INNOVATIVE TEACHING AND ASSESSMENT METHODS TO ENHANCE STUDENT BELONGING IN ONLINE TEACHING

Elizabeth Shi* and Jessica Helmi[†]

ABSTRACT

Online courses present serious challenges to students' sense of belonging because of the lack of face-to-face interactions with peers and teachers. These challenges have a negative impact on course completion and program retention rates. This paper reviews the existing literature on the 'dos and don'ts' of fostering student belonging in online teaching. It then recommends two innovative online teaching strategies designed by the authors to facilitate a stronger sense of belonging: interteaching and the use of private and public 'channels' on Microsoft Teams. Detailed steps and tips are provided on how to carry out these strategies successfully. Student feedback comments are also provided to illustrate the impact of the strategies.

[*] Senior Lecturer, Graduate School of Business and Law, RMIT University.
[†] Lecturer, Graduate School of Business and Law, RMIT University.

I INTRODUCTION

In the face of the COVID-19 pandemic and extended lockdowns making face-to-face learning impossible, online learning and teaching in universities has been growing rapidly.[1] Even before the pandemic, online courses had been growing in popularity, offering students more flexibility. This flexibility is especially beneficial for students with full-time work or family responsibilities.[2]

While these advantages are initially attractive to students, course completion and program retention rates are lower in online courses than in their face-to-face counterparts.[3] These lower rates indicate an underlying issue that many online students are dissatisfied and not learning in an optimal way. A substantial reason for this is that online students experience a lower sense of belonging than face-to-face students, often feeling disconnected from not only their institutions but also their peers and teachers.[4] Peacock et al recently found online students feel dissatisfied and disconnected in course offerings that do not facilitate personal connections with teachers and peers.[5] Similarly, Exter et al found online students feel more dissatisfied and more disconnected from their teachers and peers than face-to-face students.[6] There are similar findings of disconnection and a lack of belonging for both undergraduate and postgraduate online students.[7] These findings are pressing reasons for research on strategies to increase online students' sense of belonging.

To increase student belonging and improve learning outcomes more generally, the authors designed and implemented several innovative teaching strategies at RMIT University in 2020 and 2021. These strategies proved to be successful at increasing student belonging, as evidenced by quantitative and qualitative feedback in Course Experience Surveys. Fully informed consent was obtained from students before they took part in the Course Experience Surveys, including consent that de-identified information collected may be used for academic research.

The article first provides a brief overview of the existing literature on the 'dos and don'ts' of online teaching methods to foster belonging, which is consistent with the authors' own teaching experiences. It then discusses the strengths of two innovative strategies to facilitate a stronger sense of belonging: interteaching and the use of private and public 'channels' on Microsoft Teams. Detailed instructive steps and tips are provided on how to carry out these strategies

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[1] Wahab Ali, 'Online and Remote Learning in Higher Education Institutes: A Necessity in Light of COVID-19 Pandemic' (2020) 10(3) *Higher Education Studies* 16, 17.

[2] Subhashni Appana, 'A Review of Benefits and Limitations of Online Learning in the Context of the Student, the Instructor, and the Tenured Faculty' (2008) 7(1) *International Journal on E-Learning* 5, 17.

[3] Sarah Carr, 'As Distance Education Comes of Age, the Challenge is Keeping the Students' (2000) 46(23) *The Chronicle of Higher Education* 39, 40.

[4] Susi Peacock et al, 'An Exploration into the Importance of a Sense of Belonging for Online Learners' (2020) 21(2) *International Review of Research in Open and Distributed Learning* 18, 20.

[5] Ibid.

[6] Marisa E Exter et al, 'Sense of Community within a Fully Online Program: Perspectives of Graduate Students' (2009) 10(2) *Quarterly Review of Distance Education* 177, 191.

[7] Peacock et al (n 4) 20.

successfully. Student feedback comments from Course Experience Surveys are provided to illustrate the impact of the strategies.

It is prudent to point out at the outset that adopting the innovative strategies will, to a certain degree, increase the workload of the teachers currently teaching in a less engaging way. The increased workload should be considered by any teacher before trialling these strategies. However, it is important to also bear in mind the benefits of adopting the strategies.

II FOSTERING STUDENT BELONGING: THE 'DOS AND DON'TS'

Research into online learning tools that enable a sense of belonging has identified some specific ways to improve student belonging online, such as the use of online discussion boards.[8] However, the research often remains focused on specific tools, rather than the integration of these tools into students' learning activities. Nonetheless, out of the research emerge certain 'dos and don'ts' of online teaching to increase students' sense of belonging. This section explores the contributions of current literature into what works and what doesn't when it comes to facilitating belonging through online learning.

A *What Works?*

It remains important for online platforms to be used in a way that enables sufficient personal contact between students and the course facilitator. Making meaningful connections with academic staff has been found to help enable belonging.[9] Peacock et al identify that 'tutors [are] pivotal to the development of learners' sense of belonging'.[10] Retention and engagement rates increase with tutors who are welcoming, caring and enthusiastic,[11] and who establish and maintain a personal connection with students.[12] Tutors can use online platforms to set early examples of the expectations around engagement and personal connection in the class,[13] establishing a personal and casual connection with students[14] and a culture of sharing.[15] Studies have also found that teachers who are up to date with and even go beyond the required course material are more likely to engage students online.[16] The module and class setup should also

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[8] Jean Lave and Etienne Wenger, *Situated Learning: Legitimate Peripheral Participation* (Cambridge University Press, 1991); Etienne Wenger, *Communities of Practice: Learning, Meaning, and Identity* (Cambridge University Press, 1998).

[9] Jacqueline Brodie and Renata Osowska, 'Supporting Entrepreneurship Students' Sense of Belonging in Online Virtual Spaces' (2021) 35(4) *Industry and Higher Education* 353, 354–5; Catherine Meehan and Kristy Howells, 'In Search of the Feeling of "Belonging" in Higher Education: Undergraduate Students Transition into Higher Education' (2019) 43(10) *Journal of Further and Higher Education* 1376, 1380.

[10] Peacock et al (n 4) 25.

[11] Meehan and Howells (n 9) 1396

[12] Ibid 1386.

[13] Brodie and Osowska (n 9) 5.

[14] Lisa Thomas, James Herbert and Marko Teräs, 'A Sense of Belonging to Enhance Participation, Success and Retention in Online Programs' (2014) 5(2) *The International Journal of the First Year in Higher Education* 69, 75.

[15] Peacock et al (n 4) 26.

[16] Brodie and Osowska (n 9) 5.

allow for multiple ways to contact the facilitator.[17] A welcoming teaching and learning community helps knowledge acquisition, which leads to more meaningful learning experiences.[18] Academic staff play an important role in creating a welcoming atmosphere that nurtures trust and inclusion.[19]

Meehan and Howells recently found that developing close friendships fosters students' belonging in higher education.[20] Students long for a sense of belonging in a welcoming and supportive community,[21] which includes both their peers and instructors. There is a correlation between a strong sense of 'classroom community' and a sense of 'community between students and their instructor', which relies on 'contact with the instructor' and 'instructor responsiveness'.[22] Studies have shown that students who feel connected to their peers are more involved in online learning, preventing the feelings of isolation that can negatively affect knowledge building.[23]

Tutors can facilitate this sense of connection and community by embedding it within the online curriculum,[24] including in the assessments.[25] To help foster this connection, they can provide opportunities for students to connect with each other throughout the course, establish synchronous learning activities through teleconference technology (such as Collaborate Ultra — see Part III.A.3),[26] and provide private online spaces through which students can interact and connect.[27] The liberal use of a variety of multimedia types has been shown to be effective,[28] including short videos[29] and social media.[30] Furthermore, balancing academic tasks with more informal, social tasks and discussions has been shown to increase engagement and belonging.[31]

B *What Does Not Work?*

Developing a 'sense of belonging' goes hand in hand with establishing a feeling of being integral to and involved in one's own learning environment.[32] This enables students to nurture

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[17] Peacock et al (n 4) 27.

[18] Xiaojing Liu et al, 'Does Sense of Community Matter? An Examination of Participants' Perceptions of Building Learning Communities in Online Courses' (2007) 8(1) *Quarterly Review of Distance Education* 9, 22.

[19] Penny Jane Burke et al, 'Capability, Belonging and Equity in Higher Education: Developing Inclusive Approaches' (Research Report, Centre of Excellence for Equity in Higher Education, University of Newcastle, 2016).

[20] Meehan and Howells (n 9) 1382.

[21] Thomas, Herbert and Teräs (n 14) 71–2.

[22] Suzanne Young and Mary Alice Bruce, 'Classroom Community and Student Engagement in Online Courses' (2011) 7(2) *MERLOT Journal of Online Learning and Teaching* 219, 224.

[23] Mary E Engstrom, Susan A Santo and Rosanne M Yost, 'Knowledge Building in an Online Cohort' (2008) 9(2) *Quarterly Review of Distance Education* 151.

[24] Exter et al (n 6) 191.

[25] Thomas, Herbert and Teräs (n 14) 76.

[26] Exter et al (n 6) 191.

[27] Peacock et al (n 4) 27.

[28] Exter et al (n 6) 191.

[29] Peacock et al (n 4) 27.

[30] Exter et al (n 6) 191.

[31] Young and Bruce (n 22) 226.

[32] Bonnie MK Hagerty et al, 'Sense of Belonging: A Vital Mental Health Concept' (1992) 6(3) *Archives of Psychiatric Nursing* 172, 173.

interpersonal connections and social support networks,[33] which encourages retention, engagement and more meaningful learning experiences. When students feel like they do not belong and feel alienated from the culture of their institutions they are often less motivated to study.[34] We have, therefore, also identified several 'don'ts' of online teaching, or actions that could lead to a decrease in students' sense of belonging and therefore their engagement.

Recent research has found that unanswered questions on online discussion boards reinforce a sense of isolation.[35] Students have similarly identified the lack of real-time feedback as an ongoing challenge of online learning.[36] Additionally, if students do not keep up with the online discussions in forums on discussion boards they feel further isolated from their peers.[37] Sending regular emails to students is deemed important to improving student belonging, but students feel disconnected or overlooked when emails are not directly relevant to them or are clearly automated.[38] Some research has also found that striving too hard for a sense of belonging and engagement can actually have the opposite effect.[39]

Online learning has also been found to alienate students without existing information and communications technology ('ICT') experience or education,[40] making them feel 'left out' from the rest of the class online and thus depleting their sense of belonging and increasing their likelihood of leaving the class. A perceived difficulty in communicating with fellow students and staff can decrease students' engagement.[41] Wong suggests that the wealth of information available to students through online platforms may be overwhelming and encourage disconnection.[42]

In a similar vein, Dumford and Miller found that because many students are enrolled in multiple online courses at a time, students are more likely to engage in superficial, high-quantity but low-quality learning activities, rather than high-quality interactions such as collaborative learning, student–faculty interactions, effective teaching practices and discussions with diverse others.[43] As established above, a lack of these kinds of quality learning experiences is more likely to lead to a decreased sense of belonging and lower rates of engagement and retention.

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[33] Ibid.

[34] Richard James et al, *Participation and Equity: A Review of the Participation in Higher Education of People from Low Socioeconomic Backgrounds and Indigenous People* (Report, Centre for the Study of Higher Education, University of Melbourne, March 2008).

[35] Brodie and Osowska (n 9) 4.

[36] Kyong-Jee Kim, Shijuan Liu and Curtis J Bonk, 'Online MBA Students' Perceptions of Online Learning: Benefits, Challenges, and Suggestions' (2005) 8(4) *Internet and Higher Education* 335, 341.

[37] Peacock et al (n 4) 26.

[38] Brodie and Osowska (n 9) 4.

[39] Ibid.

[40] Dominic Wong, 'A Critical Literature Review on E-Learning Limitations' (2007) 2(1) *Journal for the Advancement of Science and Arts* 55, 55; Appana (n 2).

[41] Kim, Liu and Bonk (n 36) 340.

[42] Wong (n 40) 59.

[43] Amber D Dumford and Angie L Miller, 'Online Learning in Higher Education: Exploring Advantages and Disadvantages for Engagement' (2018) 30(3) *Journal of Computing in Higher Education* 452, 458.

Whilst, as we explored above, synchronous learning can facilitate a connection with other students, relying on synchronous learning too much can cause difficulties in students' abilities to participate,[44] that is, if they are not available or able to access the platform at a specific time. This again can lead to students feeling 'left out' of the social aspects of learning, decreasing their sense of belonging.

Our research aims to add to existing scholarship on the role of online collaborative strategies and tools to help to facilitate belonging. It is challenging to achieve the same level of student belonging in an online learning environment as in a face-to-face classroom. Taking these benefits and limitations of online learning explored above into account, we designed and implemented tailor-made strategies to enable students to maintain peer communication and collaboration, engage actively with online classes and materials, and thus feel connected with teachers and fellow students and feel a sense of belonging. Table 1 summarises the 'dos and don'ts' of fostering student belonging.

Table 1: The 'dos and don'ts' of fostering student belonging in online learning

Do	Don't
- Establish and maintain a personal and meaningful connection with students via online platforms. - Set early examples of expectations around engagement. - Establish the culture of sharing. - Provide multiple ways to contact the teacher/facilitator. - Develop friendships between students. - Embed a sense of community into the curriculum and assessments. - Provide synchronous learning activities, online spaces, multimedia, social media and videos.	- Leave discussion board questions and posts unanswered. - Be slow to respond to queries. - Not provide real-time feedback. - Send irrelevant and automated emails. - Rely on online tools that students find difficult to use, especially students with no ICT experience. - Make communication difficult. - Overwhelm students with too much information. - Set low-quality learning activities. - Put too much reliance on synchronous learning activities.

III   INTERTEACHING

Interteaching is a pedagogy originally developed by psychology faculties in the United States. It is a student-centred approach, in which students teach each other the course content using prior reading and discussion questions as guides.[45] Teachers play a more facilitative role, rather than a transmission role. The rationale for interteaching is 'the best way to learn something is to teach it'. One of the authors of this paper, Elizabeth Shi, has written previously on

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[44] Wong (n 40) 59.
[45] Thomas E Boyce and Philip N Hineline, 'Interteaching: A Strategy for Enhancing the User-Friendliness of Behavioural Arrangements in the College Classroom' (2002) 25(2) *The Behaviour Analyst* 215, 218.

interteaching as an alternative instruction method for law education,[46] and since 2020 has integrated interteaching pedagogy into an online law course. Interteaching requires active participation from students, with students reporting 'increased student satisfaction, greater engagement in learning, increased confidence in speaking in class and enhanced learning outcomes'.[47] A positive correlation between the interteaching method and the development of a sense of belonging can be identified in the step analysis of the method in practice, discussed in the next section.

A *A How-To Guide*

The steps for online interteaching are described below, with a focus on how each step can increase student belonging.

1 *Written Guide*

First, the teacher writes an interteaching guide based on the reading material for the week. Structuring each class around an interteaching guide makes it clear to students what is expected of them each week, establishing a common goal for the entire class. This common goal helps foster a sense of being part of a community, and thus a sense of belonging.[48] As one student of the interteaching method described, '[it is] very easy to understand [the] layout of [the] topic and teaching schedule' (student, Semester 2, 2020). This transparency sets the tone for the semester.

The interteaching guide contains a range of question types — from simple definitions to more complex questions, such as problem-based, normative, and personal experience questions. The questions are designed to guide students through the course content and reading material. These questions are used throughout the course across different topics to deepen the students' connections to one another over the course of the semester, which has been recognised as important to online learning and belonging.[49] Personal experience questions are especially helpful in fostering students' sense of belonging, as they require students to engage with the material as it pertains to their own lived experiences. These questions serve as both a learning activity and an icebreaker activity. Sharing personal experiences also gives students the opportunity to connect their personal experiences with the learning material. Below is an example of a personal experience question used in the interteaching guide for a class on workplace bullying in employment law:

> Have you or your friends or family experienced workplace bullying? Was there a written anti-bullying policy in place at the workplace? Was the dispute resolved in accordance with the anti-bullying policy?

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[46] Elizabeth Shi, Paul Myers and Zhong Freeman, 'Interteaching: An Alternative Format of Instruction for Law Classes' (2018) 11 *Journal of the Australian Law Teachers Association* 58, 62.
[47] Ibid.
[48] Peacock et al (n 4) 24.
[49] Thomas, Herbert and Teräs (n 14) 74.

2 *Explanatory Video*

The teacher then films a video explaining the key concepts for the topic, which is then uploaded to a learning management system ('LMS') (such as Canvas) and made accessible to students. The videos ensure that the students can become familiar with the teacher prior to live online classes (described in the next section). As discussed in Part II.A, familiarity and rapport with the teacher is a major factor in building students' sense of belonging. This type of visual engagement is more powerful than written communication, allowing communication through body language, emotion and personality. The teacher can build a relationship of camaraderie and trust through the video, and this can then develop further through the interactions in the live class.

3 *Live Online Classes*

Students then attend online interactive classes via an LMS — in this instance, the course used the platform Collaborate Ultra. The class initially takes place in the same Collaborate Ultra 'room' for 10–20 minutes. The teacher makes announcements and discusses some general points relating to the topic. It has been identified from both staff and students that a 'teacher's presence contributed to a sense of belonging'.[50] This initial point of contact helps to reinforce a teacher's presence and is therefore crucial in ensuring students' involvement in the class and their sense of belonging.

The structure of Collaborate Ultra facilitates 'real-time interactions'[51] between students on a weekly basis. One student from the interteaching course articulated:

> I really like the interaction in this course. It's a good way to communicate as we study online now. (Student, Semester 2, 2020)

The interactivity of online classes allows students the opportunity to connect their personal experiences with the material and with the other students, further facilitated by the personal experience questions included in the interteaching guide (see Part III.A.1).

During this initial segment of the class, the teacher can ask the students to share any related news they have heard during the preceding week. Depending on the size of the class, only a few students may be able to speak during this segment, with the rest of the students listening to what is being discussed. If this is the case, it is best to encourage a range of students to speak week-to-week; for example, the teacher can say something like 'I would love to hear from some students who did not speak last week'.

When the students share related news, they may have varying degrees of sophistication in the explanation of the topic. This is where the chat function of the online teaching platform can assist. The teacher can ask the students who shared news items to post links to the stories in

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[50] Ibid 75.
[51] Ibid 74.

the chat. Because the teacher is recording the session, students can go back to the recording to access the links after the session finishes.

As a form of 'synchronous instant messaging', the use of the chat function can help foster a sense of 'camaraderie',[52] particularly for students who are unable to participate verbally/via microphone, or for those better able to express themselves in writing. It can also allow those who have not yet had the opportunity to speak to provide their insight or ask questions without interrupting the flow of class.

Throughout the live online classes, the teacher's presence remains essential to ensuring student engagement and facilitating a sense of belonging. Some feedback from students highlight this:

> [My teacher] had a role in motivating me to eliminate my concerns of talking [in] public … she always encourages us to interact with each other and … motivates students to participate. [S]he always says [to] talk and participate [and that] there is no wrong answer which enhance[s] student[s] to exchange opinions and ideas. (Student, Semester 2, 2020)

4   Breakout Rooms

After the initial 20 minutes of class discussion, the teacher then places students into small breakout rooms of two or three students for 15–20 minutes. The teacher can either randomly allocate students or place specific students in each room. In our experience, it works well to allocate students randomly but still allow them to move between breakout rooms. That way, students can move into another room if they prefer to discuss with their friends rather than strangers, mimicking the freedom of movement in face-to-face classrooms.

The teacher assigns a different interteaching question to each breakout room. The groups must then report back their discussion to the larger group. One student reiterated how this part of the interteaching process can provide a level of confidence, reassuring students that they are on track with their research:

> Inter[teaching] provides an opportunity to interact, discuss with my classmates. (Student, Semester 1, 2020)

Breakout rooms have become an instrumental part of online learning, particularly in fostering students' connections on a smaller scale. Enabling smaller group discussions improves the bond between students.[53] In these smaller group discussions, students who might not be comfortable sharing with a larger audience are given the opportunity to communicate and connect.

On the other hand, some students have highlighted a potential challenge of breakout rooms. Sometimes there is very little discussion, which defeats the purpose of allowing students to

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[52] Young and Bruce (n 22) 226.
[53] Peacock et al (n 4) 27.

review their material with each other before participating in the main discussion with the rest of the cohort:

> The breakout rooms are pretty hard as some students don't want to talk. (Student, Semester 2, 2020)

Under the interteaching model, the teacher can resolve this potential issue by entering breakout rooms and asking questions that facilitate conversation and encourage students to speak. In most cases, it will only take the arrival of a teacher in the breakout room to start some form of conversation.

5   *Assessment and Feedback*

During the online classes the tutor observes and marks student participation as a form of assessment. The tutor delivers these marks halfway through the semester and then again at the end of semester. The students can therefore gain feedback on their participation at two points over the course of the semester. Students find this ongoing process of feedback engaging and helpful. As one student reported:

> I like the interteaching! It's so much easier than having to do an exam and actually forces you to participate and engage in the content. (Student, Semester 1, 2020)

The marks provided at a midway point of the semester offer students the opportunity to reflect on this mark and see what they can improve on. They are also given the opportunity in their online classes to seek individual feedback from their tutor based on their grades. This highlights the availability and presence of their tutor in the online learning spaces, which has been found to facilitate a higher sense of belonging.[54] The interteaching method takes this one step further by providing students with the opportunity to receive formal feedback based on the assessment of their class participation and the opportunity to speak with their teacher based on the feedback they have received.

B   *Consistency in Delivery*

It is important to maintain consistency of the delivery in interteaching across the entire semester. The repetitiveness of the structure mimics a routine for students that ensures they remain engaged throughout the semester, whilst the breadth of topics and questions allows for students to maintain interest in the field:

> The course structure helped me remain engaged with the content [throughout], even in weeks when we were covering material I had thought I was familiar with due to working in [the field]. (Student, Semester 1, 2020)

Some studies into online learning have found students are well supported at the onset of the course but become 'disengaged and lonely' as the course goes on.[55] Clearly there is a need for a level of consistency in the engagement of students as the course progresses, not just in the

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[54] Young and Bruce (n 22) 224; Brodie and Osowska (n 9) 5.
[55] Thomas, Herbert and Teräs (n 14) 72.

introductory stages. The interteaching method provides solutions to this challenge via its consistent framework and structure throughout the semester. As discussed earlier, by inviting new students to contribute each week, teachers ensure that students are less likely to fade into the background and become disengaged as the course progresses.

Young and Bruce's study into online learning reiterates that a higher level of 'organizational skills' is a characteristic of student engagement that facilitates 'connection between students and their own learning'.[56] A positive correlation between student engagement and a sense of community amongst students provides insight into how being more engaged with material helps foster a sense of belonging within the cohort online.[57] The routine nature of the interteaching format can support students to improve their organisational skills as it becomes a weekly practice of engaging with the material. Young and Bruce suggest that 'future studies need to focus on … learning experiences that bring students together to collaborate, socialize and interact'.[58] The interteaching model is an example of how online learning can maximise collaboration, socialisation and interaction between students who would otherwise not have met or collaborated.

IV ONLINE 'CHANNELS'

As a separate and independent strategy from interteaching, the authors also designed and implemented the use of online 'channels' in Microsoft Teams ('Teams') to improve students' sense of belonging. The strategy was trialled in a different course from the course using the interteaching strategy. The methods the authors used are described below.

Teams has a group chat function called 'channels' that allows chat threads with various subgroups of the class to be formed. To optimise student-to-student connection, the teacher can create multiple public channels for each tutorial subgroup or discussion theme, a Q&A channel, post-tutorial discussions, or icebreaker channels. These latter channels are optimal spaces for the sharing of engaging and often casual links such as news, graphics and images. The public channels serve as community hubs that enable students to interact with other students across their cohort.

Channels allow students to interact with each other across the duration of the course, not just in their allocated class time. The instant notification when someone posts in the channel creates a smaller delay time between replies. Delays in response time, such as those that often occur in traditional course discussion forums, have been identified as a source of isolation for students.[59] In contrast to discussion boards, using chat over channels can be likened to social media chat functions, such as WhatsApp and Messenger. Receiving immediate feedback from peers in this context helps to ameliorate the lack of peer-to-peer engagement on discussion boards. Thomas, Herbert and Teräs have also found a disparity between students engaging with

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[56] Young and Bruce (n 22) 225.
[57] Ibid.
[58] Ibid 227.
[59] Brodie and Osowska (n 9) 2.

a tutor on discussion boards and students engaging with their peers. According to their study, students tend to be more receptive to questions posed by staff than those posed by a fellow student.[60]

Before the implementation of channels in this course, though students posted links to their article on the discussion board, very few (if any) comments were made in response to the posts. After the implementation of channels, students began to receive more frequent responses.

Students can also post messages on chat channels that are not necessarily course-related. For example, many students posted funny GIFs to cheer each other up during assessment submissions. Media such as GIFs and videos make students feel less isolated by providing an opportunity for them to connect with their peers and the teacher in a more meaningful way outside class hours. The channels therefore facilitate camaraderie amongst the cohort beyond the course material. The use of emojis and 'reactions' also helps students who are not comfortable typing in long form or unable to participate using cameras or microphones, ensuring they are also given the opportunity to connect with classmates. One student commented on these opportunities for connection:

> [It is an] interactive method that encourages and motivates us to participate and share ideas and examples … we were told to use emojis to express our moods and could freely discuss in the class, made sure that despite it being thoroughly an online medium, it would be a fun learning experience… Even utilising emojis created a kind of interaction … (Student, Semester 2, 2020)

We ensured the use of inclusive language and emojis on channels. Brody and Caldwell found that the use of emojis in class activities helps students to better understand what they have learned,[61] especially in an online classroom.[62] Vareberg and Westerman also found that teachers' use of emojis during initial communications with students is perceived as a sign of goodwill and genuine care, although when used excessively can negatively affect the teacher's image of competence.[63] It is therefore important that the teacher leads students by showing examples of how the platform will be used throughout the semester, but remains aware of the limitations the use of such language and emojis may place on students' engagement and sense of connection and belonging with the class.

The below section describes the use of channels in this course both before and during class and outlines how this platform has helped facilitate students' sense of belonging and led to better learning outcomes.

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[60] Thomas, Herbert and Teräs (n 14) 73.

[61] Nicholas Brody and Lesley Caldwell, 'Cues Filtered In, Cues Filtered Out, Cues Cute, and Cues Grotesque: Teaching Mediated Communication with Emoji Pictionary' (2019) 33(2) *Communication Teacher* 127, 130.

[62] Joanna C Dunlap et al, 'What Sunshine Is to Flowers: A Literature Review on the Use of Emoticons to Support Online Learning' in Sharon Y Tettegah and Martin Gartmeier (eds) *Emotions, Technology, Design, and Learning* (Academic Press, 2016) 163, 178.

[63] Kyle Vareberg and David Westerman, 'To :-) or to ☺, That Is the Question: A Study of Students' Initial Impressions of Instructors' Paralinguistic Cues' (2020) 25(1) *Education and Information Technologies* 4501, 4501.

A *Channels before Class*

At the start of the course, the teacher creates a Teams site for each student group and posts a welcome message in the general Teams channel. Students are prompted to post a reply or to write their own messages in this channel and 'react' to each other's messages using Teams' multiple reaction functions (for example, 'like', 'love', 'happy', 'laugh', 'sad', 'angry'), which mimic the reaction buttons found in more familiar social media platforms. A large number of students immediately react to the teacher's welcome message by posting messages within the channel. This helps create an instant sense of community within the course even before the semester begins.

Using relevant and modern ways to communicate with students, such as emojis and reactions, fosters closeness amongst students and a welcoming online atmosphere before the start of the semester. This is highly critical, since students' perceptions of teachers are highly influenced before the official start of the class.[64] One student identified why the Teams groups and channels increased a sense of belonging by building relationships:

> [Our teacher] was able to make online learning efficient by building a relationship with us and facilitating the creation of groups using Microsoft Teams … In order to keep us engaged with our respective team, [our teacher] frequently kept breakout room sessions on Microsoft Teams along with a class activity to be done. This was supporting in forming a good level of relationship with the tutor and other students in the class. All this was highly effective in contributing to the beneficial value of this … (Student, Semester 1, 2021)

B *Channels during Class Time*

During online tutorials, the Teams platform facilitates icebreaker activities, such as using virtual backgrounds and turning on student cameras. Students are encouraged to choose a creative, fun and interesting video background to show to others, which encourages students to turn on their cameras in order to show the video background. This demonstrates how channels are an effective way to build rapport, as students organically comment on and react on others' virtual backgrounds. Another icebreaker activity facilitated by channels involves asking students to use an emoji in the channel chat to represent how they are currently feeling. In addition to fostering engagement, this exercise allows teachers to offer support to those who post a 'sad' or 'unhappy' emoji, or to those who are not confident in writing messages but are happy to use emojis.

C *Channels after Class*

Post-tutorial discussions can be made available through channels to allow students to reflect on what they have learned together. Using private channels outside of class times in particular facilitates students' sense of community and collaboration beyond the live online class.

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[64] Ibid 4504.

Students confirmed this contributed to their sense of community, providing a positive impact on student satisfaction and online learning quality.[65]

After class, teachers may also use private channels to form collaborative learning networks ('CLNs'), a mode similar to breakout rooms. The CLNs are most helpful in facilitating group assessments. Only group members of a particular CLN's channel can see and participate in the discussions, allowing for personal and private collaboration between students when discussing their assessments. Teachers can then see how each group organises their meetings outside of class time, who attended, and how long meetings were conducted. This allows teachers to monitor student progress and provide help when necessary. If students need help during their CLN meetings, they can use the 'tag' function within the channel to invite the teacher for an ad hoc consultation. The 'tag' function works just like the social media '@' function, where teachers will receive a real-time notification when students need help.

Overall, based on the feedback provided by students in the course, this strategy has enabled highly interactive online learning and has contributed to students' learning experiences:

> [I]t was a very wholesome learning experience and taught me things I would look forward to implementing in my future career. (Student, Semester 1, 2021)

V CONCLUSION

This paper has contributed to the ongoing discussion in literature regarding practical ways of community building and enhancing students' sense of belonging in online classrooms. It offers educators novel strategies to design an online pedagogy that is welcoming, inclusive, contemporary and engaging. The strategies suggested build upon the themes in the existing literature on belonging, such as the importance of having sufficient contact with the teacher and developing friendships with fellow students.

Detailed steps are described in this paper on how to use the interteaching method to encourage and incentivise students to prepare for and actively participate in online classes. This method enables students to teach and learn from each other while being guided by the teacher, and is proven to increase the students' sense of belonging in the learning community.

Detailed steps are also described on how to use public and private channels in Microsoft Teams to encourage students to connect professionally and personally with their peers and teachers before, during and after class. This method creates a strong sense of community and fosters a sense of camaraderie and a collaborative spirit.

The authors have used student feedback comments to demonstrate the positive impact of these strategies. Students report feeling connected, having fun and experiencing high interaction and motivation as a result of the teaching strategies.

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[65] Liu et al (n 18) 22.

There are some limitations and workarounds in these tactics. For example, the breakout room discussions work best if students are happy to talk, but work less well for quieter students who are reluctant to talk. In those situations, the teacher needs to intervene with more words of encouragement or suggest to the students that they type chats to each other over the chat function if talking is less comfortable for them.

To sum up, the online teaching strategies put forward in this paper should be considered when educators are designing their online teaching pedagogies. This is especially important in light of the lower course completion and program retention rates in online courses than in their face-to-face counterparts.[66] The strategies put forward in this paper will have a positive impact on course completion rates, as they address and alleviate students' feelings of isolation when participating in online courses.

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[66] Carr (n 3) 40.