



## Achieving Knowledge in Action through Online Collaborative Learning: What We Have Learned?

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### Abstract

Internationalization is a priority area in higher education. Many institutions are exploring various approaches to achieve this goal including strategies such as internationalizing the curriculum. This paper provides an example of how educators can design and facilitate international authentic online collaborative learning that engages multiple perspectives, higher order thinking, and critical discourse. Given the affordances of digital learning technologies, students and educators are able to investigate topics with others from around the world within a virtual classroom environment. For 12 years, the authors facilitated an international collaborative inquiry for student teachers where they engaged in critical discourse with practicing teachers and teacher educators who acted as experts. Through a reflective process, the authors share highlights of their experiences and research, as well as identify tensions and disconnections at institutional (macro), program or department (meso), and instructional (micro) levels, that impact the ability to create and implement innovative practices in achieving internationalization of the curriculum. They conclude the paper by sharing three implications for educational institutions in creating conditions for authentic online collaborative learning.

**Keywords:** Online Learning, Online Collaborative learning, Inclusion, Internationalization, Internationalization of the Curriculum, Higher Education

### Introduction

Contemporary higher education is actively engaging in such trends as internationalization of the curriculum, global competencies, greater flexibility and accessibility (e.g., online) to courses and programs, and fostering of inclusivity. Program designs are being better informed through what is being learned in terms of learning and how people learn. “The new science of learning is beginning to provide knowledge to improve significantly people’s abilities to become active learners who seek to understand complex subject matter and are better prepared to transfer what they have learned to new problems and settings” (Bransford, Brown, & Cocking, 2000, p. 13). Through this, along with the affordances of digital learning technologies, we are able to better design learning within technology-enhanced learning environments. This paper provides an example of internationalization of the curriculum where learning in a technology-enhanced environment provides opportunity for students to engage with peers and experts locally, nationally, and internationally. Drawing on the research, we were able to transform theory into practice in terms of the development of an international collaborative online initiative that created opportunities for students to engage with experts



from around the world. Through the implementation of a global mindset, instructors and students discussed common topics, with an international perspective. This initiative provides an example of how the nexus of the design of learning, the affordances of digital learning technology, and a global mindset can transform learning in higher education.

Starting in 2006, we began to design, develop and lead a cross-institutional online collaborative initiative that involved preservice teachers (students), teacher educators, and in-service teachers as experts. Through a four-phase learning experience, students were able to increase their understandings of diversity and inclusivity and develop global relationships. The purpose of this paper is to reflect on 12 years of practice and research of this online internationalization initiative. The practice of creating and fostering international competencies and global relationships requires the development of substantive and authentic learning outcomes and purposeful integration of digital learning technology to bridge both time and geography. As part of our 12 year review, we identify tensions and disconnections between the macro (institutional), meso (program or department) and micro (instructional) levels that impact not only the success, but also the sustainability of such an initiative 2qA in higher education.

### **Internationalization of the Curriculum**

There are various definitions and understandings of internationalization in higher education (Knight, 2004; de Wit, 2011). As noted by Garson (2016), there is over 30-years of debate in establishing a shared understanding and interpretation of internationalization. For the purpose of this paper, we draw on Knight's (2008) definition of internationalization as "...the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of higher education at the institutional and national levels" (p. 21). The focus is on the intentionality of the "academic endeavours and education for the public good" (Garson, 2016, p. 22). In terms of internationalization agendas in higher education, it needs "[the] process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education, in order to enhance the quality of education and research for all students and staff, and to make a meaningful contribution to society" (De Wit, Hunter, Howard, & Egron-Polak, 2015, p. 29).

Currently, higher educational institutions are grappling with how to create more comprehensive, integrative approaches to internationalization that spans across all programs. As well as how to better support students to thrive in a global society by developing awareness of other cultures, different cultural values and ethics, and an international mindset (Vishwanath & Mummery, 2019).

Internationalization of the curriculum (IoC) provides one approach to meet this goal. IoC, as defined by Leask (2009), is "the incorporation of an international and intercultural dimension into the preparation, delivery, and outcomes of a program of study" (p. 209). Such initiatives reported in the literature that advance IoC agendas include study abroad, recruitment of international students, foreign language learning opportunities, international partnerships, faculty exchanges, participation in foreign conferences, and recruitment of international students (Knight, 2004; Leask, 2009; The Hanover Research Council, 2010). The challenge is where and how can IoC be integrated into existing programs?



## International Online Collaboration

One example of IoC is our 12 year international online collaboration between Australia and Canada that involved students (pre-service teachers), teacher educators, and practising teachers. The goal of this work was to foster authentic discussions among participants from the two countries as they explored common topics such as cyberbullying, special educational needs, Indigenous perspectives, technology integration, and learners of English as an additional language. This initiative gave students experience of engaging as global collaborators. During the 12 year period over 5,000 students engaged in the initiative along with 38 teachers and teacher educators as experts from Australia, Canada, USA and Russia. Through the use of asynchronous and synchronous communication, student learning was extending beyond the local classroom and a single instructor for the course.

### The initiative was implemented for six weeks using the following four phase approach:

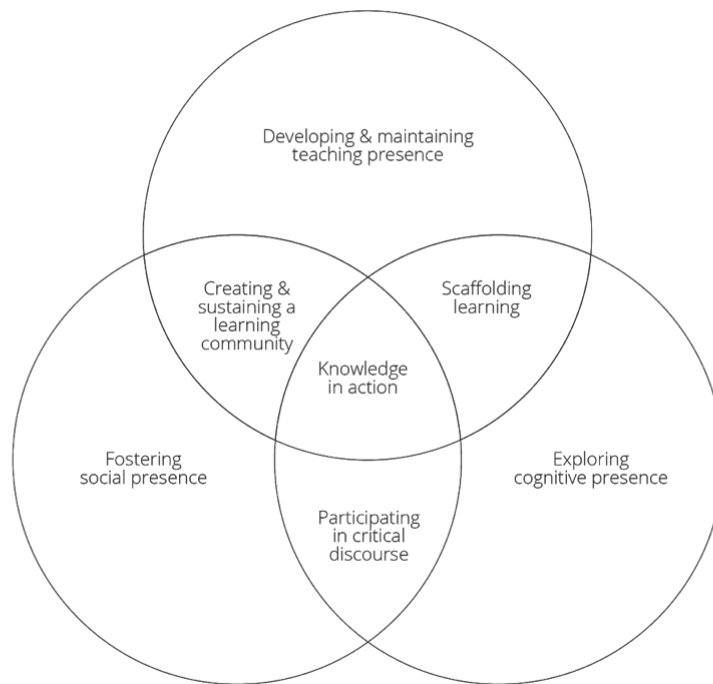
1. Community building (Week 1): Students established social presence and trust within the online community through sharing introductions, personal stories and images, and dialoguing the peers.
2. Learning from a shared experience (Week 2- 3): Students read a selected stimulus novel that aligned with key topics for the initiative (e.g. Parvana's Journey, Ellis, 2005; A Group of One, Gilmore, 2005). In teams, students created a novel summary, made links to curriculum, identified questions related to pedagogical implications, and created inquiry questions related to the novel. After they posted their summaries, teacher educators sourced initial online discussion questions from the pedagogical questions which sparked the online discussion.
3. Learning from teachers as experts (Week 4-5): Students were joined in the online discussion by practicing teachers and teacher educators to deepen their understanding of topics. It provided an opportunity for students to ask experts for strategies, resources, and stories related to the various topics. The interactions with experts included both asynchronous and synchronous discussions.
4. Critical reflection (Week 6): Based on their experiences, students reflected on the development of their content knowledge and also the process of learning through the experience (Lock & Redmond, 2011).

## Conceptual Framework

The Online Collaborative Learning Framework (Redmond & Lock, 2006) was used as a conceptual lens to both design the online collaborative initiative and to view the findings from several studies conducted over the 12 years. The framework was developed using the basis of Garrison, Anderson, and Archers (1999) Community of Inquiry model (CoI). The framework was designed to provide a structure for designers, educators, and researchers to explore collaborative and interactive online spaces where the participants share perspectives, literature, and experiences as they are de-constructing and/or co-constructing knowledge.



The three key presences (social presence, cognitive presence, and teaching presence), interact to form an additional four actions: 1) scaffolding learning, 2) participating in critical discourse, 3) creating and sustaining a learning community, and 4) knowledge in action, as indicated in Figure 1. Through the interaction of students with peers and experts, they are able to deepen their learning and develop a richer understanding of the topics through multiple perspectives and critical discourse. For further details on the framework, refer to Redmond and Lock (2006).



**Figure 1. Online collaborative learning framework (Adapted from Garrison, Anderson, and Archer's community of inquiry model, 1999).**

## Methods

Reflection is “an experiment which serves to generate both a new understanding of the phenomenon and a change in the situation” (Schön, 1983, p. 68). To frame the reflective process based on the 12 years, we have drawn on Schön’s (1983) notion of reflection-on-action. We are reflecting on experiences as designers, facilitators, and researchers of this online international collaborative initiative. Through this process, we acknowledge implications for practice in support of IoC and fostering global competencies, as well as identify tensions and disconnects between the macro (institutional), meso (program or department) and micro (instructional) levels that impact success and sustainability of such an IoC initiative in higher education. The following question guided our reflective inquiry: What factors influence the sustainability of a cross-institutional online collaboration designed to foster international competencies and global relationships?



Over the 12 years, we have studied the initiative by gathering data from student focus groups and individual interviews, expert interviews, course and assessment artefacts including online discussion posts, assessment tasks and reflections, and facilitator reflections. We have published such papers as the following: ‘International online collaboration: Modeling online learning and teaching’ (Lock & Redmond, 2006); ‘International online collaboration: Giving voice to the study of diversity’ (Lock & Redmond, 2011); ‘Investigating pre-service teachers’ inquiry into Indigenous perspective’ (Redmond & Lock, 2015); ‘Pre-service teachers’ perspectives of cyberbullying’ (Redmond, Lock, & Smart, 2018); and ‘Secondary pre-service teachers’ perceptions of technical pedagogical content knowledge (TPACK): What do they really think?’ (Redmond & Lock, 2019). We have used such publications to ground our meta-analysis of the 12 years of research as we engaged in this reflective process.

### Findings and Discussion

Through the reflective process based our research using the lens of the Online Collaborative Learning Framework, we acknowledge that the initiative provided students with a rich learning experience where they engaged in knowledge in action. Through the design of the six week experience, learning was scaffolded and supported to foster critical discourse among students, teacher educators, and practicing teachers. All who participated experienced the creation of an online learning community. Further, through this work, we were also modelling examples of IoC, as well as technology integration. Through our research, we asked students about their experience. The following are examples of some of their comments: “...this was a capacity building activity; I can use the information in other courses and in my own teaching”; “This project was the stimulus for an in class project in my prac school”; and “I felt it was creditable information when student shared experiences plus links to literature/research” (Redmond & Lock, 2008, p. 4299).

An aim of the design was to foster robust discourse among students, teacher educators, and practicing teacher within a flexible online learning environment. Through the exposure to multiple perspectives, students gained new insights into various topics. The following student quotes reflect some insights gained with regard to the authenticity of the learning experience:

- “It is interesting to see the world through somebody else’s eyes. From this novel, you gained an insight into one person’s view of the world. How does perspective change the way we see other people? How does the way we see children affect the way we teach” (Redmond & Lock, 2009, p. 269);
- “The discussion was informative, and it was personally enriching to hear real-life experiences on particular issues. It was great to have an opportunity to learn through other people’s experiences with topics surrounding inclusion, instead of just learning everything from a text book” (Redmond & Lock, 2009, p. 270);
- “It forces those in the discussion to consider ideas and beliefs beyond what they already hold” (Redmond & Lock, 2009, p. 271); and
- “Exposure to new ways to implement technology is fantastic as an aspiring teacher because it helps to develop confidence within us. I definitely found a new confidence in regards to the implementation of technology in a classroom” (Redmond & Lock, 2009, p. 271).



Diversity and inclusivity were two underpinning themes to this work. Through the readings and discussions, we wanted students to gain greater understanding of diversity but also how to create and foster inclusivity in their teaching practice. The following student quotes demonstrate how they gave voice to the topic of diversity:

- “I especially enjoyed the expert forum about Cultural Diversity and hope to implement some of the ideas that I read about in my future classrooms” (Lock & Redmond, 2011, p. 23);
- “I really appreciated having a classroom in which I could voice my concerns/questions about teaching, and to hear back from people from all different backgrounds and experiences” (Lock & Redmond, 2011, p. 23);
- “I feel a sense of loss to be losing touch with our Australian counterparts. It was wonderful to bridge our worlds, not only as citizens of different countries but as teachers in the making. I truly enjoyed the added perspectives given” (Lock & Redmond, 2011, p. 23);
- “I’m starting to realize that inclusion doesn’t just mean plonking a special needs student down in a class and expecting the teacher to conjure up something. The whole teaching process should be changing” (Redmond & Lock, 2017, p. 1054); and
- I really do think, open mindedness, a willingness to try different things, a willingness to embrace all students as individuals and to do your best to include all by thinking creatively might be the best strategies that a pre-service teacher can take to the classroom” (Redmond & Lock, 2017, p. 1055).

What became evident through our experiences and research, were the tensions and disconnections that occurred at all three levels within the institution that impacts IoC initiatives such as the one we are sharing in this paper. First, at the macro level, institutions are championing internationalization and IoC through funded projects, policies, and practices. The challenge is how are we defining internationalization, internationalizing the curriculum and internationalization at home and what will that look like from an institutional perspective? When these items are put into action, are they separate items that are add-ons to programs or are they part of the bigger initiative that becomes woven into the work across the institution? Further, with internationalization as a priority area, careful consideration and investment of resources and supports are required to foster sustainability and scalability of initiatives that identifiable impact.

Second, at the meso or procedural level, that of the department or faculty, often, there is a lack of fluidity or agility to make change. Internationalization may be a university priority but there may be tension in doing this in context where courses are approved and part of a program. Once programs are approved, there is less ability to implement unique IoC opportunities. For example, when programs have limited flexibility due to a national accreditation program and professional standards, this impedes the ability to design and implement such initiatives such as reported in this paper. There may be support for internationalization and some willingness for IoC, yet the ability to implement such items within courses or across programs tends not be taken up. What can be found is that internationalization tends to be seen as study abroad which is separate from courses, in contrast to online learning with international students and experts as part of the course



experience. Such an approach, reduces the complexity and to some degree the messiness of integrating IoC within courses and/or programs.

Third, at the micro or instructional level, there is a need for instructors to be open to a global mindset. As well as to be innovators or early adopters (Rogers, 2003) who create international learning experiences within their courses, often these individuals have the will and skill to do this work. They have or are part of an international professional network who can find others who have mutual interests in being part of such work. These individuals tend to be risk takers who are willing to design and facilitate learning in a global classroom environment. However, it cannot be assumed that all instructors are confident and/or competent to work online or work with students and instructors from other locations as they come together around mutual topics of interest. Shifting the mindset and practice for such IoC work, requires learning opportunities, and providing supports and resources to help instructors to conceptualize, design, and implement models of internationalization and global connections as part of their teaching and learning practices.

### **Implications for Educational Institutions**

As we reflected on the data and our experiences, we identified three implications for educational institutions in creating conditions for authentic online collaborative learning. First, online collaborative learning within the global classroom needs to shift from being a specialized initiative to that of being mainstream. In our situation, it was an initiative embedded in a course, which over time with changes in the program, was then eliminated. As much as we worked to invite others into being part of this online collaboration, it did not move from being an initiative within a course.

Second, educational institutions have the technical affordances that enable global conversations with peers and experts. We embraced using the digital learning technology to connect with experts from around the world using both synchronous and asynchronous communication. We have been involved in online learning for a number of decades and see this a common practice. The challenge is to shift the mindset that learning can and needs to occur with and from others beyond the classroom context. Not all instructors nor students are open to online learning or willing to open the classroom to others who are not enrolled in it.

Third, it cannot be assumed that instructors and students are prepared for online collaborative learning. Co-creating knowledge through sharing ideas requires risk taking. It also requires developing confidence and competence in being an online collaborative learner. As we think about next steps, we need to carefully consider not only the possibilities for more opportunities for authentic online collaborative learning, but also how we can support others in engaging in this form of learning. How can we more intentional in how IoC work can be scaled up and sustained?

### **Limitations and Further Research**

One limitation of what we report in this paper is that it is grounded on a reflective process based on our research and experience over 12 years. Through this reflection, however, we have identified a number of





tensions and disconnections that are impacting internationalization and internationalization of the curriculum. We see the need to conduct further research with higher education institutions who have prioritized internationalization to investigate what are their disconnects at the three levels, how are these tensions or disconnections impacting the achievement of this priority area, and what strategies are they implementing that is supporting both scalability and sustainability of such initiatives?

## Conclusion

This paper provides a meta-analysis of an international online collaborative initiative that ran for over a decade. The designers and facilitators of this work have reflected both on their experiences and their research as they examined factors that influence IoC. Unlike many IoC interventions, this initiative has been long lasting and has been researched from a variety of different perspectives. While this study does not offer a conclusive answer to the question of IoC, it does provide a model of implementation supported by data.

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