DEVELOPING AN “INCLUSIVE LEARNING TREE”:
REFLECTIONS ON PROMOTING A SENSE OF
COMMUNITY IN REMOTE INSTRUCTION

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ABSTRACT

In this paper, we seek to understand how to foster an inclusive learning community in a social science remote course. Through student feedback, our retrospective reflections on our course design and teaching, and a literature review of effective strategies that promote inclusive learning environments, we highlight the importance of embedding meaningful interactions and carefully scaffolded motivation, engagement, and management strategies in online learning settings. We draw upon a tree metaphor to describe a process-oriented approach to fostering an inclusive learning community that illuminates the instructional conditions and practices necessary for a transformative learning experience in remote contexts.

Keywords: transformative learning, higher education online course, purposeful interaction, remote instruction, socio-emotional support, modular approach, inclusive learning community

INTRODUCTION

On a fateful spring afternoon in March 2020, our large public university, like so many other universities around the world, transitioned to remote online instruction for the remainder of the academic year. Little did we know at that time that remote instruction—a format many of our faculty had never experienced—would become a pillar in most educational institutions for the foreseeable future, forcing all instructors to re-envision the role of technology in their teaching. Even before the COVID-19 pandemic, however, remote instruction in higher education was on the rise (Allen et al., 2016; Seaman et al., 2018). During the fall of 2018, for example, the percentage of college age students in the U.S. who enrolled in at least one remote course increased to 35.3%, up from 33.1% the previous year and from 26% in 2015 (U.S. Department of Education, n.d.).

Despite the greater interest and participation in this delivery mode, several challenges confront teachers in remote instructional contexts. Such challenges include higher levels of disengagement among students (Yang et al., 2018) and course attrition (Ferguson, 2020; Kim et al., 2020; Kizilcic & Halawa, 2015). Also, increased feelings of distance, between both students themselves and a student’s sense of connection to the academic program, are more likely to occur in remote learning contexts that have limited opportunities for interaction (Berry, 2019; Koslow & Piña, 2015). Establishing a strong sense of community in remote learning environments may be one way to counter such challenges, yet this has proven difficult because not many faculty in higher education are trained on how this can be accomplished (Lederman, 2020; Paquette, 2016).

In this paper, we seek to better understand how to create an inclusive and safe learning community in an undergraduate social science remote course. To do so, we reflected upon our past remote teaching experience in light of our students’ feedback and then reviewed the literature for effective strategies that can promote inclusive learning environments.
in higher education remote classes. Based on what we have learned in this process, we propose an approach to course planning and implementation that illuminates the necessary instructional conditions and practices for improving students’ learning experiences in remote contexts. We use the terms “remote instruction” and “remote course” to refer to total instructional delivery via the use of online technological platforms and tools such as Zoom.

**SETTING THE CONTEXT**

We begin by describing our own course that underwent conversion to an online remote format this past spring. Our course, an upper division undergraduate course titled Culture, Development, and Education, fulfills a core requirement for the education minor degree and is taught over a ten-week period. Approximately 65 students enroll in the course with two hours of lecture and one hour of discussion sections every week. As the pandemic hit the United States, instructors were given less than a month to plan and redesign their courses for remote instruction. Our goal, as the primary instructor and two teaching assistants, was to make sure that the content of the course would not be compromised in the online format. To maximize our instructional time, we implemented a flipped classroom approach (Murillo-Zamorano et al., 2019). In this flipped classroom approach, definitions, theories, and other resource materials pertaining to the weekly main topic were provided to students a week in advance so they could independently preview the content ahead of time. Then, during synchronous lecture class time, the instructor reviewed the main points and engaged the students in discussion and thought activities to deepen and expand their understanding. The flipped learning model relies on less lecturing and more group activity during class time to build an interactive and active learning environment, thereby increasing student motivation and confidence (Bishop & Verleger, 2013; Halili & Zainuddin, 2015; Murillo-Zamorano et al., 2019). The students were also required to attend a weekly one-hour synchronous discussion section led by one of the two teaching assistants where they reviewed and discussed the readings and assignments in depth. We insisted on maintaining a synchronous component in the course as we naively assumed that having the students be present together during class time would naturally foster a sense of learning community. We quickly learned this was not the case.

The ten topics for the course were organized by week, starting from more fundamental concepts, such as “what is culture” to more applied topics that focused on “how culture affects teaching and learning processes.” Students were required to:

1. complete the readings and preview the lecture content that were provided to them on our institution’s online learning management system (LMS);
2. attend the synchronous weekly lecture and discussion sections via Zoom;
3. submit weekly discussion questions about the readings;
4. complete weekly journal entries reflecting on their remote learning experiences; and
5. write three essays.

We held regular office hours and were available to meet with students on an individual basis by appointment via Zoom.

Our approach to instruction draws from social constructivist theories of learning that emphasize the collaborative nature of the learning process (Vygotsky, 1978). We believe that learners construct knowledge and develop intellectually through a participatory process and through social interaction that is needed for a transformative learning experience (Kreijns et al., 2003). In other words, learning is a social act dependent upon interaction among people and their tools and technologies rather than an individual cognitive exercise (Gee, 1999; Wenger, 1999). Through these interactions, students partake in transformative learning by engaging with more critical worldviews by reflecting on and challenging assumptions, revising previous frames of reference to give new perspective to previous experiences, as well as by constructing and appropriating interpretations and meanings of world experiences that can lead to action (Guthrie, 2011; Mezirow, 1996; Taylor, 2008). We opted for synchronous lecture and discussion sessions, as mentioned above, and recorded all our sessions for students who were abroad or who for other reasons could not make the class time. In total, 64 of the 65 students opted to attend the
synchronous lectures and discussion sessions. Also, we created opportunities for collaborative learning via group discussions, reading groups, and team research projects. However, we quickly learned that the success of any collaboration depends on the strength and investment of the community of learners (Wenger, 1999). Also, since this was our first experience teaching completely online, we relied on students’ weekly journal entries about their remote learning experiences (e.g., what worked, what did not work, what could be improved) to guide us in our pedagogical decisions.

STUDENT FEEDBACK
Based on the 65 students’ reflections over the ten-week course, we found two main themes that summarized the essence of students’ learning needs and experiences online: engagement and management. “Engagement” referred to their engagement with content, with other members of the class, and with the course activities, while “management” referred to their (in)ability to manage their time, the pacing of the workload, and control of their own motivation. According to the students, these were applicable to all the courses they suddenly had to take remotely and not just our specific course.

What Worked for Students
Although it is not clear whether feelings of isolation from social distancing practices accentuated their preferences, students clearly expressed a heightened interest in and satisfaction with collaborative learning opportunities. For example, they favored sharing ideas via Google docs and Padlet with other group members in discussion activities, being a part of reading groups to work together on reading the academic articles assigned in the course, and working on group infographic design assignments rather than independent assignments and activities. Students mentioned that these group activities kept them engaged and motivated; they not only knew that their group mates were relying on their individual contributions, but the group dynamic was an important source of social connection during this unexpectedly anxiety-producing time. They also valued the synchronous lectures and discussion sections and many of them expressed that they enjoyed being in breakout rooms on Zoom where they could have discussions with their classmates. Such interactions appeared to enable the students to maintain a sense of normalcy during this time, but this was not a consistent experience among all learners—some still felt disconnected.

What Could Be Improved for Students
Although we initially thought that students would enjoy the opportunity to meet different classmates in their Zoom breakout room, we learned that having randomized groups every week for class discussions actually was not as conducive for promoting critical and reflective discussions. Without the opportunity or time to get to know each other better, it was difficult for them to see the breakout rooms as a safe and inclusive setting to openly share their ideas. This was particularly true as they were asked to reflect on their personal experiences in relation to the educational issues under examination. In addition, students mentioned that they experienced difficulties when they were assigned to work on a group project with unfamiliar partners. Thus, it became clear that, especially in this remote context, we needed to have deliberate strategies to “break the ice” and take particular care in grouping students. This meant supporting a careful balance between the newness and diversity of who they are interacting with, along with the familiarity, rapport, and history with their group members. Along these lines, it would have been more effective to have perhaps two preassigned group formations that can be alternated throughout the course for when students engage in class discussions. Another strategy for creating a safer environment for remote groups, particularly as a space where transformative learning could develop, may be to have students individually write critical, personal reflections on the current course topic before they are assigned to their group breakout rooms for open, constructive dialogue on the same theme (Guthrie, 2011). For one thing, this activity helps students clarify their thoughts, their emotions, and their beliefs about the issues raised in the current lesson so they are more ready to have a fruitful discussion with their small group partners immediately afterwards. As Mezirow (1991) states, such reflective writing activity facilitates transformative learning by interrupting our “habitual actions,” which include the blank expressions and stares often seen amongst students on Zoom who seem half-present and not fully focused on the task at hand.
Students’ also raised concerns on how we as instructors would better monitor equal participation in discussion activities and group projects, as we could not always view their individual participation in breakout rooms. This relates to the larger challenge posed to instructors of remote courses of how best to “get to know” each student, both as an individual person and as a performing student. This challenge was heightened with the two-dimensional screen for communication. Hence, we asked ourselves, “What types of prompts, directions, as well as structure is needed to ensure equity and inclusion in the learning experiences of students who we do not have the opportunity to fully get to know?” It became evident over time that more support mechanisms needed to be built into the course to become more acquainted with our students. Such mechanisms can be as simple as logging on to the course 5 to 10 minutes before the official start time of the class in order to make small talk with the students. This small talk can include checking in to see how they are doing and asking them about their other classes. As we conduct our classes remotely, we often forget how much settling in, communicating, and getting comfortable occurs in the ten minutes or so before class starts during our regular, face-to-face classrooms.

In terms of management, students over the course expressed great challenges with their own time management. Despite our weekly suggested schedule, which was intended to help students keep pace with the course, and the built in minitasks (i.e., posting discussion questions and comments about the readings by a certain day and time), students found it difficult to “stay afloat.” In order to make sure the students were continuing to engage with the content in a timely manner, we built in weekly assignments to post discussion questions/comments based on the readings. However, they perceived the posting of discussion questions/comments to be busy work rather than a strategy for learning and course management and did not find the assignment helpful for their learning process. This comment was made, in fact, for all the courses that our students were enrolled in that required some form of discussion thread posting on the university’s learning management system. This prompted us to reconsider our strategy to keep students engaged with the content and with each other to help them maintain a healthy learning cycle.

LITERATURE REVIEW ON COURSE ENGAGEMENT AND MANAGEMENT

Numerous recent studies have addressed the difficulty students face with engagement, self-management, and self-regulation in remote course settings (Abou-Kahlil et al., 2021; Ferrer et al., 2020; Hwang et al., 2021; Mukhtar et al., 2020; Yasin et al., 2020). Based on literature that discusses how improved engagement and effective management for students can be fostered in a virtual space, we learned that both lack of engagement and challenges with management in remote courses could be addressed by carefully developing an inclusive, safe learning community (Bolliger et al., 2019; Delmas, 2017; Dolan et al., 2017; Yao et al., 2017). In addition to countering online course attrition (Berry, 2019; Soffer & Cohen, 2019), studies have shown that having a sense of community promotes academic benefits, including more classroom participation and deeper learning (Kebritchi et al., 2017), as well as social benefits such as increased ability to manage stress and greater overall emotional well-being (Berry, 2017; Castelló et al., 2017). Moreover, access to an inclusive community can also address the problem of course learning management by creating a structure for accountability, where students are interdependent, accounting for each other’s work and presence in the course tasks and goals. In other words, creating an inclusive community can address the issue of engagement by building in interpersonal links, fostering socio-emotional support, and increasing the social presence of others (Ryman et al., 2009; Shepherd & Bolliger, 2019).

In hindsight, we see that by attempting to replicate an in-person classroom experience as closely as possible in our remote space, rather than redesigning the course to maximize the benefits of online tools and resources, we missed opportunities to create a more transformative learning experience for students. Our fundamental constructivist beliefs about learning have not changed, but we now realize that the process in which we enact these views cannot remain the same. Therefore, in future iterations of this and other remote courses, we need to develop an online environment where: (a) opportunities for meaningful interaction are fostered in an inclusive community of learners; (b) motivation, engagement, and time management are carefully scaffolded; and (c) the components of (a)
and (b) above are properly organized and reinforced in an effective course structure.

**TOWARDS AN INCLUSIVE LEARNING COMMUNITY**

Given the students’ expressed need for engagement and management, coupled with our beliefs about the importance of interaction and community for transformative learning (Mezirow, 1996; Taylor, 2008), we propose the following integrated model for remote course design. As seen in the figure below, our model is based on an extended metaphor of a “learning tree.” We seek to “root” ourselves, our students, and the structure of our courses, so to speak, into a fruitful, fertile space where, with careful cultivation (course planning), an inclusive learning community, with a healthy trunk and a vibrant crown, can organically develop.

![Inclusive Learning Community Tree](Figure1.png)

**Figure 1: Inclusive Learning Community Tree**

Our journey toward transformative learning for students begins with the roots of interdependence, social presence, and authenticity—factors that ground and nourish the learning tasks as well as a sense of community (Ryman et al., 2009). From these roots, the trunk of the tree, representing the structure and methods of learning via a modular approach, stands. Just as nutrients need to travel from the roots of a tree to the leaves via the network of a trunk, our modular approach contains the important job of serving as a conduit between the leaves and branches of the crown and the three fundamental root factors.

Our learning tree also contains essential knots on its trunk, which are known to emerge as a reaction to some form of stress and are valued for their uniqueness. We see the knots of socio-emotional support and purposeful interaction as representing the heart of the trunk. Together, all of these components enable us to foster the crown of the tree, a flourishing, inclusive learning community where the different and numerous branches represent the diversity of the student community. In this learning community, our aim is that students will ultimately have transformative learning experiences.

What we are presenting in the inclusive learning community tree model are not new concepts in higher education course design. Our goal is to bring these concepts together with theories of learning and models of instruction, as well as research on successful pedagogical strategies in remote spaces and our learned experiences, to offer a more comprehensive guide toward remote course planning. With any course, it will be beneficial to see whether the components of the tree are present and to examine in what ways these components are exercised. Each of these components are explained further below.

**Roots to Nourish Community**

The tree’s root system plays the critical role of acquiring nutrients and water so the visible part of the tree can thrive. Building on Ryman et al.’s (2009) framework for fostering online learning communities that identifies (a) the social presence of class members, (b) the interdependence among students to achieve a common goal, and (c) the authenticity of learning tasks as essential components, we plant these three components as roots to nourish all activities the class engages in.

First, social presence is defined as the degree to which one perceives another person as real and present when using a communication medium (Garrison, 2011; Short et al., 1976). Social presence is important in an online setting because it can lead to increased levels of comfort, intimacy, self-reliance, and self-knowledge (Shepherd & Bolliger, 2019; Zhan & Mei, 2013); improved learning and
learner satisfaction (Martin et al., 2018; Oh et al., 2018; Richardson et al., 2017); and better online interaction quality (Fiock, 2020; Weidlich & Bastiaens, 2019). However, in online settings such as in Zoom rooms, the black boxes (when video is turned off), still photos, and mute buttons often restrict transmittal of visual and verbal cues (e.g., physical distance, gaze, postures, facial expressions, voice intonation) that convey social presence. Plus, the inability to exchange actual physical gestures on Zoom (e.g., nudges, handshakes, high fives), of course, can hinder the feelings of social presence. Although synchronous delivery of instruction increases the degree of social presence to some degree (Clark et al., 2015), according to our students, it alone was insufficient to counter the students’ lack of engagement or sense of community.

Along with social presence, we found it important to build in opportunities to develop strong interdependent relationships among the students. A community of learners is sustainable only when the connections among the learners are strong, and such connections are strengthened when members are working towards a common goal or task. Ryman et al. (2009) argued that “learners connect with each other when they discover the value they bring as individuals and how that individual value complements the knowledge already pooled within the group” (p. 34). Furthermore, the relationships among learners establish the social infrastructure where members of the learning community are linked to one another in a way so that their success is dependent upon one another (Kreijns et al., 2003). Thus, it is imperative that learning objectives and tasks are designed to promote both individual accountability and a collective objective interdependently.

Finally, the third root of our tree centers on the authenticity of the learning tasks. Authentic learning equates learning-by-doing, real world problem-solving, where learners move beyond just knowing concepts to being able to apply them to solving a real-life situation (or an ill-structured problem), and by considering multiple perspectives when doing so (Boholano, 2017; Lombardi, 2007). Students were quick to point out the prevalence of what they term to be busy work in the remote setting as a strategy many instructors implemented to attempt to keep them engaged. For example, as previously mentioned, students expressed how they did not gain much from the requirements to post their comments or questions and/or respond to their classmates’ posts on discussion forums. They reported to have done the task for the sake of gathering credit points, but not much learning happened. We realized that these types of weekly tasks created to keep students engaged actually fall short due to the lack of authenticity in what the learners are required to do. Yet, when students were asked to solve a problem with meaning, with real life applications, students appear to be more motivated, especially when tasked to work in collaborative groups and there was a concrete outcome.

The Trunk that Upholds the Community

In our model, we utilize the approach of modular structure course design as the trunk, the structural backbone of our inclusive community learning tree. Developing a course in terms of modules involves chunking course material logically into self-contained units where directions and instruction are broken down for students into smaller, digestible, bites. We see it to be a more manageable structure for both instructors and students to keep organized. Module units can present students with a roadmap in advance, helping them understand the organization of the course. The roadmap, specifically, enables students to estimate the amount of time required to complete each module and allows them to pace themselves, thereby elevating student agency and empowering them to take more responsibility over their own learning. This is especially important when there are other competing factors in their lives, such as the overwhelming circumstances of the pandemic, social unrest, and contentious national politics, that make it difficult for students to cope and focus (Learning for Justice, 2020).

Module-based courses also align with our constructivist educational approach because they are more student centered, where both instructors and students actively construct their shared knowledge (Dejene, 2019). Here, the role of the instructor is “to guide, probe, and support the students’ initiatives in the problem-solving process, rather than lecture, direct, manage student work or provide clear solutions” (Hou, 2014, p. 791). Modules can be nonsequential in terms of content (Cornford, 1997; Dejene, 2019), or sequential, with skills, knowledge, and applications building off of previous units. This sequential form enables positive reinforcement as concepts and
understanding are spiraled in the curriculum, each time with increasing involvement and complexity, and thereby building deeper student understanding of content (Bruner, 1971). Each self-contained module should generally include integrated theories, activities (discussion based and practical), reflections, assessments with accompanying feedback, and additional resources that provide scaffolds for students to complete the task. The overall number of modules that are assigned will depend on the content and length of the course.

Within the modular approach, small groups or learning pods that work together to accomplish the tasks of a specific module are utilized. This learning pod structure reinforces accountability, supporting both student management and interdependence with one another as they seek to address, for example, a real-world concern related to the content of the module. Additionally, to address a previously stated concern of student grouping, group formations can change with each module. This gives the students opportunities to get to know more of their classmates and increase their sense of community, while also allowing them to work with diverse people in the class. We suggest that each module be designed to build up to a collaborative group project that proposes a solution to address an issue relevant to the topic of the course (e.g., in our course, students worked on solving challenges associated with an educational issue such as inequity in instructional resources, bilingual education, or tracking in schools). The collaborative common project can comprehensively facilitate, guide, and assess their understanding of the content and goals of the module. In other words, by applying their knowledge of the module’s content to a collaborative project based on a real-world issue, this approach enhances the authenticity of student learning, allowing students to be more actively motivated and engaged in their own learning. Hence, the modular approach is not only more conducive for authentic learning in manageable units but also for increasing motivation among students that might otherwise feel disconnected.

However, there are some drawbacks to the modular approach that should be attended to when designing a course. One of the main challenges of modular courses, for example, is in providing timely feedback (Dejene, 2019). With densely concentrated content, instructors may not have enough time to give adequate feedback to all of the students for each module completed (Cornford, 1997). Additionally, completing the self-paced modules satisfactorily often relies on guidance from instructors when students need it. Thus, the more successful modular-approach courses have instructors who continuously assess and follow-up with students’ progress throughout the modules. Also, when the modules are planned sequentially, students who might not have fully understood or acquired skills in earlier modules may struggle with the content in later modules (Cornford, 1997), further emphasizing the need for multiple opportunities to access support and checks for understanding from both peers and instructors. However, when such drawbacks are attended to, we find a modular-based course design can appropriately facilitate the main sociocultural components of learning, which are purposeful interaction, authentic learning activities, and, through collaborative projects, a sense of course community.

Knots That Support Learning

Our modular approach is further distinguished by our emphasis on the core “knots” of socio-emotional support and purposeful interaction as core strategies in building an inclusive learning community.

Socio-emotional Support Knot

In online courses with limited physical presence, a whole range of psychological and socio-emotional facets, such as interactions and relationships with classmates, motivation, and the individual capacity for self-regulation and emotional self-awareness, emerge to the forefront (Sharoff, 2019). As social beings, the socio-emotional desire to belong, to have an affective connection to others, is a fundamental human need (Maslow, 1968). This same essential need, naturally, carries over into the learning process. A student’s socio-emotional investment in a course is expressed not only as a sense of belonging, but also in the trust between members, their shared expectations, and a level of concern for each other, all of which are needed in order for feelings of community to emerge (Hernández-Sellés et al., 2019). Moreover, the deepest learning actually occurs when the classroom is a space that allows for students to not only openly share but also and reflect to process their own emotions (Guthrie, 2011).
The importance of socio-emotional support for learning became ever more apparent this year as nearly all students in their weekly reflections expressed that their struggles with the sudden isolation from campus, friends, and classmates were affecting their ability to focus on coursework. For the near term, then, we have to deliberately plan our courses from a premise that our students are learning from a place of dislocation, anxiety, and uncertainty (Davidson, 2020). The socio-emotional support component, then, must be built into both the structure of the overall course as well into the specific assignments. To combat such feelings of dislocation and anxiety, we need to embed forms of learning that intently encourage empowerment, agency, community, and care. These are all aspects that not only counteract the emotional burdens of a pandemic, but also stimulate student motivation for a course and help students feel more connected to the class community. Activities are needed that encourage agency and acknowledge student emotions, while also reinforcing the sense of sanctuary of a classroom. For example, providing opportunities for critical journal responses, reflections, and free writes, where students carefully contrast and compare their personal belief systems (i.e., their frames of reference) with new, professional knowledge in the field is critical for transformative learning to occur (Guthrie, 2011; Mezirow, 1991). Other activities may include creating spaces for quiet moments where students can be mindful of their beliefs and processes and engage in “thoughtful action,” a higher-order cognitive process that also leads to transformative learning (Mezirow, 1991), or checking in frequently with students about their socio-emotional well-being via whole class activities or individual email check-ins.

Besides allowing spaces for personal, thoughtful introspection, socio-emotional support generally manifests itself through interaction characterized by compassion, care, patience, and empathy. As Sharoff (2019) states, it is not a question of whether interaction is important for online courses, it is a matter of how to facilitate interactions to maximize intellectual and socio-emotional investment in the remote learning process. This leads us to the next essential component in developing an inclusive community of learners that can enable transformative learning to occur: meaningful and purposeful interactions.

**Purposeful Interaction Knot**

Extending the notion that it is the quality of interaction that is key for fostering deep learning (Martin & Bolliger, 2018), we sought answers to the question: What types of interactions are most productive and fruitful for learning to occur, particularly in online contexts? After careful research, we arrived at Mehall’s (2020) purposeful interpersonal interaction (PII) framework, which refers to “any high quality, organic, and valid communication exchange between participants of the learning process that directly relates to the achievement of established learning outcomes or to the building of social relationships” (Mehall, 2020, p. 185, italics added). In this knot of our tree, which we see as embedding the previous knot of socio-emotional support, Mehall (2020) distinguishes between three categories of PII: instructional interaction, social interaction, and support interaction. Over time, these are facets that allow for a community to develop and where transformative learning occurs.

More specifically, instructional interaction refers to interpersonal interaction that focuses on the instructional content that directly relates to completing the learning objectives of the course (Mehall, 2020). As in face-to-face classroom settings, instructors of remote courses still must make sure to confirm expectations, define and clearly communicate the purpose of the learning community (Brinkley-Etzkorn, 2018), and model individual accountability for the course (Kreijns et al., 2003). While it is important for instructors to be open, flexible, and understanding in remote learning settings, our courses and our students still require accountability, specific expectations, and a level of consistency. In the feedback from our course, students commented on the helpfulness of presenting content and assignments using multiple modalities. For example, in our lectures we utilized (a) text supported by graphics of content using Powerpoint slides; (b) short videos that further explained the topic in depth; (c) opportunities for students to discuss their understanding of the topic in breakout rooms; and (d) a collaborative platform (e.g., Padlet, Jamboard) where students shared insights on texts and topics. In future iterations of the course, we would also like to implement...
tools for social annotation of course readings (e.g., Perusall, Kami, Hypotheses) as such tools have demonstrated efficacy for both increasing high quality learning interactions between students outside class and in promoting online active reading strategies, particularly for flipped classrooms such as ours (Miller et al., 2018).

In terms of assignments, we learned early on to discuss the writing prompts of assignments in class clearly by being transparent about how and why each assignment was purposeful to the overall course structure or aligned with the course’s learning objectives. We also made explicit our expectations by sharing our assessment rubrics with the students and, whenever possible, models of work that were submitted by former students in previous classes. Furthermore, based on student feedback, we learned that we needed to not only be clearer with instructions and expectations of the assignments, but also in the group classroom activities before sending students to breakout rooms by posting the details, goals, and assessment criteria in the chat. Such clarity minimizes having the students ask that dreaded question to each other, “What are we supposed to be doing now?” Finally, the instructor’s facilitation style when explaining tasks or course structure is also important since taking a more active role in facilitating discussions has been shown to positively impact students’ sense of community and help them feel more connected (Demmans Epp et al., 2017; Phirangee et al., 2016). Thus, we made it a point to join the different breakout rooms as much as possible to engage with our students in their discussion activities.

The second type of PII, social interaction, is interaction either between teacher and student or between students themselves. Such interaction provides opportunities for peers to connect in “non-task specific conversation” while helping to create a positive (or negative) learning environment (Hernández-Lara et al., 2019; Mehall, 2020). What Mehall (2020) pointed out, and what is often overlooked and underappreciated in students’ overall learning, is that many interactions that do not directly relate to course content are not without purpose and are, actually, much to the students’ benefit. With instructors being the primary point of contact for online students, we play a crucial role in how we cultivate a sense of community in our courses (Garrison, 2011). This means that we must increase our awareness of how our tone comes across when we communicate with students in the Zoom class, as well as how we converse with each other, e.g., if there is communication between teaching assistants and professors within the live Zoom space. A remote online space can benefit from a more welcoming, sometimes enthusiastic approach from instructors as the tone can ingratiate and motivate students to engage in the course and help them feel a part of the course community.

As we reflected upon the interactions in our own course dynamics, we also thought of different ways we could take advantage of and maximize the Zoom videoconferencing interface. For example, since videoconferencing software enables us to see and address each student’s name in the class from the first day of lecture, this feature allows us to see and address each student’s name in the class from the first day of lecture, this feature allows us to see and address each student’s name in the class from the first day of lecture, this feature allows us to see and address each student’s name in the class from the first day of lecture, this feature allows us to see and address each student’s name in the class from the first day of lecture, this feature allows us to see and address each student’s name in the class from the first day of lecture. In their weekly feedback, several students recognized this critical absence in our classes: that important space before class starts, where informal social interaction and community building actually begins to develop. Students remarked that they missed those seemingly awkward face-to-face spaces to get to know each other and their instructors. The generally quiet opening spaces on Zoom can be creatively filled with noncontent related activities—exchanging newly found memes that are humorous and timely (and safe), sharing “one boring fact” about yourself that day and then asking if others wish to volunteer the same, utilizing the survey/poll function of Zoom for a “question of the day” and then sharing the results, or as we found out, having the instructor share something about themselves, such as a hidden talent (e.g., playing the guitar), that helps create an important space in the classroom atmosphere for vulnerability, emotions, and connection. Moreover, various research suggests that emoticon use can also enhance students’ perceptions of social presence in online learning environments (Famularish, 2020; Grieve et al., 2019). Even though we are not in the same physical space with students, where they could clearly see and sense each other’s expressions of curiosity, or their eye rolls, sighs, or other simple gestures, there is a tool within the chat function of a live Zoom videoconference that allows students and instructors to interact and participate by selecting
emojis to express their feelings and their reactions. A sense of community is actually bolstered when participation, even in small and open ways, is encouraged. Despite the fact that there are fewer opportunities in remote learning for typical student-to-student socializing, there are still ways to have the instructor and students build relationships, to have everyone invested in the interactions, and to sense that others are present.

The third type of purposeful interpersonal interaction, called support interaction, entails fundamental communication providing support to students in a variety of areas where they may encounter difficulties, such as helping students navigate the course learning management system (LMS) (Mehall, 2020). Support interaction also entails fostering a community of care and an environment of acceptance in the course by asking genuine, open-ended questions during lessons and waiting for students’ answers to develop and be expressed before moving on. It is also helpful at times to let some conversations in the synchronous setting wander (Stommel, 2020), a strategy which is especially key for enabling deep reflection to occur in a remote class environment. Such reflection is, in the end, a core principle to stimulating students’ engagement in the learning community (Jung & Lee, 2018).

Based on our students’ feedback from the course, learning via a synchronous delivery format, overall, provided the greatest benefits for student engagement and purposeful interaction. Utilization of features that help students connect, including chat rooms that enable text communication, and breakout rooms that enable small group discussion, help students engage in diverse ways and increase the among between students in the synchronous virtual classroom (McDaniels et al., 2016). Moreover, synchronous communication, in general, increases students’ sense of intimacy and immediacy (Abdelmalak, 2015) and assists students to better understand what their peers and instructors are saying as they are able to also see nonverbal cues.

At the same time, some of our students, like the students in Martin and Bolliger’s (2018) study, noted problematic aspects of synchronous remote instruction. While the students in Martin and Bolliger (2018) revealed that the synchronous time obligation was burdensome, some of our students found that having their face or voice exposed on video was stressful and anxiety-producing because they were not used to seeing and hearing themselves on the screen. Additionally, in other studies, some students reported struggling with managing multiple communication features at the same time in a synchronous setting (i.e., talk and text and scanning readings simultaneously) (McDaniels et al., 2016), or feeling frustrated by an instructor’s unskillful use of said synchronous tools (Berry, 2017).

Finally, for reasons of equity and privacy, it is generally recommended that students should not be required to turn on their cameras during a synchronous session (Moses, 2020). However, given the sense of distance that is created when students do not have their videos on, it is important that instructors share their rationale for why the learning and teaching process may be enhanced when the participants in the class are able to see each other’s faces. However, due to certain constraints that are beyond the students’ control, such as the bandwidth of their internet connection, some students may not be able to utilize their video function. Thus, it is necessary for instructors to be willing to make available multiple forms of instructional delivery (e.g., recordings of the lecture, lecture slides) and provide multiple modes of content access (e.g., podcasts, videos, slides) that can accommodate their students’ needs (Stommel, 2020). As Berry (2019) stated, it is important to envision our course allowing students “multiple points of entry” for building both peer-to-peer and instructor-to-peer connections as we intentionally structure meaningful interaction into our online course designs.

The Crown: Inclusive Community

As we know, a community is not only a group of individuals with shared goals, values, and a common purpose, it is also a fruitfully messy space that develops over time through dynamic, purposeful interactions and mutual trust. Given this, we imagine the lively swaying of the crown of a tree, buffeted by the wind, as a metaphor for the energy, the movement, and the spirited, unpredictable dialogues that characterize a healthy, inclusive community. To extend our metaphor and connect our various constructs, a healthy crown only takes shape when a tree’s roots are nourished and when its trunk acts as a reliable conduit
structure, communicating messages between the crown and roots.

To further nourish the students’ sense of an inclusive, safe community, instructors have the capacity and the responsibility to create conditions where students feel they can express themselves openly, where they can present alternative viewpoints, and where these viewpoints will be accepted, if not at least listened to (Martin et al., 2020). Instructors and students have both pointed out that remote classes are most effective when instructors set aside time and make an effort to create an online classroom climate that encourages trust and open reflection—one in which students feel welcome and free to share or discuss their own needs (Berry, 2019; Blayone et al., 2017). A nurturing climate as such can greatly reduce learners’ frustrations, feelings of isolation, and the transactional distance in remote learning settings.

In terms of course tasks, a sense of community is most effectively built upon collaborative group projects, assignments, and group discussions. When organized and executed well, such collaboration requires peer knowledge, peer support, and peer accountability (Berry, 2019; Waycott et al., 2017). Collaborative opportunities for learning, such as our small group project where students were tasked to create an infographic about English learners, was one of the most engaging activities according to our students. It not only reduced the barrier of distance among the students who were not sitting within the same four walls, but it also decreased anxiety and increased participation. However, in order for collaborative, peer-based assignments to be effective and rewarding, students first have to be taught how to work effectively with others. As Kreijns et al. (2003) convey, and as supported by our own experiences, we cannot assume students possess the specific interpersonal skills needed to not only achieve a high-level end product but also to handle the common group-work problems of “social loafing” and free-riding. The instructor, thus, must provide clear goals for the assignment, often assign specific roles for each group member, and model positive, constructive interactions with others. Guthrie (2011) found that when group members assume the roles of facilitator, recorder, or moderator, while also being given specific duties within each role, more structured critical reflection and rational discourse toward transformative learning occur.

The crown of a tree is where we can notice the overall health of its structure, based on its shape, growth rate, and leaf density or color. Just as a sparse crown can indicate poor leaf or needle retention, we know a fully developed community is still far out of reach when we hear silence in the breakout rooms we visit, when too many students succumb to absenteeism, or when we feel the students’ heightened levels of discomfort. Yet, if we pay close attention to the aforementioned components comprising a healthy, vibrant, inclusive remote learning tree, we will start to see a kind of well-developed, umbrella-like crown—that is, a community—start to emerge. In sum, the cultivation of an inclusive community is a process that cannot be forced and will not organically develop without sustaining the deeply planted roots of authentic activities and genuine social presence or without cultivating interdependence.

**BRINGING IT ALL TOGETHER**

The tree must stand, it cannot run;
Whatever comes of snow or sun
It has to bear; it has no fears:
… Without a murmur, plaint or sigh—
And this has stood a thousand years
And seen ten thousand storms go by!

_from “To an Old Tree” by Annette Wynne (1919)_

During the past year, it seems we have all witnessed more than “ten thousand storms go by.” Yet, like the wise trees in the old growth forests, despite the numerous challenges, we “must stand,” we “cannot run.” And, after the period of emergency remote teaching has passed, we should not only stand, but stand resiliently in a space where we can utilize this opportunity to reassess and improve our teaching practices online. For example, one thing the pandemic forced us to see is that we as instructors in higher education are no longer just a content delivery vehicle. What has been brought to the forefront is the importance of socio-emotional support and genuine connection among our students and with our students. This is particularly true if we are to strive for transformative learning to
take place—the type of critical learning and reassessing that enables students to broaden and deepen their understanding of the content of any course.

We have all come to better understand the potential of teaching and learning online that many of us might not have taken the time to consider before the pandemic. In the past, remote education carried a stigma, a label of being lower in quality than face-to-face instruction. While we understand there is something sacred about face-to-face in-person instruction, it has become clear that some form of remote instruction will become a staple in the ways we educate. This can suffice as long as instructors strive to construct and develop the various components of the inclusive learning tree.

Our contribution to this body of literature is not necessarily in the what or even the why, but in the how. Although previous studies have addressed the importance of community in online learning and the different aspects of a remote course community, we highlight here an understanding of the process of how that community can develop. To foster an inclusive learning community, we lay out a sequence of building blocks, that is, a process to consider. We propose a guided framework, a heuristic of how to approach the fostering of an inclusive community remotely, and of how to build one from the ground up, specifically given our present situation. The implications of this work should not be based solely on a pandemic, however, as students can feel isolated and disconnected from learning in all remote courses, not just the ones taken during an unusual global health crisis.

The transfer to remote learning has not been easy or natural and has made clear that we need different ways to accommodate some form of training that suits the needs of each local community. Considering students’ ages, socio-economic status, resources, access to stable internet, time zones, language abilities, and other variables, instructors should adapt their instruction so that it most effectively reaches and accommodates students in their local contexts. This means that it is more important than ever to know your students and their situations, resources, and capabilities. Moreover, it would be useful to track student progress over time in remote contexts and see how this inclusive learning tree approach may affect student retention in these contexts. Together, we can address the immediacy of the situation and build on this momentum to continue to improve the education we provide by being more deliberate in utilizing the powerful tools we have and by recognizing that learning theories do not just translate directly across different instructional delivery formats. We hope that through this learning tree approach toward an inclusive community, students will be able to gain a transformative learning experience that will result in deeper understandings, new knowledge, and refined skills.

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REFERENCES


