates and connects her from her classmates. The

student concludes her description by demonstrating the effectiveness of the icebreaker, not only for herself but for the entire group, as noted by her remark that "*the session* laughed."

Extending space

In many cases, the sharing of space extended beyond the virtual exchange learning environment itself. Many students, for example, commented on how they were able to create a sense of community that extended beyond their Zoom conference meetings. This included different forms of communication with their peers in between virtual exchange sessions. When discussing interactions with her virtual exchange peers, one student in the pilot study noted: "Oh yes, inside of the course we got to talk, but also we got to talk outside of the course, in the freetime or maybe on the break hour, like say 'how are you?'" This student also explained how this contact with her peers both in and out of class "made it possible to connect with people and to go far, to go beyond the screen. Like we cannot see each other physically, but we can have a connection online. And that surprised me a lot." For her, this sense of community and connection with partners was unexpected in a virtual learning environment.

Another student had a routine that she performed at the end of each virtual exchange session. She described it as follows:

> Actually me and my group were doing something every time we finished the class. We
> start to say a word from a different language, not our native language, and the
> other people, they need to know where I bring this language from, bring this word from.
> So it's a fun thing.

Through this activity, the student was able to form a community with her peers, one that extended beyond their official meeting times of their virtual classroom. This extra-curricular

experience also allowed students to exert a sense of agency by creating their own engaging activities in their own space.

Another student similarly described extending the virtual exchange space with her peers beyond the class times. In particular, this student explained how her relationship with her peers continued after the completion of the virtual exchange program. She describes how she not only remained in contact with her partners (through messaging and social media applications), but also created a new space for informal exchanges with these partners. She stated:

> We added each other on Instagram, but we also did a Spotify, like it's a group I can say,
> where we share music and we go to the group to listen to music. So we can share
> each other's music.

Her description of the Spotify group reflects that it is indeed a space for sharing, a space that she and her partners *go* to share their music. This same student also mentioned other ways that she maintains contact with her peers:

> We also plan to do one session per month to remember the Soliya sessions…I'm happy
> for this because we plan to meet each other one day since a lot are traveling and we think
> that the experience could be better like this.

Through this description it is clear that the student formed a sense of community that extended beyond the space of her exchange. Interestingly, however, her comment reflects the potential limitations of the virtual space, as she notes that she thinks her social experiences with the group will be enhanced through eventual in person contact.

Finding a safe space

A theme that emerged in several of the discussion groups was that the virtual exchange provided a safe place for the exchange of ideas. Indeed, the word "safe" came up a total of

fourteen times during the focus groups, with many students describing their virtual exchange as a safe environment that allowed for freedom of expression. One student, for example, explained, "I felt really safe to express my opinions as there was no judging at all."

When discussing freedom of expression within the context of their virtual exchange, many students made comparisons with their virtual learning environment and their physical space, specifically their country. One student from Libya, for example, discussed his experience as follows:

I mean, when you look, like in a psychological way, I've been in a state of mind. For me, I'm in a country that's a little conservative when talking about certain topics, but being in this state of mind in a virtual exchange, I felt like I'm in a country where it's free; we have rights to talk, to discuss things, to have an opinion that's radical in your country. So, it feels safe; it feels like I'm in a country that has democracy.

This student described his virtual exchange experience as being not only in a virtual space but also "in a state of mind," where he had the ability to transcend the boundaries of his country and which allowed for the expression of ideas that would be considered radical in his own country.

In another discussion group, a student from Syria compared freedom of expression in her virtual exchange with that of her country. She explained,

Well, I feel like it's safer to communicate with people in a virtual exchange than communicate with them in real life and to discuss your own real thoughts. Sometimes in real life…it's difficult to be honest of your thoughts. No, you have to say what they all believe in. So I find it better to communicate in virtual exchange."

A student from Tunisia voiced a similar sentiment, stating,

Actually, I felt that online it was more safe than in real life because I can vent…in real

life, I felt unsafe. However, on Soliya, I felt more safe…they tolerate my different

opinions. But in real life, it was very challenging.

For these students, the virtual exchange environment allowed them to feel safe and express

themselves freely in ways not possible in their physical environment.

Finally, it should be noted that not all students felt that the virtual exchange provided a

safe environment to express themselves. In particular, some students expressed issues with

speaking on certain topics in a multicultural environment. For example, despite feeling safe in

her virtual environment, the above student from Tunisia also noted the tensions with this space,

stating, "It's more difficult because you are in a multicultural group so common sense says that

you are likely to have tensions, misunderstandings with people from different cultures not from

your own culture." Another student from the United States mirrored this sentiment, explaining:

I know some people didn't share because they would get offended very easily or

they would think that their comment would offend other people very easily, so lke they

would prefer to just not share anything, and that resulted in a couple of people leaving the

program pretty soon.

Both of these students' comments reflect the challenges with the virtual learning environment,

specifically within the international context of virtual exchange. For them, the variety of cultural

and national contexts could lead to misunderstandings or tensions when discussing certain topics,

and this could impact the sense of community within the virtual exchange learning environment.

Two students, however, mentioned a way to address this particular challenge through the

guidance of the facilitator. They noted in particular the important role of the facilitator in

mediating tensions and creating a sense of community for the group. For example, one student

commented, "Well, I think the atmosphere of feeling safe…one of the factors is the facilitator because you know if they lead the session well, then I think the members will also follow." Thus, the facilitator can play a fundamental role in establishing and maintaining a safe environment where students can feel free to express themselves honestly and without judgment when residing in the virtual space.

Summary

This chapter has examined the main themes that have emerged through the focus group discussions. For each theme explored, attention has been given to the student voice. Together, these themes highlight how students understood and situated themselves within both their physical and virtual spaces before, during, and after their virtual exchange sessions. The following chapter will explore how this data demonstrates students' sense of place in their virtual learning environment.

Chapter 7: Interpretations

Introduction

This chapter will consider the findings in the previous chapter within the context of the research questions. How do the emergent themes help to understand the ways in which students construct and experience a sense of place within their virtual exchange? What factors have contributed to students' sense of place within Soliya's virtual exchange programs?

In chapter three, a conceptual framework was provided in order to deconstruct the concept of sense of place within the virtual learning environment. The framework features three factors which contribute to a sense of place online: the environment, individual identity, and community. These factors work together to help students forge their own sense of place within their virtual learning environment. Using grounded theory, this framework did not provide a

restrictive model in which to insert the findings. Rather, after considering the themes that have emerged during the focus group discussions, this framework helps to inform the understanding of sense of place and how students have experienced and constructed their sense of place in their virtual exchange.

Physical and virtual environments

The findings discussed in chapter six demonstrate the importance of both the physical and the virtual environment for students' sense of place in their virtual exchange. In the focus groups, the physical environment played a dominant role in defining students' virtual exchange experience. The majority of students (57 percent), for example, identified their virtual exchange as having taken place primarily in either their rooms or within the geographical boundaries of their country. Drawing on Lombard and Ditton's (1997) conceptualization of presence as forms of transit, those students who identified first and foremost with their physical space likely experienced what the authors refer to as *it is here*. In other words, their sense of place may have been rooted in their physical space, and allowed for them to experience their virtual exchange as having happened primarily within this physical space.

On the other hand, over twenty percent of the students' first response was that their exchange took place online. These participants also mentioned specific applications, such as Zoom and Google Meets in their responses. They situated their exchange primarily in their online or virtual environments. Referring back to Lombard and Ditton (1997), they may have experienced feelings of being transported to another space, a virtual one, which they co-inhabited with their peers. Such an experience enabled students to transcend the limits of their physical space and focus more on the communal space that they created with their partners, a third space.

The findings also demonstrate that the ability to access the virtual space plays an important role in students' development of a sense of place in their virtual exchange. In every focus group, students mentioned the challenges they faced with having a stable internet connection as well as consistent electricity. The repeated mention of these issues reflects Helm's (2018) point about the mediating impact of technology and how technology can mitigate the affordances of the virtual learning environment. Indeed, the findings reveal that these factors had several implications for the virtual exchange experience and particularly for students' sense of place.

Referring back to Lombard and Ditton's (1997) notion of the consistency of information, it is clear that the participants in this study who faced challenges with technology and infrastructure experienced interruptions in communication and information within their virtual exchange. They noted feelings of frustration at not being able to connect with their group as well as not being able to participate in key events such as the final virtual exchange meeting. Students also expressed the inability to engage with participants in their space. They reported, for example, not being able to hear or speak with their peers. This lack of sensory input undoubtedly created a barrier for students' sense of place within their virtual exchange, shifting the focus back to their physical environment outside the computer screen as they worked on troubleshooting or waited to reconnect with their virtual environment.

Individual Identity

The research findings reveal that the environment, both physical and virtual, was only one component of sense of place, and that individual identity was another contributing factor. Individual identity itself is multidimensional, with students commenting on both their national and personal identities during the focus groups. In regards to national identity, for example, 25

percent of participants described their virtual exchange as having taken place in their country. These students located and identified themselves first and foremost with their country during their exchange, demonstrating that national identity contributed to their sense of place.

Discussions of national identity also arose when students spoke of freedom of expression in their virtual learning environment. Several students, for example, contrasted their virtual environment to their national context, describing the ability to speak freely in ways not possible in their own country.   This indicates that students were able to construct a strong sense of place in their virtual environment, one that allowed them to feel transported to another place when participating in their virtual exchange.   On the other hand, some students noted that the multicultural context of virtual exchange, with participants coming from a variety of different cultural and national backgrounds, was a challenge to freedom of expression. These students explained in particular that communication between a variety of national identities could potentially lead to misunderstandings or tensions within their virtual learning environment. This experience impeded students' sense of place within their exchange.

Personal identity also contributed to how students experienced their sense of place in their virtual exchange. This was mainly conveyed through the daily activities and routines, as had been noted by both Harvey (2006) and Kunz (2010).   For example, students described making themselves and their space presentable to their peers as if they were meeting them in person. Many students, for example, described cleaning their rooms and especially their desks as part of their routine to prepare for their exchange. Many also detailed making themselves presentable, for example, by changing clothes and applying makeup. These daily routines which centered around one's identity and appearance were situated in students' physical space of their

rooms and homes. Yet, they helped students to move beyond this physical space and to position themselves within a co-constructed place specific to their virtual exchange.

Community

Finally, students' sense of place was also impacted by the community they formed while in the virtual space of their exchange.   Many of the participants in this research study expressed a deep sense of community and communal identity with their international partners both during and after their exchange. This was fostered by specific activities within the virtual learning environment. For example, as noted in the findings, many students described icebreakers designed by facilitators which helped students feel comfortable and connected with each other despite geographical distance. These activities often involved students sharing a personal object from their physical space with their virtual peers. In doing so, such activities allowed students to make connections between their physical and virtual space and also to share their physical space with their virtual exchange partners. As students shared their individual identities, experiences, and personal space with the group, a communal identity was formed. This allowed students to co-create a space, a space which, as Háhn (2020) suggests, centers on collaboration and understanding across cultures. By engaging in this shared space, students came to experience a strong sense of place. Interestingly, this sense of place extended beyond the boundaries of the virtual exchange program in this study. Students, for example, reported interacting within this co-constructed place beyond their own virtual exchange, establishing their own virtual environments for informal activities such as chatting, and sharing and listening to music together.

It is important to also note that the findings suggest that participation in this shared space is not universal. Some students in this study reported facing difficulties connecting with peers and feeling comfortable sharing their ideas and thoughts with their group. This reflects Turner et

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al.'s (2013) discussion of *insideness* and *outsideness* in the virtual learning environment. Such disparities among participants undoubtedly impacted students and prevented them from experiencing a strong sense of place within their virtual environment.

Summary

This chapter has positioned the research findings within the context of the conceptual framework used to understand sense of place in online environments. The themes that have emerged from the data shed light on how students' sense of place is constructed and experienced within their virtual exchange. In particular, a sense of place is impacted by the physical and virtual environments as well as the student's personal and communal identities. The final chapter of this thesis will explore what these findings mean for the future of virtual exchange.

Chapter 8: Conclusion

This research project is intended to start an important discussion on the significance of students' sense of place in their virtual exchange. This final chapter will explore the implications of this research for the field of virtual exchange. It will also include recommendations for future research. As a research study focusing on place, this thesis aptly concludes by considering the question, "Where are we going?" in the ways we understand virtual exchange as a form of internationalization in higher education.

The findings of this study have demonstrated how students can construct and experience a sense of place within the virtual learning environment of their online exchange. As a form of internationalization, virtual exchange offers a unique opportunity to explore sense of place. It involves students from a variety of countries and cultures who join together in one virtual space. Yet in a virtual learning environment, students never fully leave their physical space, which must therefore also be considered. How do students mediate between these two spaces? How do they

access, engage, connect, and share while situated in both spaces simultaneously? This study has considered these questions. In doing so, it has attempted to demonstrate that virtual exchange offers great possibilities for the development of a sense of place and that sense of place within these online environments is impacted by the environment as well as individual and communal identity.

What are the implications of these findings for the field of virtual internationalization and specifically for virtual exchange? Virtual exchange is an emergent field and, thus far, most research has focused on learning outcomes, primarily students' development of language skills and intercultural competence (e.g., O'Dowd & O'Rourke, 2019; O'Dowd, 2021). Yet, the acquisition of such learning outcomes, while extremely important, cannot be accomplished without a sense of place. Referring back to Arora's and Khazanchi's (2014) definition, a sense of place attends to students' socio-emotional needs and allows them to connect and actively engage with their environment. It therefore helps students to successfully fulfill the tasks and actions that occur in this place. Thus, when assessing a virtual exchange program, a sense of place must be considered in order to understand how students interact within their virtual learning environment and whether they are able to successfully achieve intended outcomes within such environments.

How, then, can institutions and providers foster a sense of place within virtual exchange? As demonstrated by the above findings, a number of factors must be considered. Technology and infrastructure, for example, are still major challenges for students. As Helm (2018) notes, technology is not neutral, and in fact can create disparities between participants in virtual exchange. As this study has demonstrated, this is not a question of only accessibility. Rather, the consistency and stability of technology and infrastructure contributed greatly to students'

sense of place within their learning environment. Students with unstable connections, for example, reported feelings of frustration, stress, inability to communicate with peers, and in some cases were forced to attend their virtual exchanges in public places. Institutions and providers must address these issues when planning virtual exchange. As the Stevens Initiative 2022 report suggests, "Taking the time to work with partners to choose tech platforms that are accessible for all participants, and ensuring all participants feel supported as they try to use them, can help mitigate power differences and make the exchange more equitable" (p. 20). Such efforts can therefore also increase the equitable construction of sense of place among students.

As this thesis has also shown, identity, both personal and communal, can also contribute to students' experiences within their virtual learning environment. This is especially important in an international environment such as virtual exchange. This research suggests that the Soliya program has for the most part been able to successfully provide students with a safe and supportive space to create community and express individual identity. In particular, the role of the facilitator as well as the icebreaking activities during synchronous sessions have been fundamental for students' sense of place. Thus, regardless of the type of virtual exchange and its content, institutions and providers must consider these factors when designing virtual exchange programs.

This thesis lays a foundation for the study of students' sense of place in their virtual exchange. Future research should shift the focus from solely learning outcomes to the affordances of the virtual learning environment and how students' experience a sense of place within their virtual environment. While this thesis focuses on one particular type of virtual exchange, organized by Soliya, future studies may explore students' sense of place in the wide variety of other virtual exchange typologies. They must also address the different ways of

experiencing a sense of space through different technologies and online platforms. Can students experience a stronger sense of place, for example, in more realistic virtual spaces? What affordances of these specific technologies are most important for students' sense of place? And finally, how is a sense of place connected to other important constructs, including a sense of belonging and presence in virtual exchange?   Ultimately, all stakeholders, including researchers, institutions, providers, and students themselves, must reflect upon these important questions in order to give virtual exchange its rightful place among other forms of internationalization in higher education.

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