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Distributed Co-Mentoring as a Means to Develop Culturally Inclusive Online Learning Communities

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Gunawardena, C., Jayatilleke, G., Kulasekara, G. & Kumarasinha, M. (2020). Distributed Co-Mentoring as a Means to Develop Culturally Inclusive Online Learning Communities. In M. Brown, M. Nic Giolla Mhichil, E. Beirne, & E. Costello (eds.), *Proceedings of the 2019 ICDE World Conference on Online Learning, Volume 1*, (pp. 389-400). Dublin, Ireland: Dublin City University, <http://dx.doi.org/10.5281/zenodo.3804014>

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INTERNATIONAL
COUNCIL FOR OPEN AND
DISTANCE EDUCATION



World Conference on Online Learning

DUBLIN *Ireland* 2019



28th ICDE World Conference on Online Learning

3-7 November 2019
Convention Centre Dublin, Ireland



**Conference Proceedings
Volume 1: Full Papers**

2020



Please cite as:

Brown, M., Nic Giolla Mhichil, M., Beirne, E., & Costello, E. (eds.) (2020). *Proceedings of the 2019 ICDE World Conference on Online Learning, Volume 1*, Dublin City University, Dublin. <http://dx.doi.org/10.5281/zenodo.3804014>

ISBN: 978-1-911669-10-4

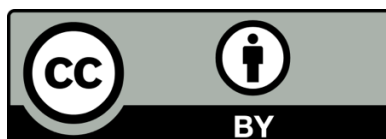


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Acknowledgements

The Editors would like to acknowledge the contributions of both Denise Brown and Sandra Forster to the 2019 ICDE World Conference Proceedings. We would also like to acknowledge the invaluable contribution members of our own team in the National Institute for Digital Learning (NIDL) made in helping to stage such a major international event. The success of the event would not have been possible without the efforts of Happening Conferences and Events and we are grateful to Anne Doherty and her amazing team for all of their work. Lastly, we would like to thank the ICDE team for their support in helping Dublin City University (DCU) to host the World Conference.



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Distributed Co-Mentoring as a Means to Develop Culturally Inclusive Online Learning Communities

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Abstract

Transformative online pedagogies call for innovative ways of conceptualizing the online environment and the student, teacher, and peer relationships. In this paper, we focus on how distributed co-mentoring can scaffold both social and knowledge building processes to develop culturally inclusive online learning communities. We critique traditional mentoring relationships, which have often sustained a biased class structure exclusive of diverse populations. We conceptualize co-mentoring drawing from the perspectives of two alternative mentoring theories: (1) feminist postmodern values that bring women and minorities into educational networks, and (2) mentoring mosaic where a diverse range of individuals of different ranks, ages, genders, ethnicities, skills, and experience come together in a non-hierarchical community, blurring distinctions between mentor and mentee to support each other in collaboration. Based on these two perspectives, we define co-mentoring as offering developmental assistance at various points in the growth of a collaborative online group, moving away from the traditional two-person relationship where a more experienced person offers assistance and guides a less experienced person to grow and advance. The expert/novice relationship definition of mentoring is problematic not only from a culturally inclusive point of view, but also from the perspective of the online environment where networked relationships can emerge between persons not bound by power structures, or, local or national cultures. We discuss two case studies of distributed co-mentoring: one, a cross-cultural co-mentoring program between the United States and Sri Lanka in the context of an online faculty development program implemented in Sri Lanka, and the second, a cross-border faculty development program conducted in Sri Lanka between participants from Sri Lanka, Pakistan, and Mauritius with U.S. co-mentors. Data sources included analysis of transcripts, journal entries and interviews with participants and mentors. In the first case, we found through analysis of computer transcripts six types of co-mentoring roles (social, pedagogical, managerial, technical, collaborative, and inspirational), which facilitated the construction of knowledge and transformed perspectives. In the second case, despite the challenges of cross-border communication, participants learned from fellow co-mentors. In cross-cultural settings, we encourage co-mentors to be cognizant of: (1) mentee needs and characteristics; (2) linguistic difficulties; (3) expectation of direct guidance from mentors; and (4) the importance of providing timely feedback during the initial stages of building a mentoring relationship. We conclude that successful co-mentoring partnerships can be established across cultures if there is mutual respect and willingness to learn from each other.

Keywords: Co-mentoring, E-mentoring, Learning Communities, Cultural Inclusivity, International Collaboration, Wisdom Communities Design Framework



Introduction

Building relationships across cultures becomes increasingly important if we are to develop meaningful, culturally relevant online learning experiences. Martin (2019) considers relationships a key to increasing engagement in the online class and observes that without this critical component, online students report a lack of interest, produce lower quality of work and report less overall satisfaction. Therefore, innovative learning designs should focus on building relationships and interactions across cultures among diverse instructors and students, and that provide all learners an opportunity to engage, contribute and learn from one another. Culturally inclusive designs “account for learners’ diverse experiences, values and beliefs” (Gunawardena, Frechette & Layne, 2019, p. 5), and provide access, alternatives, and address the learners’ preparedness and goals. One way to build relationships in a culturally inclusive learning environment is to focus on developing mentoring relationships in online classes.

Traditionally, mentoring relationships involve an expert who guides and assists a less experienced novice. These mentoring relationships, often sustain a biased class and gender structure exclusive of diverse populations. As Mullen (2012) has noted, traditional mentoring is construed as having an underlying masculinist perspective, sustaining a biased class structure, facilitating only the benefits of mentoring for some groups by some groups. “Critics have exposed paternalism, dependency, privilege, and exclusion in mentoring contexts. Alternative theories present a breakaway mindset from defunct hierarchical systems, disempowering relationships, and exploitative arrangements” (Mullen, 2012, p. 14-15). Further, in a networked learning environment, the authority of the expert shifts to one of co-learner, contributor, facilitator, guide and mentor. This calls for a re-conceptualization of the traditional role of mentoring for the online learning environment so that mentor mentee relationships can function on a more equitable plane.

Co-mentoring, is one such approach where mentors and mentees are seen as collaborators. Bona, Rinehart, and Volbrecht (1995) define co-mentoring as follows:

“Co-mentoring gives a name to supportive assistance provided by several connected individuals.” Placing the prefix “co” before “mentoring” reconstructs the relationship as nonhierarchical; “co” makes mentoring reciprocal and mutual...Co-mentoring names a dynamic that may evolve within collaborative learning. Both co-mentoring and collaborative learning are social, active, and appreciative of differences among individuals in terms of their backgrounds, talents, and learning styles” (p. 119).

The purpose of this paper is to examine how co-mentoring distributed over networks can scaffold both social and knowledge building processes to develop culturally inclusive online learning communities. We explore two case studies of distributed co-mentoring in the context of two faculty development programs implemented in Sri Lanka to help faculty learn how to facilitate and mentor online: one, a cross-cultural online co-mentoring program between graduate students in the U.S. and Sri Lankan academics and professionals in organizations which was offered as part of the National Online Distance Education Service (NODES) in Sri Lanka, and second, a cross-border faculty development program between participants from Sri Lanka, Pakistan, and Mauritius with US and Sri Lankan co-mentors offered by the Open University of Sri Lanka.



Research Questions:

Question 1: What co-mentoring roles emerged during the process of online knowledge construction?

Question 2: What are the challenges to cross-cultural co-mentoring?

Theoretical and Conceptual Framework

The theoretical framework for this study draws from two important foundations: The Zone of Proximal Development (ZPD), a central concept in Vygotsky's (1978) sociocultural theory, and legitimate peripheral participation, the process by which newcomers enter a community of practice (CoP) in Lave and Wenger's (1991) situated learning theory. Mentoring assists learners to develop their full potential and guides them into a specific CoP, thereby allowing learners, through legitimate peripheral participation to evolve into practitioners in a given field (Lave & Wenger, 1991).

Distributed Co-Mentoring

We conceptualize co-mentoring drawing from the perspectives of two alternative mentoring theories: (1) feminist postmodern values that bring women and minorities into educational networks (Bona, Rinehart, & Volbrecht, 1995), and (2) mentoring mosaic (Mullen, 2012), or relationship constellation (Kram, 1985/1988), where a diverse range of individuals of different ranks, ages, genders, ethnicities, skills, and experience come together in a non-hierarchical community blurring distinctions between mentor and mentee to support each other in collaboration. Based on these two perspectives, we define co-mentoring for this study as offering developmental assistance at various points in the growth of a collaborative online group, moving away from the traditional two-person relationship where a more experienced person offers assistance and guides a less experienced person to grow and advance. Such an approach where both mentor and mentee can share each other's expertise and learn from each other has the potential to transform educational cultures. We next discuss a design framework we have developed in our earlier work that provided us a foundation for designing co-mentoring online.

Cross-Cultural Co-Mentoring Design

The conceptual framework for the design of the cross cultural co-mentoring experiences in this study, draws from the culturally inclusive online design framework, Wisdom Communities or (WisCom) (Figure 1) developed by Gunawardena and her colleagues through several iterations of development and testing to provide guidance on how to implement co-mentoring online (Frechette, Layne, & Gunawardena, 2014; Gunawardena, Frechette, & Layne, 2019; Gunawardena, et al., 2004; Gunawardena, et al. 2006.) WisCom's emphasis on co-mentoring challenges the power structures of traditional mentor - mentee relationships by equalizing mentoring across faculty, students and community members. The more distributed, equitable nature of the online environment underscores collaborative learning and relationship networks. By eschewing inflexible mentor-mentee roles in favor of more fluid, contextual relationships, WisCom promotes cultural inclusivity and allows for the sharing of mentorship responsibilities. When co-mentoring occurs across networks, we engage in e-mentoring. While the benefits associated with e-mentoring mirror those of mentoring, research has supported two additional benefits of e-mentoring: the value of impartiality and inter-organizational connections, facilitated by the use of electronic communications (Single & Single, 2005).

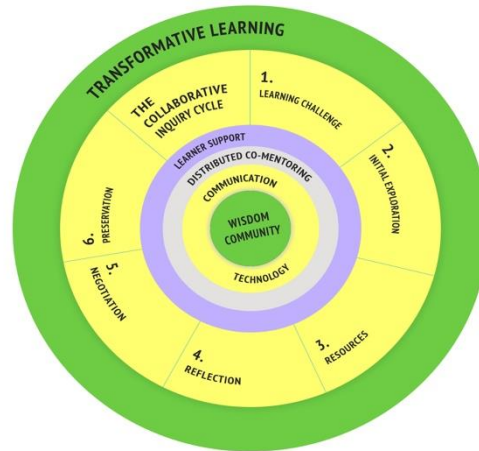


Figure 1: WisCom Design Framework in Gunawardena, C. N., Frechette, C., & Layne, L. (2019). Culturally Inclusive Instructional Design: A Framework and Guide for Building Online Wisdom Communities. New York: Routledge. Used with permission

Co-Mentoring Roles in Inquiry-based Learning Design

The context for the two studies reported here is a faculty development program conducted in Sri Lanka to train faculty (academics) and professionals on how to tutor and mentor online. One online module in this program demonstrated distributed co-mentoring by inviting graduate students from the University of New Mexico, USA to serve as e-mentors along with Sri Lankan mentors. In order to keep terminology clear, we refer to the U.S. mentors as e-mentors, the Sri Lankan participants in the training program as international and local mentors as “global e-mentor” or “e-mentor at large.”

The mentors and mentees engaged in an inquiry-based learning (IBL) activity in small groups (6-11 participants per group) for a period of three weeks using Moodle. The IBL activities designed based on the Collaborative Inquiry Cycle (CIC) of WisCom, engaged each group in solving a social problem in the city of Colombo using three formats: problem solving (cleaning up garbage), role-play (traffic congestion), and case-based reasoning (street children). For the mentees the goal was to learn through critical inquiry with peers and the e-mentor how to tutor, mentor, and facilitate an interactive learning format online. The goals for the e-mentors were to tutor, mentor, and facilitate an inquiry-based learning activity through the interplay of diverse cultural perspectives and problem resolution through negotiation of meaning. The groups were informed that the process of arriving at a solution was as important as the product, and the activity received a group grade.

Research Method

A qualitative research design examined the research questions. Methods included: (a) transcript analysis of online discussions where participant groups solved a social problem interacting with mentors, (b) mentor reflections in a focus group panel discussion and email communication, (c) mentee journals and email communication, and (d) mentee evaluation of the e-mentor’s online activity in the final course evaluation.



Both these case studies used the same online module on mentoring discussed earlier. Results are discussed from the perspectives of mentors and mentees.

The first case study which was part of NODES encompasses the first three rounds of a series of over ten tutor mentor training programs begun in 2007. In the first round, for example, there was a total of 29 participants distributed in each of the IBL groups. Each group also included one U.S. e-mentor, one Sri Lankan e-mentor at large or global e-mentor and local mentors who shared the co-mentoring role. The majority of the learners in this initial round were female (74%). The second case study conducted by the Open University of Sri Lanka had 30 mentees (academics from universities in Pakistan (9), Mauritius (10) and Sri Lanka (11)), and 4 e-mentors from the USA and 3 local mentors. In this sample the majority were female (53%).

Transcript analysis was conducted employing the Interaction Analysis Model (IAM) developed by Gunawardena, Lowe, and Anderson (1997), and widely used (Buraphadeja & Dawson, 2008) for analyzing social construction of knowledge online. The IAM describes five phases of co-constructing knowledge which correlates with Vygotsky's (1978) concept of a learner's movement from lower to higher mental functions. In this correlation, the model begins with participants working within lower mental functioning (the sharing and comparing of information), moving through the phases into higher mental function (co-construction of new knowledge, testing, and application). It is at Phase III that evidence of socially constructed knowledge appears. Phase IV and V represent the testing, metacognitive statements of the social process in which the new knowledge was constructed, and the adoption of the new knowledge into the learner's framework and schema (Gunawardena et al., 1997).

Results

Results are discussed synthesizing findings from both case studies to address the research questions on co-mentoring. We have published some of the findings from the case studies separately in previous work (Gunawardena et. al. 2013; Gunawardena & Jayatilleke, 2014; Jayatilleke & Gunawardena, 2016; Jayatilleke et. al., 2012; Jayatilleke, et. al., 2017.)

Co-Mentoring Roles that Emerged During the Process of Knowledge Construction

Analysis of the transcripts showed that the international e-mentors demonstrated different facilitating techniques to help the protégés construct knowledge and build the learning community. These techniques were categorized into six e-mentoring roles: social, pedagogical, managerial, technical, collaborative and inspirational (Jayatilleke et al, 2012) considering the nature of the attributes. Figure 2 shows the roles that emerged in the three IBL activities. The social strategies included self-introductions, greetings, encouraging and praising the participants, that helped to build the community. The pedagogical strategies involved guidance on how to conduct IBL activities as most of the mentees were new to IBL, asking thought provoking questions, paraphrasing, summarizing, etc. The strategies related to conducting and completing the activity within the stipulated time were categorized as 'managerial' and included giving instructions, assigning roles, stipulating timelines, etc. The technical category included providing technical help, or directing to a technical expert. The strategies used for promoting group collaboration were grouped as 'collaborative'. Sometimes, there was a tendency for roles to overlap, especially the social and collaborative roles. For instance,



“encouraging team members” which was categorized under “social” also has an impact on group cohesion. The “inspirational” category emerged when the protégés clearly indicated that the interactions with the e-mentor changed their way of thinking or influenced them to change their attitudes. The “inspirational” category was inferred unlike the other categories, which could be aligned to a direct utterance from the e-mentor.

In the second case study, the “inspirational” category surfaced when an e-mentor who facilitated knowledge construction in the street children group, stated the following:

Thank you for the opportunity to work and learn with you and you students. It was an honor to participate in the learning challenges of this class. If it is possible, I would like to offer my stipend as a donation to an organization in Sri-Lanka, Pakistan or Mauritius that is helping street children. Children in crisis anywhere are a priority to me... Respectfully (Email communication - International e-mentor Female 2).

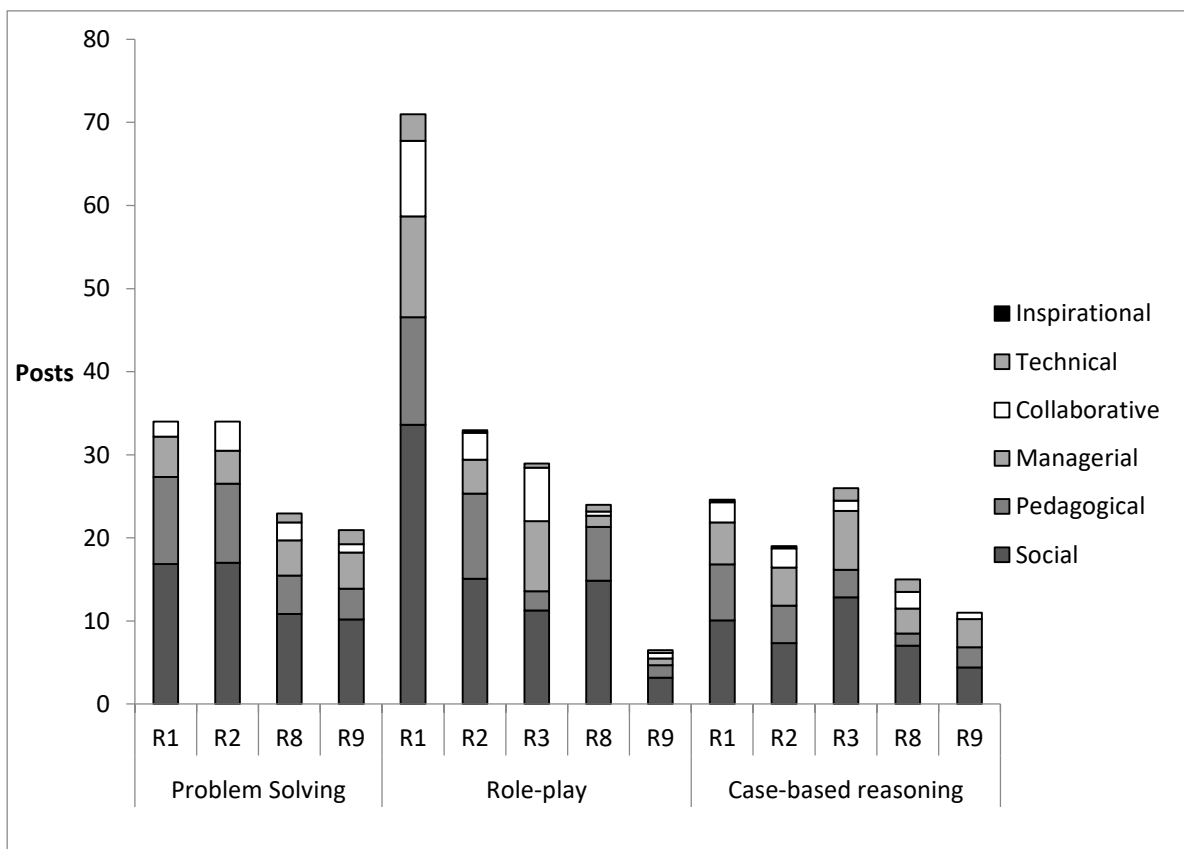


Figure 2. E-mentor roles in three inquiry-based learning activities

As observed in Figure 2, the most prominent role in both the first and second case study was the “social” role, as co-mentors developed the online learning community, followed by “pedagogical,” and “managerial.” The following quotes from a Pakistani and Sri Lankan participant in the second case study illustrate both the pedagogical and inspirational role of the mentor.



... it looked interesting for me to interact with my fellows, reading their comments and discussing on the task given to us. It gave me courage and new dimensions to think on my own expertise as a teacher and the improvements which I can bring in my teaching style (Reflective Journal Entry – Pakistani Female Participant).

The example of self-sacrifice on their part helped me to be determined that I too should be like that (Reflective Journal Entry – Sri Lankan Female Participant).

The collaborative role was exhibited by all e-mentors to a certain degree. Case study 2 offered the following collaborative co-mentoring example:

This experience also gave me much training in interacting with peers, which is quite different to a mentor/tutor role. When posting comments I had to be extremely cautious and not appear too domineering or authoritative, and at the same time urge the others to try and complete the work. So I believe this experience has enhanced my learning curve (Reflective Journal Entry – Sri Lankan Female Participant).

Earlier studies conducted with online tutors/teachers have identified similar roles (Berge, 1995; Kim, Lee, & Lim, 2010): pedagogical/ cognitive/ intellectual, social, managerial/ organizational and technical. However, our study identified two additional e-mentoring roles, “inspirational” and “collaborative.”

Co-Mentoring Facilitating Social Construction of Knowledge

Transcript analysis according to IAM suggests that e-mentors helped facilitate social construction of knowledge amongst mentees in many ways in all three rounds as discussed following Figures 3, 4, and 5.

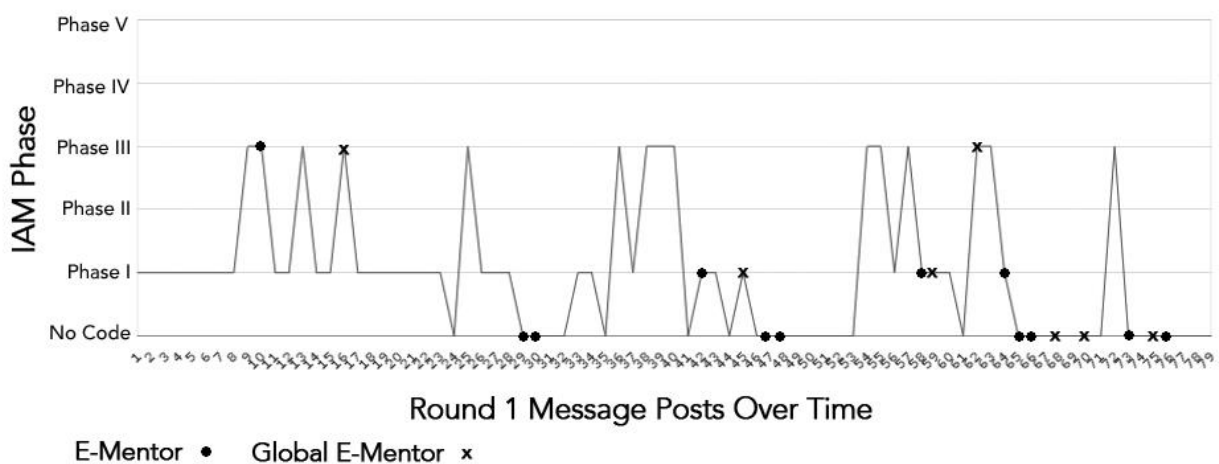


Figure 3: E-mentor participation in discussion round 1 over time

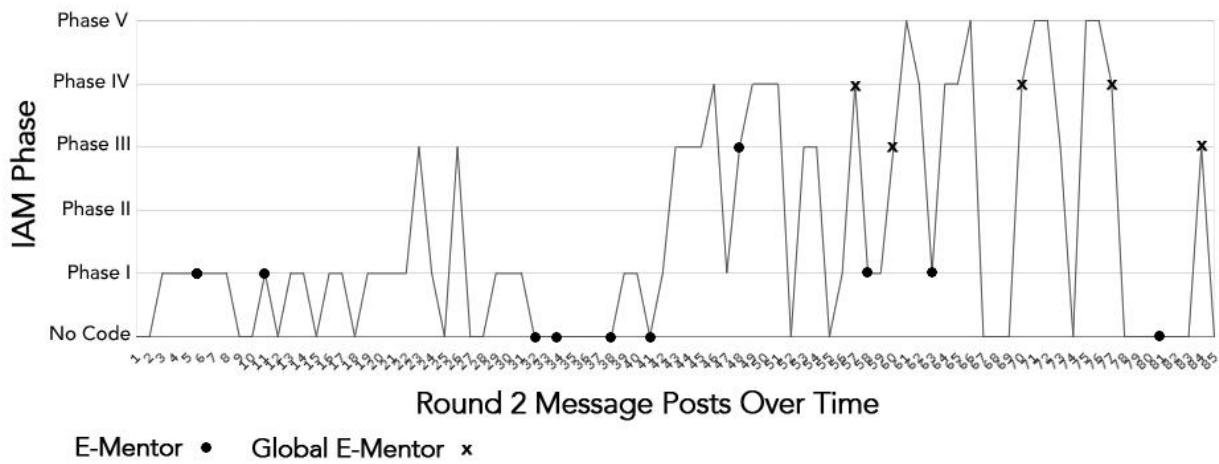


Figure 4: E-mentor participation in discussion round 2 over time

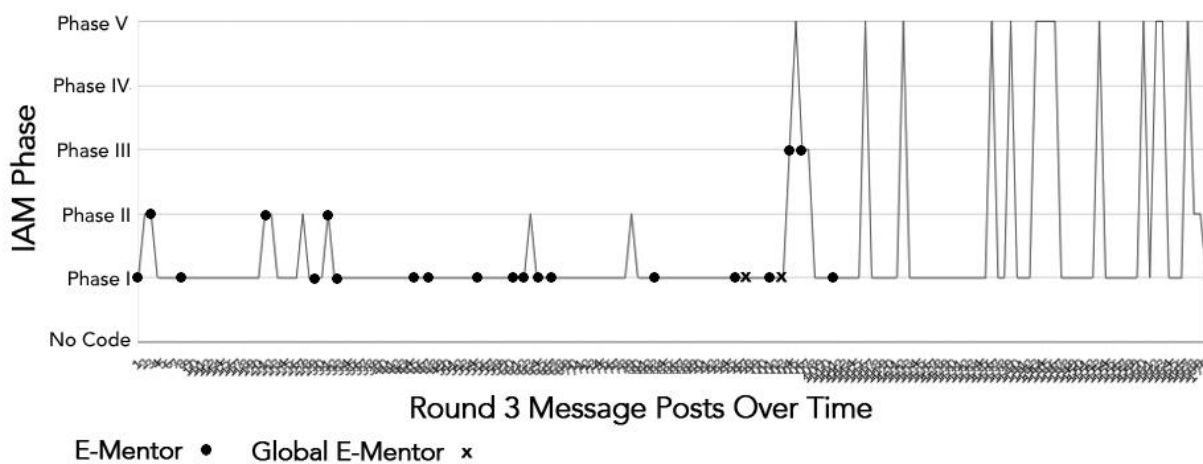


Figure 5: E-mentor participation in discussion round 3 over time

Figures 3, 4, and 5 illustrate IAM codes across each round over time. Numbers across the X-axis indicate the flow of message postings during the round, with 1 being the first post. Note that any single message may have had multiple codes assigned to it. In each figure, the highest phase code associated with the post is represented by the Y-axis. The international e-mentor participation is represented by a dot, and the global e-mentor participation is indicated by an “X”. In Round 2, e-mentors participated in 6 of the 11 clumps of interactions coded as Phase III and above. This indicates that in Round 2 e-mentors actively participated in over half of the discussions where social construction of knowledge occurred. It is also evident that in Round 2, in many instances when the e-mentor was present online, there was a flurry of activity by the participants. Similar patterns showing e-mentors actively participating in social construction of knowledge were found in the other two rounds (see Figures 4 and 5).

Figure 5 presents an interesting pattern of e-mentor and mentee activity when compared with Figures 3 and 4. In Figure 5, the e-mentor worked closely with protégés from the beginning being present online



frequently. Then, halfway through the round the e-mentor withdraws leaving the protégés to work on their own. This provides an excellent example of Vygotsky's zone of proximal development when the mentor withdraws to let the novice take a lead in performing the skills s/he was trained to do. During further analysis of how e-mentors interacted with learners during these points of social construction of knowledge, several e-mentor roles emerged, such as:

- Setting the context and expectations
- Introducing different points of view
- Providing resources
- Providing momentum
- Just in time facilitation
- Asking probing questions to get the answers from the participants
- Asking questions to help the participants to identify learning issues
- Bringing in outlier members
- Providing support and encouragement
- Promoting reflection and higher order thinking (summarizing, questioning, re-posing statements)
- Directing towards the goal by weaving each other's posts
- Relating personal experience associated with the problem
- Clarifying issues, cultural aspects in particular
- Motivating participants frequently and reminding them of deadlines
- Facilitating metacognition among participants by encouraging them to write reflections.

E-mentors prompted mentees to move beyond participation in the case and consideration of the case-based learning process by calling for reflection on their own learning process in the online environment. This also included a call to consider how e-mentors influenced the overall learning experience.

"My role as mentor and coach is to guide you through the learning process and encourage your participation and to be a fellow learner. Questions for you: What would you like to learn about yourself through this activity? What would help you to stretch as a learner? What support do you need to work at your best, from the mentor, fellow colleagues, your personal life? If you could have me be the best mentor for you what would that look like?" (E-mentor, Round 3, Group 2, Forum 1, Post 1).

Next, we discuss techniques that emerged while co-mentoring across cultures.

Cross-Cultural Co-Mentoring Techniques to Facilitate Community and Knowledge Building

In analyzing e-mentor roles further, we were able to identify culture specific e-mentoring techniques that could be grouped as social and community building, and pedagogical and knowledge building as described below:

Social and community building e-mentoring techniques include:

- greetings
- self-introductions,



- acknowledging each other, and
- polite expressions.

Pedagogical and knowledge building e-mentoring techniques are:

- direct questioning related to the issues in protégé's own country (curiosity and openness),
- explaining cultural attitudes in their own country in relation to the culture of the protégés,
- elaborating on unique culture specific terms,
- comparison with other countries on the basis of their experience,
- relating authentic examples, stories, etc., and
- simplifying and paraphrasing.

In relation to the social role, it was apparent from the postings that both the e-mentors and the protégés showed mutual respect and were culturally sensitive. One of the mentees highlights the importance of mutual respect:

...the mentor must know the 'mentee' the person's strengths and weaknesses. I also think the mentor and mentee must like each other - it can't be a purely professional relationship - there must be mutual respect, trust and appreciation (Reflective Journal Entry – Sri Lankan Female Participant).

In another example, the international e-mentor brought his US experience into the IBL activity and invited group members to discuss it in relation to their own context thereby merging two roles; pedagogical and collaborative.

... In the U.S. when a city has a traffic problem, concerned parties might make their views known to the city council, which is a group of elected officials responsible for running the city and which holds regular meetings where the citizens are invited. Does Colombo have something similar? One possibility is that we could organize an online city council meeting to give everyone a chance to make their contribution. Does anyone in the group have any thoughts about this? (e-mentor, Round 2, Group 2 Post 16).

Since there were both US e-mentors and a Sri Lankan e-mentor-at-large, we compared their facilitation styles and found differences in the way they provided guidance to their protégés. Often, indirect coaching was used by US e-mentors to get the protégés to think through the problem and come up with their own solutions. On the other hand, the Sri Lankan e-mentor provided more direct advice to solve a problem. Sri Lankan protégés often expected direct guidance as they were more accustomed to a teacher-led instructional style.

Challenges to Cross-Cultural Co-Mentoring

We identified the following challenges to cross-cultural co-mentoring which should be addressed in future design of mentoring experiences.

- Identification of mentee characteristics. One strategy used by an e-mentor was to go through the profiles of the mentees before starting the interactions
- Linguistic difficulties. Proficiency in English in this instance could not be assumed prior to the task. Those with limited language proficiency were less likely to participate. Specific communication protocols that address this issue can encourage those with limited proficiency to participate. Translanguaging when both groups know two languages will allow for the full expression of a mentees' linguistic repertoire
- Expectation of direct guidance from mentees who are more accustomed to teacher-centered learning should be accommodated initially, to subsequently move them to rely on peer networks
- Providing timely feedback to mentees due to time constraints and international time zones need to be factored in.

Conclusion

Meaningful co-mentoring partnerships can be established across cultures if there is mutual respect and willingness to learn from each other. We encourage online designers to carefully plan for co-mentoring roles that can be distributed across an online learning community considering not only mentor expertise but also peer expertise that can be channeled to support learning within a community. The results showed co-mentoring can support online knowledge construction and the development of a cohesive community. In the second case study, participants commended the design based on WisCom which provided a structured format starting with a message from the tutors giving clear instructions on e-activities and navigation, a learning challenge with the identified problem/case/issue, and online discussions for co-mentoring with peers and tutors where they felt empowered to engage. The learners who participated fully showed the gradual development of their thinking processes (Jayatilleke et al.; 2017). Issues to consider in design are mentee needs and characteristics; linguistic difficulties; expectation of direct guidance; and the commitment to providing timely feedback when co-mentoring is distributed across networks.

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