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## What a Difference a Zoom Makes: Intercultural Interactions Between Host and International Students

Helen Collins<sup>a\*</sup> and David Callaghan<sup>b</sup>

<sup>a</sup>*Liverpool Business School, Liverpool John Moores University, UK*

<sup>b</sup>*TEL Unit, Liverpool School of Tropical Medicine, UK*

\*Corresponding author: Email: [h.collins@ljmu.ac.uk](mailto:h.collins@ljmu.ac.uk)

### ABSTRACT

*International students contribute to the academic and cultural life of universities yet they often face discrimination and isolation. Studies highlight that support from the host students can make the difference between an easy or difficult transition. This article is part of a larger project about host student perceptions of international students. Initial analysis indicated that social interactions among international and host students do not become intertwined informally and work best through planned interventions. During the pandemic institutions transitioned from face-to-face to online learning using zoom. We noticed a marked increase in interaction among students online and returned to our research participants to enquire what differences online learning had made to their intercultural experiences. This study focuses on the impact of Virtual Classrooms (VCs) on intercultural relationships, and shows that VCs offers a platform for increased interaction compared to face-to-face classrooms.*

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**Key words:** host students, intercultural behaviour, international students, virtual classrooms, Zoom

## INTRODUCTION

Since the end of the Second World War the UK, along with many other Western countries, has experienced substantial increases in international student enrollment (Gu et al., 2009). We define international students as individuals who leave their home country and move to another to study, while host students are studying at an institution in their home country. At the time of writing, however, many international students studying at UK institutions are learning via Zoom in their home countries. How remote or virtual university education will be in the post-pandemic era is unknown.

Changes in student populations, both in numbers and proximity to their sites of learning, have important implications for students' experience of intercultural contact, understood as "direct face to face communication encounters between or among individuals with differing cultural backgrounds" (Kim, 1998, p. 12). To date, most research on intercultural contact has been conducted from the perspective of international students and concluded that they expect to have significant contact with host students (Pitts, 2009; Sherry et al., 2010; Ward et al., 2001). Interacting with host students benefits international students' academic performance and sociocultural adaptation (Sawir et al., 2008), yet studies on the nature and extent of such contact reveal a worrying disparity between international students' expectations and experience, indicating low and superficial contact between the two groups (Rienties & Tempelaar, 2013; Volet & Jones, 2012; Wright & Lander, 2003). These studies confirm that international and host students have minimal intercultural interaction under standard face-to-face arrangements, enjoy little meaningful interaction with their host counterparts, suffer anxiety and lack a sense of belongingness (Glass & Westmont, 2014), occasionally worsening into hostility and discrimination (Dunne, 2013). In a global society where students have to develop transversal skills, overcoming divisions is essential (Eberle et al., 2019). Instead, conational networks comprised of students from the same country have formed to provide support to international students in foreign institutions (Gomes, 2015; Hendrickson et al., 2011).

Few studies have examined host students' perceptions of international students; indeed, Jon (2013) highlights the lacuna in research on host students' experience, and Ward (2001) concurs that most research has focused on the viewpoint of the acculturating group, that is, international students. The impact of this gap is that the state of intercultural understanding and knowledge of international and host student interaction lacks the contribution of host students' perceptions about what it means to study and learn alongside international students.

Motivated by what is absent in the literature, and given the relative infancy of the impact of technology on intercultural behaviour, we pose two overarching research questions:

- What are host students' experiences of intercultural contact with international students, physically and virtually?
- What factors have an impact on – either support or prevent - greater contact between international and host students, from the host students' perception?

Our article makes two contributions. First, it focuses on host students' perception of international students and contributes to scholarship around intercultural spaces, both physical and virtual. Secondly, it identifies VCs in general and Zoom in particular as a mediator.

The paper is structured as follows: following a discussion about international students across higher education, intercultural contact and the impact of Technology Enhanced Learning (TEL), we explore host students' perceptions of international students under two headings: physical and virtual. Following our findings, we discuss our contribution to the field and suggest areas for further research.

## **INTERNATIONAL STUDENTS IN HIGHER EDUCATION**

Historically, international education lies at the heart of university formation. According to Lee and Rice (2007, p. 383) "cross-border education has existed since the earliest formations of higher education, beginning with the University of Paris opening its doors to scholars outside France to train its students in the 13th Century." Stonequist's *The Marginal Man* (1937) looked at the difficulties facing individuals caught between two cultures. Two decades after *The Marginal Man* two new concepts were developed, the U-Curve of adjustment (Lysgaard, 1955), and the notion of culture shock (Oberg, 1960). The U-Curve posits that international students go through four phases: honeymoon, culture shock, adjustment, recovery, while Oberg's culture shock captured the emotional problems encountered when moving to a new culture.

For universities, besides the obvious financial benefits to the institution (Cantwell, 2015), the presence of international students in the classroom has the potential to change both the content and process of education. International students' choice of a particular country and university enhances its reputation and "contributes to the intellectual capital of the host country" (Smith & Khawaja, 2011, p. 700). For host students the opportunity to share their educational experience enriches their learning and broadens their outlook, and many recognise the personal and career benefits of an international network (Pittaway et al., 1998; Rientes & Temperaar, 2013).

As mentioned earlier, there is evidence that in spite of culturally diverse classrooms, host and international students do not readily mix and tend to study in parallel throughout their programme, remaining in homophilic groups for both study and social purposes. Homophilic behaviour, the tendency to and stay within one's own cultural peer group, is common among all groups, including our participants (McPherson et al., 2001). In contrast, intercultural behaviour refers to actions that unite people of different cultures. Deardorff (2006), a well-known scholar on intercultural behaviours, suggests that intercultural competence comprises five components: knowledge, skills, attitudes, outcomes (internal and external). The latter, external observable behaviours and responses, is the focus of this study.

Many universities may assume that intercultural learning will develop naturally if students from diverse backgrounds share learning spaces, yet there is evidence that physical proximity alone does not increase interaction (Leask & Wallace, 2011). In some cases, opportunities for student support exist, but are either framed in ways that are not useful to students (Rose-Redwood & Rose-Redwood, 2013), or are part of a larger institutional habitus that may be hidden to students who are not familiar with the ways to leverage existing programmes. An outwardly diverse student body can lead to feelings of apathy or complacency among students, resulting in an unintended justification for their lack of interaction. In such circumstances, many students (and possibly their institutions) believe that passive forms of interaction such as sitting in the same room can suffice as intercultural interaction (Halualani, 2010). Indeed, the claim that exposure to intercultural

learning without structure and preparation that enables students' sense making of their new experience can result in negative learning outcomes has led to calls for more attention to host students' perceptions and prompted greater engagement with these students. While some studies such as Lee (2006), Gareis (2012), and Sam and Berry (2010) have included the perspectives of host students, and the reciprocal nature of intercultural contact acknowledged, few have considered host students' perceptions wholly. As the dominant group on most campuses, these students are a fundamental part of intercultural relations among students.

## **THE IMPACT OF TECHNOLOGY ENHANCED LEARNING ON INTERCULTURAL INTERACTION**

Technology Enhanced Learning (TEL), as the application of tools such as discussion boards and conferencing systems, bound together in a Virtual Learning Environment (VLE) offer distinct benefits to students and to their institutions. Benefits include on-demand learning characterised by recorded lectures (Syyimaa, 2019) and self-assessments (Wanner & Palmer, 2018), their reach across time zones with asynchronous tools such as discussion boards (Alzahrani, 2017; Blackmon, 2012), a reduction in geographic barriers with synchronous web conferencing and the availability of their recordings (Nagy & Bernschütz, 2016) and live chat systems (Blackmon, 2012). More innovative tools such as Audience Response Systems like TurningPoint (Good, 2013) and Social Annotation tools like Diigo (Sun and Gao, 2017) offer feedback and feedforward data that is unattainable without the supporting technology; for example, instant feedback from an almost unlimited audience (not necessarily co-located) to tutors questions during a session. Skilled online instructors can achieve outstanding results using such technologies, and develop new approaches to education, such as Eric Mazur's Peer Instruction (1999), David Nicol's Peer Review (Nicol et al., 2014) as exemplified by Callaghan and Collins (2020); or a Social Annotation described by Sun and Gao (2017) and Zhu et al. (2020). For students with auditory or visual impairments, video lectures that offer live captioning and/or a large view of the speaker's face that facilitates lip reading provide a more equitable experience. While most of the benefits espoused to date focus on the educational advantages, yet cognisant of the fact that we are social learners, it prioritises the learning over the social, and there is a lack of research about the social impact of online learning among students, and thus on its effects on intercultural relations. The COVID-19 pandemic has meant that for many learners, Zoom has become their learning tool as well as their social window and outlet. Zoom, like all online teaching tools, introduced barriers, most notable being a massive reduction in social presence (Garrison, 2007) that mask the distinct features of each student, offering instead a face on a screen, or worse, text on a page, or even lost in the sea of an audience response system. This removes nearly all the nonverbal communication (NVC) that has long been held as key to developing relationships between peers and teaching staff (Garrison, 2007). We are at an interesting juncture where the relationship between emotions and virtual learning is well recognised (Henritius et al., 2019), the impact of the pandemic on forced virtual learning is not yet well understood.

When the COVID virus escalated in March 2020, institutions withdrew face-to-face teaching with little or no notice. The move to online teaching was seen as the obvious alternative, although there was very little time for planning or staff training.

Some suggest the majority of tutors lacked the technical and pedagogical skills and experience to provide an equitable online experience (McCabe et al., 2021), yet others, on reflection, found “Established practices changed quickly, with educators showing ‘pedagogic agility’” (Kidd & Murray, 2020, p. 542). Some characterise the move to online teaching as “Emergency Online Teaching” (E. Jubb, personal communication, June, 2020) and “Emergency e-learning response” (Kidd & Murray, 2020, p. 552). Inexperienced tutors tried to replicate face-to-face delivery with zoom lectures rather than move to an online delivery model. This, as Zhu et al. point out “...is misguided, and is destined to miscarry” (Zhu et al., 2020, p. 261).

To allow for planning, some institutions, such as mine (LSTM), pushed back their delivery timetable by one or two weeks that gave academics and support staff a window to develop model frameworks such as the pre-recorded lectures or similar content provision and asynchronous online activities. Pre-pandemic this was followed up typically by face-to-face sessions facilitated by web conferencing system – an “inverted” (Lage et al., 2000) or “flipped” (Kaw & Hess, 2007) approach that, as Akçayır and Akçayır’s review of 71 research articles on the pedagogy (2018, p. 343) found that “... the flipped model in education yields positive academic outcomes.”

## METHODOLOGY

The study employed a three-phased approach in which the first two phases overlapped somewhat. The first phase was a series of conversations about our observations of student interaction online. Phase two involved in-depth interviews with 36 participants that aimed to gain deeper insights into the reasons for our observations and to analyse host students personal accounts of their intercultural experiences in a face-to-face setting and via Zoom. The third phase was a focus group comprised of over 20 participants where we revisited the interview questions as a group conversation.

The research applied a qualitative methodology and the data gathering method was semi-structured in-depth interviews (Glesne & Peshkin, 1992). Interviews took place between March and September 2020, the first eight before the first lockdown and the rest online via Zoom. Semi-structured interviews were conducted using broader questions throughout focusing on narrower areas of inquiry as data collection and analysis progressed in parallel (Spradley, 1979). For example, the interplay between challenge and opportunity emerged early as significant themes, so we revised our questions accordingly. We asked follow-up questions to clarify information. Questions were open-ended and aimed at allowing “unanticipated statements and stories to emerge” (Charmaz, 2006 p. 26). Interviews were recorded with participant consent, allowing us to focus on asking questions and listening, picking up nuance in the moment (Anderson, 2013). In addition to the transcriptions we had taken notes of content that was not recorded to preserve insights that could later inform coding and analysis.

After our interviews and notes from our VC observations of increased intercultural interaction, we invited all participants to an online focus group called *What difference does zoom make to intercultural interaction?* 22 participants attended for just under an hour and the discussion was recorded and transcribed verbatim.

## **The Participants**

Out of 140 students contacted by email, 38 agreed to participate, with over 30 of these aged 18 -24. Two subsequently dropped out citing work pressures as the reason. Four students were over 30 and the majority were female (24). 20 participants were postgraduates and 16 undergraduates. Most students were from the city in which the research took place or within a twenty-mile radius. All participants were interviewed once with interviews lasting approximately 40 minutes.

So, 36 students across two universities in one UK city participated, and all participants were full time undergraduate or postgraduates. With approval from programme leaders, students voluntarily participated following an email request and an online talk from one of the authors explaining the research questions and inviting host students to participate. We also used snowball sampling by asking for suggestions of other potential interviewees. From this, some new names emerged but convenient times for interviews were hard to find so no further interviews took place. We kept interviewing until data collection and analysis stopped generating new themes, signalling theoretical saturation (Glaser & Strauss, 1967).

## **Data Analysis**

Because several participants were interviewed individually through initial conversations, interviews and the focus group, the analysis was consistent with a grounded theory approach (Corbin & Strauss, 2008) and data analysis began concurrently with data collection through team meetings and discussions of interview notes. Each interview transcript was coded using line by line coding, with in vivo descriptors to assign labels to codes. Through initial coding, 21 categories and later under two broader core categories: “challenge” and “opportunity.” Although there were nuanced differences between these two categories, both indicated an understanding of what intercultural behaviour entailed, physically and virtually. Emerging findings were discussed with participants at random intervals that served as a means of improving their reliability.

## **Drawback of Methods**

The methodology is subject to several drawbacks. The relatively small sample size means that findings are not generalizable, reliance on interviews implies that student reported conversations rather than observed actions and behaviours were privileged, and the coding process subjective and open to different interpretations. Further, the students were mostly female, studying in the same city (albeit at two universities), and most participants were from the same city or its the surrounding area. The study focuses mostly on host students. In light of the relative lack of attention afforded to this group in existing research, such a decision is justified. The main challenge in an exploratory study such as this one was to balance description with comparison to enable analytical generalisation.

## **FINDINGS**

This research focused on host students’ perceptions of intercultural interaction using Zoom. Students reported that sharing their programmes with international students offered meaningful opportunities to engage with students from other countries and

different cultural backgrounds; all too often, however, there was a gap between students' aspiration about what working alongside international students could be like potentially and their actual experience. We present these experiences in participants' own words, differentiated by pseudonyms. The work of Deardorf et al. (2012) has been useful to frame commonalities and develop themes. We discuss the main findings under the two broad headings of opportunity and challenge, each with two sub sections: physical space and virtual space that align with our research questions:

- What are host students' experiences of intercultural contact with international students, physically and virtually?
- What factors have an impact on – support or prevent - greater contact between international and host students from the host students' perception?

We define opportunity as a set of circumstances or resources that make it possible to do something, and challenge as circumstances or resources that make it more difficult to do something.

## Opportunity

**Physical Space.** If proximity is a prerequisite to physical interaction, it seems that encouraging intercultural interaction was slightly doomed from the outset, since in both our research sites international students lived in separate accommodation to host students. What's more, within the classrooms and lecture theatres, groups of international students, in common with groups of host female/male often sat together in small cliques, further reducing the opportunity for intercultural collaboration, formally or informally. Several participants also mentioned that they came across very few international students socially in pubs and clubs and assumed that international students socialised either not at all or only with their own nationality in their flats. This physical remoteness between international and host students was expressed as both a matter of fact and a source of sadness by many participants.

Many participants mentioned the lack of (organised) opportunities to mix with international students: "It's like we are on the same campus but separated by parallel lines, doing the same courses, sometimes eating in the same restaurants but never actually spending time together." (Sian)

Apart from on your course, and only then for group work, do we ever communicate, host and international. Personally, I wish there were more opportunities because I want to have an international career and what better place to start my networks than at uni? (Ryan)

In contrast, organised activities that enabled intercultural contact to develop were praised:

The best thing outside of my course was the global fair. I volunteered to help set up and it was such hard work, but I actually have three international students in my social group now. Just hanging around with people doing what was necessary to get the fair off the ground was such good bonding. Just seemed like a bit of hard work at the time but as the days went by, we really got to know each other, more than that, like being with each other. That was so rewarding. (Anna)



Many participants expressed a frustration at having to engineer and self-organise opportunities to mix with international students, and felt that opportunities ought to be organised by the university:

I want to have a network for my career. I want to get an international placement in a couple of years. LinkedIn is ok but I want to know people, you know like face to face. I find myself deliberately trying to make opportunities to mix and it is hard because we just don't share the same space. I really have to go out of my way. The uni or course or union could do much more. (Jan)

Two further themes related to opportunity were the impact of single international students, and group learning, in particular action learning. Research has uncovered the significance of 'one off' students, often sole students from one country, perhaps more motivated to socialise with host students, and act as a bridge between cultures (Hendrickson et al., 2011). This highlights the role of social capital to forge relationships beyond homophilic ones, in particular Putnam's (2000) assertion that while bonding and binding ties keep one secure in one's group, it is bridging ties that enable external relationships to develop.

Second, the postgraduate students at both institutions undertook their dissertation module for their master's programmes in Action Learning Sets (ALS). Developed by Reg Revans in the 1940s to unite individuals with a major piece of work to do, organizes groups typically comprised of eight members who meet regularly as a group over a number of months. For our participants, the first meeting was face-to-face and, due to the pandemic, subsequent meetings were online. For many, it was a very useful intercultural opportunity:

"The ALS groups were great for mixing and learning about international students. All the effort of trying to get to know others was taken out by the ALS." (Annette)

"For most it was the first time I had heard them (international students) speak, loved it. After the first set, we set up WhatsApp and really began to get to know one another; then the pandemic kicked in so it continued online." (Dave)

"The ALS became at first just about our course, so learning focussed in one room but in the next few days people were inviting members to social event too. I wish we could have worked in these sets for other modules too." (Lawrence)

I want to build an international career. The Action Learning gave me the opportunity during my PG time to do this; without the ALS I would have to make do with LinkedIn." (Lawrence)

The desire to mix and connect with international students for social and future career reasons was highlighted by a few participants:

I really want to mix with international students and find limited chance to do so. I have actually joined a language group hosted by students from Southeast Asia, more to mix than learn the language. (Connie)

**Virtual Space.** At an early stage in semester two, due to the pandemic, most students' learning shifted online. Initial adjustment issues included technical problems, establishing online etiquette over, for instance, keeping cameras on or off, punctuality, informal or formal participation protocols. By the end of the first month of the first

lockdown, online learning had become the new norm. For many, this foregrounded a new way of relating to their peers, particularly those peers whom they had previously had little interaction.

You know I have made some good friends on my course but, it kind of sometimes holds you back. It sounds daft but it's like you can't dump your group once you have them. Zoom has freed me up to chat to lots of different people in groups; I wish I had not been so narrow before. I love breakout rooms and finding myself with new people. See it as a challenge now but face-to-face I would never just walk into a new room. (Sian)

Another commented how Zoom provided more sustainable contact that was somehow less daunting and less intense than face to face, for example:

I was an international student buddy last year and it didn't really create any sustainable bond between international students and host students. This year, though online, it has been miles better. We had induction on Zoom and everyone mucked in more than 2f, then weekly zoom catch ups with our buddies., no pressure just like an informal Q&A session if anything had cropped up they were unsure of, less full on than last year. I think both host and international have benefited. (Ross)

Yet another commented how Zoom made lighter work of interaction: "I kind of get to build my relationships with a wider range of students, including international, without having to commit too much." Already having enough friends was cited by several participants as justification for not reaching out too hard to international friends who some perceived as potentially more demanding than homophile friends. For instance: "I've got friends and can't afford any more with study and work." (Connor). But later Connor said, "I would say my study has improved massively through getting involved with international students on Zoom. I hadn't realised just how stuck in my own little world I was." Interrupted by his friend who added:

I don't think you were stuck in your own world. To be honest I think Zoom has been great because you can get to know more people, cultural barriers are down and you don't feel obliged to go for a coffee afterwards, win-win. (Dan)

For others, there was a sense of regret that it was not until they started the ALS towards the end of their programme that they saw the value of mixing with international students, and they expressed sadness that the opportunity had not arisen sooner:

For the ALS you just do end up getting to know more international students on many levels, either face to face or online. We became a group pretty quickly and started to share both academic and social support, sort of letting people into our group and WhatsApp, just nice getting to know people. The ALS gave us the space to get to know each other, and the pressure to be too much was lower on zoom. To be honest I was a bit sad at what I thought losing the ALS group with the pandemic, but it was even better online, less pressure, just hanging out going through feedback without having to commit to being BFF ... (laughs). (Lucie)

## Challenges

**Physical.** Participants highlighted the effort required to communicate and befriend international students. When pressed to talk about the challenges, many referred to issues such as the difficulty in understanding each other's culture, sense of humour, work ethic, group norms, routines, expectations, even time-keeping was mentioned. As Lucy said:

I'm not being deliberately awkward, but when you already have friends and a good social life, why go to the effort of meeting international students. For a start often their English isn't that great and the sense of humour is different, so what's in it?

However, many repeated the feeling that single international students both made more effort and were more worth the effort. The first occurred in the context of international students with few co nationals to depend on who might therefore be 'forced' to interact socially (Hendrickson et al., 2011). For example:

"If there's only one international student it's better for mixing, they make more effort." (Sophie) Alice commented: "There's a Mongolian student on our course and last year there was a guy from Ukraine. They really made an effort, I suppose because they are on their own and didn't have anyone else to rely on."

Later on during the interviews, participants discussed the deeper impact of the isolated international student who is not in a clique, usually because they are the only one from their country, that can be quite profound:

(name) was great because she sort of brought us all together. When she was in the group East met West so to speak - she was like the gel that helped us all mix." (Rachel)

And another: "I did enjoy her company and it kind of opened up a bit of a new world to me. To be honest I wish I had made more effort sooner. What I had previously seen as sheer effort now seemed like worth it." Over time and once host students had interacted a little with international students, they began to regard the challenge of mixing with international students as a mutual behaviour, rather than the previously held belief that international students ought to put more effort in:

once I had worked with ..... and enjoyed it, I saw that I too should put more effort in. After all, why should it just be up to the international students, it's kind of bad manners really the way I was.

And many returned to the theme of the single international student: Everyone makes more effort with one - we got really good insights into this student's culture. She made effort and we did, too. It all had a knock-on effect as the more effort everyone put in the more worthwhile it seemed. (Alice)

**Virtual.** Overwhelmingly, participants reported that intercultural relations were 'easier' and 'more natural' online compared to their previous experience face-to-face. For many, like Olivia below, Zoom heralded a new kind of interaction that seemed to require less effort:

Our course and teaching went fully online with the pandemic. It was so odd how relationships changed. I spoke to people who I would never ordinarily talk to, in breakout rooms. It was random and great. It's not that I was biased about international students, more I couldn't be

bothered making effort. But it's been really good and relaxed chatting online.

So, the online environment had the effect of making connections easier for some, requiring less effort, as Ryan expressed:

It was as if all the walls we build around each other when we have so called choice slipped away and we mixed much better. Zoom smashed down walls that we had constructed - not sure why but maybe it's that 'little Britain' mentality or too much effort, but it was worth it. I have got to know some Chinese, a couple of Nigerians and a French now pretty well.

Others spoke of how their own attitudes had shifted on Zoom. For example:

Once we had got over all the techy issues and it kind of became the new norm, I would say I had an attitude change to international students. I hadn't really put any effort in previously and couldn't be bothered mixing. (Tom)

Similar comments about the extra challenges entailed in relating to international students were discussed in the focus group. For instance:

I hadn't appreciated how much my own biases stopped me mixing with international students. If I am honest, I thought it was too much effort and they should do all the running.

Here's an interesting perspective, shared in the focus group and summarised by Sian:

You know I have made some good friends on my course, but it kind of sometimes holds you back. It sounds daft but it's like you can't dump your group once you have them. Zoom has freed me up to chat to lots of different people in groups; I wish I had not been so narrow before. I love break out rooms and finding myself with new people. See it as a challenge now but face to face I would never just walk into a new room.

Several host students mentioned the difficulties around starting and maintaining relationships with international students that might involve the provision of practical support or the perceived effort many students associated with such support. Many participants acted out a mental cost-benefit analysis, whereby they might get involved with an international student if they deemed it to be 'worth the effort', resonant of Homan's social exchange theory (Zoller & Muldoon, 2019). Whilst not commonly applied to analysing intercultural contact, social exchange theory provides an explanation for the tendency of people in mixed culture groups to form 'cliques' with people from their own culture. Sometimes, this might be due to the perceived benefits of interaction with individuals from different cultures are perceived as lower than from own-culture interactions.

This was exemplified in the following comment, with similar sentiments echoed by four other participants:

I was kind of reluctant to start a chat that might lead to getting tied and labelled as the go to person. I can see the mutual benefits but as well as my study I work and already have enough friends. Hanging out on zoom for both teaching and just social is so much less pressure. (Hannah)

Later, Hannah said:

Zoom and especially the breakout rooms have been a boom haha. I have got to know not only more of my course like English students but lots more chatting to internationals as well. It's far less a big deal online like who you are sitting next to or get into a group with and then feeling obliged to stay with them or sit with them in future. Much prefer Zoom, more chilled.

## DISCUSSION

Deardoff (2011) asserts that respectful and open-minded attitudes are antecedents to the development of positive intercultural relationships; these attitudes were present in all our participants. The comments and ideas presented above indicate that host students value the presence of international students and the opportunities to develop more intercultural friendships, whether physical or virtual. Like many students, these participants were seeking experiences that increased their knowledge of global issues and enabled them to interact with people from other cultures and build a network that might benefit their future careers. Many participants shared their belief that better intercultural relations could be possible if opportunities to interact were more frequent and organised, aligning with Jon's (2013) research, which suggests that the purposeful development of intercultural learning opportunities can have a positive outcome for all students. Host student participants in this research broadly suggested that planned rather than voluntary interaction worked better on the basis that voluntary interaction typically resulted in homophile behaviour by both international and host students. A lack of engagement between host and international students has led many authors to suggest that institutions of higher education should take a more active role in facilitating intercultural behaviour (McLachland & Justice, 2009; Rose-Redwood & Rose-Redwood, 2013).

The overwhelming message from this study was that intercultural contact does not happen if left to chance. Instead, it has to be organised, purposeful, and timely, whether physical or virtual. Interventions need to start early on before patterns are set and groups or cliques form. A recurring theme in the study was the tendency for all students to form homophilic groups if allowed to do so, and supported by existing studies (Barron, 2006; Volet & Ang, 1998). Creating the social context and the social environment for mixed groups to form has to be planned and engineered, and Zoom's breakout facility created that for many. Many participants spoke of the need for planned space to meet and mix, so we should not underestimate the importance of dedicated physical or virtual space: space to 'perform' intercultural behaviour, to organise, collaborate, and mix, beyond as well as inside the lecture theatre.

Online platforms obscure most of the characteristics that give rise to homophile behaviours (gender, race, age, and ethnicity). Names can often identify gender and ethnicity, but they do not carry the impact of a physical presence. Thus, the reader of a forum post focuses on the message, not the messenger, hence lowering cultural barriers. Further, technology makes all peers equally accessible, contrasting sharply with a physical space, where communicating with students from a different group requires more physical and social effort. These ideas dovetail with Anna's and others' experience of swapping information on their respective subjects that "... wouldn't have happened in normal [f2f] modules" (Anna).

Asynchronous forums offer time to reflect on contributions. From authors' observations and anecdotal feedback from some students it seems that for some students whose first language is not English, such as many international students, reflection time is also translation time, improving their understanding, facilitating better responses, further lowering cultural barriers.

Web conferencing systems like Zoom facilitate more of a social presence than a forum, enabling students to see and hear their peers, thus making characteristics that seed homophilic behaviour more visible than in a forum. However, homophilic groups are difficult (if not impossible) to form unless forced by the leader via breakout rooms or similar; thus, communication between international and host students is far more likely. This is evidenced by [Mentor Buddy] who said, "We had induction on Zoom and everyone mucked in more than f2f."

Whatever shape the worlds of work and study emerge in the post-pandemic period remains to be seen. What is clear from this study is that there is a desire to mix, that virtual classrooms have in part awakened from dormancy, and that technology has removed cultural barriers making communication likely between all peers enabling host and international students to collaborate and socialise. Maybe if we return to traditional teaching and learning, virtual classrooms have provided an opportunity for meaningful intercultural engagement and potential personal transformation that we should cherish. Challenges for institutions lie in both a general acceptance and encouragement of such groupings as vital sources of learning and support for international and host students. Such diverse classrooms and interaction that virtual classrooms provides is one of the key aspirations for universities as they seek to become more global in nature (Killick, 2018).

#### **Study Implications**

We found that international and host students do not engage in intercultural behaviour spontaneously, remaining instead in homophilic groups. Overwhelmingly, host students reported that it was through organised activity, physical or online, that they came to know international students better and welcomed these opportunities. Prior to the pandemic's lockdown and suspension of face-to-face contact, organised social opportunities, across academic and extracurricular contexts, were hugely popular and successful in enabling interculturalism. Interventions such as group learning, action learning, charity events, and social events were highlighted as 'brilliant' chances to network and make friends, and indeed some of this had been replicated online. In the words of one participant "it is often just the simplest interventions that bring people together, like a Zoom drop in about an assessment, and stop that awful separation and distance from each other that can be so tough to crack." Our study advances research in this field in two ways. First, we elevate the significance of host students' role in intercultural relationships. Second, we have demonstrated that successful intercultural relationships can develop in both face-to-face and virtual worlds and both methods can share and learn from each other.

#### **Further Research**

Host students are the main contributors to universities financially and educationally, and universities can reciprocate by understanding their perceptions. This paper raises many questions. For instance, young people experience more loneliness than other age groups (Achterbergh et al., 2020), likely exasperated by the pandemic, so what is the impact of online learning on loneliness? We listened to participants' stories of getting to know international students either face-to-face or online, and while organised

activity via both spaces was essential, online offered the most comfortable and less pressured environment. Does online interaction offer a temporary escape from homophobic pressure to stay in your group? Do international students currently studying in their home countries feel more inclined and able to interact online wrapped in the safety net of their own culture? Do some teaching and learning styles work better online? Is there a generational difference and do millennials simply feel more relaxed online? Finally, the perceptions of host students are an area of nascent research and more understanding of this might resolve some of the tensions that can arise, leading to a better experience for both. Of course, this can be supported by further research into the perceptions of international students.

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**HELEN COLLINS** is a Senior Lecturer and Programme Leader for International HRM at Liverpool John Moores University. Her research interests include the impact of migration and culture change on international students.

**DAVID CALLAGHAN** is a Senior Education Technologist at the Liverpool School of Tropical Medicine, researching effective use of learning technologies and supporting delivery to students. He has an interest in using technology to amplify the voices of participants (tutors and students) via online discussion forums and peer review. He tweets at @dbcallaghan and @LSTMTEL.