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Attempts to Replicate the Skills, Attributes and Capabilities Associated with International Mobility in an Online World: A Case Study

Nayiri Keshishi

University of Surrey, United Kingdom, n.keshishi@surrey.ac.uk

Alexander Seal

University of Surrey, United Kingdom, a.p.seal@surrey.ac.uk

Karl Jicha

North Carolina State University, North Carolina, kajicha@ncsu.edu

Brittany Gaustad Shantz

North Carolina State University, North Carolina, brittanyvgaustad@ncsu.edu

Anne Dorothée Slovic

University of São Paulo, Brazil, adslovic@usp.br

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Attempts to Replicate the Skills, Attributes and Capabilities Associated with International Mobility in an Online World: A Case Study

Abstract

In recent years, obstacles to physical mobility, such as the Covid-19 pandemic, have hastened the turn towards online platforms for educational and social activities. Many study abroad programs have had to adapt to such circumstances and embrace virtual environments in the face of limited physical mobility. In this case study, we look at how one multi-university program, the UGPN Academy, was able to expand international student learning efforts despite travel limitations due, in part, to adapting to online communication technologies and environments. Through comparison of surveys administered to participants pre- and post-participation, students reported that having an online community as a source of social support, as well as learning about different experiences during a global pandemic, were two strengths of the program. In addition, students reported becoming more familiar with different online technologies as well as feeling more open to people from diverse backgrounds and international careers. These findings contribute to a further understanding of Internationalisation at Home (IaH) as a useful model that can be extremely valuable in its own right. Although IaH is not a replacement for physical mobility, it may provide its own benefits, such as providing a collaborative, diverse online community as a source of social and professional support, networking and opportunities for international learning experiences for students who are unable to participate in traditional study abroad programs. Diversifying and further integrating such virtual platforms can then be seen as a part of best practices rather than a replacement for traditional modes of international cultural exchange.

Practitioner Notes

N/A

Keywords

Internationalization, Collaboration, Higher Education, Covid-19, Networking, Technology

Introduction

Since early 2020, the Covid-19 pandemic has precipitated the increased use of online platforms to provide virtual spaces for educational and professional activities during a time when international and domestic travel has been severely restricted. In particular, the pandemic has presented many challenges to physical mobility, often referred to as "traditional mobility" in this paper. In particular, travel restrictions, as well as safety measures implemented by various countries (e.g. mandatory quarantines for travellers and vaccination passes), make it more difficult to travel, especially internationally. As a result, many have turned to online learning and other virtual, technology-assisted ways to connect with others. Distinct from study abroad programs that typically rely on physical mobility to attain the "cultural immersion" associated with international learning, approaches to facilitate cultural exchange and collaboration have turned to online formats and other technological learning tools to attempt to replicate the experience of studying abroad, and the benefits often associated with it. Crises that limit mobility, such as the Covid-19 pandemic, as well as the growing use of social media and other technology-based/virtual approaches to social connection around the world, underscore the importance of integrating alternatives to traditional mobility into study abroad programs.

The University Global Partnership Network, or UGPN, is one international exchange programme that has traditionally relied on physical mobility to achieve its goals. UGPN consists of four participating educational institutions: North Carolina State University (United States), the University of Wollongong (Australia), the University of Surrey (United Kingdom), and the University of São Paulo (Brazil). The mission of this network is to develop sustainable world-class research, education and knowledge transfer through an active international network collaboration in research, learning and teaching to benefit our global society (UGPN, 2021). Since its establishment in 2012, the network has primarily offered research seeding grants for staff at its member institutions to collaborate around small projects, in anticipation of the outcomes leading to larger, external research grants. This has proven to be fruitful and has created a vibrant community of researchers across the network

Whilst education has been a pillar of UGPN, this has been exclusively pursued through physical international student mobility between each partner. Instead, we felt that the pandemic provided a timely opportunity to create an international community of students, faculty, and staff between four different continents. To this end, we set about establishing this student-centered community that would allow students to network, learn, empathise and discuss their experiences during a global pandemic: the UGPN Academy.

Traditionally, student mobility has primarily benefited more privileged members of society - for example, white, wealthy and able-bodied students (Donnelly & Gamsu, 2018). As international travel tends to be costly, many students face obstacles to participation, including financial, personal and institutional barriers (Di Pietro, 2020; Good, 2010). Good (2010) described barriers to participation in traditional study abroad programs as consisting of two types - (1) "structural negotiation" (e.g., cost and navigation of foreign systems) and (2) "cultural negotiation". Furthermore, students of colour, those from lower socioeconomic status backgrounds, low- and middle-income countries and students with disabilities may also face obstacles to participating in traditional study abroad programs that are often associated with physical mobility. These include, but are not limited to, insufficient financial aid, family, work obligations, time constraints, lack of adequate and equitable study abroad opportunities provided by universities and low levels of internationalized faculty (Gordon, Patterson & Cherry, 2014; Poce, 2020).

Institutional barriers to studying abroad were explored in one case study that focused on the perceptions of a traditionally underrepresented group in the US, African Americans (Wanger et al., 2020). Supporting prior literature, financial obligations associated with studying abroad, a lack of access to financial aid, and perceived restrictions on financial aid for studying abroad were the most common reasons that students cited in their decisions against taking part in an international educational exchange program (Wanger et al., 2020).

The creation of a virtual international learning community allowed us to widen participation to include students from non-traditional backgrounds, since many of the financial and physical barriers did not apply in an online learning context.

Primary goals of the UGPN Academy include:

- 1. Enhance existing learning and teaching practice through a focus on group work, collaborative and cooperative learning
- 2. Create authentic learning activities supported by technology
- 3. Develop participants' global and cultural awareness and help them learn about the experiences of students in other countries
- 4. Form an online virtual community between the four participating universities and increase student/staff mobility
- 5. Assist participants in learning to use new online platforms and technologies
- 6. Allow participants to develop a range of skills, knowledge, and attributes, such as problem solving, communication, critical thinking, adaptability and creativity.

For the purposes of this case study, the pedagogical question we focus on is: "To what extent can a collaborative online international learning project replicate the skills, attributes and capabilities associated with international mobility?"

Background

Internationalisation

As de Wit and Altbach (2021) have argued, internationalization has, for many years now, become an integral strategic aim of higher education institutions worldwide. Countries such as the United Kingdom, The United States of America and Australia (the three countries represented in this project), for example, have become synonymous as "host countries" for significant numbers of international students seeking the "hard currencies" (Brown et al., 2004) of a coveted Western degree. Countries, such as those mentioned above, have therefore cemented their place in the international student recruitment market as destinations that can offer an academic currency in addition to proficiency in the English language.

Whilst Western institutions of higher education have, traditionally, favoured attracting international students to their countries, there has, simultaneously, been ongoing discussions on how to best equip students with global competencies. Such competencies, it is argued, are vital for developing students with the cultural and social capital (Bourdieu, 1986) to succeed in the global workforce and global knowledge economies (Altbach, 2013). For de Wit and Altbach (2021), creating international opportunities for students has, to a greater extent, been based around the concept of mobility. That is to say that, in creating opportunities for students to accumulate academic and professional

experiences, travel to another country has been seen as the dominant vehicle to achieve this. However, less attention has been paid to other forms of international experiences that do not require physical movement to other countries.

Internationalisation at Home (IaH)

Internationalization at home (IaH) can be seen as another opportunity for university students to develop both academic and professional skills through their experience. Internationalisation at home, or IaH, is defined as "...the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments" (Beelen & Jones, 2015, pp. 69). IaH is not a new phenomenon within higher education, but it has often been overshadowed by study abroad programs, including both short-term (3-6 week faculty-led) and long-term semester or full academic year offerings, which focus on travel across universities to promote intercultural global competencies (i.e. credit mobility). Although the focus has primarily been on traditional study abroad programs in the past, Deardorff (2006) contends that "the ability to communicate effectively and appropriately in intercultural situations is based on one's intercultural knowledge, skills and attitudes" (pp. 8). The value of IaH then lies in its ability to equip students with intercultural competencies without the reliance on physical movement to develop this form of cultural capital (Bourdieu, 1986).

Indeed, the Covid-19 pandemic has, no doubt, impacted the ability for students to accumulate physical international experiences as part of their studies (namely credit mobility). Instead, we argue that the Covid-19 pandemic has allowed many teaching and learning practitioners (such as the authors of this paper) to re-examine and reappraise its worth for developing the intercultural skills in place of physical mobility. In using Beelen and Jones' (2015) definition of IaH above, we possessed a deep-seated belief in the possibility of purposefully integrating students from four continents through an informal curriculum. In designing this collaboration, we felt that, in the midst of an ongoing pandemic, the concept of mobility could and should be reconceptualised. With the affordances of video and audio technology to many (but, of course, not all), the applicability of virtual mobility and a collaborative online international learning (COIL) project that sits under the umbrella of IaH, was deemed highly desirable.

IaH provides a more inclusive model for campus-based international student engagement. As it does not incorporate an international travel component, IaH offers more equitable opportunities for both students and faculty to engage in global learning and international collaborations. One of the primary benefits of virtual IaH partnerships, and following the principles of an inclusive pedagogy (Gannon, 2018), is the potential to deliver activities that trigger or facilitate international collaborative experiences that overcome some of the barriers in accessing global learning (Poce, 2020). Due to the many benefits associated with IaH, partners within the UGPN Academy shared a belief that IaH opportunities could develop and enhance their existing mobility offerings.

For most partners, dominant forms of mobility centre on spending the semester or year studying, researching and/or working abroad, where students earn credit at a partner university to contribute towards their degree. However, more recently, opportunities for mobility have expanded to include shorter durations that are less prescriptive than a semester or year abroad. For example, the introduction of the new Turing Scheme offers students at UK universities funding towards their worldwide, and short-term, mobility. In Brazil, funding agencies such as FAPESP (São Paulo Research Foundation) and CAPES (Federal Agency for Support and Evaluation of Graduate Education) offer scholarships between three months to a year. In fact, at North Carolina State

University, 3-6 week programs are the most common form of student mobility, accounting for 70% of undergraduate study abroad participants in 2018-2019.

In line with changing student needs, institutions have continued to expand opportunities for professional and cultural skills development, without the traditional requirement of physical travel. Virtual global internships, single-course exchanges, and COIL projects represent another valuable and continuously evolving opportunity to further enhance student and faculty interactions. The UGPN Academy has provided the opportunity for undergraduate and graduate students, faculty, and staff at the four participating universities to remain globally engaged during the pandemic and to establish new partnerships with a broader network of international colleagues. While enhancing the international experiences of those involved, such virtual collaborations can also provide a more diverse environment for the sharing of instructional strategies and resources. The UGPN has also provided opportunities for professional development, research and publications tied to the scholarship of teaching and learning.

Collaboration and Pedagogical Values

The UGPN Academy employed a collaborative educational approach, where there was joint intellectual effort between students and teachers (Smith & MacGregor, 1992). As typically associated with collaborative learning, the project centered on students' exploration and understanding of a real-world issue, such as the impacts of the Covid-19 pandemic, whilst building an online global community and leading to co-created outputs. For some institutions, these outputs were part of the curriculum (i.e., unit assessment driven) and for other institutions, outputs were cocurricular in nature (i.e., related to the program but not to a particular unit assessment or course requirement). As a partnership of four institutions, each institution decided, individually, whether the Academy would be part of the curriculum or co-curricula. This was due to the different teaching and learning protocols each institution was working under. For some institutions within the partnership, the Academy would have had to go through a formal validation in order to be embedded within a particular curriculum. For this reason, in order to launch the Academy without delay during the Covid-19 pandemic, the decision for curriculum/co-curricula implementation was made at the individual institution level, with North Carolina State University and the University of Wollongong opting for curriculum implementation and the University of Surrey and the University of São Paulo co-curricula. What was particularly striking, however, was that this had no noticeable effect on the motivation and aspiration of the Academy students to participate and collaborate in the Academy. This could be explained by the self-selecting nature of the Academy for institutions where participation was co-curricula. In other words, those students who elected to join the Academy had strong motivations to collaborate and network with the other students.

Regardless of whether UGPN participation was part of the curriculum or co-curricular, collaboration and co-creation has significant pedagogical values. First, collaborative knowledge that evolves from the community is often greater than knowledge that is produced individually (Johnson & Johnson, 1990), supporting Vygotsky's (1978) argument that learning may be enhanced through engagement with others. COIL projects encompass this concept in that they establish a networked environment where the necessary interactions that improve learning can occur (Wenger et al., 2002). COIL also enables active, experiential and problem-based learning (Davidson & Major, 2014) and supports participants in developing new skills and confidence, perhaps guiding career decisions and increasing employability (Rae, 2007).

In addition to pedagogical values, collaboration and co-creation can significantly impact institutional culture and enhance the student learning experience by creating a sense of a learning community. Lave and Wenger (1991) discuss learning as participation in a social world, describing how people learn better in social settings and through social interaction. As with the UGPN

Academy, these interactions focus around knowledge sharing within the membership, who may range in experience and discipline. This learning is particularly likely when participants are involved in research and work collaboratively with teachers. In line with Vygotsky's (1978) concept of the zone of proximal development, learners acquire the sociocultural practices of the community and gain knowledge and skills from those community members positioned as more experienced (Lave & Wenger, 1991). Indeed, academic staff can gain much inspiration from the work of students and co-creation projects have the potential to open up opportunities to work in partnership with other institutions of higher education, external agencies and promote the reputation of participating institutions to the wider community. In our case, the IaH UGPN Academy provided a highly viable affordance for the network's members to unite in order to learn from participants across four geographically diverse educational institutions across the globe - Australia, Brazil, the United Kingdom, and the United States - at a time when traditional conceptions of mobility are limited globally due to the Covid-19 pandemic.

Student Skills, Attributes and Capabilities in an Age of Globalized Technologies

As discussed previously, developing students with global competencies, such as cultural and social capital, is essential in today's complex global workforce and knowledge economies (Altbach, 2013). Internationally, there is also an increased focus on employability within higher education (Govender & Taylor, 2015). This is often contextualized within wider changes in the global political economy, such as the financial crisis of 2008 or the Covid-19 pandemic (Arora, 2015; Buheji & Buheji, 2020).

One consequence of such crises is limits to mobility traditionally required to acquire the skills, attributes and capabilities needed to succeed, and to what extent this limited mobility relates to successful participation in the variety of opportunities higher education can offer (Smith & Worsfold, 2014; Hill et al., 2016). One of these opportunities is an international experience and, often, there are clear connections between student involvement and the enhancement of employability outcomes. For example, exposure to alternative perspectives and cultural contexts can lead to questioning of personal identity, values and beliefs, and can offer notable results in terms of personal growth, self-efficacy, and enhancement of students' intercultural competence (Jones, 2014; Helm & Acconcia, 2019). It can also improve students' transferable skills including communicative ability, creativity, language and digital communication skills (Gómez & Vincente, 2011; Trautrims et al., 2016).

One helpful way to categorize the content domain of intercultural competence is the work of Bird et al. (2010), where there are three distinct, but complementary, dimensions including: (1) *Perception Management*, which involves individual approaches to cultural differences; (2) *Relationship Management*, appreciating the importance of interpersonal relationships and management of intercultural relations; and (3) *Self-management*, an individual's ability to observe their own identities, manage emotions and understand core values.

The international competencies outlined above can be seen as accelerated through the physical immersion of students when abroad. This is because students are forced to adapt and assimilate into their host environments. For this reason, there is a strong requirement for students to reflect on their perception, relationship and self-management (Bird et al., 2010). COIL projects develop a range of intercultural competences due to the social interaction of students from different countries in a contained virtual space. This virtual space, occupied by students from a range of countries, allows for the opportunity to renegotiate their own perceptions of the world and to explore relationship building away from the lived day-to-day realities in their own countries. For these reasons, it can be

argued that a COIL project, such as the UGPN Academy, sitting under the larger agenda pertaining to IaH, may offer some equivalence in terms of attaining intercultural competences (Helm & Beaven, 2020) that is often promoted through physical mobility.

Last, while many of the students in the Academy were American, Australian, Brazilian and British (the countries that comprise the UGPN partners), international students, who were studying at these institutions, also participated. This diversity heightened the international character of our academy through developing the depth and breadth in the views and experiences within the Academy's tasks. Furthermore, we also felt that this was a strong opportunity for international students to have the international experiences they had sought, yet, in many instances, had not been able to fully realize. Due to some of the partner countries living in legally enforced lockdowns, many international students were either confined to their dorms or studying remotely in their home countries. We were acutely aware that this was not the student experience they had envisaged when applying to their university. The Academy therefore offered a chance to participate in an international experience at a time when there was a strong inability to physically be on campus. Overall, the UGPN Academy offered students the chance to join an inclusive community where its members could gain intercultural competences in a relaxed, safe and, in some national contexts, legal manner.

The UGPN Academy - Learning Activity

Program Coordination and Implementation

The UGPN Academy began with contacting and arranging meetings with the relevant staff and faculty members across each of the four academic institutions. Those involved included: professors in various social science subjects, teaching fellows, graduate teaching assistants, and associate deans (international). After a series of discussions to coordinate semester timetables, assess technical availability and any language barriers, the team decided to execute the project in the process outlined below.

Student Participation, Topic Selection and Group Collaboration

Students from a range of undergraduate Social Science programs including Criminology, Sociology, Law, Media and Communications, Politics and Public Health engaged with the project, either as part of the curriculum or as a self-selected co-curricular activity. The 49 participants were randomly assigned to six different groups, which were structured to include students from each of the participating universities to facilitate inter-institutional collaboration. Each of these groups were also assigned a staff mentor, who acted as a point of contact for support and guidance. Due to differences in semester schedules, as well as difficulties with scheduling due to different time zones, engagement was staggered with North Carolina State University and the University of Surrey beginning the collaboration, and the University of São Paulo and the University of Wollongong joining at a later phase.

Participants were then tasked to work asynchronously with international peers, for six weeks between March and May of 2021, to create an academic poster and accompanying presentation related to the topic of Covid-19 and Worldwide Responses. One of the innovative aspects of the UGPN Academy, which allowed students to be more engaged with learning, was that they were granted a considerable amount of freedom to select the topics they would focus on within their groups. Given that each participating university started their semester at different times, the UGPN Academy leaders were not able to survey every participant to determine topics of interest. In an effort to centre the students as the focal point of the learning exchanges, North Carolina State

University students, which began classes first, were asked to provide a variety of topics which they believed were particularly relevant to their experiences during the pandemic. In response to a survey question asking them to list points of interest, the most popular topics were: (1) Healthcare system responses to Covid-19; (2) How government (at all levels) communicates information about Covid-19 to the general public; (3) Maintaining positive mental health during the pandemic; (4) How media coverage influences public perceptions of the pandemic; and (5) Social inequality and Covid-19 (disparities in hospitalization and death rates and prevention efforts).

Students from all four universities were then allowed to narrow the topics down to three (Healthcare, Physical and Mental Well-being, and Media and Communication) during their first live meeting. Incorporating student feedback early in the development of program content was important as it allowed them to have a stake in the collaborative process. The student-led selection of a topic relevant to their own lives encouraged student engagement and permitted students to form a unified bond around an experience they were all facing in different political and geographical contexts. This offered students an opportunity to develop their confidence in sharing personal opinions and contextualizing their own commentaries on the respective political, community and societal responses in their chosen area. In addition, the flexibility of the Academy granted an opportunity to leverage their unique skills/backgrounds to contribute to the group project in various ways, such as research, design or fact-checking. This, we believe, was a worthy opportunity and powerful pedagogical tool for students to acquire skills, not only in sharing and conversing about contemporary world issues in an international setting, but other essential professional skills, such as teamwork, openness, familiarity with divergent perspectives, collaborative problem solving, critical thinking, adaptability and creativity (Rienties et al., 2015).

Cross-Institutional Virtual Meetings

To facilitate this educational exchange, and help achieve some of the project aims, there were two virtual events (March 10th and 24th) with guest speakers and Question-and-Answer sessions. This provided a space for networking between students, and faculty members in which participants were exposed to different cultures and identities, allowing for the awareness, acceptance, and respect of individuals from diverse backgrounds (i.e., global and cultural awareness) which is increasingly important for social and academic success in an interconnected world. In addition, some student groups self-organized virtual meetings and connected on other social media platforms outside of the ones used within the UGPN Academy. A number of these meetings were facilitated by participating faculty and group mentors.

Group Poster Peer Review

The project concluded with a virtual conference and asynchronous peer-to-peer scoring of posters. At the live event, each group presented to a panel (made up of UGPN staff representatives) and the other student groups. Then, using a pre-set grading criteria and peer feedback sheet, students were encouraged to give each other scores and qualitative feedback. Again, this granted participants the opportunity to progress important skills such as presentation/public speaking, giving/receiving effective feedback and building resilience.

Digital Capabilities and Familiarity with Diverse Online Platforms

COIL projects often incorporate a variety of synchronous and asynchronous peer learning methods (Broadbent & Poon, 2015; Martin et al., 2017), which provide varied opportunities for cross-country intercultural exchange. Indeed, the pedagogic features of online group work provides a platform for

supporting this intercultural learning between participants from diverse backgrounds (Lewis & O'Dowd, 2016). While some studies have investigated the challenges of using technology to enable learning across countries and cultures (Han et al., 2018; Malik, 2018; Baroni et al., 2019), such as a lack of authentic engagement with international perspectives (Ramanau, 2016), the UGPN Academy had a strong collaborative and social networking component to it. Communication was facilitated between students as well as UGPN faculty and graduate students through multiple collaborative platforms, including Google Drive, Slack, Zoom, and at times other supplementary technologies/platforms. These platforms were used to host live events, store and edit presentations/posters and other project documentation, communicate and build a shared sense of community. This use of technology promoted authentic learning activities and allowed participants to grow their digital capabilities and familiarity with prominent online platforms, which is becoming increasingly sought after by employers. Skills such as creating and collaborating on documents, presentations, spreadsheets and communicating via email/social media are areas which are essential to global organizations.

Methodology

Survey Structure and Supplementary Sources of Data

The research question guiding this study focuses on to what extent a collaborative online international learning project can replicate the skills, attributes and capabilities associated with international mobility. To answer this question, a pre-survey was administered at the start of the UGPN Academy, and a post-survey was administered at the conclusion of program participation. In addition, observations on the process of student collaboration in group projects, as well as the final products associated with their activities (including group presentations and posters), further provide context for the differences observed in the survey findings.

Survey Recruitment

Survey participants were recruited for participation in the UGPN Academy survey through in-class announcements and email by the respective professors participating in the Academy. Survey participants were incentivized with a range of sources, such as extra credit points or vouchers, depending on the university they attended. The 16 question pre-survey was sent out to all 49 UGPN student participants on the first day of the 2021 UGPN Academy (March 10th). Instructors emailed a digital survey to the students and reminders were provided during the initial synchronous Zoom meeting and over the Academy Slack communications platform.

Pre-Participation Survey

The initial survey, before participation in the Academy, asked students to indicate on a 5 point Likert scale the level to which they agreed or disagreed with 12 questions examining their perceptions of the importance of connecting with students in different countries, their ability to adjust to new people and instructional settings, the importance of learning about current events in other countries, their confidence level in interacting and collaborating with students from other countries, support from their teachers and university in preparing them to use online technologies, and how embedded they are in their university and campus life. Four additional questions asked students to share their expectations and goals tied to participation in the Academy, if they had considered studying abroad before their involvement in the Academy, and if they had considered a career that would allow them to travel internationally.

Post-Participation Survey

At the conclusion of the Academy, student participants were sent a second post-survey consisting of the same 12 Likert scale items and a set of five new questions. The new questions focused on their perceptions of virtual study abroad after having participated in the Academy. Respondents were asked to provide what were the most valuable aspects of participating in the Academy, if they were considering study abroad after their virtual experience, if they thought virtual mobility could ever fully replace physical student exchange post-pandemic, if participation had impacted their desire to consider a career involving international travel, what recommendations they had for improving the Academy, and if they would recommend it to other students.

Survey Analysis

To analyse survey results, closed-ended responses were totalled to reveal the frequency of responses in each category. Consistent with a grounded theory approach, open-ended responses were coded to reveal thematic content, after which the survey responses from the pre-participation survey were compared as a whole to the survey responses obtained following completion of the UGPN Academy.

Findings

Survey Response Rates by University

In general, the pre- and post- participation surveys indicate that following engagement with the UGPN Academy, participants perceive to have improved their familiarity with a variety of online tools, as well as given them an opportunity to learn from diverse experiences. In addition, students who participated in the UGPN Academy also reported perceived increased openness, including an openness to international careers. Both surveys were sent to all 49 students who participated in the UGPN Academy across the four partner universities. For the pre-participation survey, there were 41 responses in total, which indicates a response rate of 84%. As the survey was sent out at the end of the term for two of the participating universities, response rates were lower for the post-UGPN Academy participation survey (57%), with only 28 completed surveys from the pre-participation survey group of 41 respondents. This number includes 20 responses from North Carolina State University students, eight responses from the University of Surrey, eight responses from the University of Wollongong, and five responses from the University of São Paulo. The postparticipation survey consisted of 28 respondents across all participating universities; this number includes 13 responses from North Carolina State University, eight responses from the University of Surrey, four responses from the University of Wollongong, and three responses from the University of São Paulo (see Table 1).

Table 1.Number of participants and survey respondents from each partner university

University	Total participants	Pre-participation survey	Post-participation survey
North Carolina State	19	20	13

Total	49	41	28
University of São Paulo	5	5	3
University of Wollongong	13	8	4
University of Surrey	12	8	8

Student Perceptions of Openness and Intercultural Competencies

In the post-participation survey, 96% of participants (an increase from 93% in the pre-survey) agreed or strongly agreed with the following statements: (1) "it is important to take the time to learn about global issues," (2) "connecting with students in different countries helped me to view the world differently," (3) "I have the ability to adjust to new people, places and situations," and (4) "I feel confident socializing with people from other cultures." These responses indicate an increase in self-reported intercultural competence and openness following participation in the UGPN Academy. Expanding upon this, 71% indicated that developing their global and cultural awareness (e.g. intercultural competence) was an important benefit of participating in the UGPN Academy.

Student Perceptions of Technological Accessibility and Competence

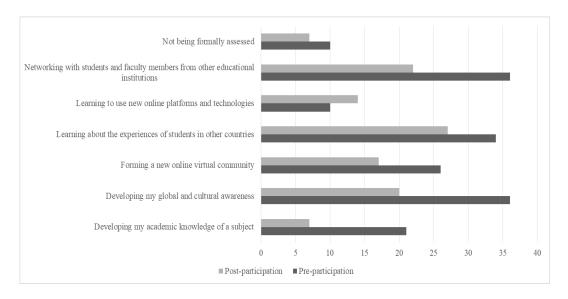
Students also reported the usefulness of the UGPN Academy in feeling comfortable with diverse online technologies and channels of communication. Diverse online formats were used, including Slack, Google Drive and its associated applications, Zoom and email communications, among others, to replace in-person interactions in a context where travel was limited. Among post-UGPN survey participants, 82% of respondents, a 16% increase from 66% in the pre-survey, either agreed or strongly agreed that involvement in the UGPN Academy had developed their use of online technologies (see Figure 1).

Social Connection, Networking, and Learning about Diverse Experiences

Students also reported what they perceived to be the most valuable aspects of participating in the UGPN Academy. Out of 28 participants in the post-UGPN survey, 96% of students participating in the UGPN Academy who responded to the post-participation survey reported that they enjoyed learning about the experiences of students in other countries. The second most prevalent response, 79%, perceived networking with students and faculty members from other educational institutions to be useful. In addition, 93% of participants in the post-survey either agreed or strongly agreed that they feel confident discussing ideas online with peers (a 3% increase from 90% in the pre-survey), although this difference could be within the margin of error.

Figure 1.

Most valuable aspects of participating in the project responses



Student Perceived Openness to International Careers

Following participation in the UGPN Academy, 68% of students who took the post-survey (a 12% increase from 56%) reported to be currently considering a career that would allow them to travel internationally. This change in perception may open doors to their professional futures, allowing participants to consider different types of job roles which they may not have regarded or been exposed to before. This openness/awareness, along with the international networks that they have established, can be positive attributes for their future careers.

Virtual International Exchange Programs an Alternative/Supplement to Physical Mobility, Rather than a Replacement

Towards the end of the post-project survey, students were asked in an open-ended question format if they think that virtual mobility can ever fully replace physical student exchange post-pandemic. Whilst the students were almost unanimous in their view that IaH could not fully replace physical mobility, what was particularly interesting was how many students elaborated on the subtle affordances of IaH in their open-ended responses. For example, one student commented:

"I think there is something about interacting and conversing in person. However, I do think platforms such as Zoom really help us connect due to the ability to see others. I don't know if virtual mobility can fully replace physical student exchange, but it can help." - 2021 UGPN student participant

In this sense, as anticipated by the researchers, IaH was not conceptualized as a replacement to physical student mobility. Rather, IaH was seen as a platform and medium with its own different set of outcomes in comparison to physical mobility. Another student expressed a similar sentiment when asked whether virtual mobility could replace physical mobility:

"Sadly not completely, but it's definitely a good step, and a good compromise for when travel isn't possible! It was definitely nice to still have some communication with students from other countries, and absolutely better than not having the opportunity at all." - 2021 UGPN student participant

Another student, however, expressed that virtual mobility has its own functions separate from replacing mobility: "No, but it doesn't have to. It can just be an intermediate option for those who can't travel to another place for whatever reason." Similarly, another student response described the virtual format as a possible "alternative or supplement."

Virtual International Exchange as a More Inclusive Platform: Accessibility to Underserved Student Populations and Fewer Barriers to Participation

Expanding on the advantages of the UGPN Academy virtual format, a student described how embracing such online approaches to learning may lower the barriers to participation, expanding the pool of participants for whom international exchange programs are within their reach:

"Nothing can really ever replace physical exchange but the virtual format makes it more accessible for everyone since it doesn't cost anything to talk to someone on Slack versus actually traveling to one place or another."

The majority (71%) of students who completed the post-participation survey perceived that aspects of physical mobility, including experiences of "cultural immersion," could only be achieved by physical presence in the destination country. One student expanded upon their view that virtual mobility could not fully replace physical mobility, as follows:

"No, but I do think virtual mobility plays an important part in education for long-distance requirements, such as the UGPN connecting students internationally, but also for students with disabilities which may render them unable to access the education they have a right to and deserve. Whilst virtual mobility is incredibly useful and should not be underused or underestimated, it will not replace physical, in-person learning, in my opinion."

This was not surprising when we consider that, when completing the post-participation survey, many of the students, particularly in the UK, were experiencing a full lockdown. For this reason, we would theorise that the context here perhaps impacted their view that "cultural immersion" was a unique outcome of physical mobility. Students indicated that the most valuable aspect of participating in the UGPN Academy was "learning about the experiences of students in other countries" (96%) and "networking with students and faculty members from other educational institutions" (79%). Drawing on these responses, we argue that the project provided a portal to facilitate professional networking opportunities and connections amongst a number of students, faculty and staff at educational institutions across diverse geographical spaces and time zones.

Based on the findings of the UGPN pre- and post-participation surveys, as well as the goals of the UGPN Academy, we believe that we have largely met the project aims and have given participants an authentic opportunity to develop a range of skills, knowledge and attributes, which will help them academically and professionally. It has also had a positive impact on the overall student experience, during a time in which we have had to be creative and find alternatives to different events. In fact, 79% of participants would recommend participating in a project similar to the UGPN Academy to future students. This helps to demonstrate the need for opportunities to experience and improve these skills, knowledge and attributes which participants of the UGPN Academy experienced.

Discussion and Conclusion

Intercultural Competence and Remote International Exchange

Our findings connect to the background and overall aims of this project in several ways. First, the positive outputs correspond to the three dimensions of intercultural competence, which consist of

(1) perception management, (2) relationship management, and (3) self-management (Bird et al., 2010). For example, developing global and cultural awareness and learning about the experiences of others represents the *perception management* element. The increase in ability to adjust to new people, places and situations and feeling more confident socializing with people from other cultures constitutes *relationship management*. Similarly, improved confidence when talking about and discussing ideas online with peers connects with the *self-management* dimension. Altogether, not only does this support the development of intercultural competence, but the evolution of skills/attributes, such as self-efficacy, communication and creativity, put students in good stead for the workplace and reflect what global organisations are seeking in future employees (Gómez & Vincente, 2011; Helm, 2019; Jones, 2014; Trautrims et al., 2016).

Creating a Sense of Community in an IaH Virtual Collaborative Environment

Second, the collaborative aspect of the project may enhance the student learning experience by creating a sense of community within a virtual, intercultural context. As Lave and Wenger (1991) discuss, people learn better in social settings and through social interaction. Therefore, any COIL project must make an effort to create authentic social activities and provide an online space and communication technologies for networking between students and faculty members, so this fundamental virtual community can be established.

While we appreciate that online student collaboration can never *fully* replace physical exchanges, we felt that our international community was able to widen participation in international experiences that provide and nurture an inquisitiveness into the lives of others. To this end, we felt that our community acted as a way to allow students to develop important global workplace skills such as intercultural competence. The outcome of this project is therefore especially significant for those students who would be less inclined to carry out an international study/work abroad experience, perhaps due to financial constraints or other personal commitments.

Challenges of Translating a Traditional Study Abroad Program into an IaH Format

However, there were various themes and challenges which we aim to address in future iterations. This is based both on staff reflections and open-ended responses from students who completed the post-participation survey question "What aspects of the project could be improved?"

Difficulty aligning semester schedules and course credit across participating universities

The first being the variety in student timetables. Due to institutions having different semester and module start dates, we agreed that UK and US students would start the project and be joined by Australian and Brazilian participants later. Although this staggered approach provided institutional flexibility and an authentic workplace experience, where often new people are on-boarded to a project, student feedback indicated it would be preferable to find a time in the semester when all universities could participate together:

"Coming in late into the program meant I was unclear on how I could contribute."

"As a Brazilian student, my participation was minimal as the project had already started when we joined the groups."

"I felt the timing could have been altered so we all started the project at the same time (although I recognise this is likely impossible as there are four universities around the world to consider)."

There was also difficulty in establishing a single method for assigning credit/grades for participation. As discussed above, with North Carolina State University and the University of Wollongong opting for curriculum implementation and the University of Surrey and the University of São Paulo co-curricula, instructors had to determine how best to fit the meetings into class schedules and the content they were covering at the time of collaboration. As a result, and where relevant, each faculty member established their own credit/grading guidelines for their respective students.

Coordinating meetings across four international time zones

The second challenge was time zones. The UGPN spans four different time zones, so we had to communicate clearly the time/date of meetings and project deadlines. These often fell outside of 'normal' working hours and so helped participants exercise a flexible approach to their work. With many organisations having an increased global workforce, this is good practice for their future professional careers. Despite this, students did express the navigation of times zones and conflicting schedules as a considerable challenge:

"As a student from Australia, I felt a bit disconnected because of the time zone difference."

"My group's participation was disappointing. I think it was due to having a group leader that was in a different time zone than most participants."

Differences in preferred online platforms and their accessibility

A further challenge was the availability of online tools. Our first preference was to use Microsoft Teams, but not all institutions had access to a licence. Therefore, we decided to use three different tools: Zoom, Google Drive and Slack. One of the benefits of this was that students learnt how to use three online platforms and technologies, rather than one. These key digital skills can be taken forward into a variety of career paths, where these popular platforms are used daily to communicate, collaborate and contribute to projects. Despite this, we plan to explore how we can use Microsoft Teams via those institutions that do have licences, for better consistency and accessibility throughout the project. This use of technology needs to be supported by pedagogy through critical and contextual reflection (Selwyn, 2010). This includes critically reflecting on how it might purposefully contribute to 'meaningful intercultural interaction' (Leask & Carroll, 2011, p. 655). Therefore, we argue that additional research is needed to understand, differentiate, and support inclusive technology-supported internationalization pedagogies. Student feedback also supports this view:

"Changing to a more accessible platform would be good, since Slack was hard to use and did not give notifications unless you had the app."

"Slack was a really great program to utilise, but I gathered it was quite new to a lot of people...perhaps MS Teams would be a better alternative."

Language barriers

The final challenge was the language barrier. For three of the UGPN partners, the language of instruction is English. The University of São Paulo, however, is the only UGPN partner whose primary language is Portuguese. As a group, we were highly receptive to the idea of the project running bilingually. Therefore, we actively encouraged staff and students of the University of São Paulo to use whatever language they felt most comfortable, with ongoing translation made available via staff and technology. In a global culture where English has become the dominant language in academia, it was beneficial to introduce students to this bilingual learning experience. By being part of a multilingual community, students are able to articulate their achievements and experiences in

applications and interviews upon transitioning into the labour market, highlighting the inclusivity and global and cultural awareness they have developed.

The Importance of Recurring Live Sessions with All Four Participating Universities

Other enhancements we wish to make, based on student feedback, include providing even more structured opportunities to interact with other participants:

"The program would have been even more engaging if we were able to have more meetings with everyone."

"I think it would be fun to have more Zoom meetings with the whole UGPN group. They were very informative and the most enjoyable part of the project for me."

We also aim to collaborate with other colleagues in the sector. For example, The US-UK Fulbright Commission, the Brazilian Science without Borders - "Bolsa Sanduíche" programme, Universities UK (Higher Education International Unit), The British Council, Careers and Employability and International Departments. Through these relationships, more research and awareness can be raised for alternatives to traditional student exchanges and, instead, encompass students from non-traditional mobile backgrounds.

Reflection and Lessons Learned

Other institutions, especially those with their own international network, can certainly deliver similar projects with little or few changes and low barriers to implementation (further guidance outlined below). This can supplement study/work abroad offerings and allow a wider group of students to benefit from this type of engagement.

Based on the challenges observed above, we feel it is appropriate to share the following guidance for those who would like to carry out their own COIL project:

- 1. Where possible, coordinate semester timetables so all participants can start the project together. If this is not possible, and you instead use a staggered approach, make it clear to students what their role is and how they can contribute at the time they join the project.
- 2. Plan for whether the project will be delivered in the curriculum or as a co-curricular activity. This includes determining how to best fit content and participation into class schedules and establishing appropriate credit/grading guidelines.
- 3. When working across different time zones, communicate clearly the time/date of meetings and project deadlines, in *all* time zones. Support students in navigating time zones with resources and suggestions, including "video diaries" to communicate effectively with students' teams. That way, you could have a constant conversation going on without the time zone challenges.
- 4. Consider which online tools will work best for the project and how accessible they are. If you are introducing new technology, provide guides and/or appropriate training to participants on how to use it effectively.
- 5. Tailor the project to your students' interests, providing opportunities for student input and feedback. If working in multiple languages, encourage staff and students to use whatever language they feel most comfortable with. Provide options for ongoing translation, either through staff and/or technology.
- 6. Provide ample opportunities for participants to interact with each other. In particular, host several structured live online events where staff and students can connect, in tandem with asynchronous approaches.

7. Explore whether it would be helpful to collaborate with internal and/or external colleagues in the sector.

laH Distinct from Physical Mobility but Offers Benefits

In returning to the definition of IaH, as outlined by Beelen and Jones (2015), we would agree that the real value of IaH can be viewed as "...the purposeful integration of international and intercultural dimensions" (pp. 69). Our experiences and findings would support the idea that intercultural dimensions are multifaceted and encompass a broad range of benefits for both students and faculty. For example, the ability for students to engage interculturally over live virtual events, as well as connecting over Slack and social media, allowed for the development of an organic eco-system of social integration. This type of virtual intercultural interaction, we would argue, is quite distinct from "mobility" in the strict sense, as the term mobility is often perceived to be synonymous with the physicality of travel, or cultural immersion, as revealed in many of the survey responses. Instead, we argue that IaH is very much a form of virtual collaboration that nurtures a sense of openness and inquisitiveness into the lives of others, both of which are related to intercultural competencies sought after within the workforce.

Overall, more work is needed to understand how COIL projects can complement or supplement existing comprehensive internationalization strategies at existing institutions around the world. While IaH may democratize opportunities for a broader range of students, and be seen as the first step to engage in internationalization, additional research is required to fully understand the views of participating students and the impacts of IaH. Only then can we fully appreciate the extent to which COIL projects can replicate the skills, attributes and capabilities associated with international mobility.

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